Technical Memorandum

Existing Design Conditions

November 2009

Submitted to:
Washington State Department of Transportation

Submitted by:
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SECTION 1 INTRODUCTION

1.1 Corridor Limits

Washington State Route 9 (SR 9) begins at SR 522, north of Bothell, and parallels Interstate 5 (I-5) going north to the Canadian border at Sumas. SR 9 serves Snohomish, Skagit and Whatcom counties. This technical memorandum is part of an effort in developing a comprehensive Route Development Plan (RDP) which will only address a 30-mile segment of SR 9 between SR 522 in the south and SR 530 (Burke Avenue) in the north (see Exhibit 1).

1.2 Purpose

This technical memorandum will summarize the findings along the corridor. It will describe the characteristics of the existing roadway and evaluate some of the existing design conditions for deficiencies that do not appear to meet current design standards.

Structural assessment and calculations, hydrologic and hydraulic evaluations and calculations were not tasked for this technical memorandum.

This technical will also provide the following roadway information for SR 9:

- Functional classification
- NHS status
- Freight and Goods Transportation System Status
- Access classification
- Highway of Statewide Significance

Exhibit 1: SR 9 Corridor Limits with Mile Posts

SECTION 2 CLASSIFICATION

2.1 Functional Classification

The WSDOT functional classification of SR9 from MP 0.00 to MP 30.00 is Urban-Principal Arterial.

2.2 NHS Status

The National Highway System is an interconnected system of principal arterial routes that serve interstate and inter-region travel. In addition, these routes meet national defense requirements. This segment of SR9 (MP 0.00 to MP 30.00) is currently not a National Highway System (NHS) route.

2.3 Freight and Goods Transportation System Status

The Freight and Goods Transportation System (FGTS) has been established due to increasing interest in developing the most effective and efficient system for moving freight from suppliers to consumers. The FGTS ranks state highways, county roads and city streets based on annual tonnage carried. According to Washington State FGTS 2007 update, the annual FGTS tonnage class for SR9 is **T-2,** which has an annual gross tonnage between 4 to 10 million, and has approximately 320 to 800 numbers of large trucks per day.

2.4 Access Classification

The access classifications for this segment of SR9 include Managed Access Class 2 and Class 4; Limited Access Levels are Partial Control and Modified Control.

2.5 Highway of Statewide Significance

The Highways of Statewide Significance (HSS) include the Interstate highway system, interregional state principal arterials, and ferry connections that serve state wide travel and support the state's economy. This segment of SR9 (MP 0.00 to MP 30.00) is currently is a Highway of Statewide Significance.

SECTION 3 EXISTING CONDITIONS

3.1 Evaluation Procedures

A corridor map created for the RDP that shows the existing channelization and configuration overlaid on digital aerial orthophotographs was used as the primary source for the evaluation process. Other data used to help supplement the evaluation process were State Highway Log (Planning Report 2006), Roadside Classification Plan (1996), photo images from State SRview. In addition, one field visit performing a "windshield" survey of the corridor was made to observe the existing conditions. Corridor and intersection design parameters from project design files were not readily available.

The purpose of this technical memo is to provide a general knowledge of the layout of the corridor and to point out some of the existing deficiencies. It is not meant to be a detailed design parameter check list.

The configuration and traffic operation of intersections within the corridor were analyzed under a separate task of the RDP. This technical memorandum will only focus on the roadway segments between the intersections.

3.2 Existing Conditions

In general, the southern half of this 30-mile a two lane highway cuts through a mostly rural landscape, while the northern half cut through a predominately forested landscape. Two short segments, approximately half a mile each, run through a semi-urban environment.

The horizontal alignment of this entire corridor is relatively straight with moderate curves. The vertical alignment is classified as rolling where slopes rise and fall gently with occasional steep slopes. The posted speed is 55 mph along the rural and forested segments. Within the semi-urban environment of Frontier Village (in Lake Stevens) and in City of Arlington, the speed limit is 40 mph.

For the purpose of this technical memorandum, the 30-mile corridor is divided into six segments based on existing posted speed limits. These segments in some degrees reflect the common theme of the surrounding terrains, spacing between intersections, and adjacent land uses. Exhibit 1 shows the corridor with mile posts and Exhibit 2 shows some of the roadway characteristics of these six segments.

Exhibit 2: Existing Conditions Summary

Segment	1	2	3	4	5	6
MP to MP	0.10 to 4.17	4.17 to 15.40	15.40 to 15.96	15.96 to 27.06	27.06 to 29.13	29.13 to 30.00
Posted Speed Limit	45 mph	55 mph	40 mph	55 mph	45 mph	40 mph
Number of thru Lanes*	2	2	3 to 4	2 to 4	2	2
Lane Width	11ft - 12ft	11ft - 12ft	12ft plus	11ft - 12ft	12ft	12ft
Shoulder Width	6ft - 10ft	4ft - 10ft	8ft - 9ft	7ft - 9ft	4ft - 10ft	4ft - 10ft
Pavement Type	Asphalt	Asphalt	Asphalt	Asphalt	Asphalt	Asphalt
Number of Bridges	0	8	0	1	2	1
Number of Intersections	10	19	3	14	2	3
Horizontal Alignment Description	Straight with 3 moderate curves	Straight with 7 moderate curves	Straight with no curve	Straight with 1 moderate curve	Straight with 1 moderate curve	Straight with no curve
Roadside Characteristic Classification	Rural	Rural & Forest	Semi-urban	Forest	Rural	Semi-urban
Comments			Frontier Village of City of Lake Stevens			City of Arlington

A picture from Segment 3 near Lake Stevens

A picture from Segment 4 near Marysville

A picture from Segment 5 near Getchell Hill

A picture from Segment 6 near Arlington

3.3 Deficiencies

Corridor and intersection design parameters from project design files were not readily available. Therefore, existing design parameters were based on existing conditions. According to Design Matrix 5 for Main Line Non-NHS Routes (WSDOT Design Manual Exhibit 1100-8, June 2009), modified design level applies to most of the design elements for this project corridor.

Current ADT for the corridor is between 10,000 and 37,000 and the truck percentage is approximately 6%. Modified Design Level 11 was selected to evaluate the two-lane segment of this corridor (DM Exhibit 1130-11, June 2009). Modified Design Level 6 was selected to evaluate the multi-lane segment of this corridor (DM Exhibit 1130-10, June 2009).

Because of limited data from project files, only the following design elements were evaluated to meet current design standards:

- **Traffic lane width** – Meets Standard: Standard recommends 11ft; Existing varies between 11ft and 12ft.
- **Shoulder width** – Meets Standard: Standard recommends 4ft to 6ft; Existing varies between 4ft and 10ft.
- Minimum radius for horizontal curves – Meets Standard
  - Curve data table from as-built plans were not available, existing radii were measured from digital aerial orthophotographs using Microstation Cadd software. There are 17 horizontal curves within the corridor, the radii varied between 1570ft to 37,840ft.
  - It was assumed that existing superelevation has a maximum rate of 8%. Based on DM Exhibit 1250-4b, June 2009, all of the existing curve radii meet standard.
- **Stopping sight distance for horizontal curves** - Meets Standard: Existing horizontal sight distances were obtained graphically from digital aerial orthophotographs using Microstation Cadd software. The sight distances were measured from center of traveled lane to center of traveled lane using the edge of shoulder as the limit of obstruction. Based on DM Exhibit 1130-2, June 2009, existing stopping for both the north bound and the south bound travel lanes of the corridor meet or exceed the minimum stopping sight distance.

Recommendations: When more as-built data become available, other design elements should be checked for deficiencies to ensure a safer corridor. These are some of the recommended design elements: vertical alignment, superelevation rate, turning roadway width, side slope protection, and passing sight distance.

Analysis Unit: MP 0.00 - 0.07

(Vicinity: From MP 0.00 - BEG ROUTE - MAIN ROUTE To MP 0.07 - END BRIDGE - SR 522)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 0.00	MP End: 0.07	Qualifier:
ARM Begin: 0.00	ARM End: 0.07	Length (Miles): 0.07
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: N/A	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 77.0
Lane Miles: 0.14	Lt Shoulder (ft): 0.0	Rt Shoulder (ft): 0.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: Yes

Year	Contract	Construction	Thickness	Surface Type	Exception
2001	014810	BRIDGE	0.00	PCCP	NONE

Related Programmed Project: SR 9 Mainline Increasing 0.00 to 7.01

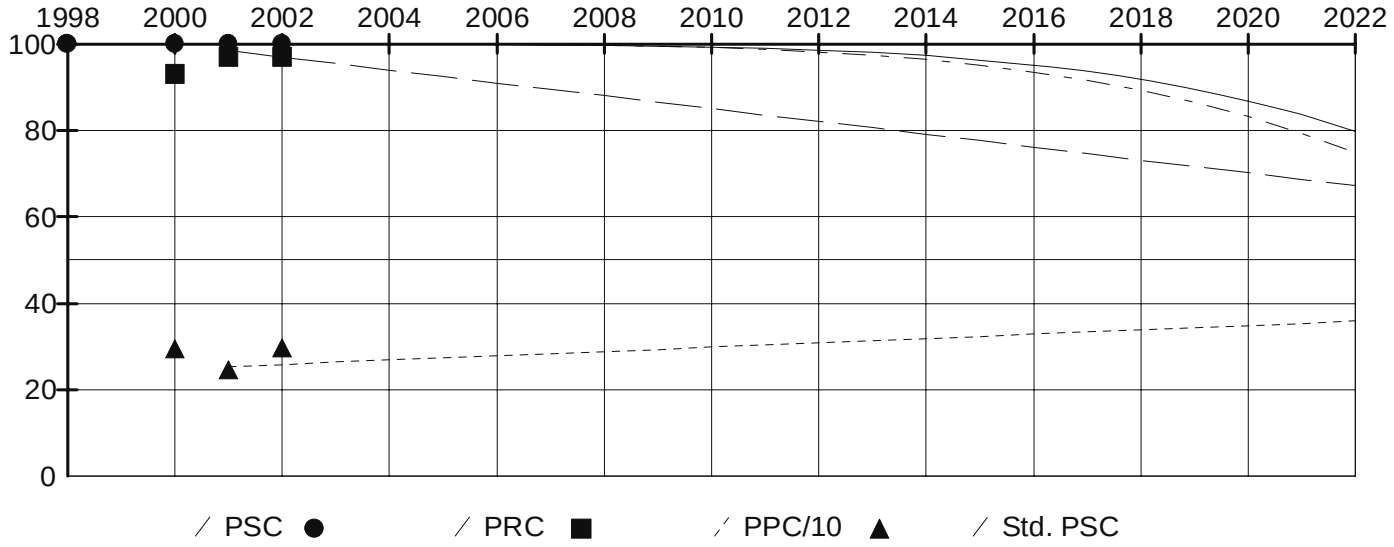
Ad. Date/PIN/Title: 04/2010 100904A - SR 9/172nd St. SE Vicinity to Montessori(MP 4.20 -6.80)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1998	2000	2001	2002
PSC (Structure)	100	100	100	100
PRC (Rutting)	N/A	93	97	97
PPC (IRI cm/km)	N/A	295	246	297

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2020	Regression	16.63	31.28	2001	253.67	5.00E+00	1.00
PRC	2034	Regression	52.68	2.95	2001	98.38	-1.49E+00	1.00
PSC	2027	Modified Standard	99.00	0.00	2001	99.84	-4.81E-05	4.25



Survey Data

Survey Year: 2006	Pavement: PCCP	Survey Lane: Right
Rut (mm): 2	PSC: N/A	IRI (cm/km): 238

Defect Type	Low	Medium	High
Slab Cracking	0	0	0
Patching	0	0	0
Scaling	0	0	0
Faulting	0	0	0
Joint/Crack Spalling	0	0	0
Pumping	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 20832	Ave. Weekday Traffic: 22776
ADT Growth: 1.69%	Single Units: 1949	Double Units: 551
Trains: 106	Total Trucks: 2606	Trucks Percentage: 12.51%
Trucks Growth: 1.69%	Directional Split: 66.50%	Peak Hour: 7.77%
Min. Level of Service: C	Cur. Level of Service: E	15yrs Level of Service: F

Past ESALs: 1,519,890 ESALs after 15yrs: 5,581,860

Analysis Unit: MP 0.07 - 0.23

(Vicinity: From MP 0.07 - END BRIDGE - SR 522 To MP 0.23 - INTRSECTN - 233RD PL SE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 0.07	MP End: 0.23	Qualifier:
ARM Begin: 0.07	ARM End: 0.23	Length (Miles): 0.16
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: N/A	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 21.0
Lane Miles: 0.32	Lt Shoulder (ft): 8.0	Rt Shoulder (ft): 9.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
9999	016994	RESURFACE EXISTING RDWY	0.20	ACP CLASS 1/2IN PG64-22	NONE
9999	016994	NEW CONSTR OR ALIGN CHG	0.60	ACP CLASS 1/2IN PG64-22	LN ADDED RIGHT-CONSTR
9999	016994	NEW CONSTR OR ALIGN CHG	0.70	CSTS	LN ADDED RIGHT-CONSTR
9999	016994	RESURFACE EXISTING RDWY	0.00	CSTS	RF TURN ADDED-STRIPING
2001	014810	RECONSTR EXISTING ALIGN	0.55	ACP CLASS B AR4000W	NONE
2001			0.00	N/A	
2001			0.50	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 0.00 to 7.01

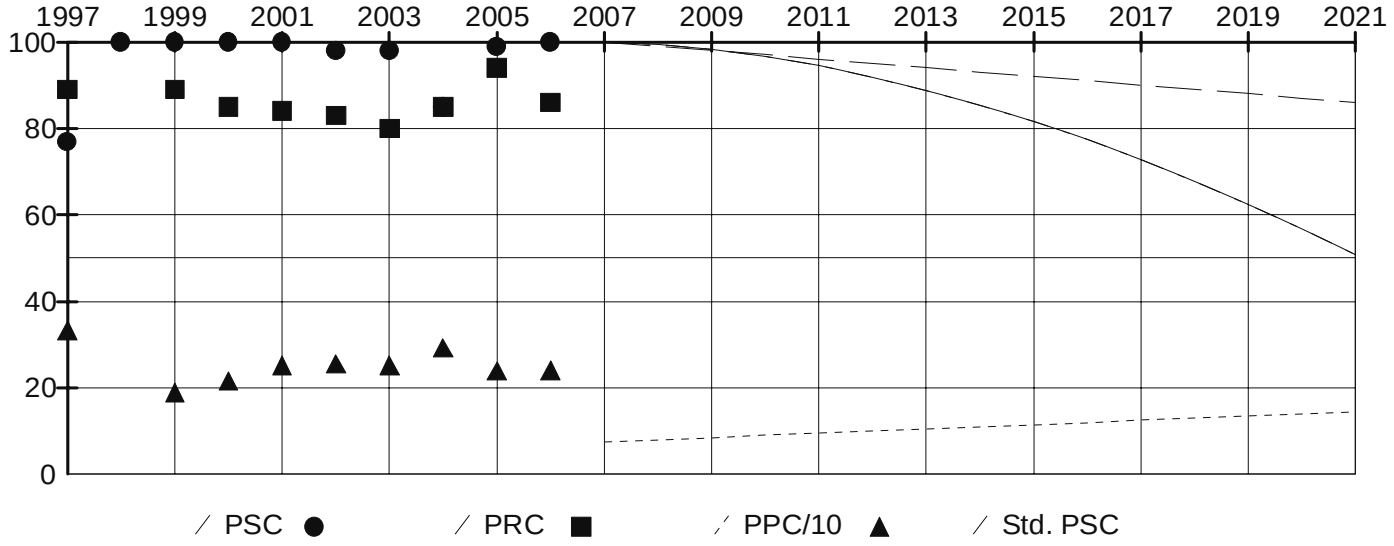
Ad. Date/PIN/Title: 04/2010 100904A - SR 9/172nd St. SE Vicinity to Montessori(MP 4.20 -6.80)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	77	100	100	100	100	98	98	85	99	100
PRC (Rutting)	89	N/A	89	85	84	83	80	85	94	86
PPC (IRI cm/km)	333	N/A	190	216	252	255	252	293	239	240

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2062	Regression	100.00	0.00	2007	75.00	5.00E+00	1.00
PRC	2057	Regression	100.00	0.00	2007	100.00	-1.00E+00	1.00
PSC	2021	Standard Equation	100.00	0.00	2007	100.00	-4.85E-01	1.75



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 3	PSC: 100	IRI (cm/km): 240

Defect Type	Low	Medium	High

Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006
Ave. Daily Traffic: 24622
Ave. Weekday Traffic: 27946
ADT Growth: 1.69%
Single Units: 2305
Double Units: 652
Trains: 125
Total Trucks: 3082
Trucks Percentage: 12.52%
Trucks Growth: 1.69%
Directional Split: 59.38%
Peak Hour: 7.36%
Min. Level of Service: C
Cur. Level of Service: E
15yrs Level of Service: F
Past ESALs: 1,796,737
ESALs after 15yrs: 6,598,591

Analysis Unit: MP 0.23 - 0.33

(Vicinity: From MP 0.23 - INTRSECTN - 233RD PL SE To MP 0.23 - INTRSECTN - 233RD PL SE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 0.23	MP End: 0.33	Qualifier:
ARM Begin: 0.23	ARM End: 0.33	Length (Miles): 0.10
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: N/A	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 0.20	Lt Shoulder (ft): 6.0	Rt Shoulder (ft): 6.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
9999	016994	RESURFACE EXISTING RDWY	0.20	ACP CLASS 1/2IN PG64-22	NONE
9999	016994	RECONSTR EXISTING ALIGN	0.60	ACP CLASS 1/2IN PG64-22	2 LN ADDED RT-CONSTR
9999	016994	RECONSTR EXISTING ALIGN	0.70	CSTS	2 LN ADDED RT-CONSTR
9999	016994	RESURFACE EXISTING RDWY	0.00	CSTS	RC ACCEL ADDED-STRIPING
1996	014854	RESURFACE EXISTING RDWY	0.20	ACP CLASS B AR4000W	NONE
1982	012098	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1964	000000	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1949	000000	RECONSTR EXISTING ALIGN	0.11	PENETRATION MACADAM	NONE
1949			0.00	N/A	
1949			5.80	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 0.00 to 7.01

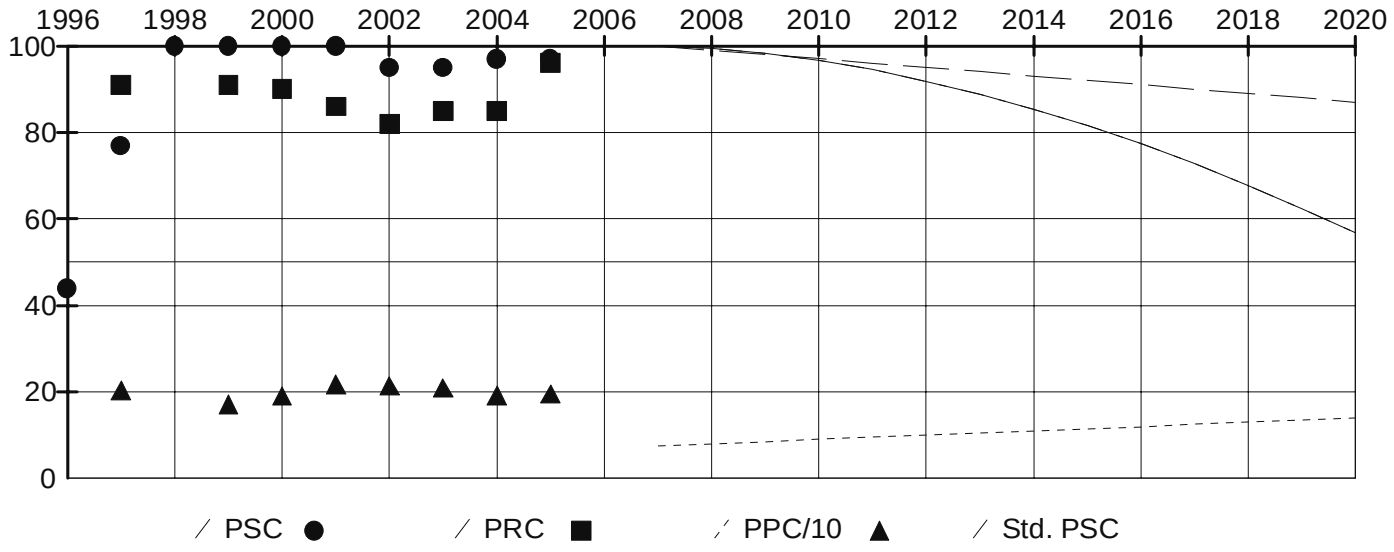
Ad. Date/PIN/Title: 04/2010 100904A - SR 9/172nd St. SE Vicinity to Montessori(MP 4.20 -6.80)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
PSC (Structure)	44	77	100	100	100	100	95	95	97	97
PRC (Rutting)	N/A	91	N/A	91	90	86	82	85	85	96
PPC (IRI cm/km)	N/A	203	N/A	171	191	217	214	209	192	195

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2062	Regression	100.00	0.00	2007	75.00	5.00E+00	1.00
PRC	2057	Regression	100.00	0.00	2007	100.00	-1.00E+00	1.00
PSC	2021	Standard Equation	100.00	0.00	2007	100.00	-4.85E-01	1.75



Survey Data

Survey Year: 2006 Pavement: ACP Survey Lane: Right
Rut (mm): 2 PSC: N/A IRI (cm/km): 243

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 24110 Ave. Weekday Traffic: 27365
ADT Growth: 1.69% Single Units: 2257 Double Units: 638
Trains: 122 Total Trucks: 3017 Trucks Percentage: 12.51%
Trucks Growth: 1.69% Directional Split: 59.90% Peak Hour: 7.33%
Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F
Past ESALs: 2,964,501 ESALs after 15yrs: 6,463,342

Analysis Unit: MP 0.33 - 0.49

(Vicinity: From MP 0.23 - INTRSECTN - 233RD PL SE To MP 0.57 - INTRSECTN - 228TH ST SE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 0.33	MP End: 0.49	Qualifier:
ARM Begin: 0.33	ARM End: 0.49	Length (Miles): 0.16
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: N/A	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 0.32	Lt Shoulder (ft): 6.0	Rt Shoulder (ft): 6.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
9999	016994	RESURFACE EXISTING RDWY	0.20	ACP CLASS 1/2IN PG64-22	NONE
9999	016994	RECONSTR EXISTING ALIGN	0.60	ACP CLASS 1/2IN PG64-22	2 LN ADDED RT-CONSTR
9999	016994	RECONSTR EXISTING ALIGN	0.70	CSTS	2 LN ADDED RT-CONSTR
1996	014854	RESURFACE EXISTING RDWY	0.20	ACP CLASS B AR4000W	NONE
1982	012098	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1964	000000	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1949	000000	RECONSTR EXISTING ALIGN	0.11	PENETRATION MACADAM	NONE
1949			0.00	N/A	
1949			5.80	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 0.00 to 7.01

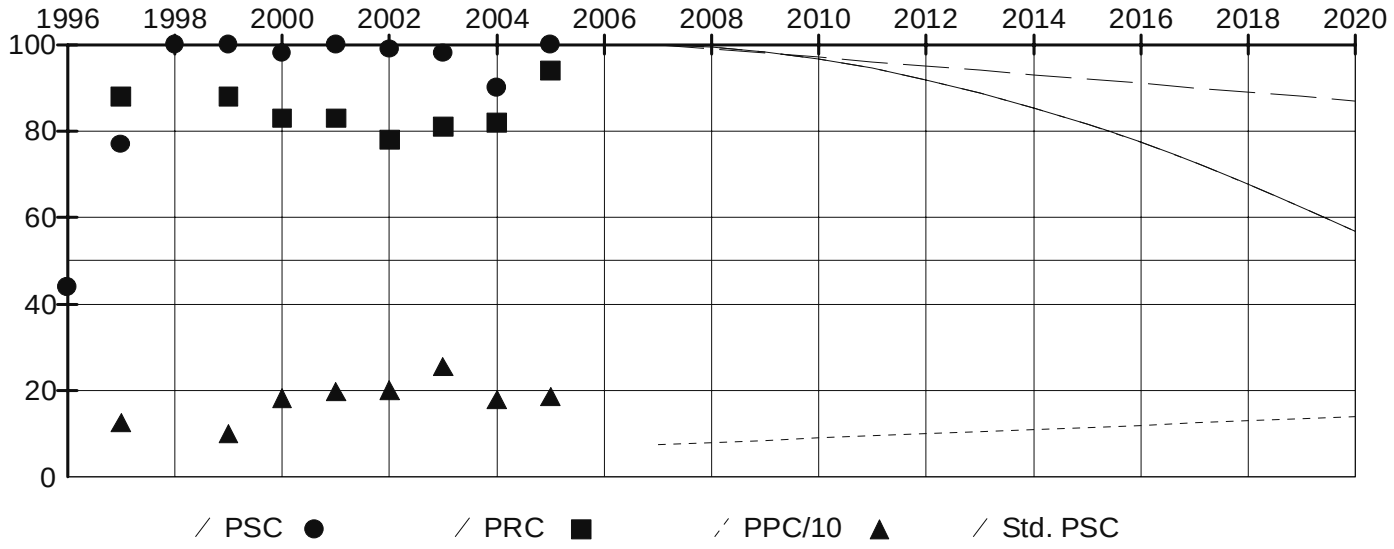
Ad. Date/PIN/Title: 04/2010 100904A - SR 9/172nd St. SE Vicinity to Montessori(MP 4.20 -6.80)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
PSC (Structure)	44	77	100	100	98	100	99	98	90	100
PRC (Rutting)	N/A	88	N/A	88	83	83	78	81	82	94
PPC (IRI cm/km)	N/A	126	N/A	100	182	198	201	255	179	186

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2062	Regression	100.00	0.00	2007	75.00	5.00E+00	1.00
PRC	2057	Regression	100.00	0.00	2007	100.00	-1.00E+00	1.00
PSC	2021	Standard Equation	100.00	0.00	2007	100.00	-4.85E-01	1.75



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right

Rut (mm): 1 PSC: N/A IRI (cm/km): 181

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 23274 Ave. Weekday Traffic: 26350
ADT Growth: 1.69% Single Units: 2178 Double Units: 616
Trains: 118 Total Trucks: 2912 Trucks Percentage: 12.51%
Trucks Growth: 1.69% Directional Split: 61.00% Peak Hour: 7.32%
Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F
Past ESALs: 2,862,744 ESALs after 15yrs: 6,241,487

Analysis Unit: MP 0.49 - 0.54

(Vicinity: From MP 0.57 - INTRSECTN - 228TH ST SE To MP 0.57 - INTRSECTN - 228TH ST SE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 0.49	MP End: 0.54	Qualifier:
ARM Begin: 0.49	ARM End: 0.54	Length (Miles): 0.05
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: N/A	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 0.10	Lt Shoulder (ft): 6.0	Rt Shoulder (ft): 6.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
9999	016994	RESURFACE EXISTING RDWY	0.20	ACP CLASS 1/2IN PG64-22	NONE
9999	016994	NEW CONSTR OR ALIGN CHG	0.60	ACP CLASS 1/2IN PG64-22	LN ADDED RIGHT-CONSTR
9999	016994	NEW CONSTR OR ALIGN CHG	0.70	CSTS	LN ADDED RIGHT-CONSTR
9999	016994	RESURFACE EXISTING RDWY	0.00	CSTS	LN TURN ADDED-STRIPING
1996	014854	RESURFACE EXISTING RDWY	0.20	ACP CLASS B AR4000W	NONE
1982	012098	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1964	000000	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1949	000000	RECONSTR EXISTING ALIGN	0.11	PENETRATION MACADAM	NONE
1949			0.00	N/A	
1949			5.80	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 0.00 to 7.01

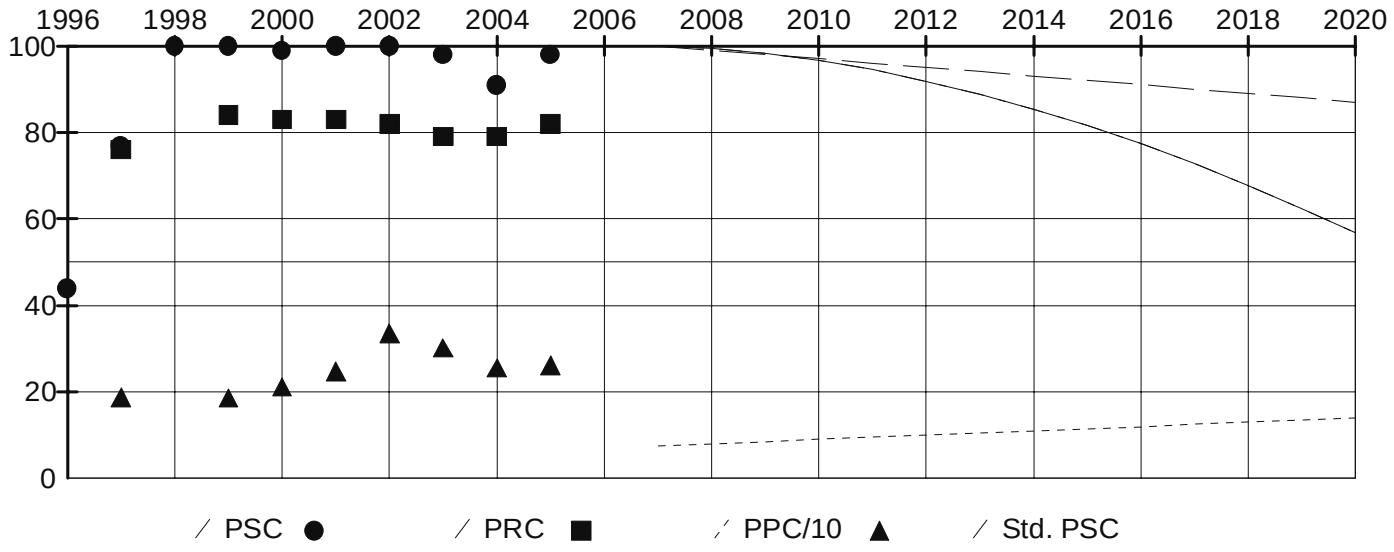
Ad. Date/PIN/Title: 04/2010 100904A - SR 9/172nd St. SE Vicinity to Montessori(MP 4.20 -6.80)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
PSC (Structure)	44	77	100	100	99	100	100	98	91	98
PRC (Rutting)	N/A	76	N/A	84	83	83	82	79	79	82
PPC (IRI cm/km)	N/A	187	N/A	186	211	248	335	302	255	261

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2062	Regression	100.00	0.00	2007	75.00	5.00E+00	1.00
PRC	2057	Regression	100.00	0.00	2007	100.00	-1.00E+00	1.00
PSC	2021	Standard Equation	100.00	0.00	2007	100.00	-4.85E-01	1.75



Survey Data

Survey Year: 2006 Pavement: ACP Survey Lane: Right
Rut (mm): 1 PSC: N/A IRI (cm/km): 319

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 22598 Ave. Weekday Traffic: 25531
ADT Growth: 1.69% Single Units: 2115 Double Units: 598
Trains: 115 Total Trucks: 2828 Trucks Percentage: 12.51%
Trucks Growth: 1.69% Directional Split: 61.89% Peak Hour: 7.32%
Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F
Past ESALs: 2,777,223 ESALs after 15yrs: 6,055,030

Analysis Unit: MP 0.54 - 0.66

(Vicinity: From MP 0.57 - INTRSECTN - 228TH ST SE To MP 0.74 - ENT/EXIT - BUSINESS)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 0.54	MP End: 0.66	Qualifier:
ARM Begin: 0.54	ARM End: 0.66	Length (Miles): 0.12
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: N/A	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 0.24	Lt Shoulder (ft): 6.0	Rt Shoulder (ft): 6.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
9999	016994	RESURFACE EXISTING RDWY	0.20	ACP CLASS 1/2IN PG64-22	NONE
9999	016994	NEW CONSTR OR ALIGN CHG	0.60	ACP CLASS 1/2IN PG64-22	LN ADDED RIGHT-CONSTR
9999	016994	NEW CONSTR OR ALIGN CHG	0.70	CSTS	LN ADDED RIGHT-CONSTR
1996	014854	RESURFACE EXISTING RDWY	0.20	ACP CLASS B AR4000W	NONE
1982	012098	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1964	000000	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1949	000000	RECONSTR EXISTING ALIGN	0.11	PENETRATION MACADAM	NONE
1949			0.00	N/A	
1949			5.80	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 0.00 to 7.01

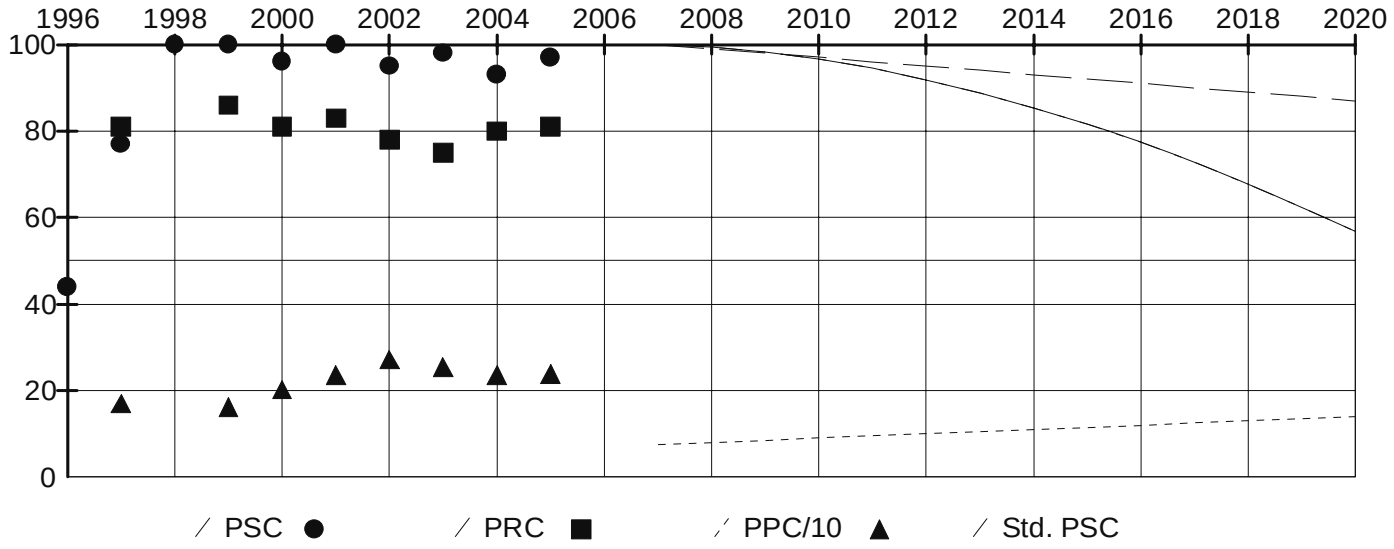
Ad. Date/PIN/Title: 04/2010 100904A - SR 9/172nd St. SE Vicinity to Montessori(MP 4.20 -6.80)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
PSC (Structure)	44	77	100	100	96	100	95	98	93	97
PRC (Rutting)	N/A	81	N/A	86	81	83	78	75	80	81
PPC (IRI cm/km)	N/A	170	N/A	162	202	236	272	254	236	238

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2062	Regression	100.00	0.00	2007	75.00	5.00E+00	1.00
PRC	2057	Regression	100.00	0.00	2007	100.00	-1.00E+00	1.00
PSC	2021	Standard Equation	100.00	0.00	2007	100.00	-4.85E-01	1.75



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right

Rut (mm): 1 PSC: N/A IRI (cm/km): 267

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 21068 Ave. Weekday Traffic: 23680
ADT Growth: 1.69% Single Units: 1975 Double Units: 550
Trains: 106 Total Trucks: 2631 Trucks Percentage: 12.49%
Trucks Growth: 1.69% Directional Split: 63.07% Peak Hour: 7.26%
Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F
Past ESALs: 2,577,776 ESALs after 15yrs: 5,620,186

Analysis Unit: MP 0.66 - 1.16

(Vicinity: From MP 0.74 - ENT/EXIT - BUSINESS To MP 1.35 - INTRSECTN - 216TH ST SE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 0.66	MP End: 1.16	Qualifier:
ARM Begin: 0.66	ARM End: 1.16	Length (Miles): 0.50
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: N/A	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 1.00	Lt Shoulder (ft): 6.0	Rt Shoulder (ft): 6.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
9999	016994	RESURFACE EXISTING RDWY	0.20	ACP CLASS 1/2IN PG64-22	NONE
9999	016994	NEW CONSTR OR ALIGN CHG	0.60	ACP CLASS 1/2IN PG64-22	2 LN ADDED RT-CONSTR
9999	016994	NEW CONSTR OR ALIGN CHG	0.70	CSTS	2 LN ADDED RT-CONSTR
1996	014854	RESURFACE EXISTING RDWY	0.20	ACP CLASS B AR4000W	NONE
1982	012098	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1964	000000	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1949	000000	RECONSTR EXISTING ALIGN	0.11	PENETRATION MACADAM	NONE
1949			0.00	N/A	
1949			5.80	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 0.00 to 7.01

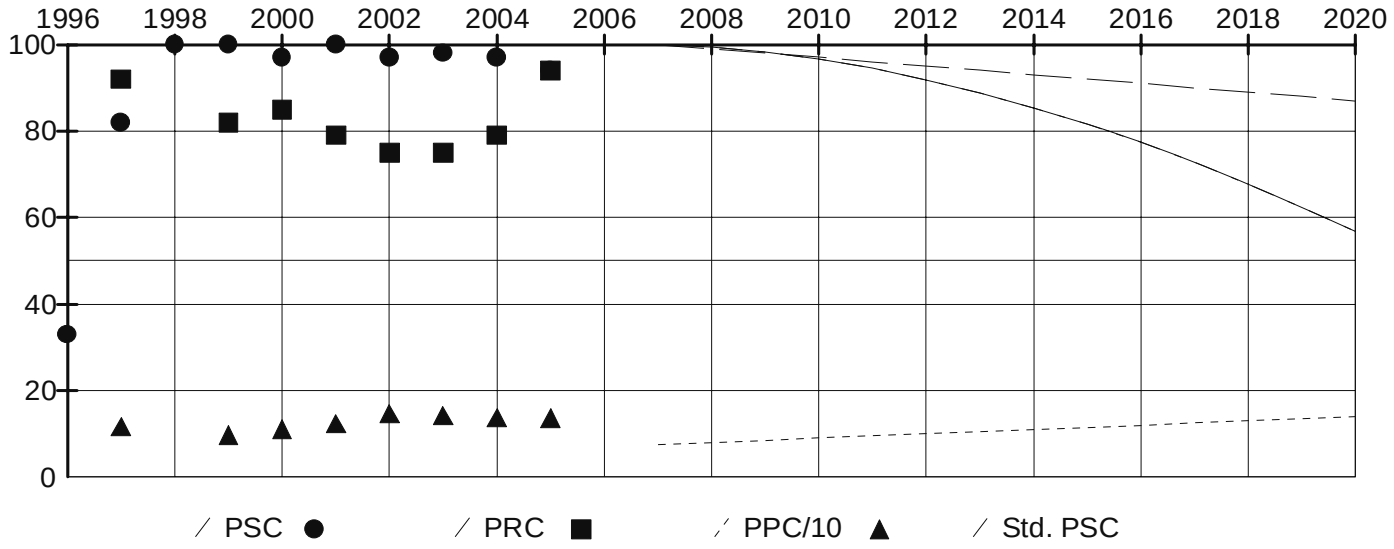
Ad. Date/PIN/Title: 04/2010 100904A - SR 9/172nd St. SE Vicinity to Montessori(MP 4.20 -6.80)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
PSC (Structure)	33	82	100	100	97	100	97	98	97	94
PRC (Rutting)	N/A	92	N/A	82	85	79	75	75	79	94
PPC (IRI cm/km)	N/A	117	N/A	97	111	123	147	142	137	136

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2062	Regression	100.00	0.00	2007	75.00	5.00E+00	1.00
PRC	2057	Regression	100.00	0.00	2007	100.00	-1.00E+00	1.00
PSC	2021	Standard Equation	100.00	0.00	2007	100.00	-4.85E-01	1.75



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right

Rut (mm): 1 PSC: N/A IRI (cm/km): 165

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 20780 Ave. Weekday Traffic: 22478
ADT Growth: 1.69% Single Units: 1978 Double Units: 471
Trains: 98 Total Trucks: 2547 Trucks Percentage: 12.26%
Trucks Growth: 1.69% Directional Split: 64.12% Peak Hour: 7.21%
Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F
Past ESALs: 2,421,598 ESALs after 15yrs: 5,279,680

Analysis Unit: MP 1.16 - 1.35

(Vicinity: From MP 1.35 - INTRSECTN - 216TH ST SE To MP 1.35 - INTRSECTN - 216TH ST SE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 1.16	MP End: 1.35	Qualifier:
ARM Begin: 1.16	ARM End: 1.35	Length (Miles): 0.19
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: N/A	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 0.38	Lt Shoulder (ft): 6.0	Rt Shoulder (ft): 6.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
9999	016994	RESURFACE EXISTING RDWY	0.20	ACP CLASS 1/2IN PG64-22	NONE
9999	016994	NEW CONSTR OR ALIGN CHG	0.60	ACP CLASS 1/2IN PG64-22	2 LN ADDED RT-CONSTR
9999	016994	NEW CONSTR OR ALIGN CHG	0.70	CSTS	2 LN ADDED RT-CONSTR
1996	014854	RESURFACE EXISTING RDWY	0.20	ACP CLASS B AR4000W	NONE
1982	012098	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1964	000000	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1949	000000	RECONSTR EXISTING ALIGN	0.11	PENETRATION MACADAM	NONE
1949			0.00	N/A	
1949			5.80	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 0.00 to 7.01

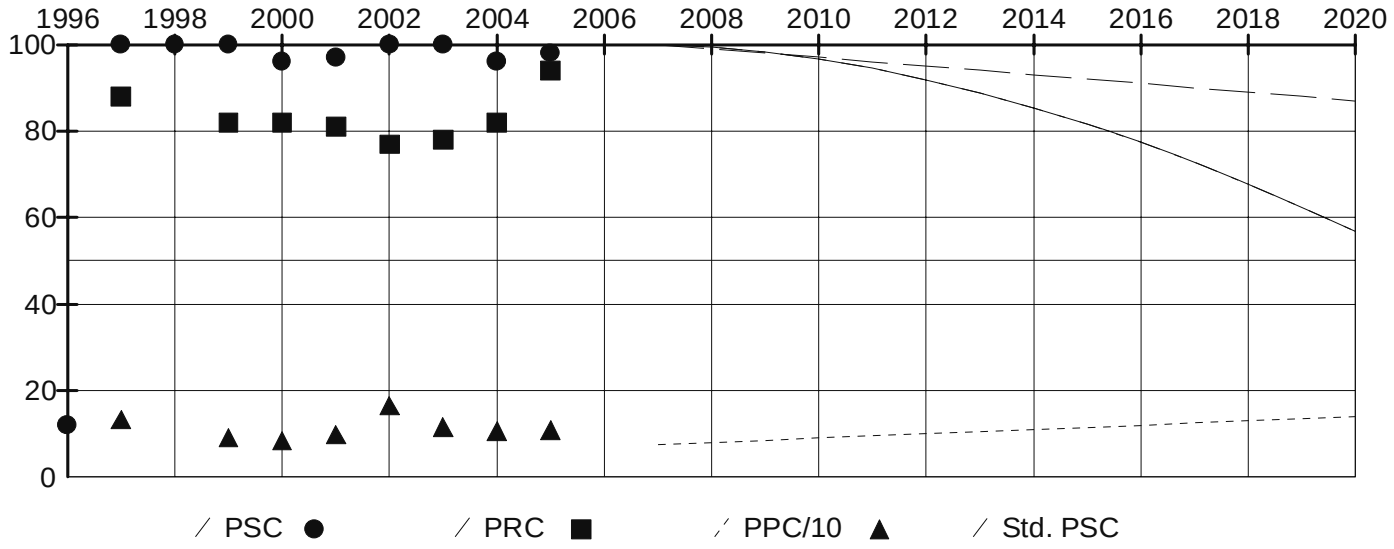
Ad. Date/PIN/Title: 04/2010 100904A - SR 9/172nd St. SE Vicinity to Montessori(MP 4.20 -6.80)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
PSC (Structure)	12	100	100	100	96	97	100	100	96	98
PRC (Rutting)	N/A	88	N/A	82	82	81	77	78	82	94
PPC (IRI cm/km)	N/A	133	N/A	91	84	98	165	115	106	109

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2062	Regression	100.00	0.00	2007	75.00	5.00E+00	1.00
PRC	2057	Regression	100.00	0.00	2007	100.00	-1.00E+00	1.00
PSC	2021	Standard Equation	100.00	0.00	2007	100.00	-4.85E-01	1.75



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right

Rut (mm): 2 PSC: N/A IRI (cm/km): 172

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 20940 Ave. Weekday Traffic: 21673
ADT Growth: 1.69% Single Units: 2028 Double Units: 395
Trains: 92 Total Trucks: 2515 Trucks Percentage: 12.01%
Trucks Growth: 1.69% Directional Split: 65.02% Peak Hour: 7.18%
Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F

Past ESALs: 2,309,200 ESALs after 15yrs: 5,034,625

Analysis Unit: MP 1.35 - 1.42

(Vicinity: From MP 1.35 - INTRSECTN - 216TH ST SE To MP 1.35 - INTRSECTN - 216TH ST SE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 1.35	MP End: 1.42	Qualifier:
ARM Begin: 1.35	ARM End: 1.42	Length (Miles): 0.07
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: N/A	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 0.14	Lt Shoulder (ft): 6.0	Rt Shoulder (ft): 6.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
9999	016994	RESURFACE EXISTING RDWY	0.20	ACP CLASS 1/2IN PG64-22	NONE
9999	016994	NEW CONSTR OR ALIGN CHG	0.60	ACP CLASS 1/2IN PG64-22	2 LN ADDED RT-CONSTR
9999	016994	NEW CONSTR OR ALIGN CHG	0.70	CSTS	2 LN ADDED RT-CONSTR
1996	014854	RESURFACE EXISTING RDWY	0.20	ACP CLASS B AR4000W	NONE
1982	012098	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1964	000000	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1949	000000	RECONSTR EXISTING ALIGN	0.11	PENETRATION MACADAM	NONE
1949			0.00	N/A	
1949			5.80	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 0.00 to 7.01

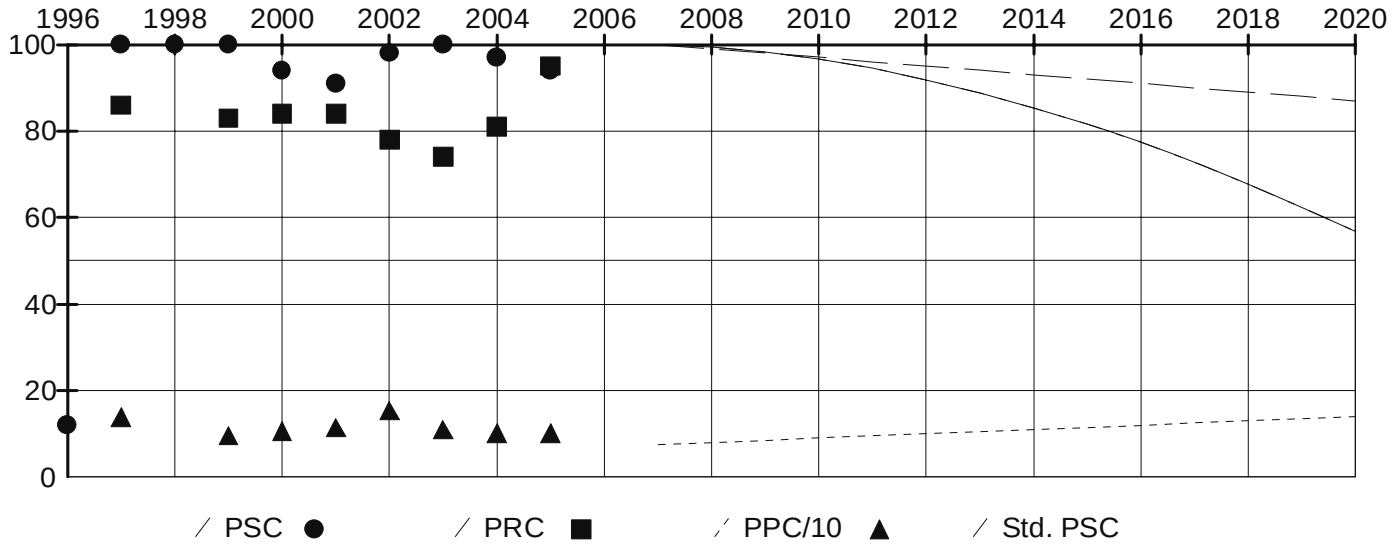
Ad. Date/PIN/Title: 04/2010 100904A - SR 9/172nd St. SE Vicinity to Montessori(MP 4.20 -6.80)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
PSC (Structure)	12	100	100	100	94	91	98	100	97	94
PRC (Rutting)	N/A	86	N/A	83	84	84	78	74	81	95
PPC (IRI cm/km)	N/A	138	N/A	96	106	114	154	110	102	102

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2062	Regression	100.00	0.00	2007	75.00	5.00E+00	1.00
PRC	2057	Regression	100.00	0.00	2007	100.00	-1.00E+00	1.00
PSC	2021	Standard Equation	100.00	0.00	2007	100.00	-4.85E-01	1.75



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right

Rut (mm): 3 PSC: N/A IRI (cm/km): 139

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 21000 Ave. Weekday Traffic: 21369
ADT Growth: 1.69% Single Units: 2046 Double Units: 366
Trains: 90 Total Trucks: 2502 Trucks Percentage: 11.91%
Trucks Growth: 1.69% Directional Split: 65.36% Peak Hour: 7.17%
Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F
Past ESALs: 2,268,125 ESALs after 15yrs: 4,945,071

Analysis Unit: MP 1.42 - 1.57

(Vicinity: From MP 1.35 - INTRSECTN - 216TH ST SE To MP 1.57 - INTRSECTN - SR 524-MALTBY RD)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 1.42	MP End: 1.57	Qualifier:
ARM Begin: 1.42	ARM End: 1.57	Length (Miles): 0.15
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: N/A	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 0.30	Lt Shoulder (ft): 6.0	Rt Shoulder (ft): 6.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
9999	016994	RESURFACE EXISTING RDWY	0.20	ACP CLASS 1/2IN PG64-22	NONE
9999	016994	NEW CONSTR OR ALIGN CHG	0.60	ACP CLASS 1/2IN PG64-22	LN ADDED RIGHT-CONSTR
9999	016994	NEW CONSTR OR ALIGN CHG	0.70	CSTS	LN ADDED RIGHT-CONSTR
1996	014854	RESURFACE EXISTING RDWY	0.20	ACP CLASS B AR4000W	NONE
1982	012098	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1964	000000	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1949	000000	RECONSTR EXISTING ALIGN	0.11	PENETRATION MACADAM	NONE
1949			0.00	N/A	
1949			5.80	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 0.00 to 7.01

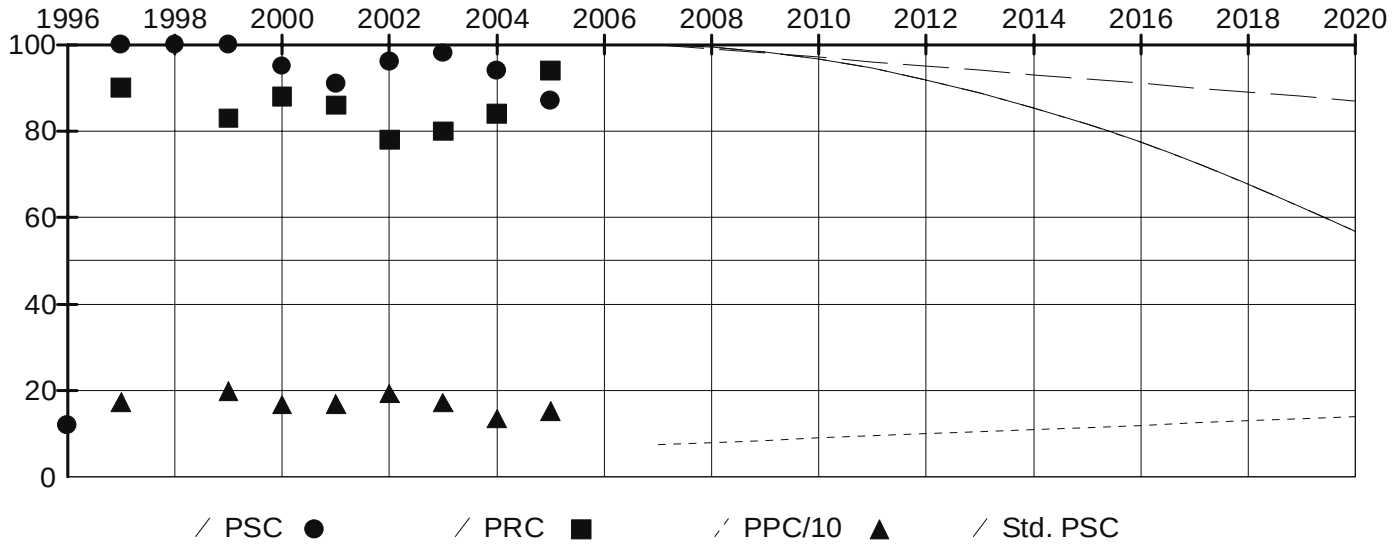
Ad. Date/PIN/Title: 04/2010 100904A - SR 9/172nd St. SE Vicinity to Montessori(MP 4.20 -6.80)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
PSC (Structure)	12	100	100	100	95	91	96	98	94	87
PRC (Rutting)	N/A	90	N/A	83	88	86	78	80	84	94
PPC (IRI cm/km)	N/A	173	N/A	199	167	168	193	172	135	153

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2062	Regression	100.00	0.00	2007	75.00	5.00E+00	1.00
PRC	2057	Regression	100.00	0.00	2007	100.00	-1.00E+00	1.00
PSC	2021	Standard Equation	100.00	0.00	2007	100.00	-4.85E-01	1.75



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right

Rut (mm): 4 PSC: N/A IRI (cm/km): 200

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 21051 Ave. Weekday Traffic: 21112
ADT Growth: 1.69% Single Units: 2062 Double Units: 342
Trains: 88 Total Trucks: 2492 Trucks Percentage: 11.84%
Trucks Growth: 1.69% Directional Split: 65.64% Peak Hour: 7.16%
Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F
Past ESALs: 2,232,459 ESALs after 15yrs: 4,867,310

Analysis Unit: MP 1.57 - 1.67

(Vicinity: From MP 1.57 - INTRSECTN - SR 524-MALTBY RD To MP 1.57 - INTRSECTN - SR 524-MALTBY RD)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 1.57	MP End: 1.67	Qualifier:
ARM Begin: 1.57	ARM End: 1.67	Length (Miles): 0.10
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: N/A	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 0.20	Lt Shoulder (ft): 6.0	Rt Shoulder (ft): 6.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
9999	016994	RESURFACE EXISTING RDWY	0.20	ACP CLASS 1/2IN PG64-22	NONE
9999	016994	NEW CONSTR OR ALIGN CHG	0.60	ACP CLASS 1/2IN PG64-22	LN ADDED RIGHT-CONSTR
9999	016994	NEW CONSTR OR ALIGN CHG	0.70	CSTS	LN ADDED RIGHT-CONSTR
1996	014854	RESURFACE EXISTING RDWY	0.20	ACP CLASS B AR4000W	NONE
1982	012098	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1964	000000	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1958	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1958	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1948	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1948	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1944	000000	RESURFACE EXISTING RDWY	0.17	MIXED BITUMINOUS	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.02	BST CLASS A CRS-2 TACK	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.04	BST CLASS A CRS-2 PRIME	NONE
1939			0.00	N/A	
1939			1.08	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 0.00 to 7.01

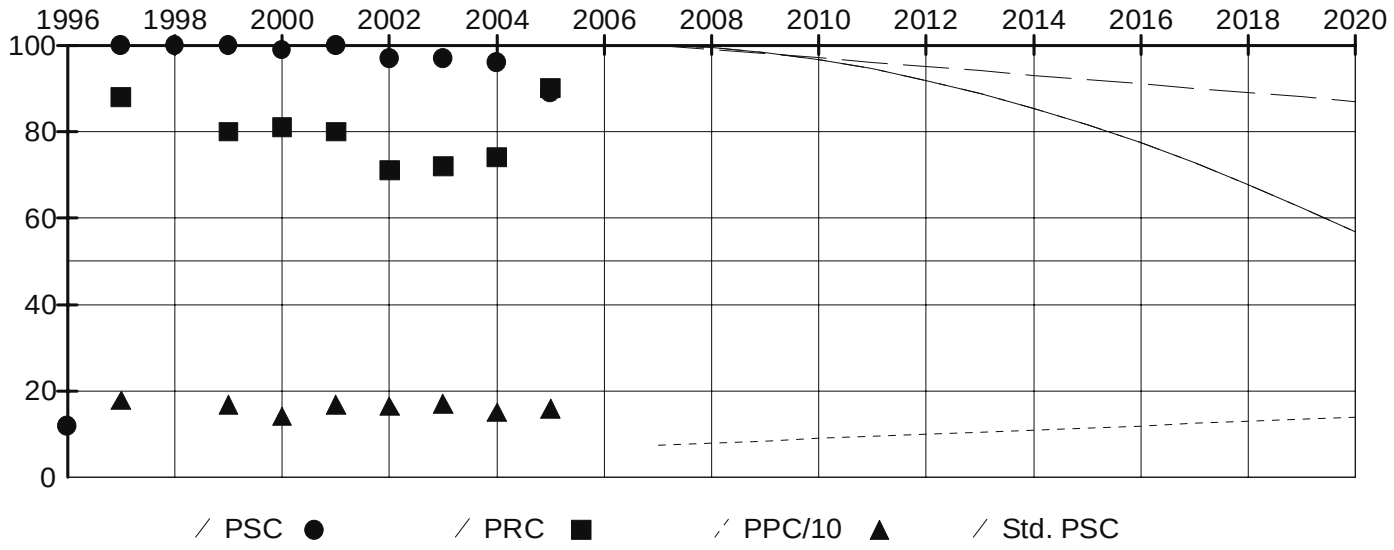
Ad. Date/PIN/Title: 04/2010 100904A - SR 9/172nd St. SE Vicinity to Montessori(MP 4.20 -6.80)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
PSC (Structure)	12	100	100	100	99	100	97	97	96	89
PRC (Rutting)	N/A	88	N/A	80	81	80	71	72	74	90
PPC (IRI cm/km)	N/A	179	N/A	169	142	168	165	171	151	160

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2062	Regression	100.00	0.00	2007	75.00	5.00E+00	1.00
PRC	2057	Regression	100.00	0.00	2007	100.00	-1.00E+00	1.00
PSC	2021	Standard Equation	100.00	0.00	2007	100.00	-4.85E-01	1.75



Survey Data

Survey Year: 2006 Pavement: ACP Survey Lane: Right

Rut (mm): 5 PSC: N/A IRI (cm/km): 177

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 18456 Ave. Weekday Traffic: 18334

ADT Growth: 1.71% Single Units: 2780 Double Units: 243

Trains: 40 Total Trucks: 3063 Trucks Percentage: 16.60%

Trucks Growth: 1.71% Directional Split: 68.00% Peak Hour: 8.02%

Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F

Past ESALs: 2,406,891 ESALs after 15yrs: 5,247,615

Analysis Unit: MP 1.67 - 1.81

(Vicinity: From MP 1.57 - INTRSECTN - SR 524-MALTBY RD To MP 1.57 - INTRSECTN - SR 524-MALTBY RD)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 1.67	MP End: 1.81	Qualifier:
ARM Begin: 1.67	ARM End: 1.81	Length (Miles): 0.14
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: N/A	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 0.28	Lt Shoulder (ft): 6.0	Rt Shoulder (ft): 6.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
9999	016994	RESURFACE EXISTING RDWY	0.20	ACP CLASS 1/2IN PG64-22	NONE
9999	016994	NEW CONSTR OR ALIGN CHG	0.60	ACP CLASS 1/2IN PG64-22	2 LN ADDED RT-CONSTR
9999	016994	NEW CONSTR OR ALIGN CHG	0.70	CSTS	2 LN ADDED RT-CONSTR
1996	014854	RESURFACE EXISTING RDWY	0.20	ACP CLASS B AR4000W	NONE
1982	012098	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1964	000000	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1958	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1958	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1948	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1948	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1944	000000	RESURFACE EXISTING RDWY	0.17	MIXED BITUMINOUS	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.02	BST CLASS A CRS-2 TACK	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.04	BST CLASS A CRS-2 PRIME	NONE
1939			0.00	N/A	
1939			1.08	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 0.00 to 7.01

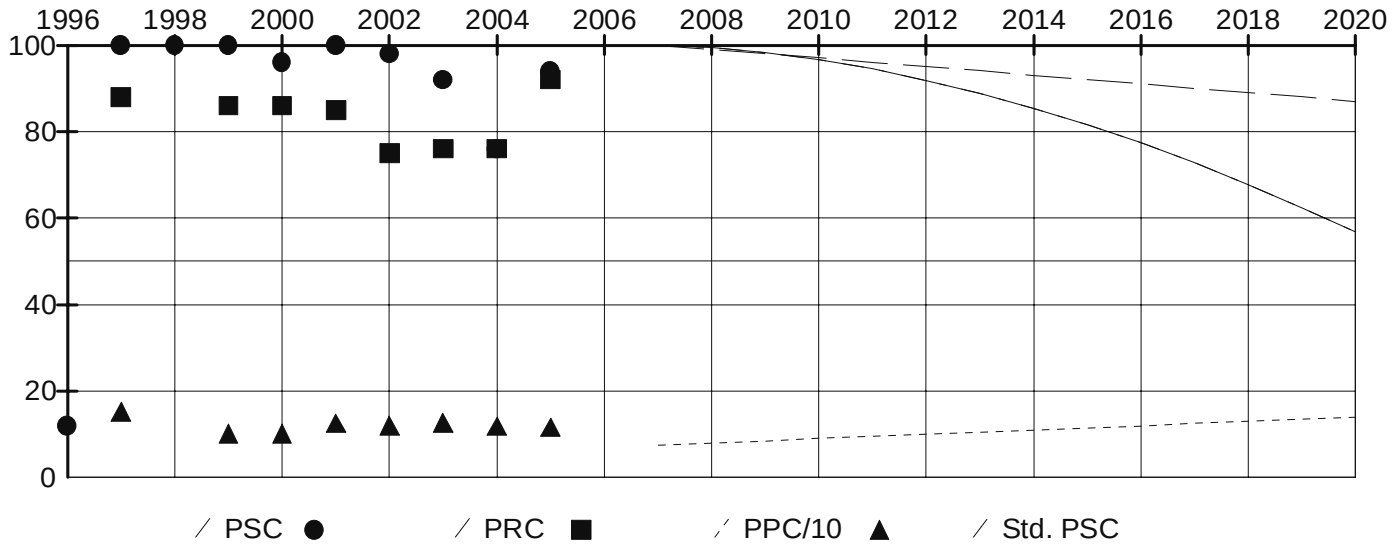
Ad. Date/PIN/Title: 04/2010 100904A - SR 9/172nd St. SE Vicinity to Montessori(MP 4.20 -6.80)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
PSC (Structure)	12	100	100	100	96	100	98	92	76	94
PRC (Rutting)	N/A	88	N/A	86	86	85	75	76	76	92
PPC (IRI cm/km)	N/A	152	N/A	102	101	126	120	127	119	117

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2062	Regression	100.00	0.00	2007	75.00	5.00E+00	1.00
PRC	2057	Regression	100.00	0.00	2007	100.00	-1.00E+00	1.00
PSC	2021	Standard Equation	100.00	0.00	2007	100.00	-4.85E-01	1.75



Survey Data

Survey Year: 2006 Pavement: ACP Survey Lane: Right

Rut (mm): 8 PSC: N/A IRI (cm/km): 128

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 18431 Ave. Weekday Traffic: 18324

ADT Growth: 1.77% Single Units: 2777 Double Units: 243

Trains: 40 Total Trucks: 3060 Trucks Percentage: 16.60%

Trucks Growth: 1.77% Directional Split: 67.95% Peak Hour: 7.98%

Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F

Past ESALs: 2,404,186 ESALs after 15yrs: 5,241,718

Analysis Unit: MP 1.81 - 1.94

(Vicinity: From MP 1.57 - INTRSECTN - SR 524-MALTBY RD To MP 2.26 - INTRSECTN - 201ST ST SE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 1.81	MP End: 1.94	Qualifier:
ARM Begin: 1.81	ARM End: 1.94	Length (Miles): 0.13
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: N/A	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 0.26	Lt Shoulder (ft): 6.0	Rt Shoulder (ft): 6.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
9999	016994	RESURFACE EXISTING RDWY	0.20	ACP CLASS 1/2IN PG64-22	NONE
1996	014854	RESURFACE EXISTING RDWY	0.20	ACP CLASS B AR4000W	NONE
1982	012098	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1964	000000	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1958	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1958	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1948	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1948	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1944	000000	RESURFACE EXISTING RDWY	0.17	MIXED BITUMINOUS	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.02	BST CLASS A CRS-2 TACK	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.04	BST CLASS A CRS-2 PRIME	NONE
1939			0.00	N/A	
1939			1.08	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 0.00 to 7.01

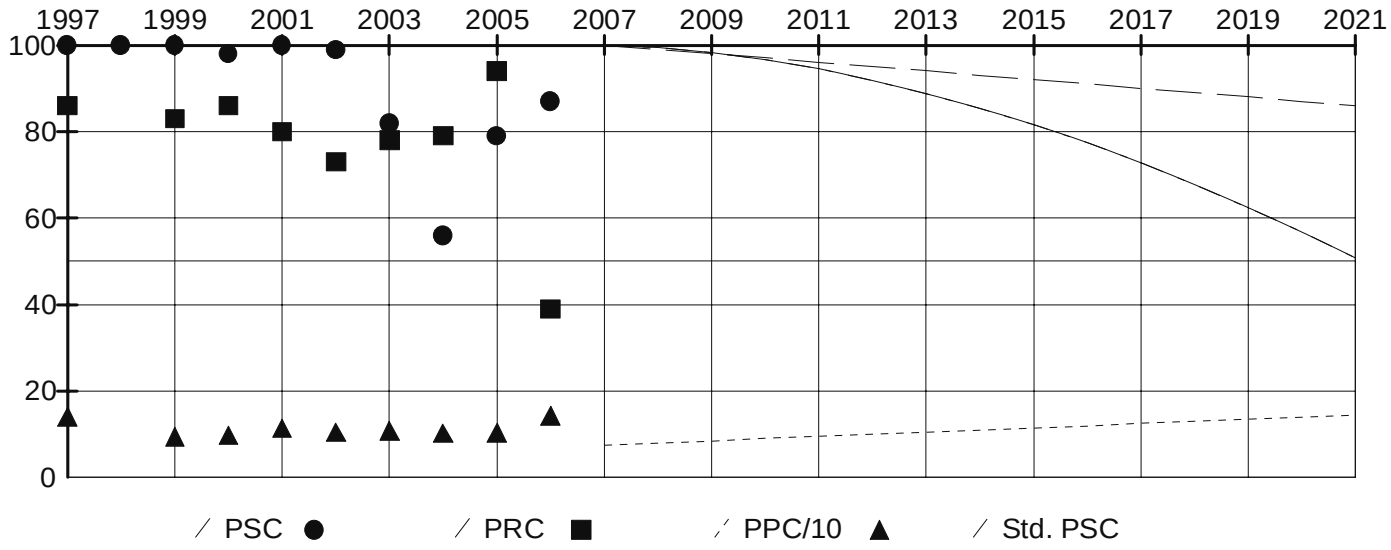
Ad. Date/PIN/Title: 04/2010 100904A - SR 9/172nd St. SE Vicinity to Montessori(MP 4.20 -6.80)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	100	100	100	98	100	99	82	56	79	87
PRC (Rutting)	86	N/A	83	86	80	73	78	79	94	39
PPC (IRI cm/km)	141	N/A	95	98	114	105	108	103	104	143

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2062	Regression	100.00	0.00	2007	75.00	5.00E+00	1.00
PRC	2057	Regression	100.00	0.00	2007	100.00	-1.00E+00	1.00
PSC	2021	Standard Equation	100.00	0.00	2007	100.00	-4.85E-01	1.75



Survey Data

Survey Year: 2006 Pavement: ACP Survey Lane: Right

Rut (mm): 12 PSC: 87 IRI (cm/km): 143

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	34	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 18402 Ave. Weekday Traffic: 18313

ADT Growth: 1.83% Single Units: 2772 Double Units: 242

Trains: 40 Total Trucks: 3054 Trucks Percentage: 16.60%

Trucks Growth: 1.83% Directional Split: 67.89% Peak Hour: 7.95%

Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F

Past ESALs: 2,401,482 ESALs after 15yrs: 5,235,822

Analysis Unit: MP 1.94 - 2.13

(Vicinity: From MP 2.26 - INTRSECTN - 201ST ST SE To MP 2.26 - INTRSECTN - 201ST ST SE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 1.94	MP End: 2.13	Qualifier:
ARM Begin: 1.94	ARM End: 2.13	Length (Miles): 0.19
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: N/A	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 0.38	Lt Shoulder (ft): 6.0	Rt Shoulder (ft): 6.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1996	014854	RESURFACE EXISTING RDWY	0.20	ACP CLASS B AR4000W	NONE
1982	012098	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1964	000000	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1958	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1958	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1948	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1948	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1944	000000	RESURFACE EXISTING RDWY	0.17	MIXED BITUMINOUS	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.02	BST CLASS A CRS-2 TACK	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.04	BST CLASS A CRS-2 PRIME	NONE
1939			0.00	N/A	
1939			1.08	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 0.00 to 7.01

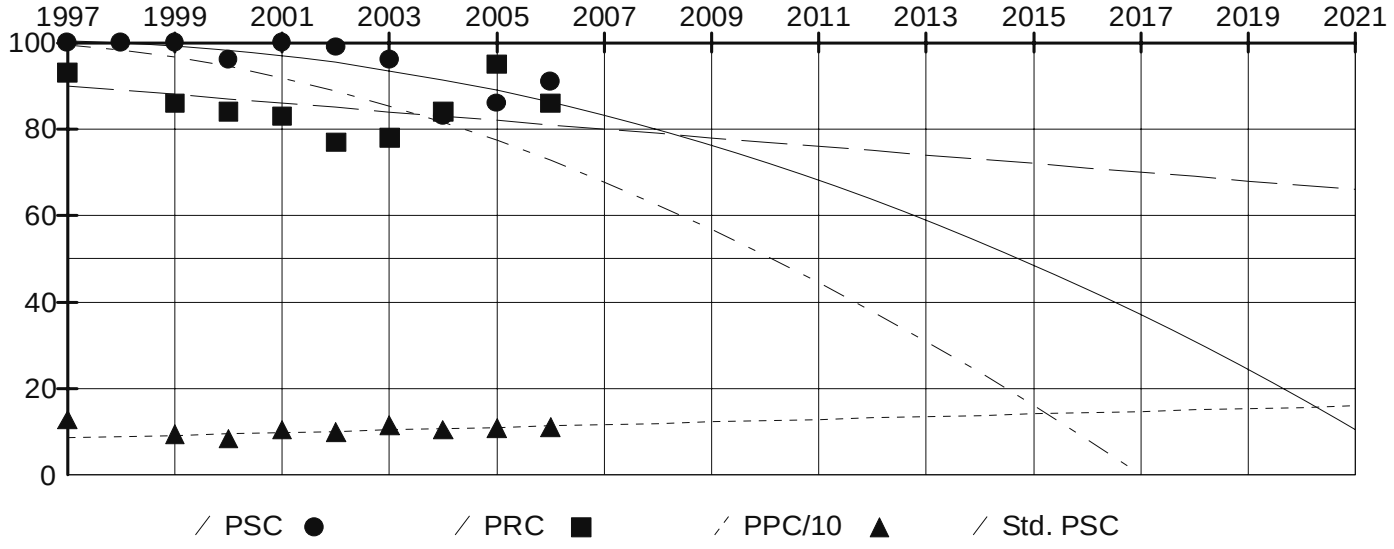
Ad. Date/PIN/Title: 04/2010 100904A - SR 9/172nd St. SE Vicinity to Montessori(MP 4.20 -6.80)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	100	100	100	96	100	99	96	83	86	91
PRC (Rutting)	93	N/A	86	84	83	77	78	84	95	86
PPC (IRI cm/km)	128	N/A	94	84	105	99	115	105	109	111

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2082	Regression	56.71	7.15	1996	82.63	3.10E+00	1.00
PRC	2037	Regression	24.18	6.82	1996	91.00	-1.00E+00	1.00
PSC	2014	Regression	64.00	3.00	1996	100.57	-1.44E-01	2.00



Survey Data

Survey Year: 2006 Pavement: ACP Survey Lane: Right

Rut (mm): 3 PSC: 91 IRI (cm/km): 111

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	18	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 18368 Ave. Weekday Traffic: 18299

ADT Growth: 1.90% Single Units: 2767 Double Units: 242

Trains: 40 Total Trucks: 3049 Trucks Percentage: 16.60%

Trucks Growth: 1.90% Directional Split: 67.82% Peak Hour: 7.90%

Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F

Past ESALs: 2,397,425 ESALs after 15yrs: 5,226,978

Analysis Unit: MP 2.13 - 2.35

(Vicinity: From MP 2.26 - INTRSECTN - 201ST ST SE To MP 2.26 - INTRSECTN - 201ST ST SE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 2.13	MP End: 2.35	Qualifier:
ARM Begin: 2.13	ARM End: 2.35	Length (Miles): 0.22
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: N/A	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 0.44	Lt Shoulder (ft): 8.0	Rt Shoulder (ft): 8.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1996	014854	RESURFACE EXISTING RDWY	0.20	ACP CLASS B AR4000W	NONE
1982	012098	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1964	000000	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1958	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1958	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1948	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1948	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1944	000000	RESURFACE EXISTING RDWY	0.17	MIXED BITUMINOUS	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.02	BST CLASS A CRS-2 TACK	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.04	BST CLASS A CRS-2 PRIME	NONE
1939			0.00	N/A	
1939			1.08	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 0.00 to 7.01

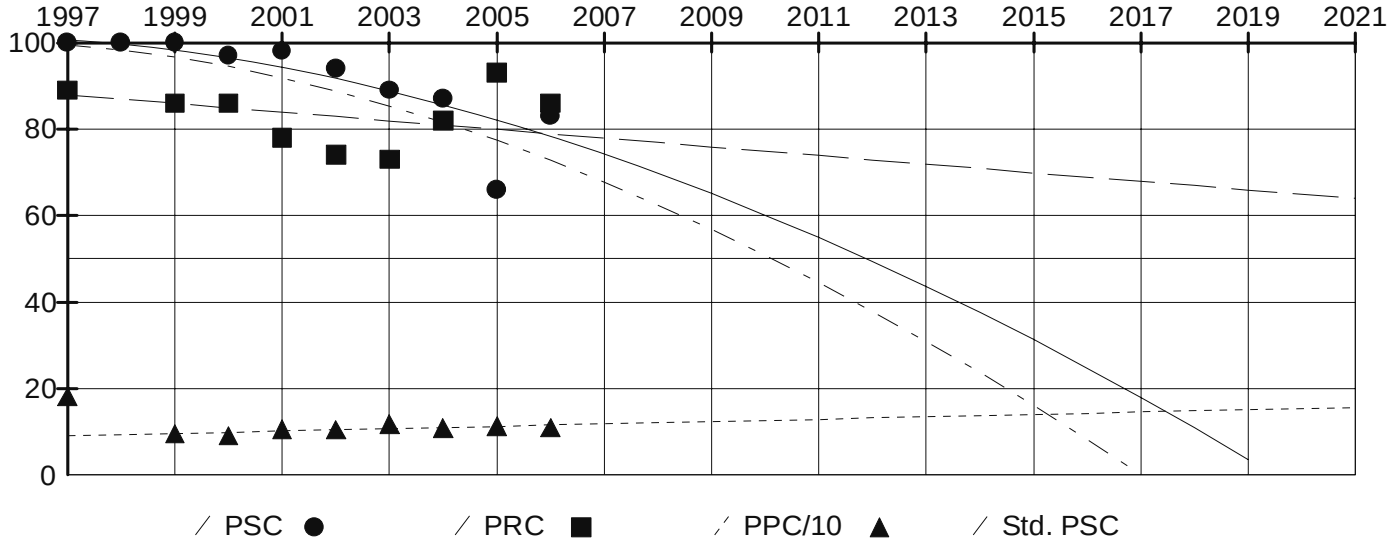
Ad. Date/PIN/Title: 04/2010 100904A - SR 9/172nd St. SE Vicinity to Montessori(MP 4.20 -6.80)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	100	100	100	97	98	94	89	87	66	83
PRC (Rutting)	89	N/A	86	86	78	74	73	82	93	86
PPC (IRI cm/km)	181	N/A	96	91	106	105	118	109	113	110

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2092	Regression	57.88	6.18	1996	88.20	2.74E+00	1.00
PRC	2035	Regression	18.62	7.74	1996	88.89	-1.00E+00	1.00
PSC	2011	Too Short	97.00	5.00	1996	100.95	-4.03E-01	1.75



Survey Data

Survey Year: 2006 Pavement: ACP Survey Lane: Right

Rut (mm): 3 PSC: 83 IRI (cm/km): 110

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	48	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 18324 Ave. Weekday Traffic: 18282

ADT Growth: 2.00% Single Units: 2761 Double Units: 240

Trains: 40 Total Trucks: 3041 Trucks Percentage: 16.60%

Trucks Growth: 2.00% Directional Split: 67.74% Peak Hour: 7.85%

Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F

Past ESALs: 2,389,848 ESALs after 15yrs: 5,211,336

Analysis Unit: MP 2.35 - 3.24

(Vicinity: From MP 2.26 - INTRSECTN - 201ST ST SE To MP 3.18 - INTRSECTN - 188TH ST SE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 2.35	MP End: 3.24	Qualifier:
ARM Begin: 2.35	ARM End: 3.24	Length (Miles): 0.89
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: N/A	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 1.78	Lt Shoulder (ft): 6.0	Rt Shoulder (ft): 6.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1996	014854	RESURFACE EXISTING RDWY	0.20	ACP CLASS B AR4000W	NONE
1982	012098	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1964	000000	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1958	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1958	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1948	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1948	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1944	000000	RESURFACE EXISTING RDWY	0.17	MIXED BITUMINOUS	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.02	BST CLASS A CRS-2 TACK	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.04	BST CLASS A CRS-2 PRIME	NONE
1939			0.00	N/A	
1939			1.08	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 0.00 to 7.01

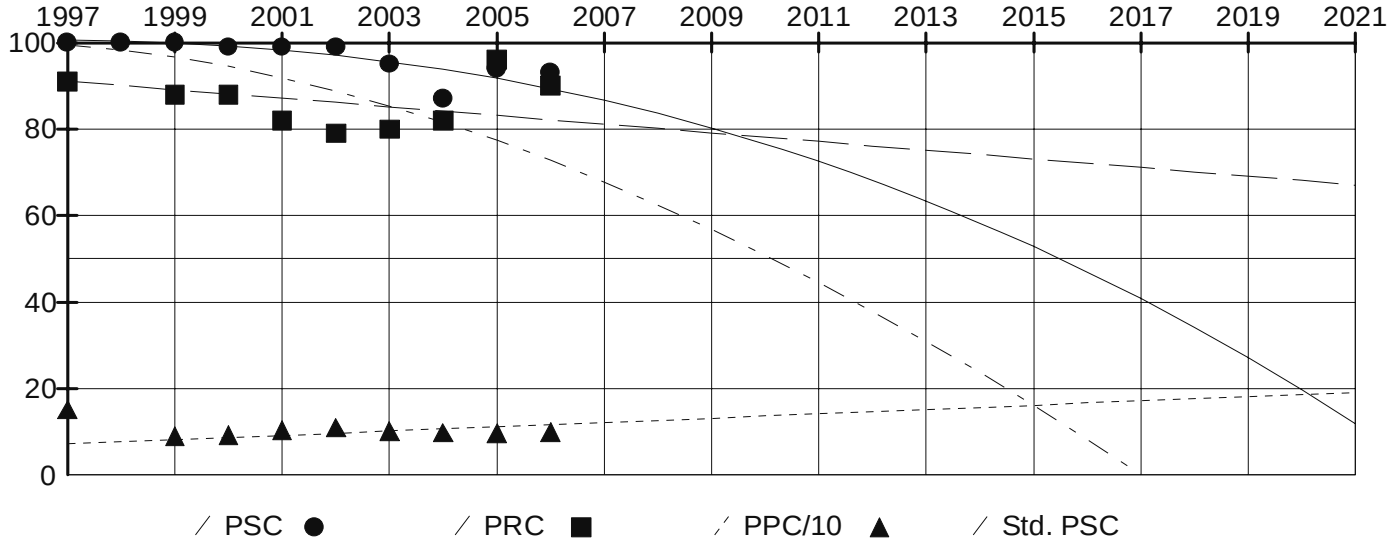
Ad. Date/PIN/Title: 04/2010 100904A - SR 9/172nd St. SE Vicinity to Montessori(MP 4.20 -6.80)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	100	100	100	99	99	99	95	87	94	93
PRC (Rutting)	91	N/A	88	88	82	79	80	82	96	90
PPC (IRI cm/km)	151	N/A	90	92	104	110	102	98	97	99

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2053	Regression	362.07	13.10	1996	66.50	5.00E+00	1.00
PRC	2038	Regression	25.94	6.94	1996	92.11	-1.00E+00	1.00
PSC	2015	Too Long	99.00	2.00	1996	100.58	-6.34E-02	2.25



Survey Data

Survey Year: 2006 Pavement: ACP Survey Lane: Right

Rut (mm): 3 PSC: 93 IRI (cm/km): 99

Defect Type	Low	Medium	High
Alligator Cracking	1	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	9	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 18206 Ave. Weekday Traffic: 18236

ADT Growth: 2.26% Single Units: 2743 Double Units: 240

Trains: 40 Total Trucks: 3023 Trucks Percentage: 16.60%

Trucks Growth: 2.26% Directional Split: 67.50% Peak Hour: 7.69%

Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F

Past ESALs: 2,349,665 ESALs after 15yrs: 5,301,347

Analysis Unit: MP 3.24 - 3.66

(Vicinity: From MP 3.18 - INTRSECTN - 188TH ST SE To MP 3.76 - INTRSECTN - 180TH ST SE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 3.24	MP End: 3.66	Qualifier:
ARM Begin: 3.24	ARM End: 3.66	Length (Miles): 0.42
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: N/A	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 0.84	Lt Shoulder (ft): 6.0	Rt Shoulder (ft): 6.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1996	014854	RESURFACE EXISTING RDWY	0.20	ACP CLASS B AR4000W	NONE
1987	013157	RESURFACE EXISTING RDWY	0.15	ACP CLASS B AR4000W	NONE
1982	012098	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1964	000000	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1958	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1958	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1948	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1948	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1944	000000	RESURFACE EXISTING RDWY	0.17	MIXED BITUMINOUS	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.02	BST CLASS A CRS-2 TACK	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.04	BST CLASS A CRS-2 PRIME	NONE
1939			0.00	N/A	
1939			1.08	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 0.00 to 7.01

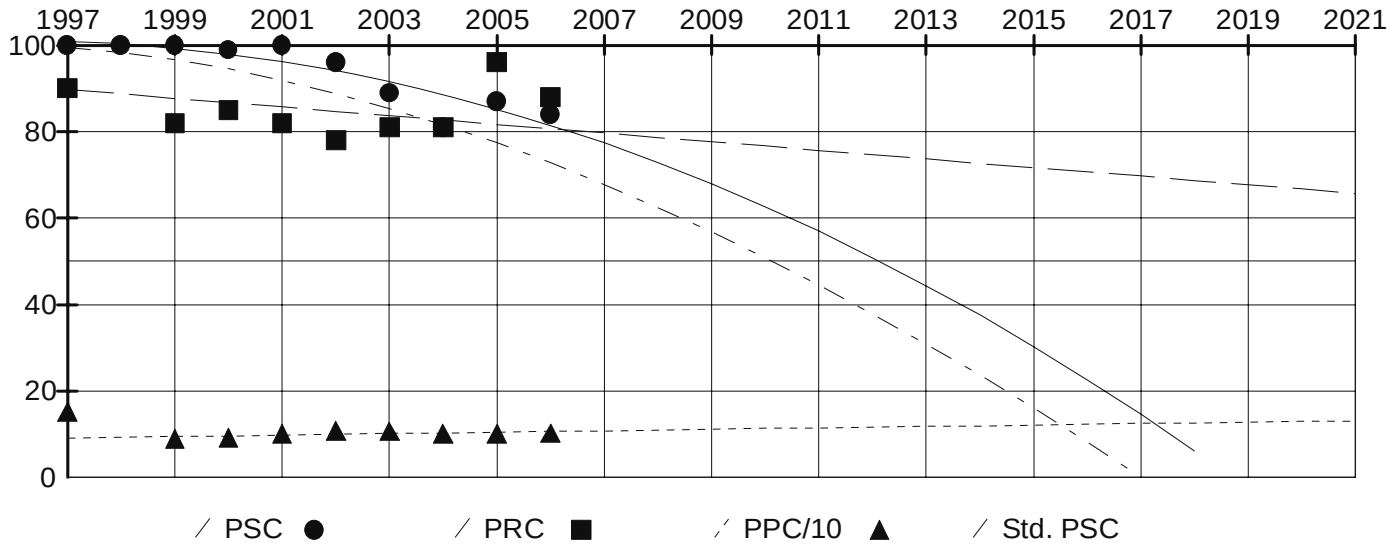
Ad. Date/PIN/Title: 04/2010 100904A - SR 9/172nd St. SE Vicinity to Montessori(MP 4.20 -6.80)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	100	100	100	99	100	96	89	81	87	84
PRC (Rutting)	90	N/A	82	85	82	78	81	81	96	88
PPC (IRI cm/km)	152	N/A	90	92	102	109	107	102	102	103

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2153	Regression	37.23	5.68	1996	90.12	1.65E+00	1.00
PRC	2037	Regression	27.17	7.19	1996	90.67	-1.00E+00	1.00
PSC	2012	Regression	82.00	3.00	1996	101.05	-1.96E-01	2.00



Survey Data

Survey Year: 2006 Pavement: ACP Survey Lane: Right

Rut (mm): 3 PSC: 84 IRI (cm/km): 103

Defect Type	Low	Medium	High
Alligator Cracking	3	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	17	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 18068 Ave. Weekday Traffic: 18181

ADT Growth: 2.57% Single Units: 2722 Double Units: 238

Trains: 39 Total Trucks: 2999 Trucks Percentage: 16.60%

Trucks Growth: 2.57% Directional Split: 67.22% Peak Hour: 7.51%

Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F

Past ESALs: 2,295,071 ESALs after 15yrs: 5,390,474

Analysis Unit: MP 3.66 - 3.72

(Vicinity: From MP 3.76 - INTRSECTN - 180TH ST SE To MP 3.76 - INTRSECTN - 180TH ST SE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 3.66	MP End: 3.72	Qualifier:
ARM Begin: 3.66	ARM End: 3.72	Length (Miles): 0.06
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: N/A	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 0.12	Lt Shoulder (ft): 10.0	Rt Shoulder (ft): 10.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1996	014854	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1985	012658	RESURFACE EXISTING RDWY	0.15	ACP CLASS B AR4000W	LANE ADDED LEFT
1958	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1958	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1948	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1948	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1944	000000	RESURFACE EXISTING RDWY	0.17	MIXED BITUMINOUS	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.02	BST CLASS A CRS-2 TACK	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.04	BST CLASS A CRS-2 PRIME	NONE
1939			0.00	N/A	
1939			1.08	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 0.00 to 7.01

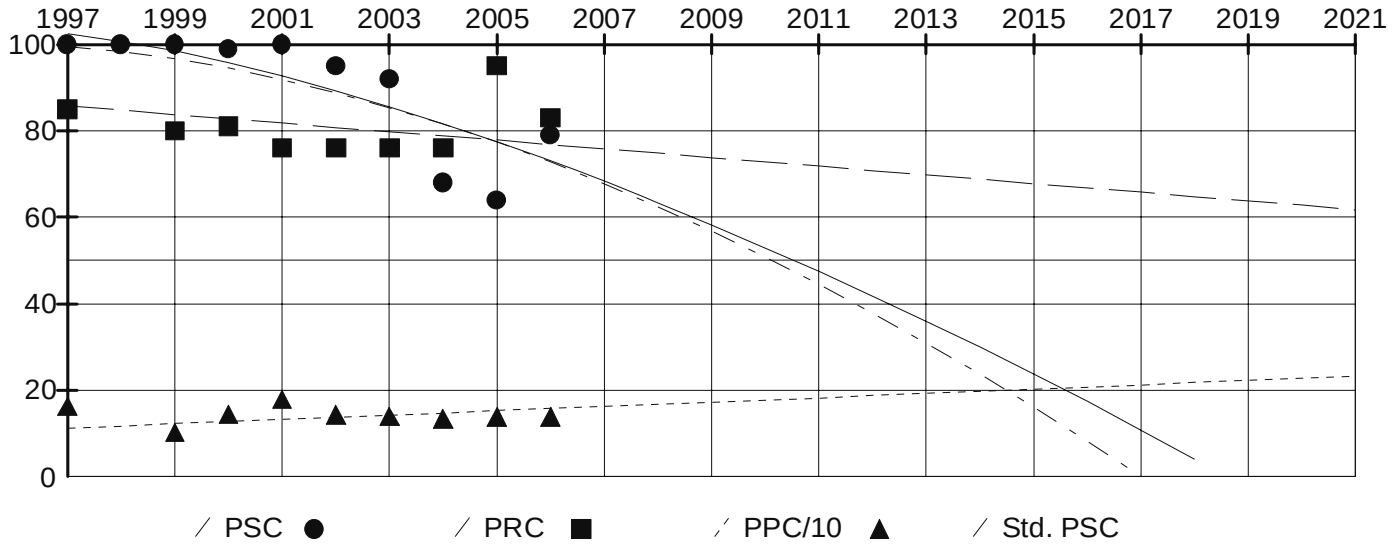
Ad. Date/PIN/Title: 04/2010 100904A - SR 9/172nd St. SE Vicinity to Montessori(MP 4.20 -6.80)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	100	100	100	99	100	95	92	68	64	79
PRC (Rutting)	85	N/A	80	81	76	76	76	76	95	83
PPC (IRI cm/km)	163	N/A	103	144	179	143	140	134	139	138

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2044	Regression	35.52	24.48	1996	107.50	5.00E+00	1.00
PRC	2033	Regression	21.74	7.85	1996	86.78	-1.00E+00	1.00
PSC	2010	Too Short	94.00	7.00	1996	103.38	-9.62E-01	1.50



Survey Data

Survey Year: 2006 Pavement: ACP Survey Lane: Right

Rut (mm): 4 PSC: 79 IRI (cm/km): 138

Defect Type	Low	Medium	High
Alligator Cracking	3	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	53	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 18016 Ave. Weekday Traffic: 18161

ADT Growth: 2.68% Single Units: 2714 Double Units: 237

Trains: 39 Total Trucks: 2990 Trucks Percentage: 16.60%

Trucks Growth: 2.68% Directional Split: 67.12% Peak Hour: 7.45%

Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F

Past ESALs: 2,274,993 ESALs after 15yrs: 5,422,507

Analysis Unit: MP 3.72 - 3.80

(Vicinity: From MP 3.76 - INTRSECTN - 180TH ST SE To MP 3.76 - INTRSECTN - 180TH ST SE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 3.72	MP End: 3.80	Qualifier:
ARM Begin: 3.72	ARM End: 3.80	Length (Miles): 0.08
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: N/A	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 34.0
Lane Miles: 0.16	Lt Shoulder (ft): 10.0	Rt Shoulder (ft): 10.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1996	014854	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1985	012658	RESURFACE EXISTING RDWY	0.15	ACP CLASS B AR4000W	LANE ADDED LEFT
1958	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1958	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1948	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1948	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1944	000000	RESURFACE EXISTING RDWY	0.17	MIXED BITUMINOUS	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.02	BST CLASS A CRS-2 TACK	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.04	BST CLASS A CRS-2 PRIME	NONE
1939			0.00	N/A	
1939			1.08	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 0.00 to 7.01

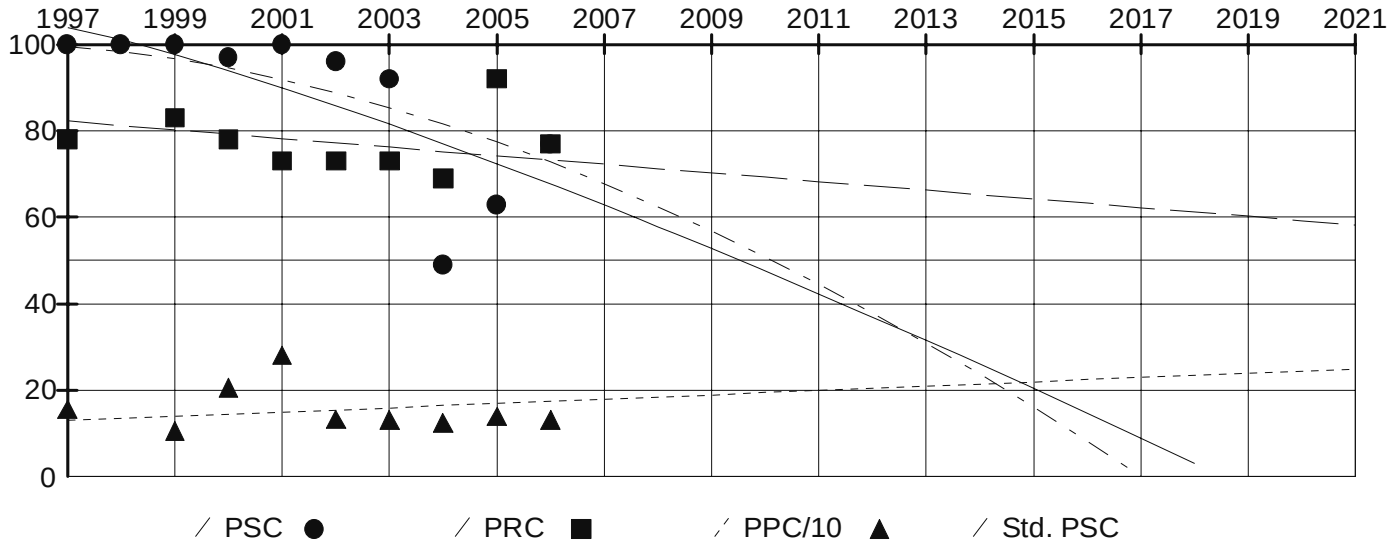
Ad. Date/PIN/Title: 04/2010 100904A - SR 9/172nd St. SE Vicinity to Montessori(MP 4.20 -6.80)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	100	100	100	97	100	96	92	49	63	77
PRC (Rutting)	78	N/A	83	78	73	73	73	69	92	77
PPC (IRI cm/km)	156	N/A	106	206	281	133	132	125	140	132

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2041	Regression	4.46	67.89	1996	124.38	5.00E+00	1.00
PRC	2029	Regression	18.42	8.03	1996	83.22	-1.00E+00	1.00
PSC	2009	Too Short	88.00	11.00	1996	106.09	-2.16E+00	1.25



Survey Data

Survey Year: 2006 Pavement: ACP Survey Lane: Right
Rut (mm): 5 PSC: 77 IRI (cm/km): 132

Defect Type	Low	Medium	High
Alligator Cracking	6	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	34	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 19672 Ave. Weekday Traffic: 19848
ADT Growth: 2.72% Single Units: 2964 Double Units: 259
Trains: 42 Total Trucks: 3265 Trucks Percentage: 16.60%
Trucks Growth: 2.72% Directional Split: 66.20% Peak Hour: 7.61%
Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F
Past ESALs: 2,482,293 ESALs after 15yrs: 5,945,379

Analysis Unit: MP 3.80 - 3.94

(Vicinity: From MP 3.76 - INTRSECTN - 180TH ST SE To MP 4.03 - INTRSECTN - 176TH ST SE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 3.80	MP End: 3.94	Qualifier:
ARM Begin: 3.80	ARM End: 3.94	Length (Miles): 0.14
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: N/A	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 24.0
Lane Miles: 0.28	Lt Shoulder (ft): 10.0	Rt Shoulder (ft): 10.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1996	014854	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1985	012658	RESURFACE EXISTING RDWY	0.15	ACP CLASS B AR4000W	LANE ADDED LEFT
1958	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1958	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1948	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1948	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1944	000000	RESURFACE EXISTING RDWY	0.17	MIXED BITUMINOUS	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.02	BST CLASS A CRS-2 TACK	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.04	BST CLASS A CRS-2 PRIME	NONE
1939			0.00	N/A	
1939			1.08	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 0.00 to 7.01

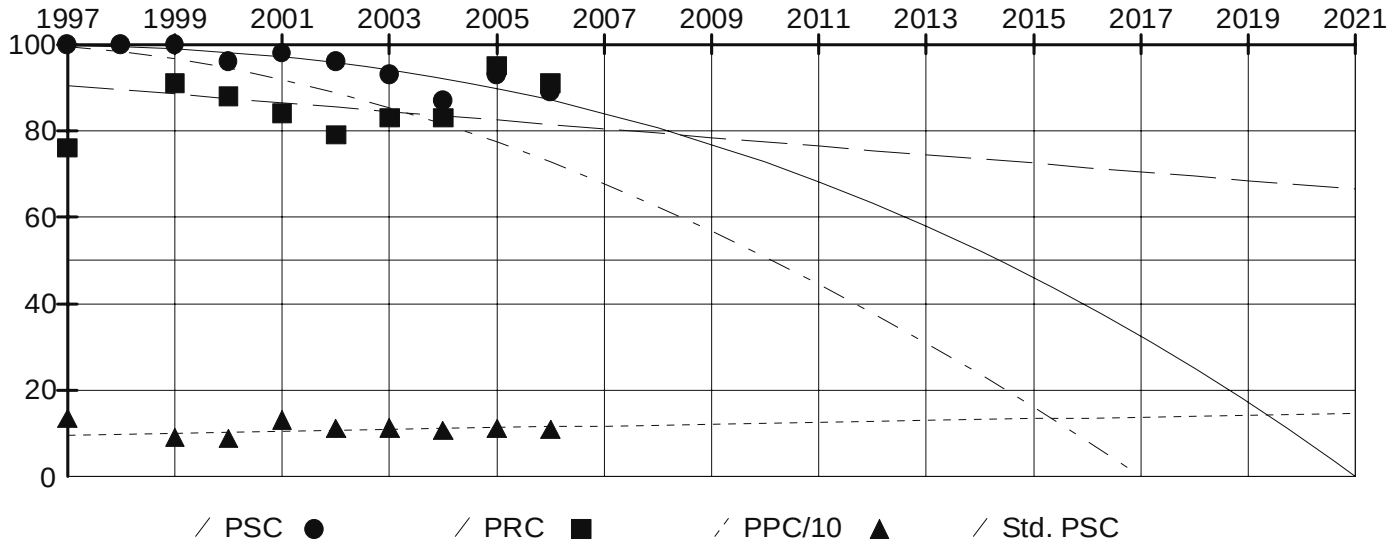
Ad. Date/PIN/Title: 04/2010 100904A - SR 9/172nd St. SE Vicinity to Montessori(MP 4.20 -6.80)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	100	100	100	96	98	96	93	87	93	89
PRC (Rutting)	76	N/A	91	88	84	79	83	83	95	91
PPC (IRI cm/km)	135	N/A	91	89	132	112	113	107	112	110

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2119	Regression	14.00	13.58	1996	94.79	2.07E+00	1.00
PRC	2037	Regression	22.64	8.57	1996	91.44	-1.00E+00	1.00
PSC	2014	Too Long	99.00	2.00	1996	99.72	-7.13E-02	2.25



Survey Data

Survey Year: 2006 Pavement: ACP Survey Lane: Right
Rut (mm): 2 PSC: 89 IRI (cm/km): 110

Defect Type	Low	Medium	High
Alligator Cracking	1	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	19	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 21526 Ave. Weekday Traffic: 21825
ADT Growth: 2.82% Single Units: 3244 Double Units: 284
Trains: 46 Total Trucks: 3574 Trucks Percentage: 16.60%
Trucks Growth: 2.82% Directional Split: 65.18% Peak Hour: 7.72%
Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F
Past ESALs: 2,708,093 ESALs after 15yrs: 6,566,733

Analysis Unit: MP 3.94 - 4.07

(Vicinity: From MP 4.03 - INTRSECTN - 176TH ST SE To MP 4.07 - ENT FROM - SHOPPING CENTER)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 3.94	MP End: 4.07	Qualifier:
ARM Begin: 3.94	ARM End: 4.07	Length (Miles): 0.13
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: N/A	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 36.0
Lane Miles: 0.26	Lt Shoulder (ft): 10.0	Rt Shoulder (ft): 6.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1996	014854	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1985	012658	RESURFACE EXISTING RDWY	0.15	ACP CLASS B AR4000W	LANE ADDED LEFT
1958	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1958	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1948	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1948	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1944	000000	RESURFACE EXISTING RDWY	0.17	MIXED BITUMINOUS	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.02	BST CLASS A CRS-2 TACK	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.04	BST CLASS A CRS-2 PRIME	NONE
1939			0.00	N/A	
1939			1.08	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 0.00 to 7.01

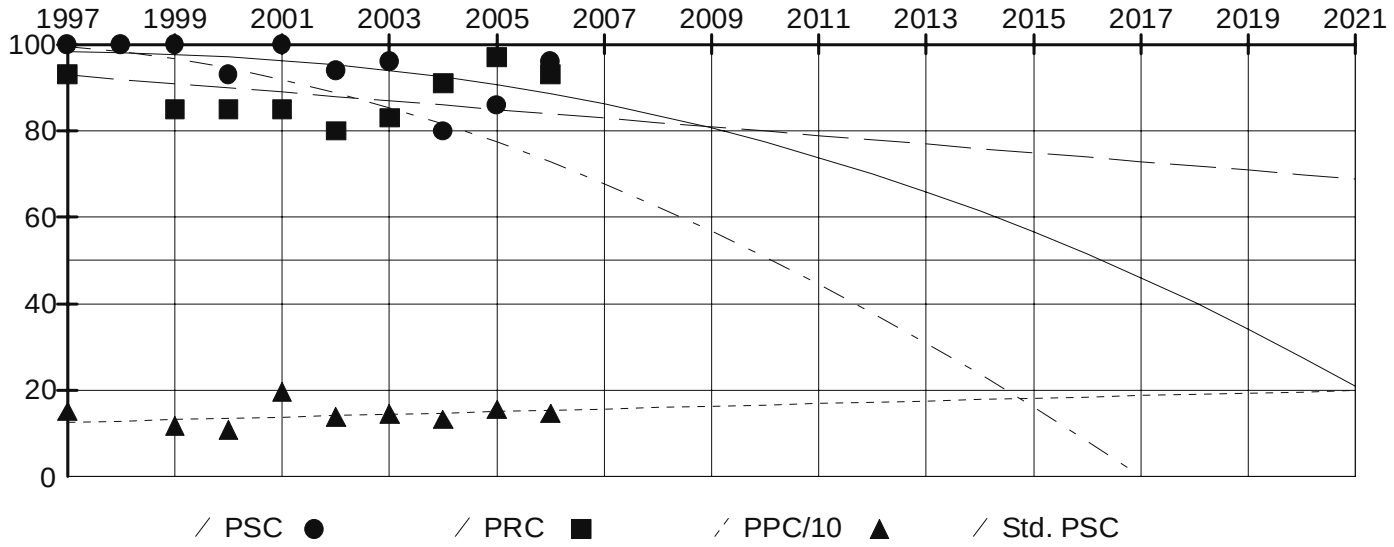
Ad. Date/PIN/Title: 04/2010 100904A - SR 9/172nd St. SE Vicinity to Montessori(MP 4.20 -6.80)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	100	100	100	93	100	94	96	80	86	96
PRC (Rutting)	93	N/A	85	85	85	80	83	91	97	93
PPC (IRI cm/km)	151	N/A	118	109	196	138	146	133	156	147

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2070	Regression	8.01	27.43	1996	122.99	3.06E+00	1.00
PRC	2040	Regression	26.91	7.62	1996	93.89	-1.00E+00	1.00
PSC	2016	Too Long	97.00	5.00	1996	98.34	-5.54E-02	2.25



Survey Data

Survey Year: 2006 Pavement: ACP Survey Lane: Right

Rut (mm): 2 PSC: 96 IRI (cm/km): 147

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	4	0	0
Transverse Cracking	1	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 21809 Ave. Weekday Traffic: 22254

ADT Growth: 2.94% Single Units: 3286 Double Units: 288

Trains: 48 Total Trucks: 3622 Trucks Percentage: 16.61%

Trucks Growth: 2.94% Directional Split: 65.01% Peak Hour: 7.61%

Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F

Past ESALs: 2,732,908 ESALs after 15yrs: 6,732,622

Analysis Unit: MP 4.07 - 4.17

(Vicinity: From MP 4.07 - ENT FROM - SHOPPING CENTER To MP 4.08 - EXIT TO - SHOPPING CENTER)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 4.07	MP End: 4.17	Qualifier:
ARM Begin: 4.07	ARM End: 4.17	Length (Miles): 0.10
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: N/A	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 44.0
Lane Miles: 0.20	Lt Shoulder (ft): 0.0	Rt Shoulder (ft): 10.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1996	014854	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1985	012658	RESURFACE EXISTING RDWY	0.15	ACP CLASS B AR4000W	LANE ADDED LEFT
1958	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1958	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1948	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1948	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1944	000000	RESURFACE EXISTING RDWY	0.17	MIXED BITUMINOUS	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.02	BST CLASS A CRS-2 TACK	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.04	BST CLASS A CRS-2 PRIME	NONE
1939			0.00	N/A	
1939			1.08	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 0.00 to 7.01

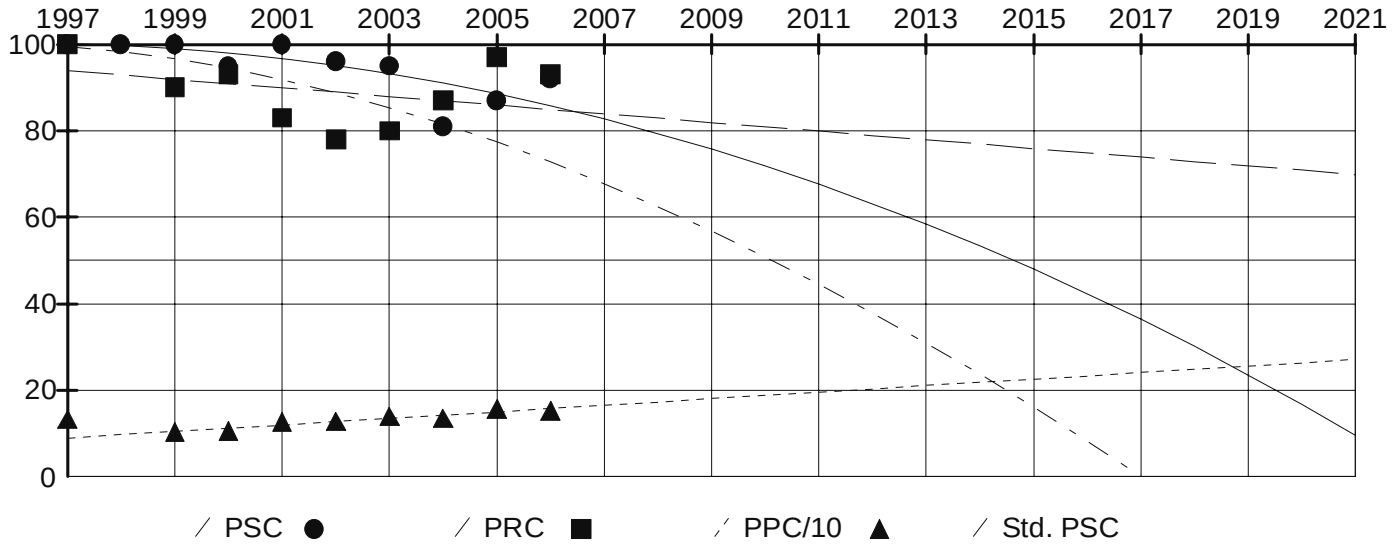
Ad. Date/PIN/Title: 04/2010 100904A - SR 9/172nd St. SE Vicinity to Montessori(MP 4.20 -6.80)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	100	100	100	95	100	96	95	81	87	92
PRC (Rutting)	100	N/A	90	93	83	78	80	87	97	93
PPC (IRI cm/km)	133	N/A	104	106	127	128	140	135	157	153

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2031	Regression	90.78	6.36	1996	82.19	7.55E+00	1.00
PRC	2041	Regression	14.98	8.13	1996	94.89	-1.00E+00	1.00
PSC	2014	Too Long	98.00	4.00	1996	100.27	-1.45E-01	2.00



Survey Data

Survey Year: 2006 Pavement: ACP Survey Lane: Right

Rut (mm): 2 PSC: 92 IRI (cm/km): 153

Defect Type	Low	Medium	High
Alligator Cracking	1	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	10	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 22050 Ave. Weekday Traffic: 22619

ADT Growth: 3.04% Single Units: 3323 Double Units: 290

Trains: 47 Total Trucks: 3660 Trucks Percentage: 16.60%

Trucks Growth: 3.04% Directional Split: 64.86% Peak Hour: 7.52%

Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F

Past ESALs: 2,741,232 ESALs after 15yrs: 6,844,750

Analysis Unit: MP 4.17 - 4.32

(Vicinity: From MP 4.08 - EXIT TO - SHOPPING CENTER To MP 4.29 - INTRSECTN - 172ND ST SE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 4.17	MP End: 4.32	Qualifier:
ARM Begin: 4.17	ARM End: 4.32	Length (Miles): 0.15
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: N/A	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 24.0
Lane Miles: 0.30	Lt Shoulder (ft): 10.0	Rt Shoulder (ft): 10.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1996	014854	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1985	012658	RESURFACE EXISTING RDWY	0.15	ACP CLASS B AR4000W	LANE ADDED LEFT
1958	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1958	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1948	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1948	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1944	000000	RESURFACE EXISTING RDWY	0.17	MIXED BITUMINOUS	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.02	BST CLASS A CRS-2 TACK	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.04	BST CLASS A CRS-2 PRIME	NONE
1939			0.00	N/A	
1939			1.08	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 0.00 to 7.01

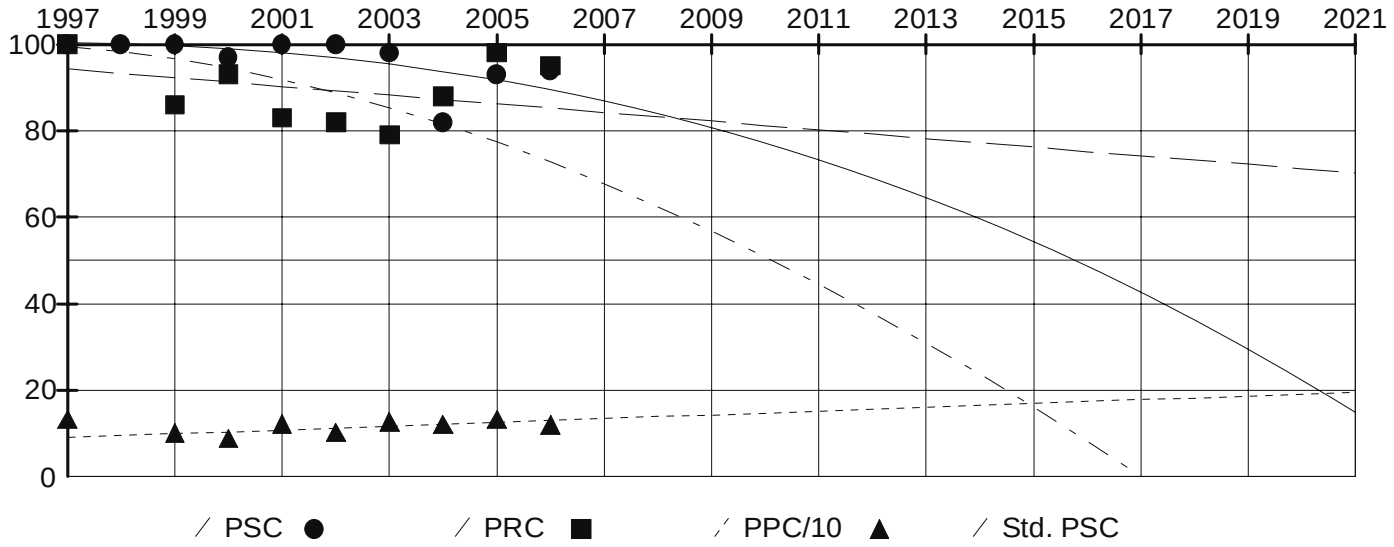
Ad. Date/PIN/Title: 04/2010 100904A - SR 9/172nd St. SE Vicinity to Montessori(MP 4.20 -6.80)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	100	100	100	97	100	100	98	82	93	94
PRC (Rutting)	100	N/A	86	93	83	82	79	88	98	95
PPC (IRI cm/km)	133	N/A	102	89	122	103	127	121	133	120

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2056	Regression	51.20	11.29	1996	86.23	4.37E+00	1.00
PRC	2041	Regression	15.38	8.45	1996	95.22	-1.00E+00	1.00
PSC	2015	Too Long	98.00	4.00	1996	100.30	-6.11E-02	2.25



Survey Data

Survey Year: 2006 Pavement: ACP Survey Lane: Right

Rut (mm): 1 PSC: 94 IRI (cm/km): 120

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	10	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 22312 Ave. Weekday Traffic: 23017

ADT Growth: 3.15% Single Units: 3362 Double Units: 294

Trains: 48 Total Trucks: 3704 Trucks Percentage: 16.60%

Trucks Growth: 3.15% Directional Split: 64.70% Peak Hour: 7.42%

Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F

Past ESALs: 2,765,393 ESALs after 15yrs: 7,006,929

Analysis Unit: MP 4.32 - 4.56

(Vicinity: From MP 4.29 - INTRSECTN - 172ND ST SE To MP 4.56 - INTRSECTN - 168TH ST SE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 4.32	MP End: 4.56	Qualifier:
ARM Begin: 4.32	ARM End: 4.56	Length (Miles): 0.24
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: N/A	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 0.48	Lt Shoulder (ft): 10.0	Rt Shoulder (ft): 6.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1996	014854	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1985	012658	RESURFACE EXISTING RDWY	0.15	ACP CLASS B AR4000W	LANE ADDED LEFT
1958	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1958	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1948	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1948	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1944	000000	RESURFACE EXISTING RDWY	0.17	MIXED BITUMINOUS	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.02	BST CLASS A CRS-2 TACK	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.04	BST CLASS A CRS-2 PRIME	NONE
1939			0.00	N/A	
1939			1.08	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 0.00 to 7.01

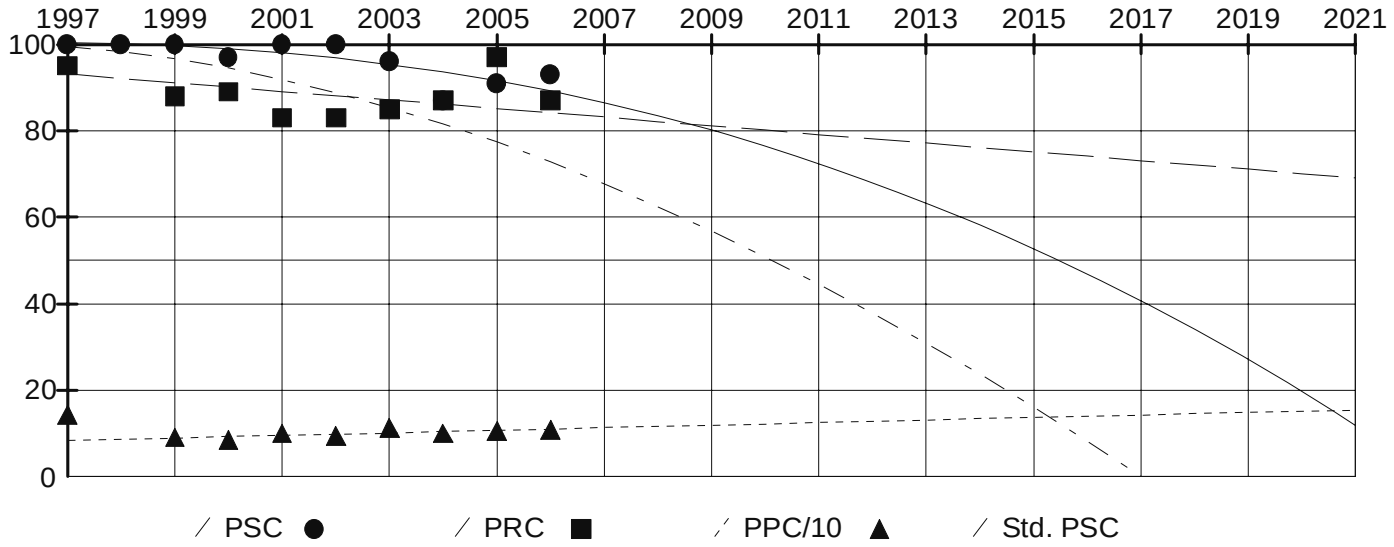
Ad. Date/PIN/Title: 04/2010 100904A - SR 9/172nd St. SE Vicinity to Montessori(MP 4.20 -6.80)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	100	100	100	97	100	100	96	87	91	93
PRC (Rutting)	95	N/A	88	89	83	83	85	87	97	87
PPC (IRI cm/km)	143	N/A	91	85	100	95	113	100	106	109

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2087	Regression	59.83	6.43	1996	80.61	2.96E+00	1.00
PRC	2040	Regression	35.96	5.77	1996	94.11	-1.00E+00	1.00
PSC	2015	Too Long	99.00	2.00	1996	100.41	-6.33E-02	2.25



Survey Data

Survey Year: 2006 Pavement: ACP Survey Lane: Right

Rut (mm): 3 PSC: 93 IRI (cm/km): 109

Defect Type	Low	Medium	High
Alligator Cracking	1	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	6	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 22721 Ave. Weekday Traffic: 23636

ADT Growth: 3.33% Single Units: 3424 Double Units: 300

Trains: 50 Total Trucks: 3774 Trucks Percentage: 16.61%

Trucks Growth: 3.33% Directional Split: 64.46% Peak Hour: 7.26%

Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F

Past ESALs: 2,798,809 ESALs after 15yrs: 7,255,361

Analysis Unit: MP 4.56 - 4.73

(Vicinity: From MP 4.56 - INTRSECTN - 168TH ST SE To MP 4.83 - INTRSECTN - 164TH ST SE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 4.56	MP End: 4.73	Qualifier:
ARM Begin: 4.56	ARM End: 4.73	Length (Miles): 0.17
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: N/A	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 0.34	Lt Shoulder (ft): 10.0	Rt Shoulder (ft): 10.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1996	014854	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1985	012658	RESURFACE EXISTING RDWY	0.15	ACP CLASS B AR4000W	LANE ADDED LEFT
1958	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1958	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1948	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1948	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1944	000000	RESURFACE EXISTING RDWY	0.17	MIXED BITUMINOUS	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.02	BST CLASS A CRS-2 TACK	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.04	BST CLASS A CRS-2 PRIME	NONE
1939			0.00	N/A	
1939			1.08	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 0.00 to 7.01

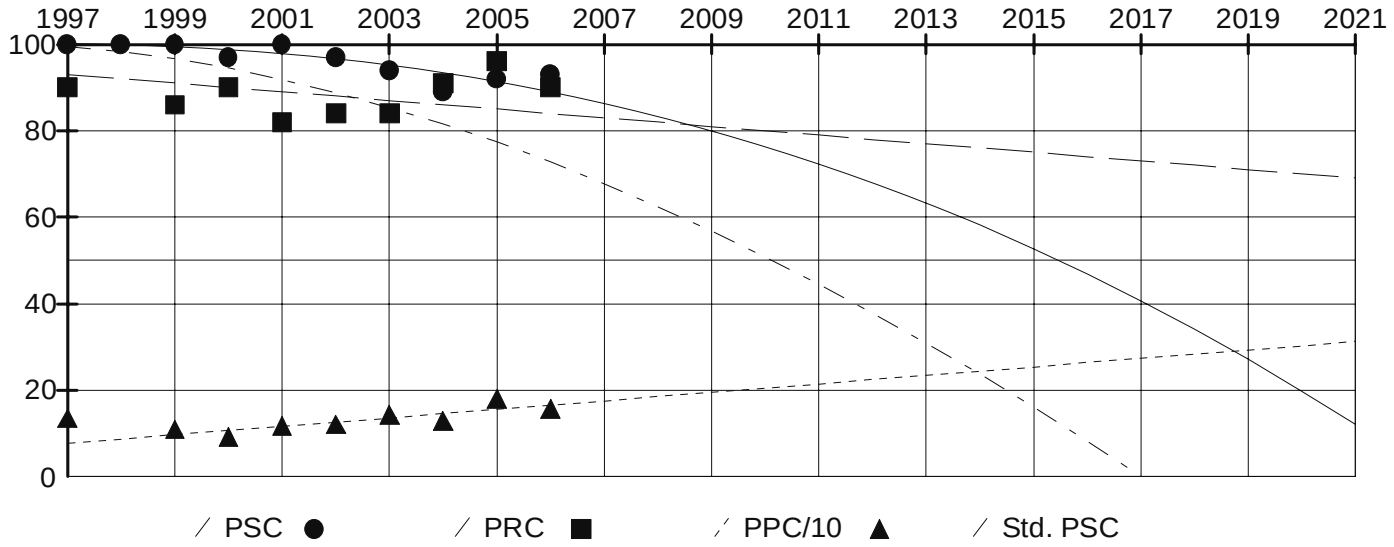
Ad. Date/PIN/Title: 04/2010 100904A - SR 9/172nd St. SE Vicinity to Montessori(MP 4.20 -6.80)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	100	100	100	97	100	97	94	89	92	93
PRC (Rutting)	90	N/A	86	90	82	84	84	91	96	90
PPC (IRI cm/km)	135	N/A	110	92	118	121	143	129	180	157

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2025	Regression	74.08	15.35	1996	67.49	9.81E+00	1.00
PRC	2040	Regression	43.91	6.44	1996	94.00	-1.00E+00	1.00
PSC	2015	Too Long	99.00	2.00	1996	100.21	-6.31E-02	2.25



Survey Data

Survey Year: 2006 Pavement: ACP Survey Lane: Right

Rut (mm): 2 PSC: 93 IRI (cm/km): 157

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	11	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 23150 Ave. Weekday Traffic: 24288

ADT Growth: 3.51% Single Units: 3489 Double Units: 305

Trains: 50 Total Trucks: 3844 Trucks Percentage: 16.60%

Trucks Growth: 3.51% Directional Split: 64.20% Peak Hour: 7.09%

Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F

Past ESALs: 2,823,130 ESALs after 15yrs: 7,496,060

Analysis Unit: MP 4.73 - 4.88

(Vicinity: From MP 4.83 - INTRSECTN - 164TH ST SE To MP 4.83 - INTRSECTN - 164TH ST SE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 4.73	MP End: 4.88	Qualifier:
ARM Begin: 4.73	ARM End: 4.88	Length (Miles): 0.15
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: N/A	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 0.30	Lt Shoulder (ft): 10.0	Rt Shoulder (ft): 10.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1996	014854	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1985	012658	RESURFACE EXISTING RDWY	0.15	ACP CLASS B AR4000W	LANES ADDED LEFT AND RT
1958	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1958	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1948	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1948	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1944	000000	RESURFACE EXISTING RDWY	0.17	MIXED BITUMINOUS	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.02	BST CLASS A CRS-2 TACK	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.04	BST CLASS A CRS-2 PRIME	NONE
1939			0.00	N/A	
1939			1.08	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 0.00 to 7.01

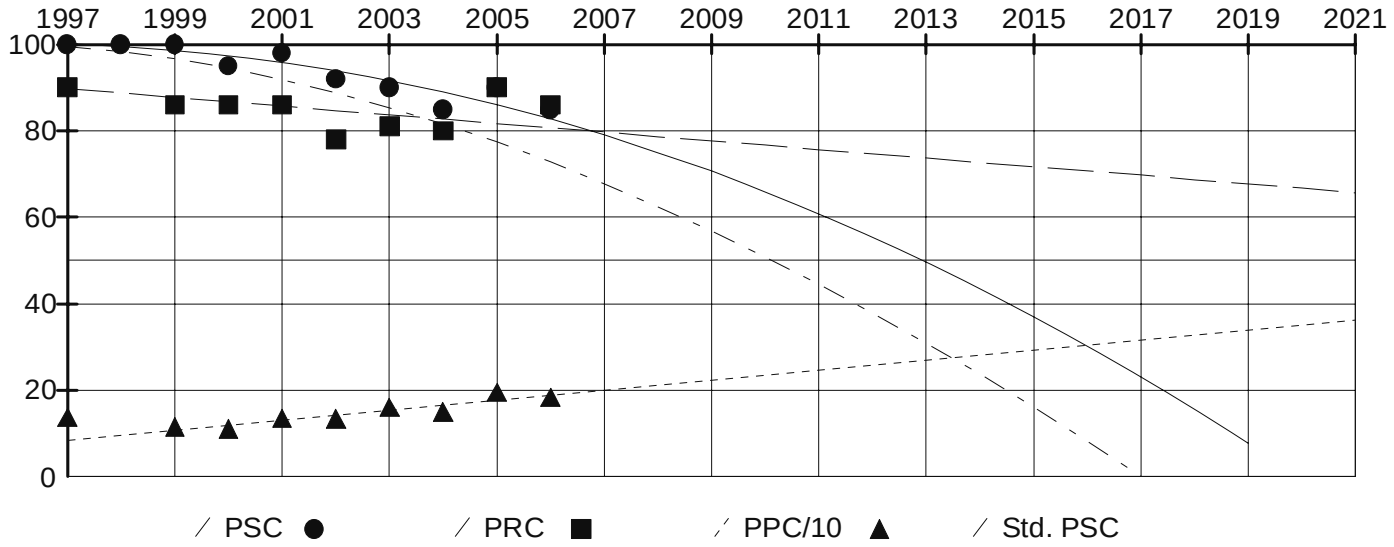
Ad. Date/PIN/Title: 04/2010 100904A - SR 9/172nd St. SE Vicinity to Montessori(MP 4.20 -6.80)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	100	100	100	95	98	92	90	85	90	85
PRC (Rutting)	90	N/A	86	86	86	78	81	80	90	86
PPC (IRI cm/km)	137	N/A	116	111	135	134	161	150	195	184

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2020	Regression	86.67	11.96	1996	73.35	1.15E+01	1.00
PRC	2037	Regression	47.99	4.78	1996	90.67	-1.00E+00	1.00
PSC	2012	Too Long	99.00	2.00	1996	100.18	-1.75E-01	2.00



Survey Data

Survey Year: 2006 Pavement: ACP Survey Lane: Right

Rut (mm): 3 PSC: 85 IRI (cm/km): 184

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	41	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 23124 Ave. Weekday Traffic: 24408

ADT Growth: 3.65% Single Units: 3484 Double Units: 304

Trains: 50 Total Trucks: 3838 Trucks Percentage: 16.60%

Trucks Growth: 3.65% Directional Split: 64.07% Peak Hour: 6.97%

Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F

Past ESALs: 2,803,928 ESALs after 15yrs: 7,578,286

Analysis Unit: MP 4.88 - 5.35

(Vicinity: From MP 4.83 - INTRSECTN - 164TH ST SE To MP 5.36 - INTRSECTN - 156TH ST SE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 4.88	MP End: 5.35	Qualifier:
ARM Begin: 4.88	ARM End: 5.35	Length (Miles): 0.47
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: N/A	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 0.94	Lt Shoulder (ft): 10.0	Rt Shoulder (ft): 10.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1996	014854	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1985	012658	RESURFACE EXISTING RDWY	0.15	ACP CLASS B AR4000W	LANE ADDED LEFT
1971	000000	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1958	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1958	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1948	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1948	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1944	000000	RESURFACE EXISTING RDWY	0.17	MIXED BITUMINOUS	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.02	BST CLASS A CRS-2 TACK	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.04	BST CLASS A CRS-2 PRIME	NONE
1939			0.00	N/A	
1939			1.08	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 0.00 to 7.01

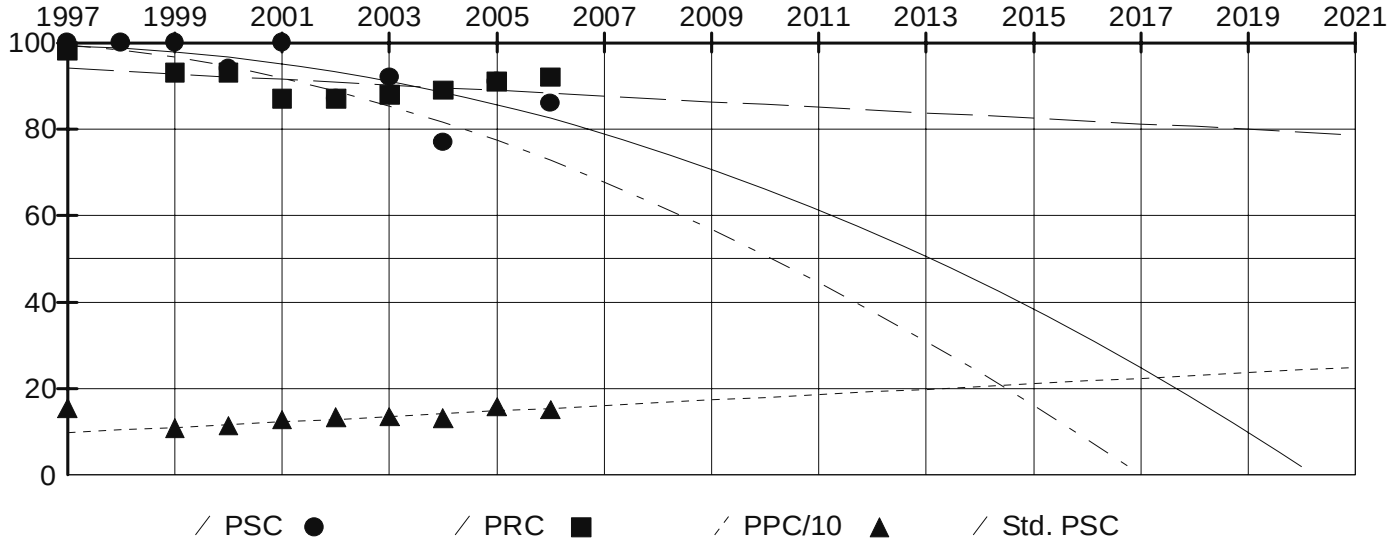
Ad. Date/PIN/Title: 04/2010 100904A - SR 9/172nd St. SE Vicinity to Montessori(MP 4.20 -6.80)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	100	100	100	94	100	87	92	77	91	86
PRC (Rutting)	98	N/A	93	93	87	87	88	89	91	92
PPC (IRI cm/km)	155	N/A	108	114	128	134	135	131	158	151

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2037	Regression	85.37	6.92	1996	91.29	6.32E+00	1.00
PRC	2066	Regression	27.45	3.27	1996	94.66	-6.40E-01	1.00
PSC	2013	Too Long	97.00	4.00	1996	99.31	-1.69E-01	2.00



Survey Data

Survey Year: 2006 Pavement: ACP Survey Lane: Right

Rut (mm): 2 PSC: 86 IRI (cm/km): 151

Defect Type	Low	Medium	High
Alligator Cracking	1	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	33	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 22114 Ave. Weekday Traffic: 23388

ADT Growth: 3.68% Single Units: 3332 Double Units: 292

Trains: 48 Total Trucks: 3672 Trucks Percentage: 16.60%

Trucks Growth: 3.68% Directional Split: 64.06% Peak Hour: 7.09%

Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F

Past ESALs: 2,680,592 ESALs after 15yrs: 7,273,227

Analysis Unit: MP 5.35 - 5.59

(Vicinity: From MP 5.36 - INTRSECTN - 156TH ST SE To MP 5.66 - INTRSECTN - 152ND ST SE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 5.35	MP End: 5.59	Qualifier:
ARM Begin: 5.35	ARM End: 5.59	Length (Miles): 0.24
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: N/A	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 0.48	Lt Shoulder (ft): 10.0	Rt Shoulder (ft): 10.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1996	014854	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1983	012319	FIRST STAGE CONSTR	0.30	ACP CLASS B AR4000W	LANE ADDED LEFT
1971	000000	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1958	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1958	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1948	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1948	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1944	000000	RESURFACE EXISTING RDWY	0.17	MIXED BITUMINOUS	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.02	BST CLASS A CRS-2 TACK	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.04	BST CLASS A CRS-2 PRIME	NONE
1939			0.00	N/A	
1939			1.08	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 0.00 to 7.01

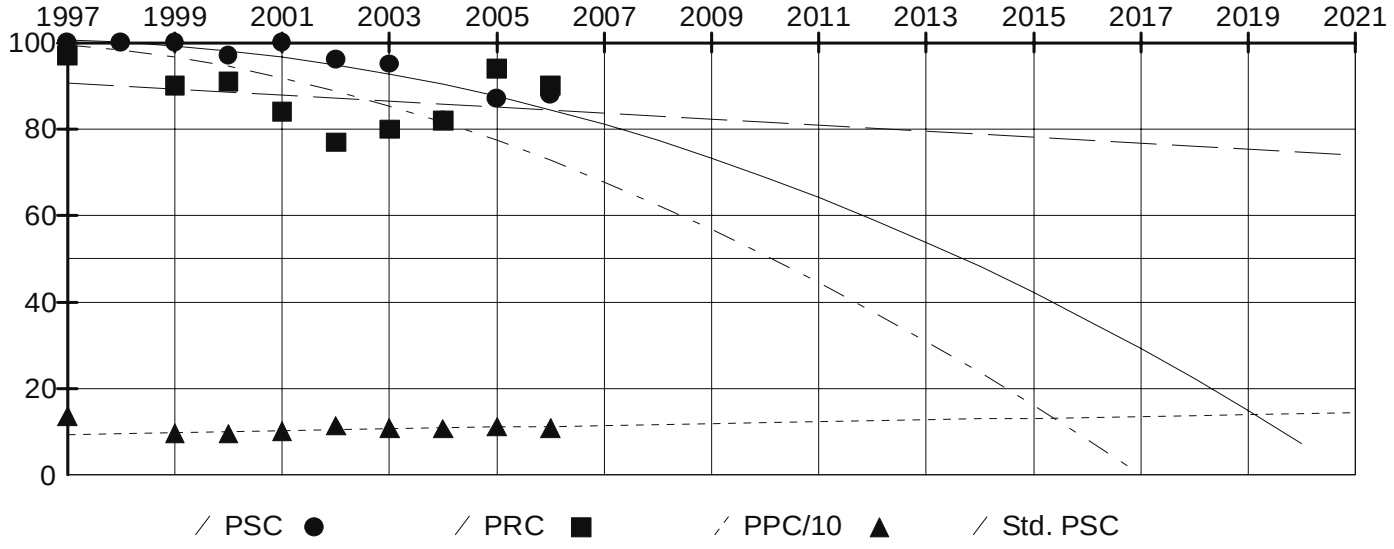
Ad. Date/PIN/Title: 04/2010 100904A - SR 9/172nd St. SE Vicinity to Montessori(MP 4.20 -6.80)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	100	100	100	97	100	96	95	82	87	88
PRC (Rutting)	97	N/A	90	91	84	77	80	82	94	90
PPC (IRI cm/km)	136	N/A	97	96	102	114	108	107	112	109

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2121	Regression	57.49	4.69	1996	92.24	2.06E+00	1.00
PRC	2056	Regression	9.06	6.89	1996	91.31	-6.94E-01	1.00
PSC	2013	Regression	75.00	3.00	1996	100.65	-1.62E-01	2.00



Survey Data

Survey Year: 2006 Pavement: ACP Survey Lane: Right

Rut (mm): 3 PSC: 88 IRI (cm/km): 109

Defect Type	Low	Medium	High
Alligator Cracking	2	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	21	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 21577 Ave. Weekday Traffic: 22842

ADT Growth: 3.68% Single Units: 3252 Double Units: 284

Trains: 46 Total Trucks: 3582 Trucks Percentage: 16.60%

Trucks Growth: 3.68% Directional Split: 63.93% Peak Hour: 7.29%

Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F

Past ESALs: 2,612,352 ESALs after 15yrs: 7,088,070

Analysis Unit: MP 5.59 - 5.89

(Vicinity: From MP 5.66 - INTRSECTN - 152ND ST SE To MP 6.07 - INTRSECTN - CATHCART WAY)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 5.59	MP End: 5.89	Qualifier:
ARM Begin: 5.59	ARM End: 5.89	Length (Miles): 0.30
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: N/A	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 0.60	Lt Shoulder (ft): 4.0	Rt Shoulder (ft): 10.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1996	014854	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1983	012319	FIRST STAGE CONSTR	0.30	ACP CLASS B AR4000W	LANE ADDED LEFT
1971	000000	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1958	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1958	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1948	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1948	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1944	000000	RESURFACE EXISTING RDWY	0.17	MIXED BITUMINOUS	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.02	BST CLASS A CRS-2 TACK	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.04	BST CLASS A CRS-2 PRIME	NONE
1939			0.00	N/A	
1939			1.08	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 0.00 to 7.01

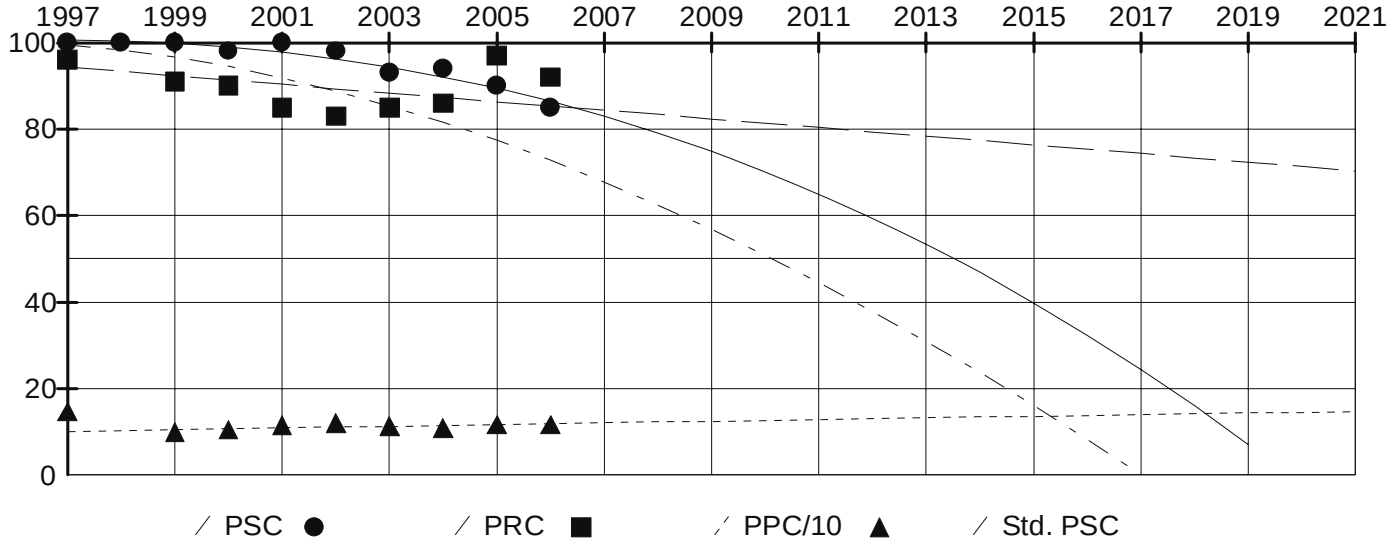
Ad. Date/PIN/Title: 04/2010 100904A - SR 9/172nd St. SE Vicinity to Montessori(MP 4.20 -6.80)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	100	100	100	98	100	98	93	94	90	85
PRC (Rutting)	96	N/A	91	90	85	83	85	86	97	92
PPC (IRI cm/km)	147	N/A	99	105	115	120	113	109	117	117

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2127	Regression	43.97	5.72	1996	99.42	1.92E+00	1.00
PRC	2041	Regression	34.07	5.93	1996	95.33	-1.00E+00	1.00
PSC	2013	Too Short	99.00	1.00	1996	100.75	-8.09E-02	2.25



Survey Data

Survey Year: 2006 Pavement: ACP Survey Lane: Right

Rut (mm): 2 PSC: 85 IRI (cm/km): 117

Defect Type	Low	Medium	High
Alligator Cracking	4	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	7	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 21170 Ave. Weekday Traffic: 22427

ADT Growth: 3.68% Single Units: 3190 Double Units: 279

Trains: 46 Total Trucks: 3515 Trucks Percentage: 16.60%

Trucks Growth: 3.68% Directional Split: 63.83% Peak Hour: 7.44%

Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F

Past ESALs: 2,564,036 ESALs after 15yrs: 6,956,975

Analysis Unit: MP 5.89 - 5.99

(Vicinity: From MP 6.07 - INTRSECTN - CATHCART WAY To MP 6.07 - INTRSECTN - CATHCART WAY)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 5.89	MP End: 5.99	Qualifier:
ARM Begin: 5.89	ARM End: 5.99	Length (Miles): 0.10
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: N/A	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 0.20	Lt Shoulder (ft): 4.0	Rt Shoulder (ft): 10.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1996	014854	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1983	012319	FIRST STAGE CONSTR	0.30	ACP CLASS B AR4000W	LANES ADDED LEFT AND RT
1971	000000	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1958	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1958	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1948	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1948	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1944	000000	RESURFACE EXISTING RDWY	0.17	MIXED BITUMINOUS	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.02	BST CLASS A CRS-2 TACK	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.04	BST CLASS A CRS-2 PRIME	NONE
1939			0.00	N/A	
1939			1.08	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 0.00 to 7.01

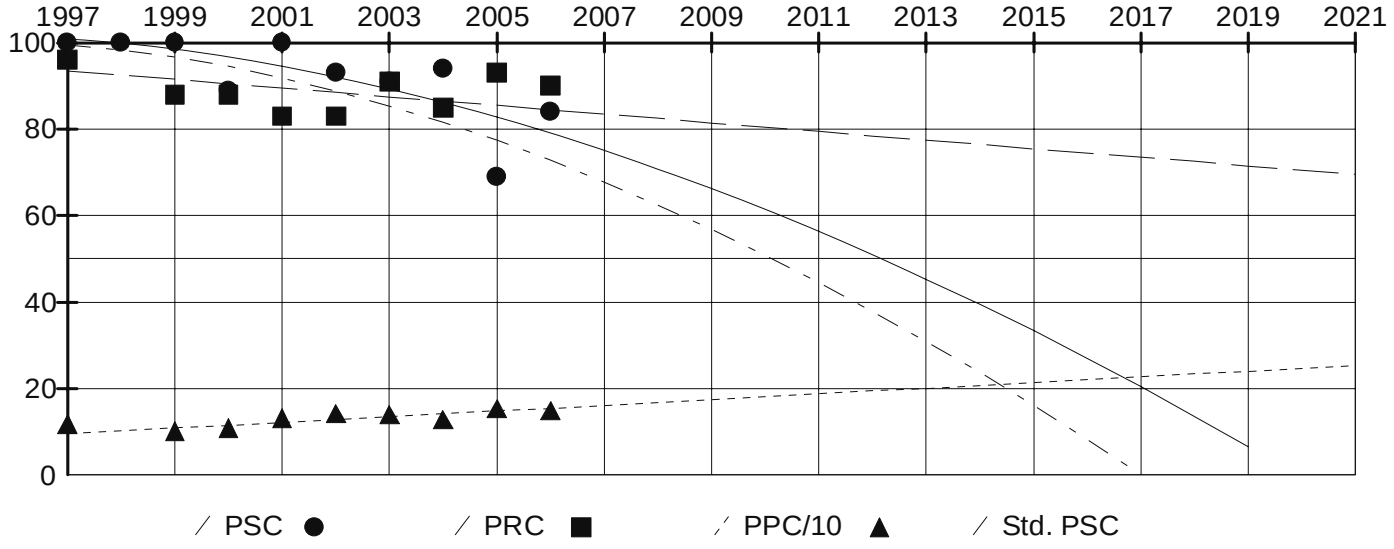
Ad. Date/PIN/Title: 04/2010 100904A - SR 9/172nd St. SE Vicinity to Montessori(MP 4.20 -6.80)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	100	100	100	89	100	93	91	94	69	84
PRC (Rutting)	96	N/A	88	88	83	83	91	85	93	90
PPC (IRI cm/km)	118	N/A	101	108	132	142	140	128	154	149

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2036	Regression	72.85	10.61	1996	89.04	6.57E+00	1.00
PRC	2040	Regression	43.54	5.32	1996	94.44	-1.00E+00	1.00
PSC	2012	Too Short	96.00	5.00	1996	101.14	-3.92E-01	1.75



Survey Data

Survey Year: 2006 Pavement: ACP Survey Lane: Right

Rut (mm): 3 PSC: 84 IRI (cm/km): 149

Defect Type	Low	Medium	High
Alligator Cracking	4	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	8	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 20868 Ave. Weekday Traffic: 22119

ADT Growth: 3.68% Single Units: 3144 Double Units: 275

Trains: 46 Total Trucks: 3465 Trucks Percentage: 16.60%

Trucks Growth: 3.68% Directional Split: 63.76% Peak Hour: 7.55%

Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F

Past ESALs: 2,528,897 ESALs after 15yrs: 6,861,633

Analysis Unit: MP 5.99 - 6.11

(Vicinity: From MP 6.07 - INTRSECTN - CATHCART WAY To MP 6.07 - INTRSECTN - CATHCART WAY)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 5.99	MP End: 6.11	Qualifier:
ARM Begin: 5.99	ARM End: 6.11	Length (Miles): 0.12
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: N/A	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 0.24	Lt Shoulder (ft): 4.0	Rt Shoulder (ft): 10.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1996	014854	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1983	012319	FIRST STAGE CONSTR	0.30	ACP CLASS B AR4000W	INCL CONSTR FOR CHAN
1971	000000	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1958	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1958	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1948	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1948	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1944	000000	RESURFACE EXISTING RDWY	0.17	MIXED BITUMINOUS	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.02	BST CLASS A CRS-2 TACK	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.04	BST CLASS A CRS-2 PRIME	NONE
1939			0.00	N/A	
1939			1.08	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 0.00 to 7.01

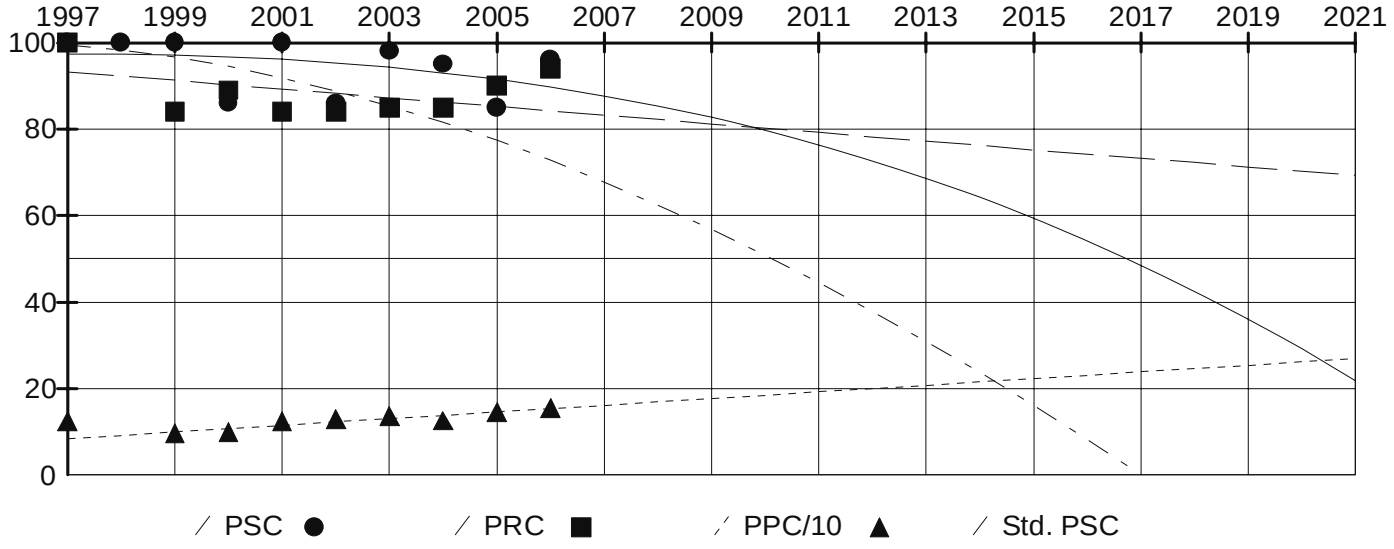
Ad. Date/PIN/Title: 04/2010 100904A - SR 9/172nd St. SE Vicinity to Montessori(MP 4.20 -6.80)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	100	100	100	86	100	86	98	95	85	96
PRC (Rutting)	100	N/A	84	89	84	84	85	85	90	94
PPC (IRI cm/km)	124	N/A	97	99	124	129	136	126	145	155

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2031	Regression	86.94	7.92	1996	76.15	7.73E+00	1.00
PRC	2040	Regression	27.56	6.21	1996	94.22	-1.00E+00	1.00
PSC	2016	Too Long	96.00	5.00	1996	97.43	-2.42E-02	2.50



Survey Data

Survey Year: 2006 Pavement: ACP Survey Lane: Right

Rut (mm): 2 PSC: 96 IRI (cm/km): 155

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	3	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 20702 Ave. Weekday Traffic: 21949

ADT Growth: 3.68% Single Units: 3120 Double Units: 273

Trains: 45 Total Trucks: 3438 Trucks Percentage: 16.61%

Trucks Growth: 3.68% Directional Split: 63.72% Peak Hour: 7.61%

Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F

Past ESALs: 2,505,216 ESALs after 15yrs: 6,797,380

Analysis Unit: MP 6.11 - 6.20

(Vicinity: From MP 6.07 - INTRSECTN - CATHCART WAY To MP 6.32 - INTRSECTN - 142ND ST SE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 6.11	MP End: 6.20	Qualifier:
ARM Begin: 6.11	ARM End: 6.20	Length (Miles): 0.09
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: N/A	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 0.18	Lt Shoulder (ft): 4.0	Rt Shoulder (ft): 10.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1996	014854	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1983	012319	FIRST STAGE CONSTR	0.30	ACP CLASS B AR4000W	LANES ADDED LEFT AND RT
1971	000000	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1958	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1958	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1948	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1948	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1944	000000	RESURFACE EXISTING RDWY	0.17	MIXED BITUMINOUS	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.02	BST CLASS A CRS-2 TACK	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.04	BST CLASS A CRS-2 PRIME	NONE
1939			0.00	N/A	
1939			1.08	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 0.00 to 7.01

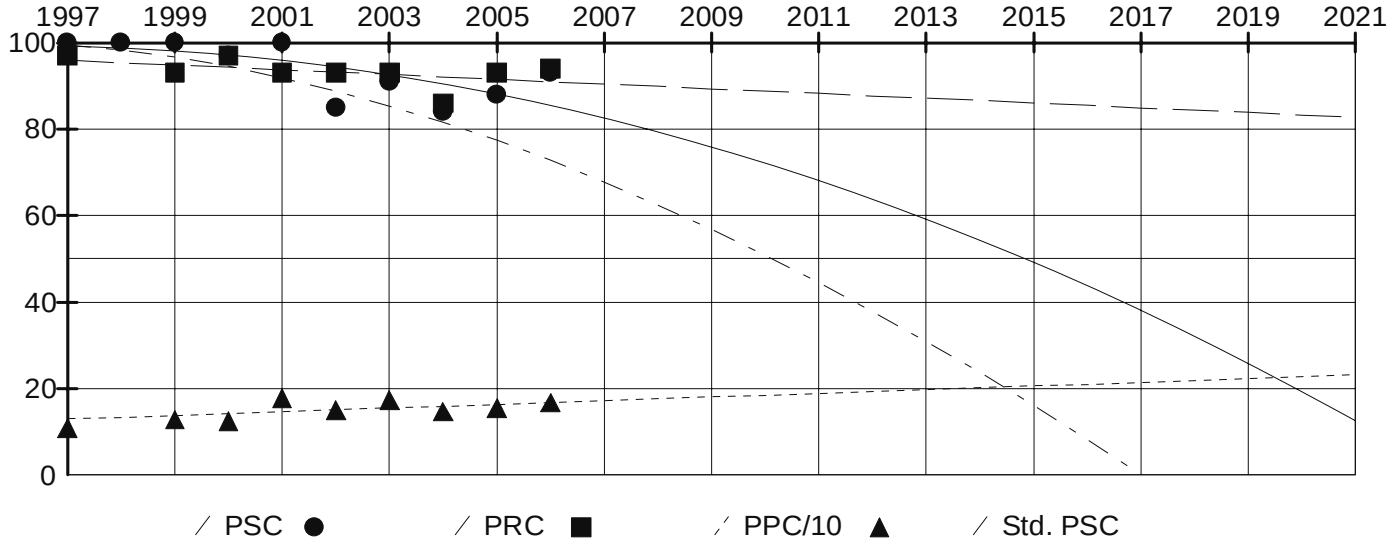
Ad. Date/PIN/Title: 04/2010 100904A - SR 9/172nd St. SE Vicinity to Montessori(MP 4.20 -6.80)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	100	100	100	97	100	85	91	84	88	93
PRC (Rutting)	97	N/A	93	97	93	93	93	86	93	94
PPC (IRI cm/km)	109	N/A	128	124	178	150	173	147	155	167

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2049	Regression	27.89	18.13	1996	125.05	4.26E+00	1.00
PRC	2081	Regression	25.40	2.95	1996	96.45	-5.48E-01	1.00
PSC	2014	Too Long	97.00	4.00	1996	99.37	-1.39E-01	2.00



Survey Data

Survey Year: 2006 Pavement: ACP Survey Lane: Right

Rut (mm): 2 PSC: 93 IRI (cm/km): 167

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	13	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 20544 Ave. Weekday Traffic: 21788

ADT Growth: 3.68% Single Units: 3096 Double Units: 271

Trains: 45 Total Trucks: 3412 Trucks Percentage: 16.61%

Trucks Growth: 3.68% Directional Split: 63.68% Peak Hour: 7.67%

Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F

Past ESALs: 2,487,019 ESALs after 15yrs: 6,748,006

Analysis Unit: MP 6.20 - 6.50

(Vicinity: From MP 6.32 - INTRSECTN - 142ND ST SE To MP 6.60 - INTRSECTN - 136TH ST SE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 6.20	MP End: 6.50	Qualifier:
ARM Begin: 6.20	ARM End: 6.50	Length (Miles): 0.30
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: N/A	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 0.60	Lt Shoulder (ft): 4.0	Rt Shoulder (ft): 10.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1996	014854	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1983	012319	FIRST STAGE CONSTR	0.30	ACP CLASS B AR4000W	LANE ADDED LEFT
1971	000000	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1958	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1958	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1948	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1948	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1944	000000	RESURFACE EXISTING RDWY	0.17	MIXED BITUMINOUS	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.02	BST CLASS A CRS-2 TACK	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.04	BST CLASS A CRS-2 PRIME	NONE
1939			0.00	N/A	
1939			1.08	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 0.00 to 7.01

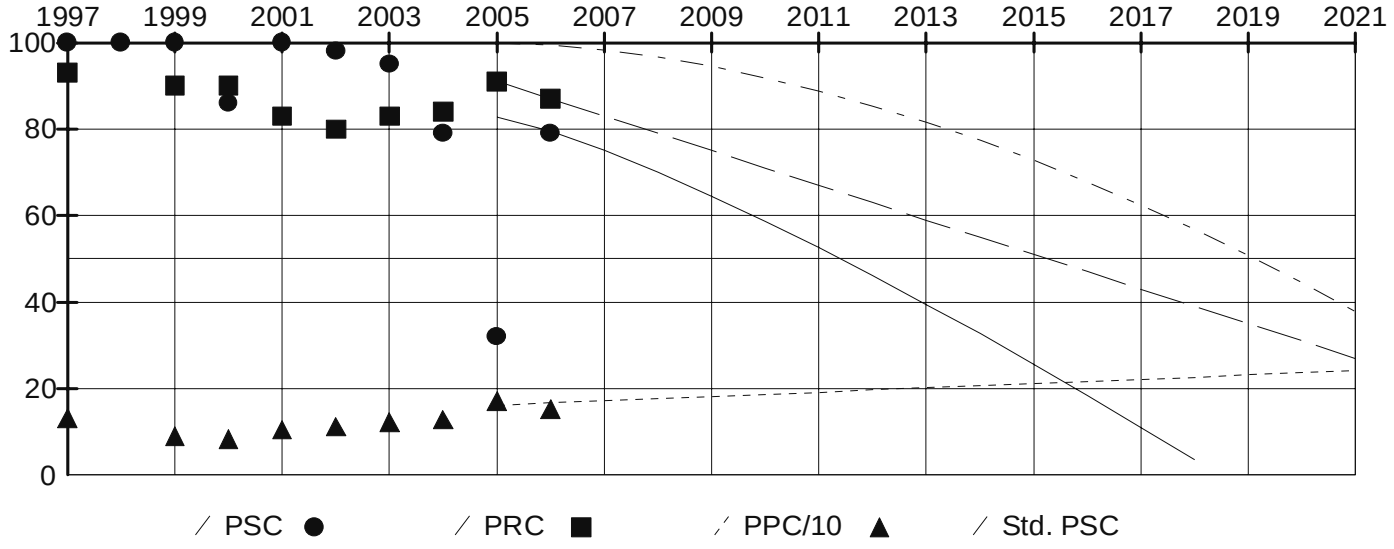
Ad. Date/PIN/Title: 04/2010 100904A - SR 9/172nd St. SE Vicinity to Montessori(MP 4.20 -6.80)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	100	100	100	86	100	98	95	79	32	79
PRC (Rutting)	93	N/A	90	90	83	80	83	84	91	87
PPC (IRI cm/km)	132	N/A	90	83	105	112	122	128	171	152

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2043	Regression	100.00	0.00	2005	161.50	5.00E+00	1.00
PRC	2015	Regression	100.00	0.00	2005	91.00	-4.00E+00	1.00
PSC	2011	New Year Mod. Std.	99.00	1.00	2005	82.68	-3.21E+00	1.25



Survey Data

Survey Year: 2006 Pavement: ACP Survey Lane: Right

Rut (mm): 3 PSC: 79 IRI (cm/km): 152

Defect Type	Low	Medium	High
Alligator Cracking	2	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	61	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 20250 Ave. Weekday Traffic: 21488

ADT Growth: 3.68% Single Units: 3051 Double Units: 267

Trains: 44 Total Trucks: 3362 Trucks Percentage: 16.60%

Trucks Growth: 3.68% Directional Split: 63.61% Peak Hour: 7.78%

Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F

Past ESALs: 2,451,880 ESALs after 15yrs: 6,652,664

Analysis Unit: MP 6.50 - 6.80

(Vicinity: From MP 6.60 - INTRSECTN - 136TH ST SE To MP 6.78 - INTRSECTN - MONTESSORI RD)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 6.50	MP End: 6.80	Qualifier:
ARM Begin: 6.50	ARM End: 6.80	Length (Miles): 0.30
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: N/A	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 0.60	Lt Shoulder (ft): 4.0	Rt Shoulder (ft): 10.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1996	014854	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1983	012319	FIRST STAGE CONSTR	0.30	ACP CLASS B AR4000W	LANE ADDED LEFT
1958	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1958	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1948	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1948	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1944	000000	RESURFACE EXISTING RDWY	0.17	MIXED BITUMINOUS	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.02	BST CLASS A CRS-2 TACK	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.04	BST CLASS A CRS-2 PRIME	NONE
1939			0.00	N/A	
1939			1.08	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 0.00 to 7.01

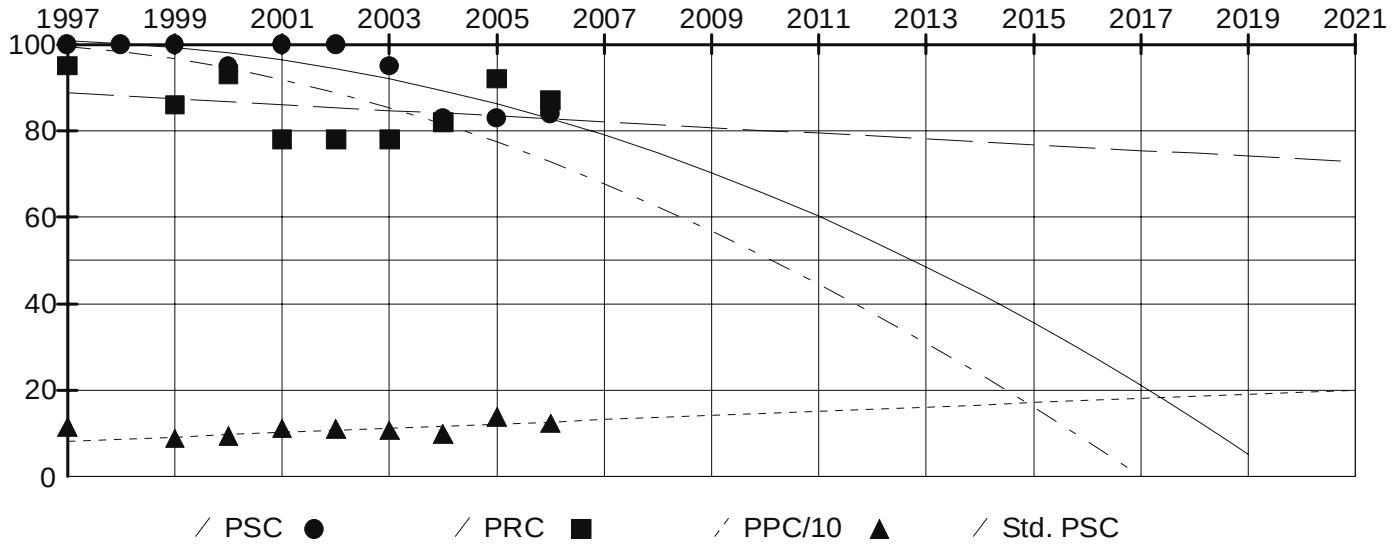
Ad. Date/PIN/Title: 04/2010 100904A - SR 9/172nd St. SE Vicinity to Montessori(MP 4.20 -6.80)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	100	100	100	95	100	100	95	83	83	84
PRC (Rutting)	95	N/A	86	93	78	78	78	82	92	87
PPC (IRI cm/km)	116	N/A	89	95	112	111	107	99	139	123

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2051	Regression	56.70	11.42	1996	77.26	4.94E+00	1.00
PRC	2055	Regression	8.09	6.99	1996	89.34	-6.61E-01	1.00
PSC	2012	Too Short	98.00	3.00	1996	100.90	-1.81E-01	2.00



Survey Data

Survey Year: 2006 Pavement: ACP Survey Lane: Right

Rut (mm): 3 PSC: 84 IRI (cm/km): 123

Defect Type	Low	Medium	High
Alligator Cracking	3	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	24	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 19796 Ave. Weekday Traffic: 21026

ADT Growth: 3.68% Single Units: 2983 Double Units: 261

Trains: 44 Total Trucks: 3288 Trucks Percentage: 16.61%

Trucks Growth: 3.68% Directional Split: 63.50% Peak Hour: 7.95%

Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F

Past ESALs: 2,399,799 ESALs after 15yrs: 6,511,354

Analysis Unit: MP 6.80 - 6.91

(Vicinity: From MP 6.78 - INTRSECTN - MONTESSORI RD To MP 6.97 - INTRSECTN - BROADWAY AVE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 6.80	MP End: 6.91	Qualifier:
ARM Begin: 6.80	ARM End: 6.91	Length (Miles): 0.11
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: N/A	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 0.22	Lt Shoulder (ft): 4.0	Rt Shoulder (ft): 10.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1996	014854	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1983	012319	FIRST STAGE CONSTR	0.30	ACP CLASS B AR4000W	LANES ADDED LEFT AND RT
1958	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1958	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1948	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1948	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1944	000000	RESURFACE EXISTING RDWY	0.17	MIXED BITUMINOUS	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.02	BST CLASS A CRS-2 TACK	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.04	BST CLASS A CRS-2 PRIME	NONE
1939			0.00	N/A	
1939			1.08	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 0.00 to 7.01

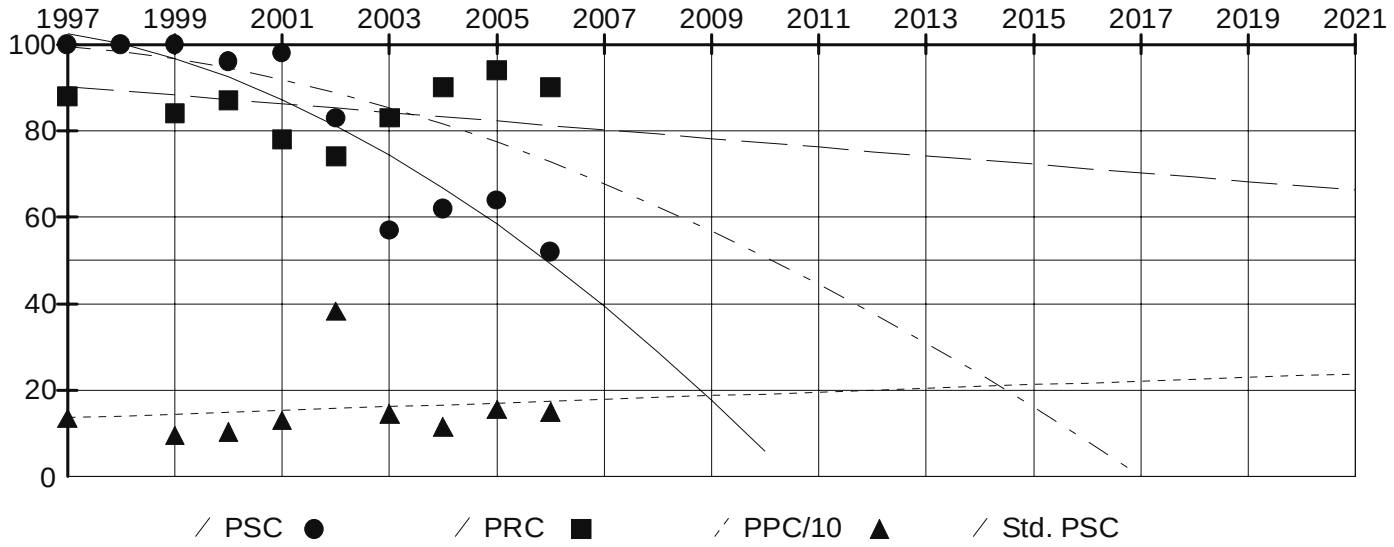
Ad. Date/PIN/Title: 04/2010 100904A - SR 9/172nd St. SE Vicinity to Montessori(MP 4.20 -6.80)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	100	100	100	96	98	83	57	62	64	52
PRC (Rutting)	88	N/A	84	87	78	74	83	90	94	90
PPC (IRI cm/km)	135	N/A	96	104	130	383	145	115	156	150

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2047	Regression	1.25	99.56	1996	132.40	4.23E+00	1.00
PRC	2037	Regression	21.66	8.28	1996	91.22	-1.00E+00	1.00
PSC	2005	Regression	86.00	7.00	1996	103.31	-9.62E-01	1.75



Survey Data

Survey Year: 2006 Pavement: ACP Survey Lane: Right

Rut (mm): 3 PSC: 52 IRI (cm/km): 150

Defect Type	Low	Medium	High
Alligator Cracking	20	0	0
Patching	0	5	0
Raveling	0	0	0
Longitudinal Cracking	13	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 19487 Ave. Weekday Traffic: 20711

ADT Growth: 3.68% Single Units: 2936 Double Units: 257

Trains: 42 Total Trucks: 3235 Trucks Percentage: 16.60%

Trucks Growth: 3.68% Directional Split: 63.43% Peak Hour: 8.06%

Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F

Past ESALs: 2,359,168 ESALs after 15yrs: 6,401,109

Analysis Unit: MP 6.91 - 7.01

(Vicinity: From MP 6.97 - INTRSECTN - BROADWAY AVE To MP 6.97 - INTRSECTN - SR 96-LOWELL LARIMER RD)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 6.91	MP End: 7.01	Qualifier:
ARM Begin: 6.91	ARM End: 7.01	Length (Miles): 0.10
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: N/A	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 0.20	Lt Shoulder (ft): 4.0	Rt Shoulder (ft): 10.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1996	014854	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1983	012319	FIRST STAGE CONSTR	0.30	ACP CLASS B AR4000W	INCL CONSTR FOR CHAN
1958	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1958	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1948	000000	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1948	000000	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1944	000000	RESURFACE EXISTING RDWY	0.17	MIXED BITUMINOUS	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.02	BST CLASS A CRS-2 TACK	NONE
1939	000000	RECONSTR EXISTING ALIGN	0.04	BST CLASS A CRS-2 PRIME	NONE
1939			0.00	N/A	
1939			1.08	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 0.00 to 7.01

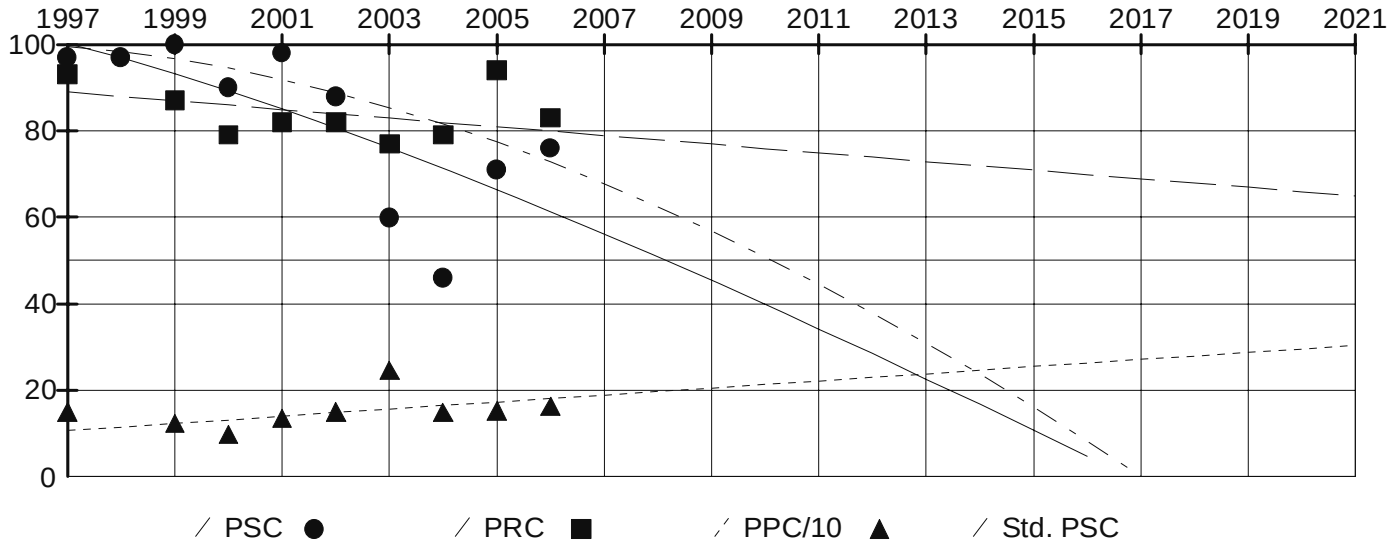
Ad. Date/PIN/Title: 04/2010 100904A - SR 9/172nd St. SE Vicinity to Montessori(MP 4.20 -6.80)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	97	97	100	90	98	88	60	46	71	76
PRC (Rutting)	93	N/A	87	79	82	82	77	79	94	83
PPC (IRI cm/km)	150	N/A	123	98	135	150	246	149	152	163

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2027	Regression	21.65	41.23	1996	98.76	8.19E+00	1.00
PRC	2036	Regression	23.12	6.56	1996	89.89	-1.00E+00	1.00
PSC	2008	Regression	57.00	12.00	1996	102.38	-2.31E+00	1.25



Survey Data

Survey Year: 2006 Pavement: ACP Survey Lane: Right

Rut (mm): 4 PSC: 76 IRI (cm/km): 163

Defect Type	Low	Medium	High
Alligator Cracking	7	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	22	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 19732 Ave. Weekday Traffic: 21104

ADT Growth: 3.68% Single Units: 2249 Double Units: 375

Trains: 78 Total Trucks: 2702 Trucks Percentage: 13.69%

Trucks Growth: 3.68% Directional Split: 61.59% Peak Hour: 7.86%

Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F

Past ESALs: 2,211,392 ESALs after 15yrs: 6,000,151

Analysis Unit: MP 7.01 - 7.15

(Vicinity: From MP 6.97 - INTRSECTN - SR 96-LOWELL LARIMER RD To MP 6.97 - INTRSECTN - SR 96-LOWELL LARIMER RD)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 7.01	MP End: 7.15	Qualifier:
ARM Begin: 7.01	ARM End: 7.15	Length (Miles): 0.14
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: N/A	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 0.28	Lt Shoulder (ft): 4.0	Rt Shoulder (ft): 6.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1996	014854	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1983	012319	FIRST STAGE CONSTR	0.15	ACP CLASS B AR4000W	LANE ADDED RIGHT
1978	011000	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1964	000000	RESURFACE EXISTING RDWY	0.15	ACP CLASS B AR4000W	NONE
1932	000000	RECONSTR EXISTING ALIGN	0.58	PCCP	NONE
1932			0.00	N/A	
1932			0.50	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 7.01 to 8.20

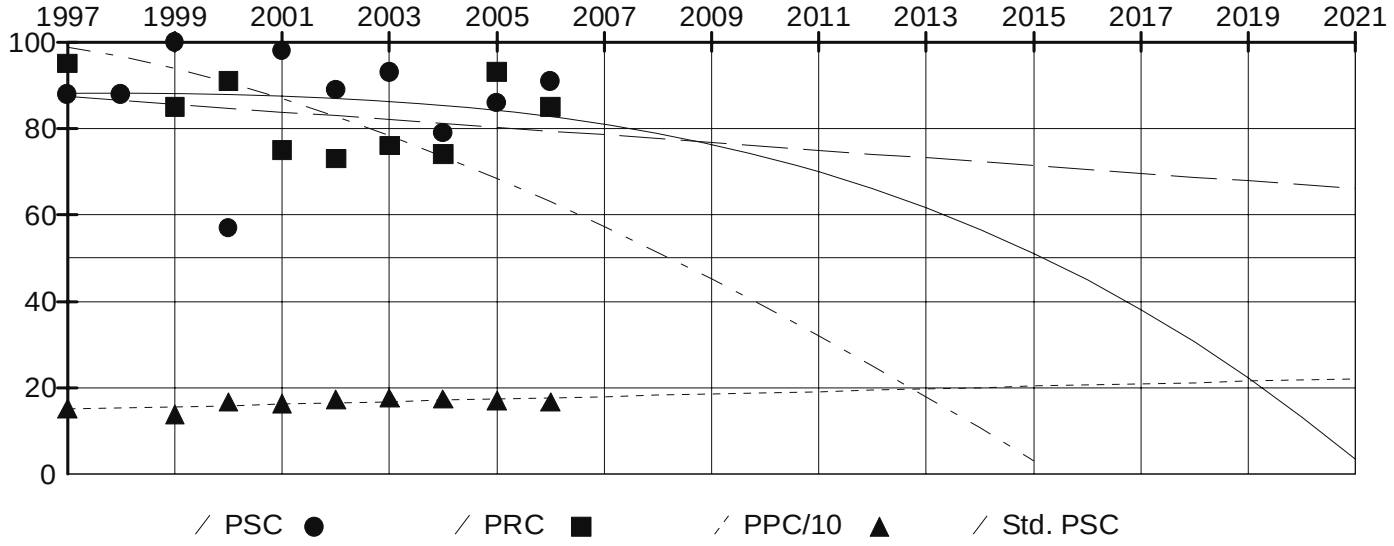
Ad. Date/PIN/Title: 02/2013 100914M - SR-9 Snoh. River Overflow to Market Pl.&(MP 3.90 -14.31)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	88	88	100	57	98	89	93	79	86	91
PRC (Rutting)	95	N/A	85	91	75	73	76	74	93	85
PPC (IRI cm/km)	153	N/A	139	167	164	173	177	174	171	167

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2064	Regression	37.50	10.17	1996	147.15	2.98E+00	1.00
PRC	2039	Regression	8.85	8.91	1996	88.21	-8.85E-01	1.00
PSC	2015	Too Long	84.00	11.00	1996	88.17	-5.41E-03	3.00



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 4	PSC: 91	IRI (cm/km): 167

Defect Type	Low	Medium	High

Alligator Cracking	1	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	16	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 20322 Ave. Weekday Traffic: 21944
ADT Growth: 3.68% Single Units: 1442 Double Units: 524
Trains: 123 Total Trucks: 2089 Trucks Percentage: 10.28%
Trucks Growth: 3.68% Directional Split: 59.50% Peak Hour: 7.61%
Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F
Past ESALs: 2,061,743 ESALs after 15yrs: 5,594,108

Analysis Unit: MP 7.15 - 7.28

(Vicinity: From MP 6.97 - INTRSECTN - SR 96-LOWELL LARIMER RD To MP 6.97 - INTRSECTN - SR 96-LOWELL LARIMER RD)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 7.15	MP End: 7.28	Qualifier:
ARM Begin: 7.15	ARM End: 7.28	Length (Miles): 0.13
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: N/A	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 24.0
Lane Miles: 0.26	Lt Shoulder (ft): 4.0	Rt Shoulder (ft): 4.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2005	016545	RESURFACE EXISTING RDWY	0.15	ACP CLASS 1/2IN PG58-22	NONE
1989	013523	RESURFACE EXISTING RDWY	0.15	ACP CLASS B AR4000W	NONE
1978	011000	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1964	000000	RESURFACE EXISTING RDWY	0.15	ACP CLASS B AR4000W	NONE
1932	000000	RECONSTR EXISTING ALIGN	0.58	PCCP	NONE
1932			0.00	N/A	
1932			0.50	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 7.01 to 8.20

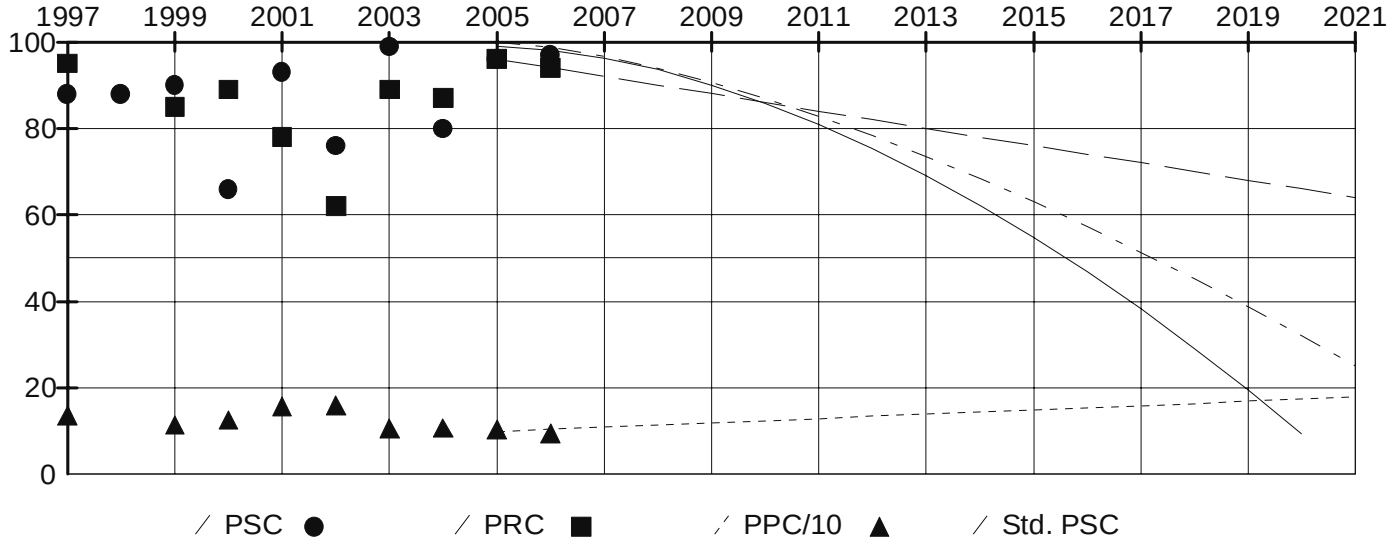
Ad. Date/PIN/Title: 02/2013 100914M - SR-9 Snoh. River Overflow to Market Pl.&(MP 3.90 -14.31)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	88	88	90	66	93	76	99	80	96	97
PRC (Rutting)	95	N/A	85	89	78	62	89	87	96	94
PPC (IRI cm/km)	136	N/A	114	126	157	160	106	107	104	94

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2055	Regression	100.00	0.00	2005	99.00	5.00E+00	1.00
PRC	2028	Regression	100.00	0.00	2005	96.00	-2.00E+00	1.00
PSC	2015	Modified Standard	99.00	1.00	2005	98.89	-7.84E-01	1.75



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 2	PSC: 97	IRI (cm/km): 94

Defect Type	Low	Medium	High

Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	4	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 20522 Ave. Weekday Traffic: 22242
ADT Growth: 3.68% Single Units: 1457 Double Units: 530
Trains: 124 Total Trucks: 2111 Trucks Percentage: 10.29%
Trucks Growth: 3.68% Directional Split: 59.68% Peak Hour: 7.67%
Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F
Past ESALs: 472,932 ESALs after 15yrs: 5,658,384

Analysis Unit: MP 7.28 - 7.40

(Vicinity: From MP 6.97 - INTRSECTN - SR 96-LOWELL LARIMER RD To MP 6.97 - INTRSECTN - SR 96-LOWELL LARIMER RD)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 7.28	MP End: 7.40	Qualifier:
ARM Begin: 7.28	ARM End: 7.40	Length (Miles): 0.12
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: N/A	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 24.0
Lane Miles: 0.24	Lt Shoulder (ft): 4.0	Rt Shoulder (ft): 0.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2005	016545	RESURFACE EXISTING RDWY	0.15	ACP CLASS 1/2IN PG58-22	NONE
1989	013523	RESURFACE EXISTING RDWY	0.15	ACP CLASS B AR4000W	NONE
1978	011000	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1964	000000	RESURFACE EXISTING RDWY	0.15	ACP CLASS B AR4000W	NONE
1932	000000	RECONSTR EXISTING ALIGN	0.58	PCCP	NONE
1932			0.00	N/A	
1932			0.50	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 7.01 to 8.20

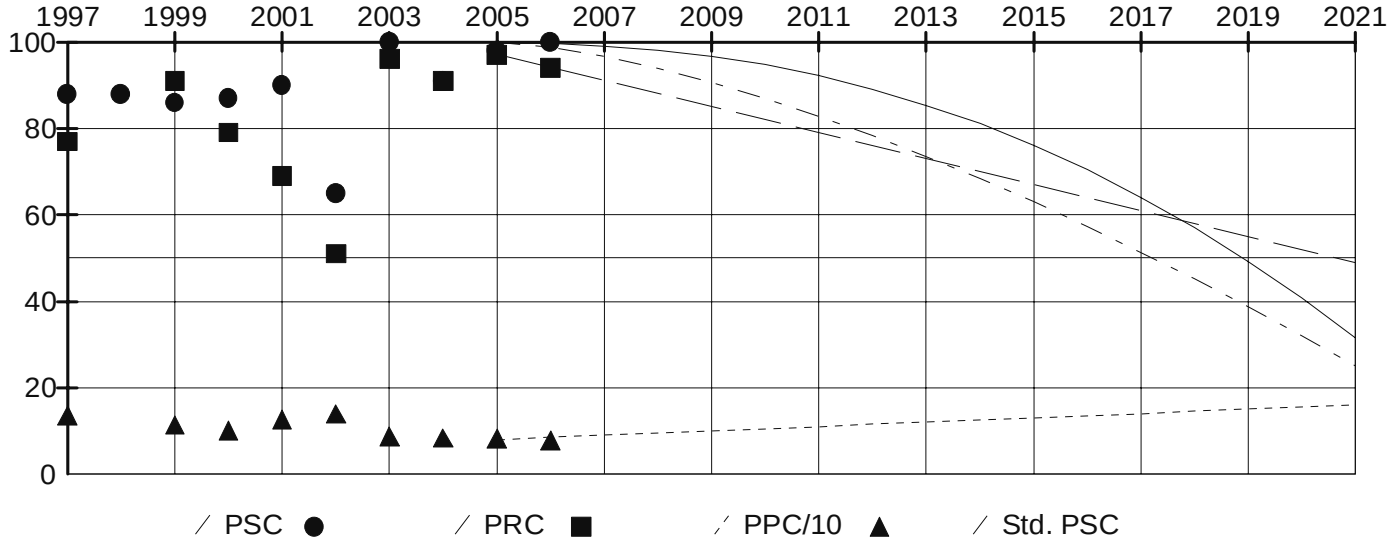
Ad. Date/PIN/Title: 02/2013 100914M - SR-9 Snoh. River Overflow to Market Pl.&(MP 3.90 -14.31)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	88	88	86	87	90	65	100	91	98	100
PRC (Rutting)	77	N/A	91	79	69	51	96	91	97	94
PPC (IRI cm/km)	136	N/A	114	102	127	140	88	84	83	78

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2059	Regression	100.00	0.00	2005	80.50	5.00E+00	1.00
PRC	2021	Regression	100.00	0.00	2005	97.00	-3.00E+00	1.00
PSC	2018	Modified Standard	99.00	1.00	2005	99.70	-1.33E-01	2.25



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 2	PSC: 100	IRI (cm/km): 78

Defect Type	Low	Medium	High

Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 20708 Ave. Weekday Traffic: 22518
ADT Growth: 3.68% Single Units: 1470 Double Units: 534
Trains: 126 Total Trucks: 2130 Trucks Percentage: 10.29%
Trucks Growth: 3.68% Directional Split: 59.84% Peak Hour: 7.73%
Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F
Past ESALs: 477,591 ESALs after 15yrs: 5,714,125

Analysis Unit: MP 7.40 - 7.50

(Vicinity: From MP 6.97 - INTRSECTN - SR 96-LOWELL LARIMER RD To MP 6.97 - INTRSECTN - SR 96-LOWELL LARIMER RD)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 7.40	MP End: 7.50	Qualifier:
ARM Begin: 7.40	ARM End: 7.50	Length (Miles): 0.10
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 24.0
Lane Miles: 0.20	Lt Shoulder (ft): 4.0	Rt Shoulder (ft): 0.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2005	016545	RESURFACE EXISTING RDWY	0.15	ACP CLASS 1/2IN PG58-22	NONE
1989	013523	RESURFACE EXISTING RDWY	0.15	ACP CLASS B AR4000W	NONE
1978	011000	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1964	000000	RESURFACE EXISTING RDWY	0.15	ACP CLASS B AR4000W	NONE
1932	000000	RECONSTR EXISTING ALIGN	0.58	PCCP	NONE
1932			0.00	N/A	
1932			0.50	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 7.01 to 8.20

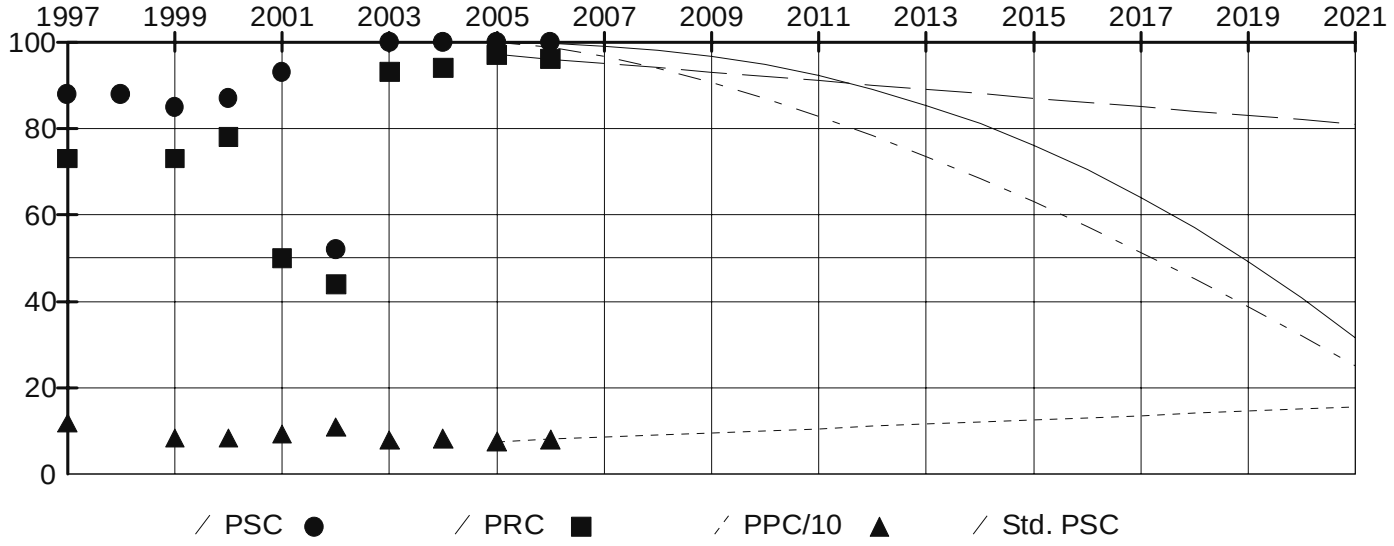
Ad. Date/PIN/Title: 02/2013 100914M - SR-9 Snoh. River Overflow to Market Pl.&(MP 3.90 -14.31)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	88	88	85	87	93	52	100	100	100	100
PRC (Rutting)	73	N/A	73	78	50	44	93	94	97	96
PPC (IRI cm/km)	119	N/A	84	84	93	110	79	83	76	81

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2060	Regression	100.00	0.00	2005	76.00	5.00E+00	1.00
PRC	2052	Regression	100.00	0.00	2005	97.00	-1.00E+00	1.00
PSC	2018	Modified Standard	99.00	1.00	2005	99.70	-1.33E-01	2.25



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 1	PSC: 100	IRI (cm/km): 81

Defect Type	Low	Medium	High

Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 20872 Ave. Weekday Traffic: 22761
ADT Growth: 3.68% Single Units: 1482 Double Units: 538
Trains: 126 Total Trucks: 2146 Trucks Percentage: 10.28%
Trucks Growth: 3.68% Directional Split: 59.99% Peak Hour: 7.78%
Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F
Past ESALs: 480,721 ESALs after 15yrs: 5,751,581

Analysis Unit: MP 7.50 - 7.93

(Vicinity: From MP 6.97 - INTRSECTN - SR 96-LOWELL LARIMER RD To MP 8.42 - INTRSECTN - MARSH RD)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 7.50	MP End: 7.93	Qualifier:
ARM Begin: 7.50	ARM End: 7.93	Length (Miles): 0.43
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 24.0
Lane Miles: 0.86	Lt Shoulder (ft): 4.0	Rt Shoulder (ft): 4.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2005	016545	RESURFACE EXISTING RDWY	0.15	ACP CLASS 1/2IN PG58-22	NONE
1989	013523	RESURFACE EXISTING RDWY	0.15	ACP CLASS B AR4000W	NONE
1978	011000	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1964	000000	RESURFACE EXISTING RDWY	0.15	ACP CLASS B AR4000W	NONE
1932	000000	RECONSTR EXISTING ALIGN	0.58	PCCP	NONE
1932			0.00	N/A	
1932			0.50	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 7.01 to 8.20

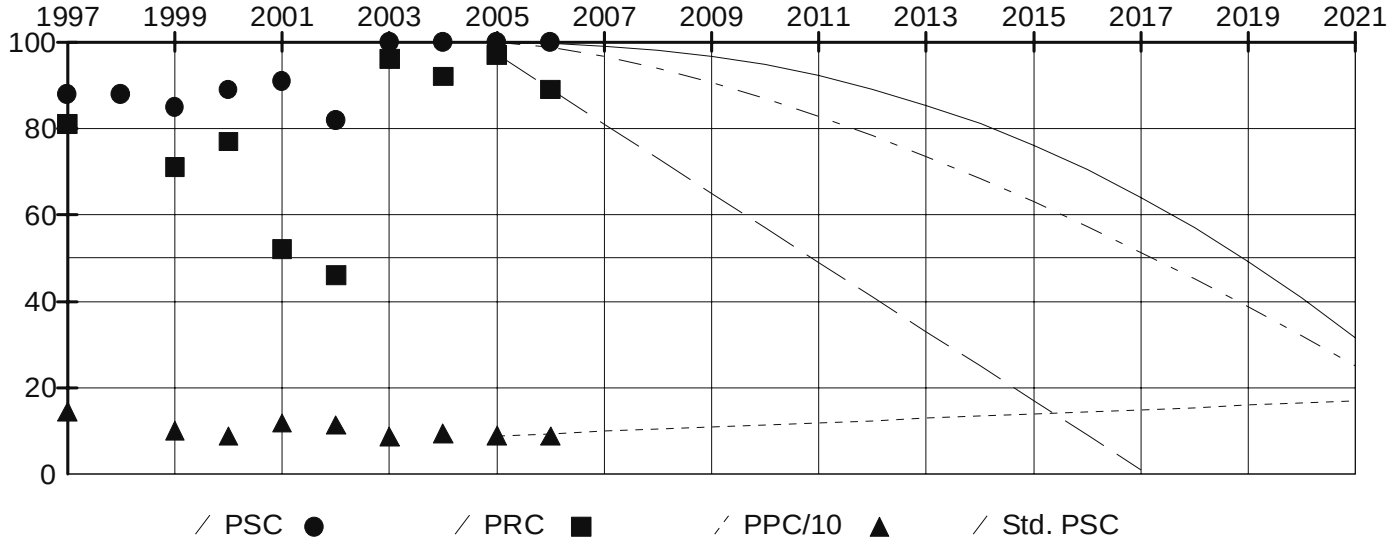
Ad. Date/PIN/Title: 02/2013 100914M - SR-9 Snoh. River Overflow to Market Pl.&(MP 3.90 -14.31)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	88	88	85	89	91	82	100	100	100	100
PRC (Rutting)	81	N/A	71	77	52	46	96	92	97	89
PPC (IRI cm/km)	146	N/A	101	89	119	114	88	95	90	89

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2057	Regression	100.00	0.00	2005	89.50	5.00E+00	1.00
PRC	2011	Regression	100.00	0.00	2005	97.00	-8.00E+00	1.00
PSC	2018	Modified Standard	99.00	1.00	2005	99.70	-1.33E-01	2.25



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 3	PSC: 100	IRI (cm/km): 89

Defect Type	Low	Medium	High

Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 21268 Ave. Weekday Traffic: 23346
ADT Growth: 3.68% Single Units: 1510 Double Units: 548
Trains: 129 Total Trucks: 2187 Trucks Percentage: 10.28%
Trucks Growth: 3.68% Directional Split: 60.34% Peak Hour: 7.91%
Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F
Past ESALs: 489,509 ESALs after 15yrs: 5,856,718

Analysis Unit: MP 7.93 - 8.20

(Vicinity: From MP 8.42 - INTRSECTN - MARSH RD To MP 8.42 - INTRSECTN - MARSH RD)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 7.93	MP End: 8.20	Qualifier:
ARM Begin: 7.93	ARM End: 8.20	Length (Miles): 0.27
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 24.0
Lane Miles: 0.54	Lt Shoulder (ft): 4.0	Rt Shoulder (ft): 4.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2005	016545	RESURFACE EXISTING RDWY	0.15	ACP CLASS 1/2IN PG58-22	NONE
1989	013523	RESURFACE EXISTING RDWY	0.15	ACP CLASS B AR4000W	NONE
1976	010396	RESURFACE EXISTING RDWY	0.20	ACP CLASS B AR4000W	NONE
1964	000000	RESURFACE EXISTING RDWY	0.15	ACP CLASS B AR4000W	NONE
1932	000000	RECONSTR EXISTING ALIGN	0.58	PCCP	NONE
1932			0.00	N/A	
1932			0.50	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 7.01 to 8.20

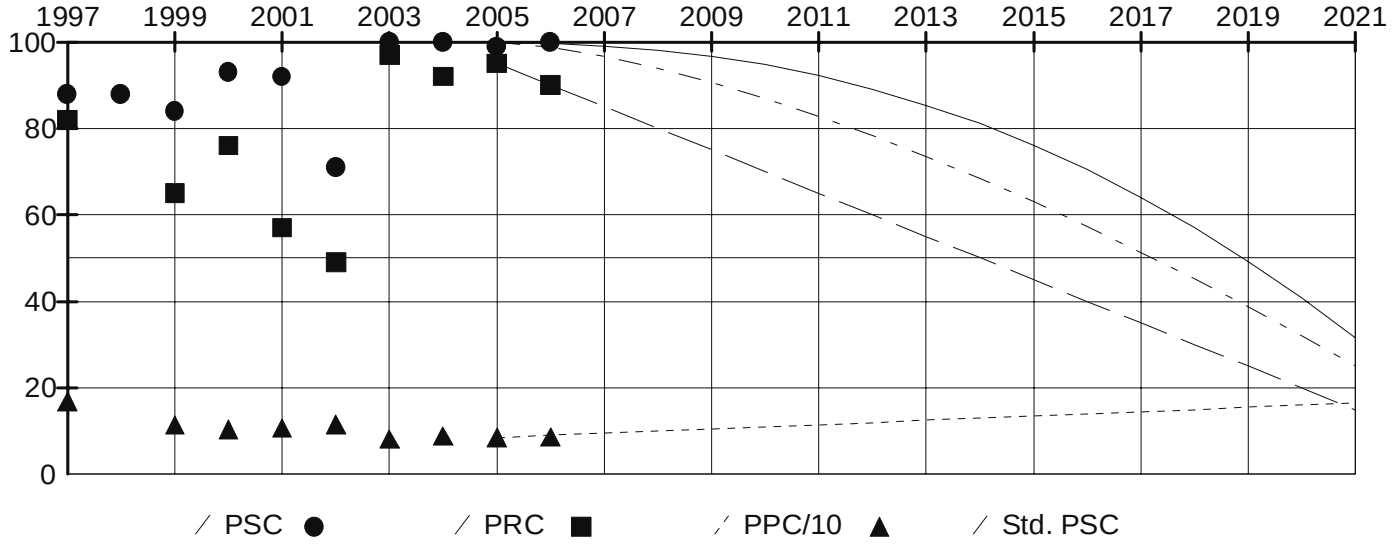
Ad. Date/PIN/Title: 02/2013 100914M - SR-9 Snoh. River Overflow to Market Pl.&(MP 3.90 -14.31)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	88	88	84	93	92	71	100	100	99	100
PRC (Rutting)	82	N/A	65	76	57	49	97	92	95	90
PPC (IRI cm/km)	169	N/A	114	104	107	116	82	89	85	86

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2058	Regression	100.00	0.00	2005	85.00	5.00E+00	1.00
PRC	2014	Regression	100.00	0.00	2005	95.00	-5.00E+00	1.00
PSC	2018	Modified Standard	99.00	1.00	2005	99.70	-1.33E-01	2.25



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 3	PSC: 100	IRI (cm/km): 86

Defect Type	Low	Medium	High

Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 21790	Ave. Weekday Traffic: 24119
ADT Growth: 3.68%	Single Units: 1547	Double Units: 562
Trains: 132	Total Trucks: 2241	Trucks Percentage: 10.28%
Trucks Growth: 3.68%	Directional Split: 60.80%	Peak Hour: 8.07%
Min. Level of Service: C	Cur. Level of Service: E	15yrs Level of Service: F

Past ESALs: 502,103 ESALs after 15yrs: 6,007,404

Analysis Unit: MP 8.20 - 8.66

(Vicinity: From MP 8.42 - INTRSECTN - MARSH RD To MP 8.88 - BEG BRIDGE - SNOHOMISH RIV OFLW)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 8.20	MP End: 8.66	Qualifier:
ARM Begin: 8.20	ARM End: 8.66	Length (Miles): 0.46
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 24.0
Lane Miles: 0.92	Lt Shoulder (ft): 4.0	Rt Shoulder (ft): 4.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2005	016545	RESURFACE EXISTING RDWY	0.15	ACP CLASS 1/2IN PG58-22	NONE
1989	013523	RECONSTR EXISTING ALIGN	0.70	ACP CLASS B AR4000W	NONE
1989			0.00	N/A	
1989			0.30	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 8.20 to 14.50

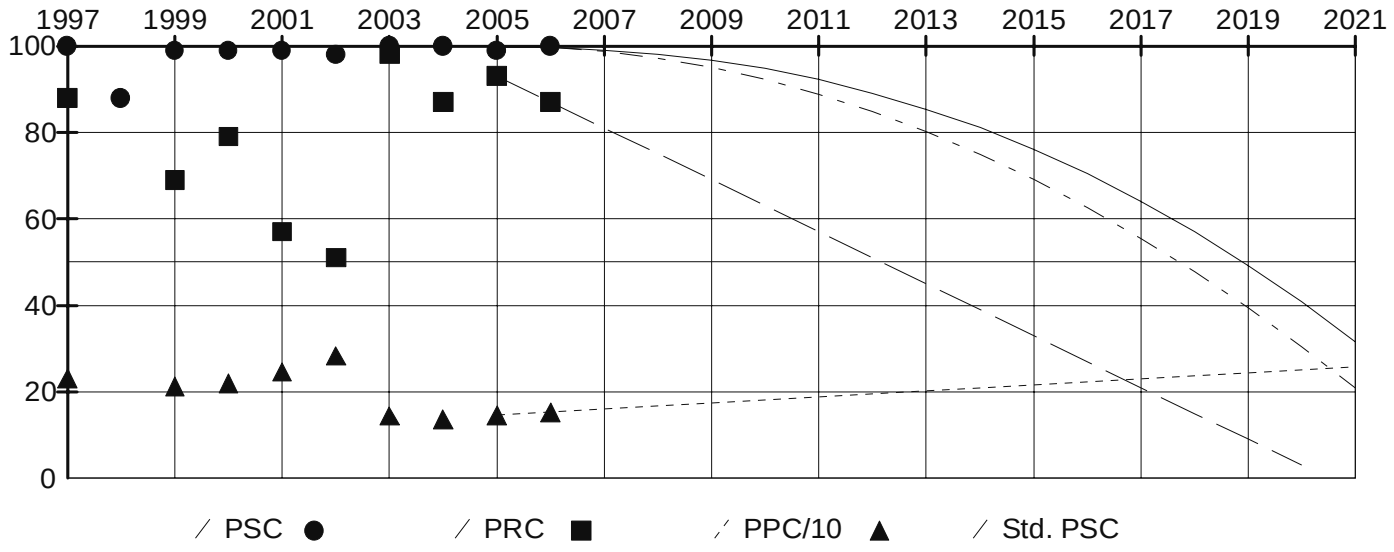
Ad. Date/PIN/Title: 05/2008 100916G - SR-9 Lake Stevens Road to 20th st. SE(Sn(MP 13.70 -14.50)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	100	88	99	99	99	98	100	100	99	100
PRC (Rutting)	88	N/A	69	79	57	51	98	87	93	87
PPC (IRI cm/km)	231	N/A	212	220	246	283	144	136	146	153

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2034	Regression	100.00	0.00	2005	146.00	7.00E+00	1.00
PRC	2012	Regression	100.00	0.00	2005	93.00	-6.00E+00	1.00
PSC	2018	Modified Standard	99.00	1.00	2005	99.70	-1.33E-01	2.25



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 3	PSC: 100	IRI (cm/km): 153

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0

Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 22334	Ave. Weekday Traffic: 24925
ADT Growth: 3.68%	Single Units: 1586	Double Units: 576
Trains: 136	Total Trucks: 2298	Trucks Percentage: 10.29%
Trucks Growth: 3.68%	Directional Split: 61.29%	Peak Hour: 8.24%
Min. Level of Service: C	Cur. Level of Service: E	15yrs Level of Service: F

Past ESALs: 515,265 ESALs after 15yrs: 6,164,877

Analysis Unit: MP 8.66 - 8.76

(Vicinity: From MP 8.88 - BEG BRIDGE - SNOHOMISH RIV OFLW To MP 8.88 - BEG BRIDGE - SNOHOMISH RIV OFLW)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 8.66	MP End: 8.76	Qualifier:
ARM Begin: 8.66	ARM End: 8.76	Length (Miles): 0.10
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 24.0
Lane Miles: 0.20	Lt Shoulder (ft): 8.0	Rt Shoulder (ft): 10.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2005	016545	RESURFACE EXISTING RDWY	0.15	ACP CLASS 1/2IN PG58-22	NONE
1989	013523	RECONSTR EXISTING ALIGN	0.70	ACP CLASS B AR4000W	NONE
1989			0.00	N/A	
1989			0.30	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 8.20 to 14.50

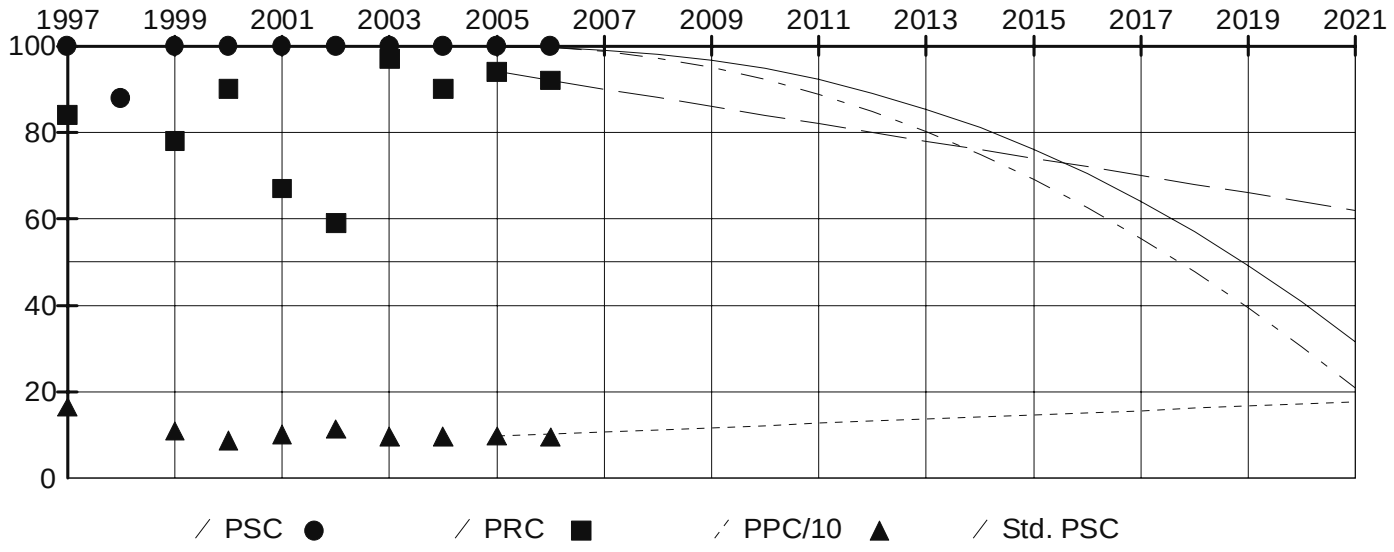
Ad. Date/PIN/Title: 05/2008 100916G - SR-9 Lake Stevens Road to 20th st. SE(Sn(MP 13.70 -14.50)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	100	88	100	100	100	100	100	100	100	100
PRC (Rutting)	84	N/A	78	90	67	59	97	90	94	92
PPC (IRI cm/km)	165	N/A	110	88	102	114	97	97	98	96

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2056	Regression	100.00	0.00	2005	97.00	5.00E+00	1.00
PRC	2027	Regression	100.00	0.00	2005	94.00	-2.00E+00	1.00
PSC	2018	Modified Standard	99.00	1.00	2005	99.70	-1.33E-01	2.25



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 2	PSC: 100	IRI (cm/km): 96

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0

Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 22752	Ave. Weekday Traffic: 25543
ADT Growth: 3.68%	Single Units: 1616	Double Units: 586
Trains: 138	Total Trucks: 2340	Trucks Percentage: 10.28%
Trucks Growth: 3.68%	Directional Split: 61.66%	Peak Hour: 8.37%
Min. Level of Service: C	Cur. Level of Service: E	15yrs Level of Service: F

Past ESALs: 524,337 ESALs after 15yrs: 6,273,419

Analysis Unit: MP 8.76 - 8.88

(Vicinity: From MP 8.88 - BEG BRIDGE - SNOHOMISH RIV OFLW To MP 8.88 - BEG BRIDGE - SNOHOMISH RIV OFLW)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 8.76	MP End: 8.88	Qualifier:
ARM Begin: 8.76	ARM End: 8.88	Length (Miles): 0.12
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 24.0
Lane Miles: 0.24	Lt Shoulder (ft): 8.0	Rt Shoulder (ft): 10.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2005	016545	RESURFACE EXISTING RDWY	0.15	ACP CLASS 1/2IN PG58-22	NONE
1989	013523	RESURFACE EXISTING RDWY	0.15	ACP CLASS B AR4000W	NONE
1982	012359	RESURFACE EXISTING RDWY	0.15	ACP CLASS B AR4000W	NONE
1961	000000	RECONSTR EXISTING ALIGN	0.25	ACP CLASS B AR4000W	NONE
1961			0.50	CTB	
1961			0.25	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 8.20 to 14.50

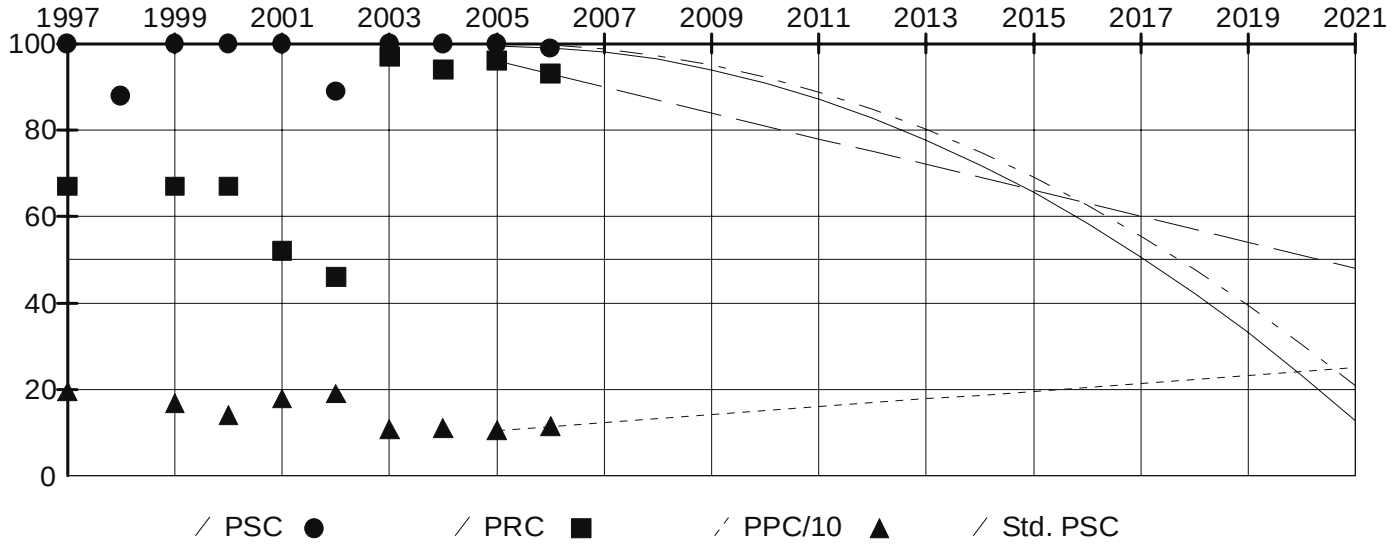
Ad. Date/PIN/Title: 05/2008 100916G - SR-9 Lake Stevens Road to 20th st. SE(Sn(MP 13.70 -14.50)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	100	88	100	100	100	89	100	100	100	99
PRC (Rutting)	67	N/A	67	67	52	46	97	94	96	93
PPC (IRI cm/km)	195	N/A	168	141	179	191	109	111	106	115

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2032	Regression	100.00	0.00	2005	106.00	9.00E+00	1.00
PRC	2020	Regression	100.00	0.00	2005	96.00	-3.00E+00	1.00
PSC	2017	Modified Standard	99.00	1.00	2005	99.34	-3.38E-01	2.00



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 2	PSC: 99	IRI (cm/km): 115

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0

Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	1	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 22916	Ave. Weekday Traffic: 25786
ADT Growth: 3.68%	Single Units: 1626	Double Units: 590
Trains: 140	Total Trucks: 2356	Trucks Percentage: 10.28%
Trucks Growth: 3.68%	Directional Split: 61.81%	Peak Hour: 8.42%
Min. Level of Service: C	Cur. Level of Service: E	15yrs Level of Service: F

Past ESALs: 528,428 ESALs after 15yrs: 6,322,373

Analysis Unit: MP 8.88 - 8.95

(Vicinity: From MP 8.88 - BEG BRIDGE - SNOHOMISH RIV OFLW To MP 8.95 - END BRIDGE - SNOHOMISH RIV OFLW)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 8.88	MP End: 8.95	Qualifier:
ARM Begin: 8.88	ARM End: 8.95	Length (Miles): 0.07
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 31.0
Lane Miles: 0.14	Lt Shoulder (ft): 0.0	Rt Shoulder (ft): 0.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: Yes

Year	Contract	Construction	Thickness	Surface Type	Exception
2005	016545	RESURFACE EXISTING RDWY	0.15	ACP CLASS 1/2IN PG58-22	BRIDGE DECK RESURFACING
2005	016545	PLANING	0.15	GRINDING ACP OR BST	NONE
1989	013523	RESURFACE EXISTING RDWY	0.15	ACP CLASS B AR4000W	BRIDGE DECK RESURFACING
1961	006347	BRIDGE	0.00	PCCP	NONE

Related Programmed Project: SR 9 Mainline Increasing 8.20 to 14.50

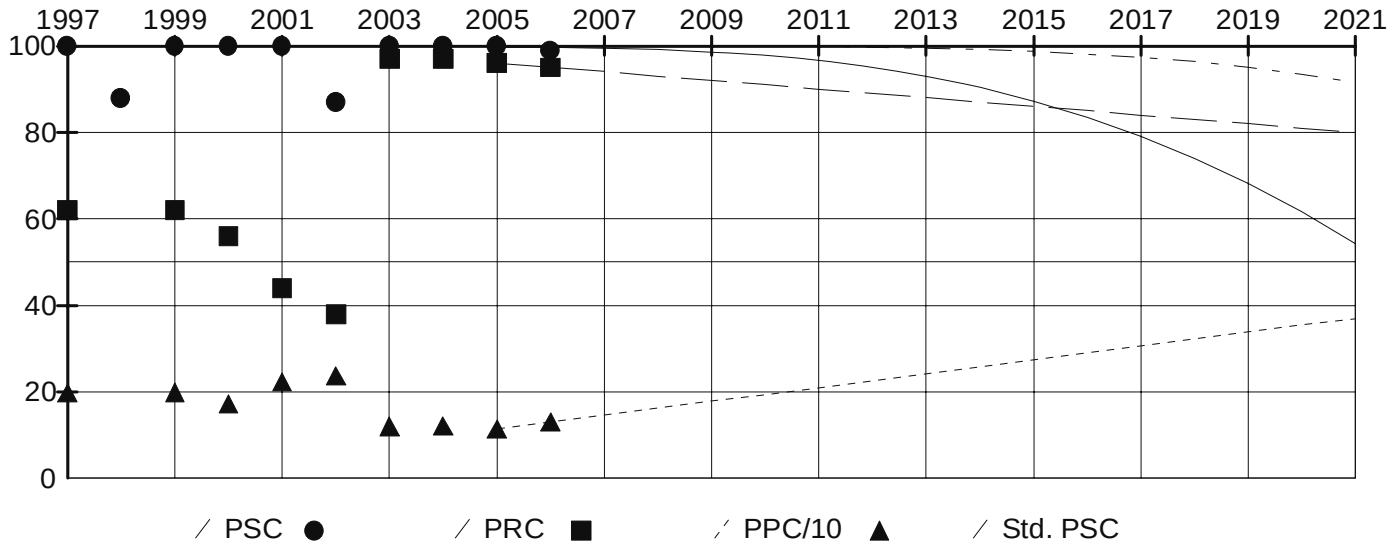
Ad. Date/PIN/Title: 05/2008 100916G - SR-9 Lake Stevens Road to 20th st. SE(Sn(MP 13.70 -14.50)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	100	88	100	100	100	87	100	100	100	99
PRC (Rutting)	62	N/A	62	56	44	38	97	97	96	95
PPC (IRI cm/km)	198	N/A	199	172	223	237	120	121	114	130

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2020	Regression	100.00	0.00	2005	114.00	1.60E+01	1.00
PRC	2051	Regression	100.00	0.00	2005	96.00	-1.00E+00	1.00
PSC	2021	Modified Standard	99.00	0.00	2005	99.59	-2.21E-02	2.75



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 1	PSC: 99	IRI (cm/km): 130

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0

Longitudinal Cracking	1	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 23057	Ave. Weekday Traffic: 25996
ADT Growth: 3.68%	Single Units: 1636	Double Units: 594
Trains: 140	Total Trucks: 2370	Trucks Percentage: 10.28%
Trucks Growth: 3.68%	Directional Split: 61.93%	Peak Hour: 8.46%
Min. Level of Service: C	Cur. Level of Service: E	15yrs Level of Service: F

Past ESALs: 531,274 ESALs after 15yrs: 6,356,423

Analysis Unit: MP 8.95 - 9.17

(Vicinity: From MP 8.95 - END BRIDGE - SNOHOMISH RIV OFLW To MP 9.17 - RR XING - NUM 84579F STRUCTURE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 8.95	MP End: 9.17	Qualifier:
ARM Begin: 8.95	ARM End: 9.17	Length (Miles): 0.22
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 24.0
Lane Miles: 0.44	Lt Shoulder (ft): 8.0	Rt Shoulder (ft): 8.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2005	016545	RESURFACE EXISTING RDWY	0.15	ACP CLASS 1/2IN PG58-22	NONE
1989	013523	RESURFACE EXISTING RDWY	0.15	ACP CLASS B AR4000W	NONE
1982	012359	RESURFACE EXISTING RDWY	0.15	ACP CLASS B AR4000W	NONE
1961	000000	RECONSTR EXISTING ALIGN	0.25	ACP CLASS B AR4000W	NONE
1961			0.50	CTB	
1961			0.25	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 8.20 to 14.50

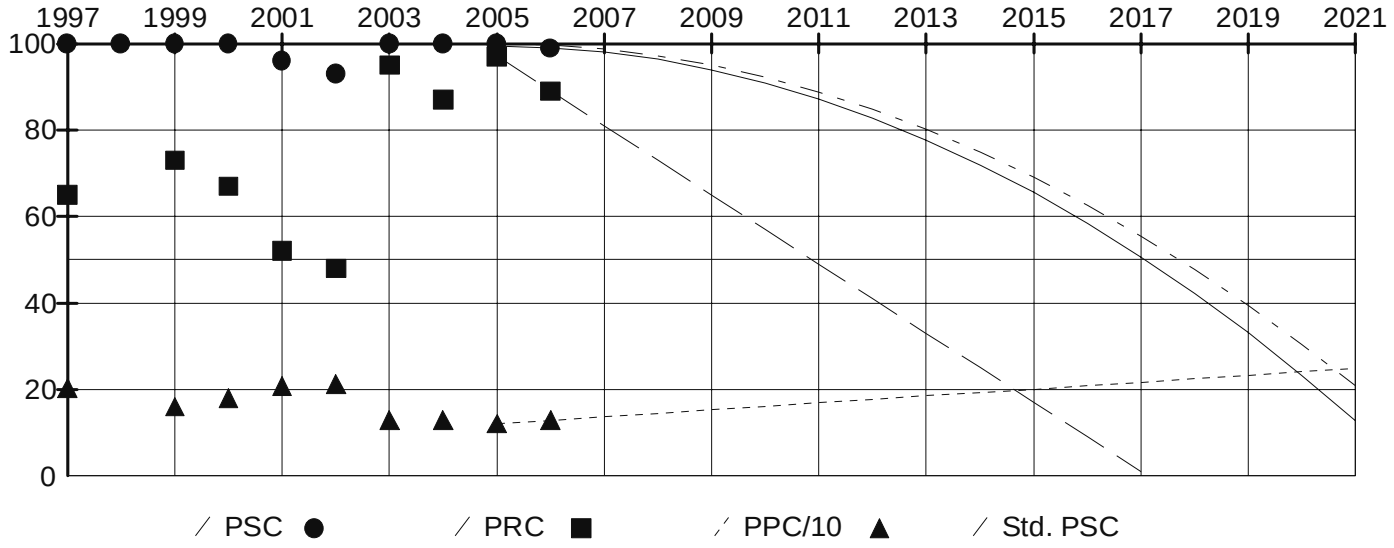
Ad. Date/PIN/Title: 05/2008 100916G - SR-9 Lake Stevens Road to 20th st. SE(Sn(MP 13.70 -14.50)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	100	100	100	100	96	93	100	100	100	99
PRC (Rutting)	65	N/A	73	67	52	48	95	87	97	89
PPC (IRI cm/km)	204	N/A	161	180	208	213	129	129	121	129

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2034	Regression	100.00	0.00	2005	121.00	8.00E+00	1.00
PRC	2011	Regression	100.00	0.00	2005	97.00	-8.00E+00	1.00
PSC	2017	Modified Standard	99.00	1.00	2005	99.34	-3.38E-01	2.00



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 3	PSC: 99	IRI (cm/km): 129

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0

Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	1	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 23273	Ave. Weekday Traffic: 26316
ADT Growth: 3.68%	Single Units: 1652	Double Units: 600
Trains: 142	Total Trucks: 2394	Trucks Percentage: 10.29%
Trucks Growth: 3.68%	Directional Split: 62.13%	Peak Hour: 8.53%
Min. Level of Service: C	Cur. Level of Service: E	15yrs Level of Service: F

Past ESALs: 536,929 ESALs after 15yrs: 6,424,082

Analysis Unit: MP 9.17 - 9.38

(Vicinity: From MP 9.17 - RR XING - NUM 84579F STRUCTURE To MP 9.38 - END BRIDGE - SNOHOMISH RIV OFLW)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 9.17	MP End: 9.38	Qualifier:
ARM Begin: 9.17	ARM End: 9.38	Length (Miles): 0.21
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 30.0
Lane Miles: 0.42	Lt Shoulder (ft): 0.0	Rt Shoulder (ft): 0.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: Yes

Year	Contract	Construction	Thickness	Surface Type	Exception
1988	013276	RESURFACE EXISTING RDWY	0.15	LATEX MODIFIED PCC	BRIDGE DECK RESURFACING
1988	013276	PLANING	0.10	GRINDING ACP OR BST	NONE
1959	005727	BRIDGE	0.00	PCCP	NONE

Related Programmed Project: SR 9 Mainline Increasing 8.20 to 14.50

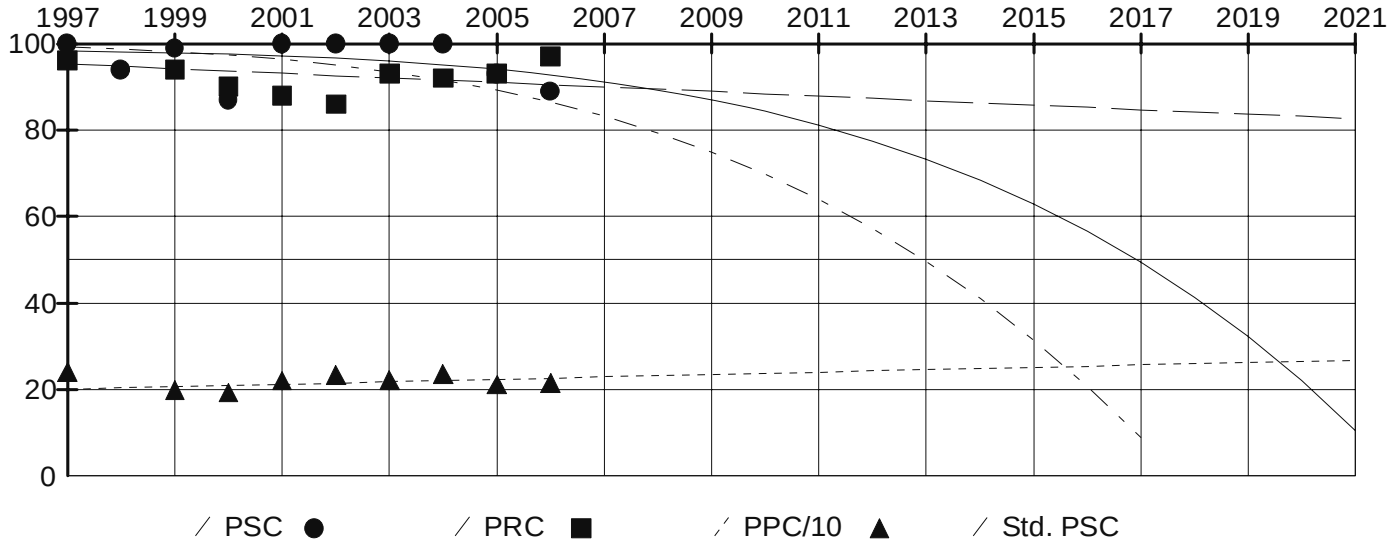
Ad. Date/PIN/Title: 05/2008 100916G - SR-9 Lake Stevens Road to 20th st. SE(Sn(MP 13.70 -14.50)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	100	94	99	87	100	100	100	100	93	89
PRC (Rutting)	96	N/A	94	90	88	86	93	92	93	97
PPC (IRI cm/km)	241	N/A	199	193	221	233	222	236	211	215

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2050	Regression	20.80	14.50	1988	175.51	2.81E+00	1.00
PRC	2083	Regression	47.83	3.43	1988	99.94	-5.26E-01	1.00
PSC	2016	Regression	14.00	4.00	1988	98.49	-1.29E-05	4.50



Survey Data

Survey Year: 2006	Pavement: PCCP	Survey Lane: Right
Rut (mm): 1	PSC: 89	IRI (cm/km): 215

Defect Type	Low	Medium	High
Slab Cracking	0	0	0
Patching	0	0	0
Scaling	0	0	0
Faulting	11	0	0

Joint/Crack Spalling	0	0	0
Pumping	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 23594	Ave. Weekday Traffic: 26791
ADT Growth: 3.68%	Single Units: 1675	Double Units: 608
Trains: 144	Total Trucks: 2427	Trucks Percentage: 10.29%
Trucks Growth: 3.68%	Directional Split: 62.41%	Peak Hour: 8.63%
Min. Level of Service: C	Cur. Level of Service: F	15yrs Level of Service: F

Past ESALs: 3,457,214 ESALs after 15yrs: 6,510,491

Analysis Unit: MP 9.38 - 9.56

(Vicinity: From MP 9.38 - END BRIDGE - SNOHOMISH RIV OFLW To MP 9.56 - BEG BRIDGE - SECOND ST)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 9.38	MP End: 9.56	Qualifier:
ARM Begin: 9.38	ARM End: 9.56	Length (Miles): 0.18
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 0.36	Lt Shoulder (ft): 8.0	Rt Shoulder (ft): 8.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2005	016545	RESURFACE EXISTING RDWY	0.15	ACP CLASS 1/2IN PG58-22	NONE
1988	013276	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1979	0X1460	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1961	000000	RECONSTR EXISTING ALIGN	0.25	ACP CLASS B AR4000W	NONE
1961			0.50	CTB	
1961			0.25	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 8.20 to 14.50

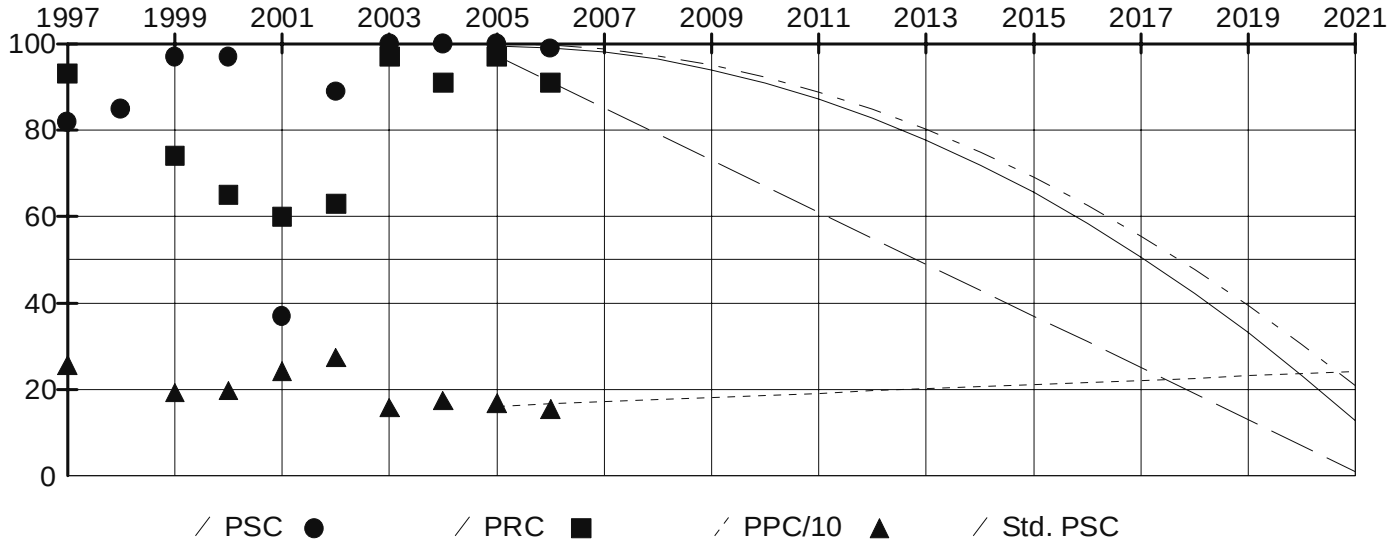
Ad. Date/PIN/Title: 05/2008 100916G - SR-9 Lake Stevens Road to 20th st. SE(Sn(MP 13.70 -14.50)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	82	85	97	97	37	89	100	100	100	99
PRC (Rutting)	93	N/A	74	65	60	63	97	91	97	91
PPC (IRI cm/km)	257	N/A	193	198	243	274	158	174	168	155

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2043	Regression	100.00	0.00	2005	161.50	5.00E+00	1.00
PRC	2013	Regression	100.00	0.00	2005	97.00	-6.00E+00	1.00
PSC	2017	Modified Standard	99.00	1.00	2005	99.34	-3.38E-01	2.00



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 2	PSC: 99	IRI (cm/km): 155

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0

Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	1	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 20417	Ave. Weekday Traffic: 23243
ADT Growth: 3.68%	Single Units: 1449	Double Units: 526
Trains: 124	Total Trucks: 2099	Trucks Percentage: 10.28%
Trucks Growth: 3.68%	Directional Split: 63.59%	Peak Hour: 8.50%
Min. Level of Service: C	Cur. Level of Service: E	15yrs Level of Service: F

Past ESALs: 470,370 ESALs after 15yrs: 5,627,739

Analysis Unit: MP 9.56 - 9.60

(Vicinity: From MP 9.56 - BEG BRIDGE - SECOND ST To MP 9.60 - END BRIDGE - SECOND ST)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 9.56	MP End: 9.60	Qualifier:
ARM Begin: 9.56	ARM End: 9.60	Length (Miles): 0.04
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 30.0
Lane Miles: 0.08	Lt Shoulder (ft): 0.0	Rt Shoulder (ft): 0.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: Yes

Year	Contract	Construction	Thickness	Surface Type	Exception
2005	016545	RESURFACE EXISTING RDWY	0.15	ACP CLASS 1/2IN PG58-22	BRIDGE DECK RESURFACING
2005	016545	PLANING	0.08	GRINDING ACP OR BST	NONE
1988	013276	RESURFACE EXISTING RDWY	0.08	ACP CLASS B AR4000W	NONE
1964	007157	BRIDGE	0.00	PCCP	NONE

Related Programmed Project: SR 9 Mainline Increasing 8.20 to 14.50

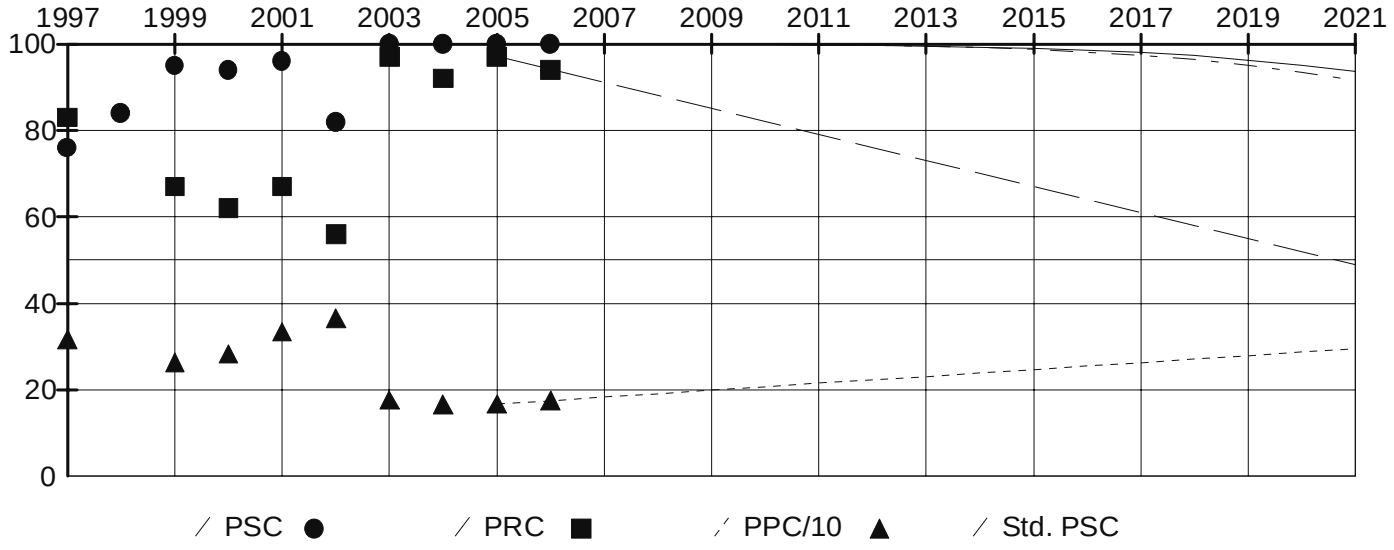
Ad. Date/PIN/Title: 05/2008 100916G - SR-9 Lake Stevens Road to 20th st. SE(Sn(MP 13.70 -14.50)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	76	84	95	94	96	82	100	100	100	100
PRC (Rutting)	83	N/A	67	62	67	56	97	92	97	94
PPC (IRI cm/km)	317	N/A	263	283	334	366	177	166	167	175

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2028	Regression	100.00	0.00	2005	167.00	8.00E+00	1.00
PRC	2021	Regression	100.00	0.00	2005	97.00	-3.00E+00	1.00
PSC	2031	Modified Standard	99.00	0.00	2005	99.84	-4.81E-05	4.25



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 2	PSC: 100	IRI (cm/km): 175

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0

Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 15840	Ave. Weekday Traffic: 18034
ADT Growth: 3.68%	Single Units: 1147	Double Units: 400
Trains: 94	Total Trucks: 1641	Trucks Percentage: 10.36%
Trucks Growth: 3.68%	Directional Split: 65.00%	Peak Hour: 8.23%
Min. Level of Service: C	Cur. Level of Service: E	15yrs Level of Service: F

Past ESALs: 363,894 ESALs after 15yrs: 4,353,800

Analysis Unit: MP 9.60 - 9.85

(Vicinity: From MP 9.60 - END BRIDGE - SECOND ST To MP 9.86 - OFF RAMP - SECOND ST)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 9.60	MP End: 9.85	Qualifier:
ARM Begin: 9.60	ARM End: 9.85	Length (Miles): 0.25
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 0.50	Lt Shoulder (ft): 8.0	Rt Shoulder (ft): 8.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2005	016545	RESURFACE EXISTING RDWY	0.15	ACP CLASS 1/2IN PG58-22	NONE
1988	013276	RESURFACE EXISTING RDWY	0.08	ACP CLASS B AR4000W	NONE
1979	0X1460	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1964	007157	NEW CONSTR OR ALIGN CHG	0.25	ACP CLASS B AR4000W	NONE
1964			0.50	CTB	
1964			1.13	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 8.20 to 14.50

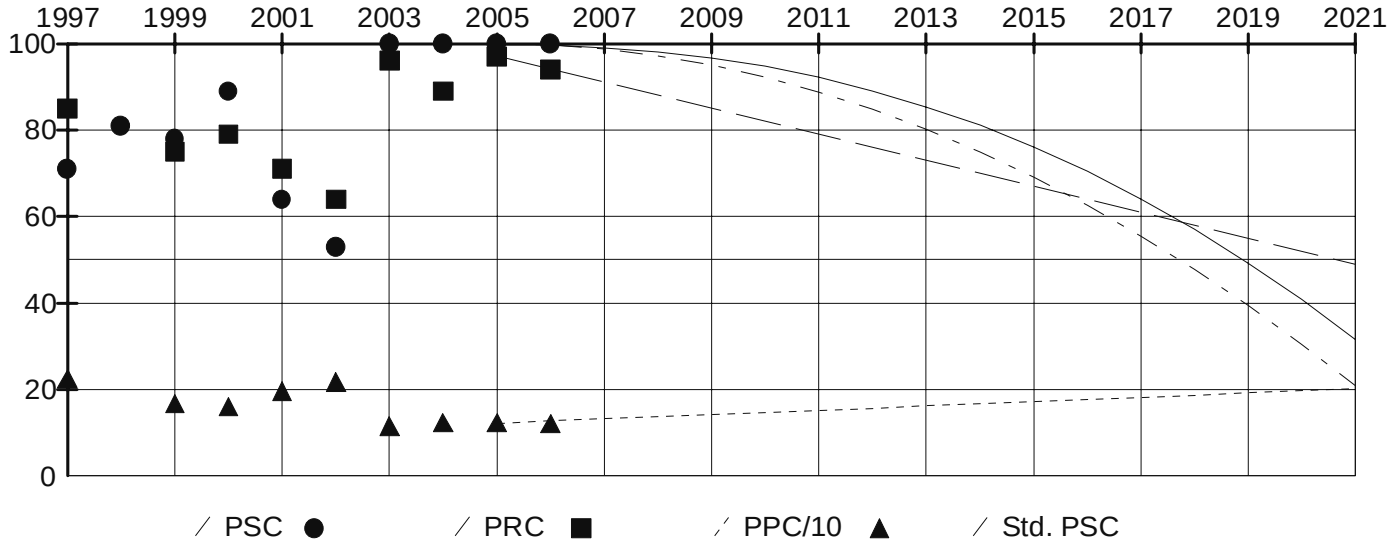
Ad. Date/PIN/Title: 05/2008 100916G - SR-9 Lake Stevens Road to 20th st. SE(Sn(MP 13.70 -14.50)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	71	81	78	89	64	53	100	100	100	100
PRC (Rutting)	85	N/A	75	79	71	64	96	89	97	94
PPC (IRI cm/km)	225	N/A	167	161	196	217	115	123	123	121

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2051	Regression	100.00	0.00	2005	122.00	5.00E+00	1.00
PRC	2021	Regression	100.00	0.00	2005	97.00	-3.00E+00	1.00
PSC	2018	Modified Standard	99.00	1.00	2005	99.70	-1.33E-01	2.25



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 2	PSC: 100	IRI (cm/km): 121

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0

Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 16918	Ave. Weekday Traffic: 19260
ADT Growth: 3.68%	Single Units: 1395	Double Units: 371
Trains: 88	Total Trucks: 1854	Trucks Percentage: 10.96%
Trucks Growth: 3.68%	Directional Split: 65.11%	Peak Hour: 8.25%
Min. Level of Service: C	Cur. Level of Service: E	15yrs Level of Service: F

Past ESALs: 384,777 ESALs after 15yrs: 4,603,653

Analysis Unit: MP 9.85 - 10.69

(Vicinity: From MP 9.86 - OFF RAMP - SECOND ST To MP 10.69 - BEG BRIDGE - 72ND ST SE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 9.85	MP End: 10.69	Qualifier:
ARM Begin: 9.85	ARM End: 10.69	Length (Miles): 0.84
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 1.68	Lt Shoulder (ft): 8.0	Rt Shoulder (ft): 8.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2005	016545	RESURFACE EXISTING RDWY	0.15	ACP CLASS 1/2IN PG58-22	NONE
1988	013276	RESURFACE EXISTING RDWY	0.08	ACP CLASS B AR4000W	NONE
1964	007157	NEW CONSTR OR ALIGN CHG	0.25	ACP CLASS B AR4000W	NONE
1964			0.50	CTB	
1964			0.50	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 8.20 to 14.50

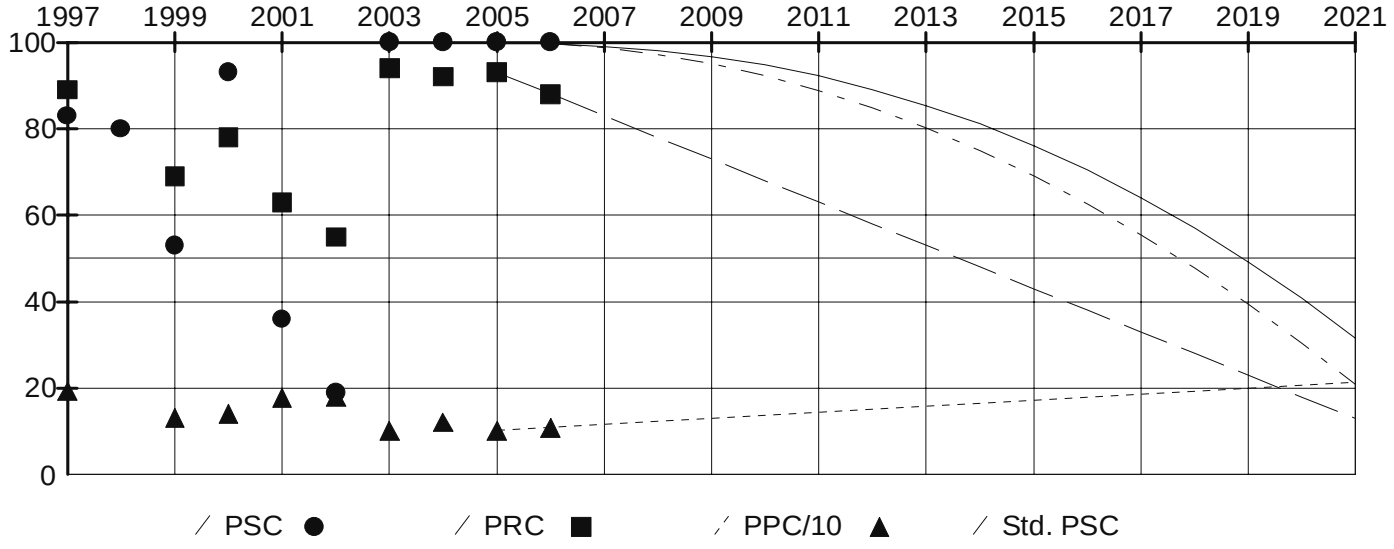
Ad. Date/PIN/Title: 05/2008 100916G - SR-9 Lake Stevens Road to 20th st. SE(Sn(MP 13.70 -14.50)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	83	80	53	93	36	19	100	100	100	100
PRC (Rutting)	89	N/A	69	78	63	55	94	92	93	88
PPC (IRI cm/km)	193	N/A	131	141	178	180	101	121	102	109

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2040	Regression	100.00	0.00	2005	102.00	7.00E+00	1.00
PRC	2014	Regression	100.00	0.00	2005	93.00	-5.00E+00	1.00
PSC	2018	Modified Standard	99.00	1.00	2005	99.70	-1.33E-01	2.25



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 3	PSC: 100	IRI (cm/km): 109

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0
Patching	0	0	0

Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 18213	Ave. Weekday Traffic: 20631
ADT Growth: 3.68%	Single Units: 1399	Double Units: 321
Trains: 82	Total Trucks: 1802	Trucks Percentage: 9.89%
Trucks Growth: 3.68%	Directional Split: 66.53%	Peak Hour: 8.16%
Min. Level of Service: C	Cur. Level of Service: E	15yrs Level of Service: F

Past ESALs: 363,824 ESALs after 15yrs: 4,352,960

Analysis Unit: MP 10.69 - 10.74

(Vicinity: From MP 10.69 - BEG BRIDGE - 72ND ST SE To MP 10.74 - END BRIDGE - 72ND ST SE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 10.69	MP End: 10.74	Qualifier:
ARM Begin: 10.69	ARM End: 10.74	Length (Miles): 0.05
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 30.0
Lane Miles: 0.10	Lt Shoulder (ft): 0.0	Rt Shoulder (ft): 0.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: Yes

Year	Contract	Construction	Thickness	Surface Type	Exception
2005	016545	RESURFACE EXISTING RDWY	0.15	ACP CLASS 1/2IN PG58-22	BRIDGE DECK RESURFACING
2005	016545	PLANING	0.08	GRINDING ACP OR BST	NONE
1988	013276	RESURFACE EXISTING RDWY	0.08	ACP CLASS B AR4000W	NONE
1964	007157	BRIDGE	0.00	PCCP	NONE

Related Programmed Project: SR 9 Mainline Increasing 8.20 to 14.50

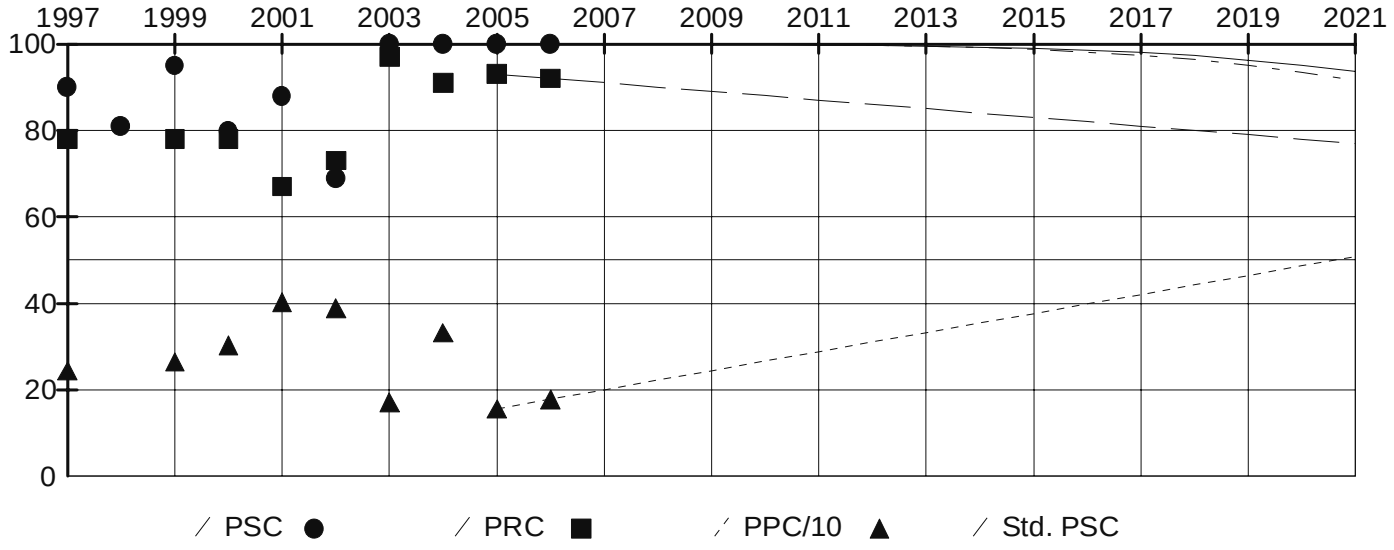
Ad. Date/PIN/Title: 05/2008 100916G - SR-9 Lake Stevens Road to 20th st. SE(Sn(MP 13.70 -14.50)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	90	81	95	80	88	69	100	100	100	100
PRC (Rutting)	78	N/A	78	78	67	73	97	91	93	92
PPC (IRI cm/km)	244	N/A	265	303	402	388	171	332	156	178

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2014	Regression	100.00	0.00	2005	156.00	2.20E+01	1.00
PRC	2048	Regression	100.00	0.00	2005	93.00	-1.00E+00	1.00
PSC	2031	Modified Standard	99.00	0.00	2005	99.84	-4.81E-05	4.25



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 2	PSC: 100	IRI (cm/km): 178

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0

Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 18606	Ave. Weekday Traffic: 20968
ADT Growth: 3.68%	Single Units: 1171	Double Units: 294
Trains: 80	Total Trucks: 1545	Trucks Percentage: 8.30%
Trucks Growth: 3.68%	Directional Split: 67.97%	Peak Hour: 8.05%
Min. Level of Service: C	Cur. Level of Service: E	15yrs Level of Service: F

Past ESALs: 320,884 ESALs after 15yrs: 3,839,215

Analysis Unit: MP 10.74 - 10.87

(Vicinity: From MP 10.74 - END BRIDGE - 72ND ST SE To MP 10.87 - UXING - OLD SR 2)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 10.74	MP End: 10.87	Qualifier:
ARM Begin: 10.74	ARM End: 10.87	Length (Miles): 0.13
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 0.26	Lt Shoulder (ft): 8.0	Rt Shoulder (ft): 8.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2005	016545	RESURFACE EXISTING RDWY	0.15	ACP CLASS 1/2IN PG58-22	NONE
1988	013276	RESURFACE EXISTING RDWY	0.08	ACP CLASS B AR4000W	NONE
1964	007157	NEW CONSTR OR ALIGN CHG	0.25	ACP CLASS B AR4000W	NONE
1964			0.50	CTB	
1964			0.50	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 8.20 to 14.50

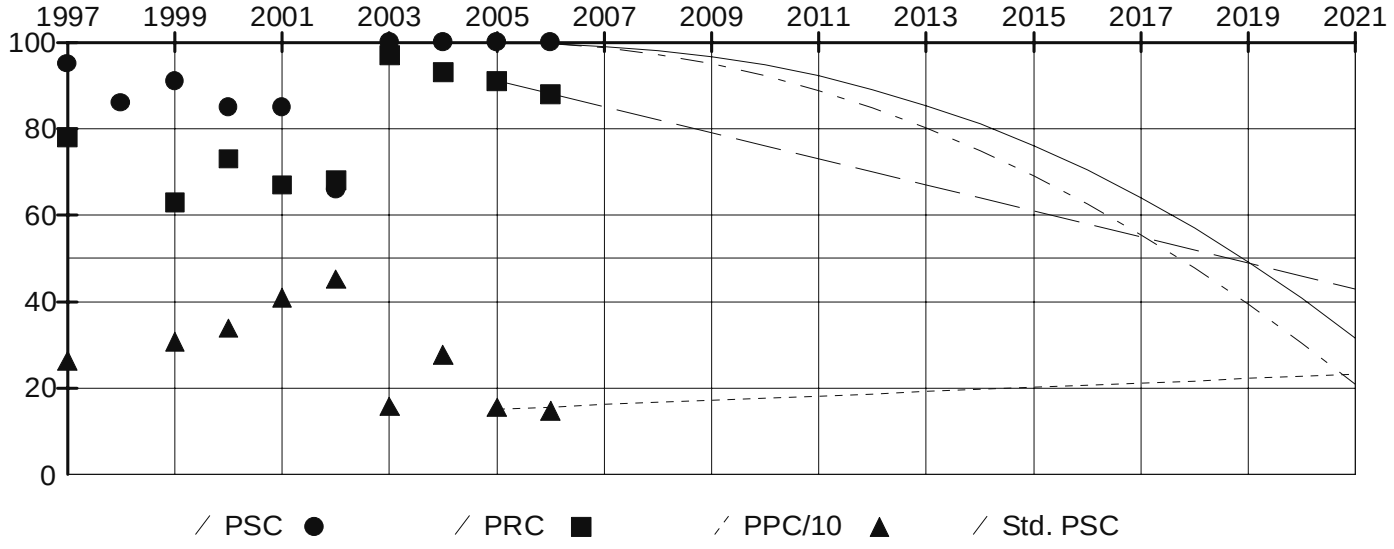
Ad. Date/PIN/Title: 05/2008 100916G - SR-9 Lake Stevens Road to 20th st. SE(Sn(MP 13.70 -14.50)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	95	86	91	85	85	66	100	100	100	100
PRC (Rutting)	78	N/A	63	73	67	68	97	93	91	88
PPC (IRI cm/km)	264	N/A	308	339	410	452	158	278	156	148

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2045	Regression	100.00	0.00	2005	152.00	5.00E+00	1.00
PRC	2019	Regression	100.00	0.00	2005	91.00	-3.00E+00	1.00
PSC	2018	Modified Standard	99.00	1.00	2005	99.70	-1.33E-01	2.25



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 3	PSC: 100	IRI (cm/km): 148

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0
Patching	0	0	0

Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 18686	Ave. Weekday Traffic: 21036
ADT Growth: 3.68%	Single Units: 1126	Double Units: 288
Trains: 80	Total Trucks: 1494	Trucks Percentage: 8.00%
Trucks Growth: 3.68%	Directional Split: 68.27%	Peak Hour: 8.03%
Min. Level of Service: C	Cur. Level of Service: E	15yrs Level of Service: F

Past ESALs: 312,489 ESALs after 15yrs: 3,738,765

Analysis Unit: MP 10.87 - 11.00

(Vicinity: From MP 10.87 - UXING - OLD SR 2 To MP 10.96 - INTRSECTN - OLD SR 2-BICKFORD AVE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 10.87	MP End: 11.00	Qualifier:
ARM Begin: 10.87	ARM End: 11.00	Length (Miles): 0.13
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 0.26	Lt Shoulder (ft): 8.0	Rt Shoulder (ft): 8.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2005	016545	RESURFACE EXISTING RDWY	0.15	ACP CLASS 1/2IN PG58-22	NONE
1988	013276	RESURFACE EXISTING RDWY	0.08	ACP CLASS B AR4000W	NONE
1964	007157	NEW CONSTR OR ALIGN CHG	0.25	ACP CLASS B AR4000W	NONE
1964			0.50	CTB	
1964			0.33	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 8.20 to 14.50

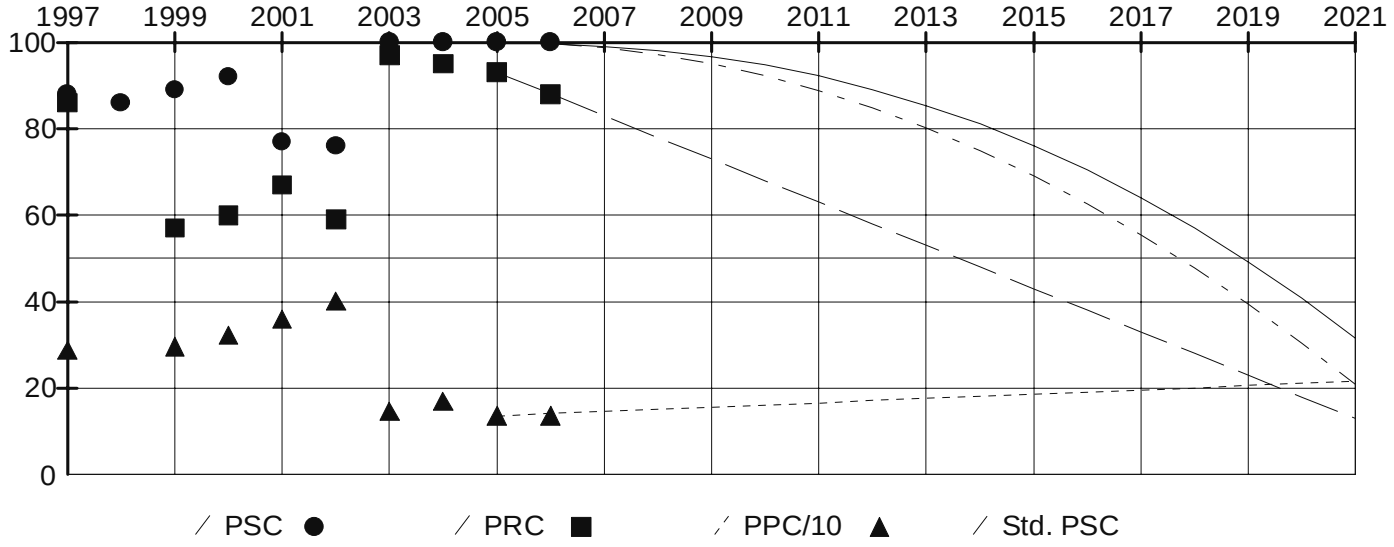
Ad. Date/PIN/Title: 05/2008 100916G - SR-9 Lake Stevens Road to 20th st. SE(Sn(MP 13.70 -14.50)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	88	86	89	92	77	76	100	100	100	100
PRC (Rutting)	86	N/A	57	60	67	59	97	95	93	88
PPC (IRI cm/km)	288	N/A	296	323	360	401	147	170	136	136

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2048	Regression	100.00	0.00	2005	136.00	5.00E+00	1.00
PRC	2014	Regression	100.00	0.00	2005	93.00	-5.00E+00	1.00
PSC	2018	Modified Standard	99.00	1.00	2005	99.70	-1.33E-01	2.25



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 3	PSC: 100	IRI (cm/km): 136

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0
Patching	0	0	0

Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 18795	Ave. Weekday Traffic: 21005
ADT Growth: 3.68%	Single Units: 1062	Double Units: 280
Trains: 79	Total Trucks: 1421	Trucks Percentage: 7.56%
Trucks Growth: 3.68%	Directional Split: 68.58%	Peak Hour: 8.00%
Min. Level of Service: C	Cur. Level of Service: E	15yrs Level of Service: F

Past ESALs: 299,290 ESALs after 15yrs: 3,580,849

Analysis Unit: MP 11.00 - 11.16

(Vicinity: From MP 10.96 - INTRSECTN - OLD SR 2-BICKFORD AVE To MP 10.96 - INTRSECTN - OLD SR 2-BICKFORD AVE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 11.00	MP End: 11.16	Qualifier:
ARM Begin: 11.00	ARM End: 11.16	Length (Miles): 0.16
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 0.32	Lt Shoulder (ft): 8.0	Rt Shoulder (ft): 8.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2005	016545	RESURFACE EXISTING RDWY	0.15	ACP CLASS 1/2IN PG58-22	NONE
1988	013276	RESURFACE EXISTING RDWY	0.08	ACP CLASS B AR4000W	NONE
1971	008989	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1964	007157	NEW CONSTR OR ALIGN CHG	0.25	ACP CLASS B AR4000W	NONE
1964			0.50	CTB	
1964			0.33	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 8.20 to 14.50

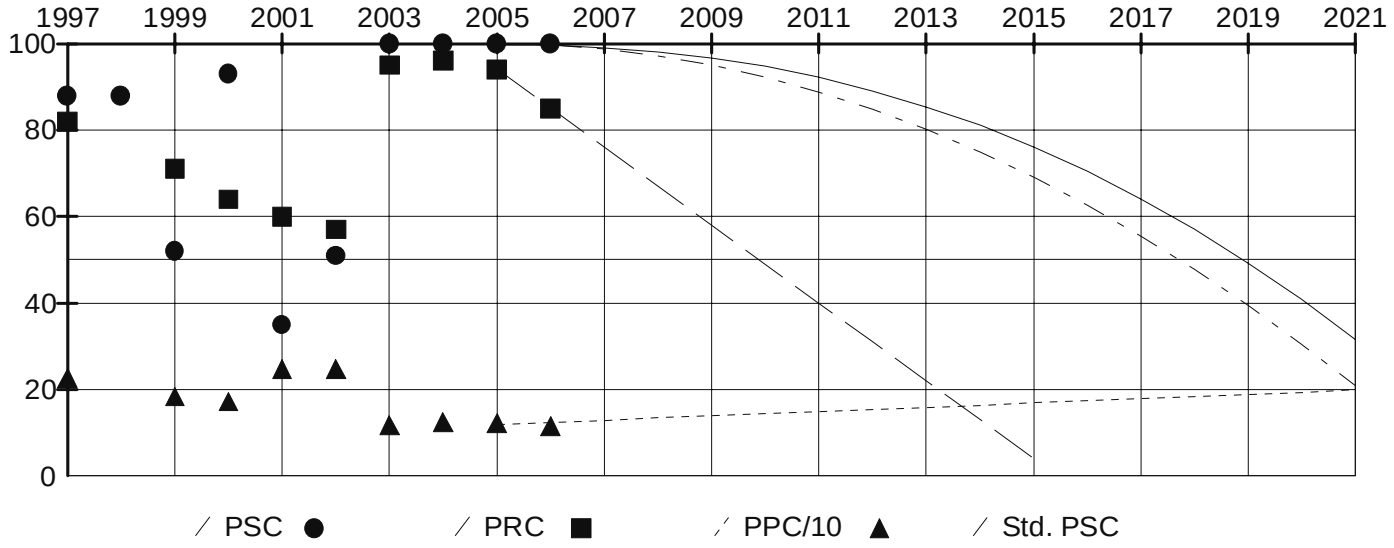
Ad. Date/PIN/Title: 05/2008 100916G - SR-9 Lake Stevens Road to 20th st. SE(Sn(MP 13.70 -14.50)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	88	88	52	93	35	51	100	100	100	100
PRC (Rutting)	82	N/A	71	64	60	57	95	96	94	85
PPC (IRI cm/km)	226	N/A	184	172	247	247	118	125	122	116

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2051	Regression	100.00	0.00	2005	119.00	5.00E+00	1.00
PRC	2010	Regression	100.00	0.00	2005	94.00	-9.00E+00	1.00
PSC	2018	Modified Standard	99.00	1.00	2005	99.70	-1.33E-01	2.25



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 4	PSC: 100	IRI (cm/km): 116

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0

Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 18822	Ave. Weekday Traffic: 18723
ADT Growth: 3.68%	Single Units: 1046	Double Units: 278
Trains: 79	Total Trucks: 1403	Trucks Percentage: 7.45%
Trucks Growth: 3.68%	Directional Split: 66.94%	Peak Hour: 8.09%
Min. Level of Service: C	Cur. Level of Service: E	15yrs Level of Service: F

Past ESALs: 296,302 ESALs after 15yrs: 3,545,096

Analysis Unit: MP 11.16 - 11.31

(Vicinity: From MP 10.96 - INTRSECTN - OLD SR 2-BICKFORD AVE To MP 10.96 - INTRSECTN - OLD SR 2-BICKFORD AVE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 11.16	MP End: 11.31	Qualifier:
ARM Begin: 11.16	ARM End: 11.31	Length (Miles): 0.15
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 0.30	Lt Shoulder (ft): 8.0	Rt Shoulder (ft): 8.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2005	016545	RESURFACE EXISTING RDWY	0.15	ACP CLASS 1/2IN PG58-22	NONE
1988	013276	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1971	008989	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1964	007157	NEW CONSTR OR ALIGN CHG	0.25	ACP CLASS B AR4000W	NONE
1964			0.50	CTB	
1964			0.33	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 8.20 to 14.50

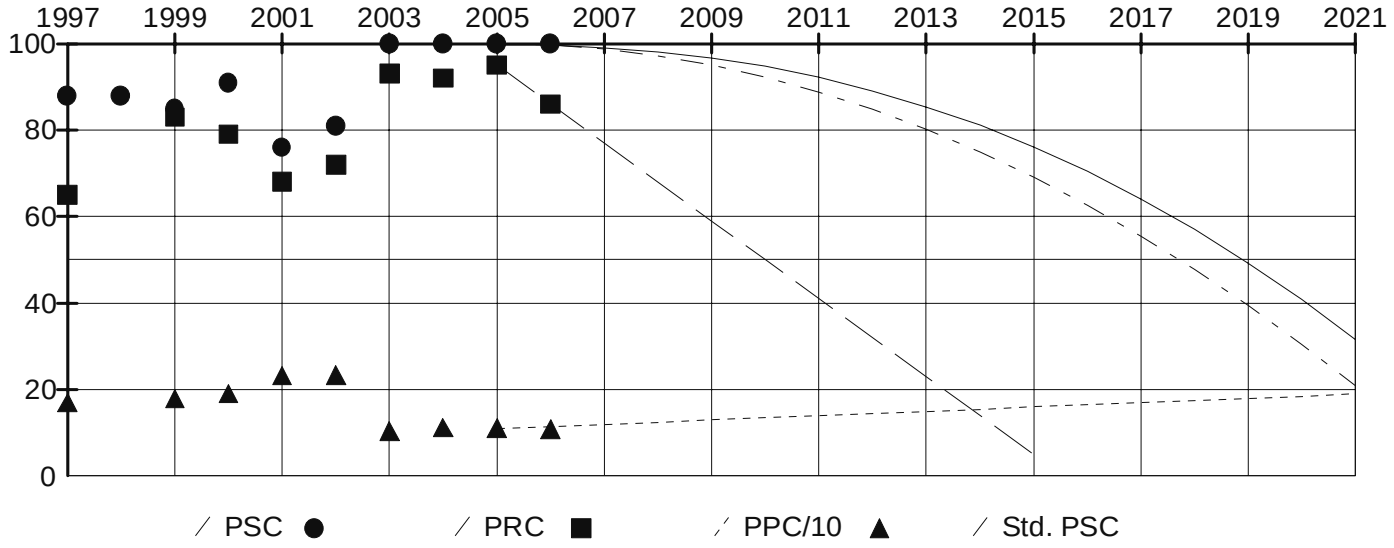
Ad. Date/PIN/Title: 05/2008 100916G - SR-9 Lake Stevens Road to 20th st. SE(Sn(MP 13.70 -14.50)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	88	88	85	91	76	81	100	100	100	100
PRC (Rutting)	65	N/A	83	79	68	72	93	92	95	86
PPC (IRI cm/km)	170	N/A	179	191	232	233	104	112	111	108

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2053	Regression	100.00	0.00	2005	109.50	5.00E+00	1.00
PRC	2010	Regression	100.00	0.00	2005	95.00	-9.00E+00	1.00
PSC	2018	Modified Standard	99.00	1.00	2005	99.70	-1.33E-01	2.25



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 3	PSC: 100	IRI (cm/km): 108

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0

Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 18822	Ave. Weekday Traffic: 15585
ADT Growth: 3.68%	Single Units: 1046	Double Units: 278
Trains: 79	Total Trucks: 1403	Trucks Percentage: 7.45%
Trucks Growth: 3.68%	Directional Split: 64.59%	Peak Hour: 8.23%
Min. Level of Service: C	Cur. Level of Service: E	15yrs Level of Service: F

Past ESALs: 296,302 ESALs after 15yrs: 3,545,096

Analysis Unit: MP 11.31 - 11.88

(Vicinity: From MP 10.96 - INTRSECTN - OLD SR 2-BICKFORD AVE To MP 11.88 - BEG BRIDGE - WATER MAIN)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 11.31	MP End: 11.88	Qualifier:
ARM Begin: 11.31	ARM End: 11.88	Length (Miles): 0.57
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 1.14	Lt Shoulder (ft): 8.0	Rt Shoulder (ft): 8.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2005	016545	RESURFACE EXISTING RDWY	0.15	ACP CLASS 1/2IN PG58-22	NONE
1988	013276	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1971	008989	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1963	000000	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1952	000000	RECONSTR EXISTING ALIGN	0.21	MIXED BITUMINOUS	NONE
1952			0.00	N/A	
1952			0.67	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 8.20 to 14.50

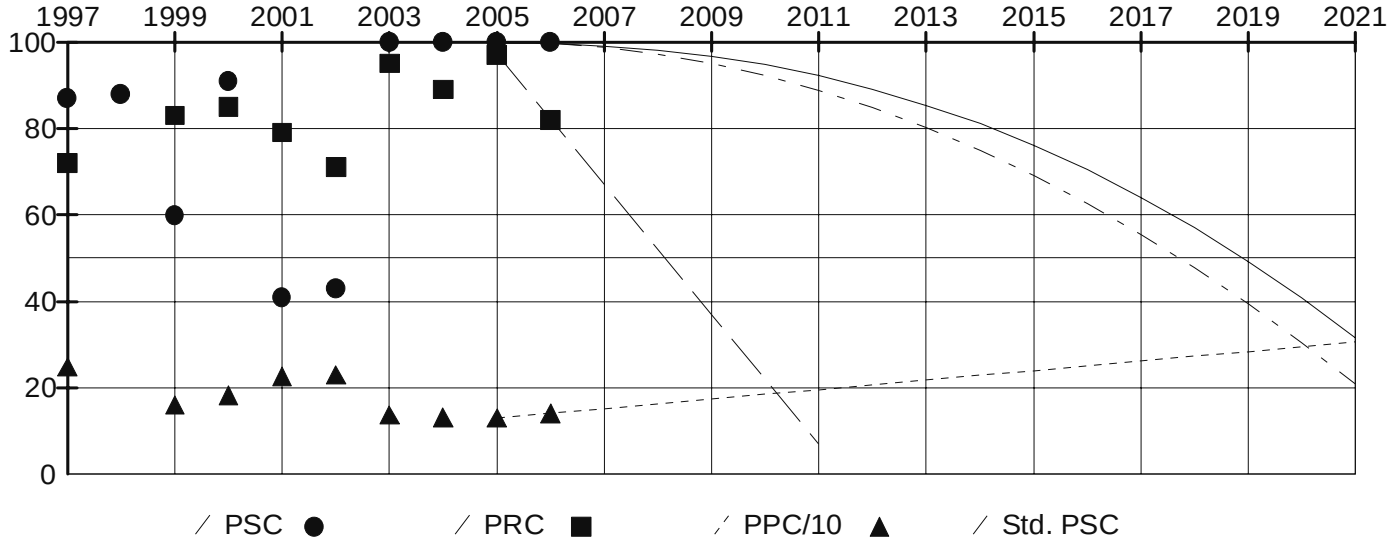
Ad. Date/PIN/Title: 05/2008 100916G - SR-9 Lake Stevens Road to 20th st. SE(Sn(MP 13.70 -14.50)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	87	88	60	91	41	43	100	100	100	100
PRC (Rutting)	72	N/A	83	85	79	71	95	89	97	82
PPC (IRI cm/km)	249	N/A	161	183	227	230	137	131	130	141

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2025	Regression	100.00	0.00	2005	130.00	1.10E+01	1.00
PRC	2008	Regression	100.00	0.00	2005	97.00	-1.50E+01	1.00
PSC	2018	Modified Standard	99.00	1.00	2005	99.70	-1.33E-01	2.25



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 4	PSC: 100	IRI (cm/km): 141

Defect Type	Low	Medium	High

Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 18907 Ave. Weekday Traffic: 8878
ADT Growth: 3.68% Single Units: 1064 Double Units: 279
Trains: 78 Total Trucks: 1421 Trucks Percentage: 7.52%
Trucks Growth: 3.68% Directional Split: 59.26% Peak Hour: 8.50%
Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F
Past ESALs: 298,863 ESALs after 15yrs: 3,575,742

Analysis Unit: MP 11.88 - 11.89

(Vicinity: From MP 11.88 - BEG BRIDGE - WATER MAIN To MP 11.89 - END BRIDGE - WATER MAIN)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 11.88	MP End: 11.89	Qualifier:
ARM Begin: 11.88	ARM End: 11.89	Length (Miles): 0.01
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 36.0
Lane Miles: 0.02	Lt Shoulder (ft): 0.0	Rt Shoulder (ft): 0.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: Yes

Year	Contract	Construction	Thickness	Surface Type	Exception
2005	016545	RESURFACE EXISTING RDWY	0.15	ACP CLASS 1/2IN PG58-22	BRIDGE DECK RESURFACING
2005	016545	PLANING	0.12	GRINDING ACP OR BST	NONE
1988	013276	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1950	003999	BRIDGE	0.00	PCCP	NONE

Related Programmed Project: SR 9 Mainline Increasing 8.20 to 14.50

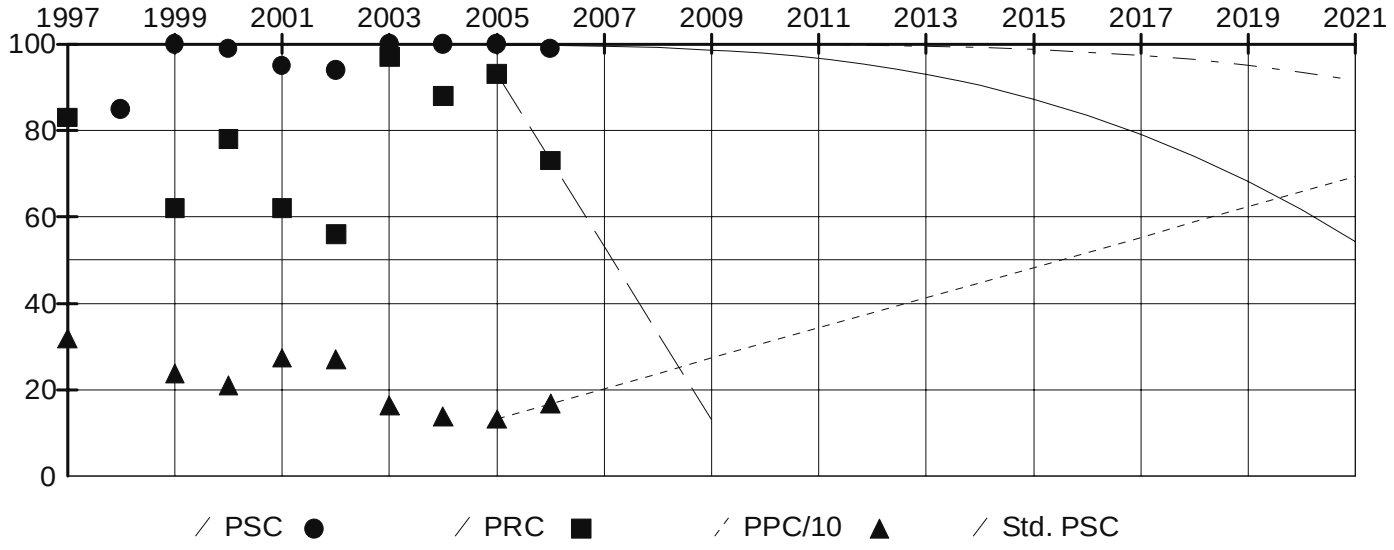
Ad. Date/PIN/Title: 05/2008 100916G - SR-9 Lake Stevens Road to 20th st. SE(Sn(MP 13.70 -14.50)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	83	85	100	99	95	94	100	100	100	99
PRC (Rutting)	83	N/A	62	78	62	56	97	88	93	73
PPC (IRI cm/km)	319	N/A	238	210	274	271	164	138	133	168

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2011	Regression	100.00	0.00	2005	133.00	3.50E+01	1.00
PRC	2007	Regression	100.00	0.00	2005	93.00	-2.00E+01	1.00
PSC	2021	Modified Standard	99.00	0.00	2005	99.59	-2.21E-02	2.75



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 6	PSC: 99	IRI (cm/km): 168

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0

Longitudinal Cracking	1	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 19961	Ave. Weekday Traffic: 10215
ADT Growth: 3.68%	Single Units: 1282	Double Units: 294
Trains: 70	Total Trucks: 1646	Trucks Percentage: 8.25%
Trucks Growth: 3.68%	Directional Split: 56.79%	Peak Hour: 8.33%
Min. Level of Service: C	Cur. Level of Service: E	15yrs Level of Service: F

Past ESALs: 330,596 ESALs after 15yrs: 3,955,407

Analysis Unit: MP 11.89 - 12.21

(Vicinity: From MP 11.89 - END BRIDGE - WATER MAIN To MP 12.21 - BEG BRIDGE - SR 2)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 11.89	MP End: 12.21	Qualifier:
ARM Begin: 11.89	ARM End: 12.21	Length (Miles): 0.32
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 24.0
Lane Miles: 0.64	Lt Shoulder (ft): 10.0	Rt Shoulder (ft): 10.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1998	015157	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1980	011298	RECONSTR EXISTING ALIGN	0.70	ACP CLASS B AR4000W	NONE
1980			0.00	N/A	
1980			0.80	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 8.20 to 14.50

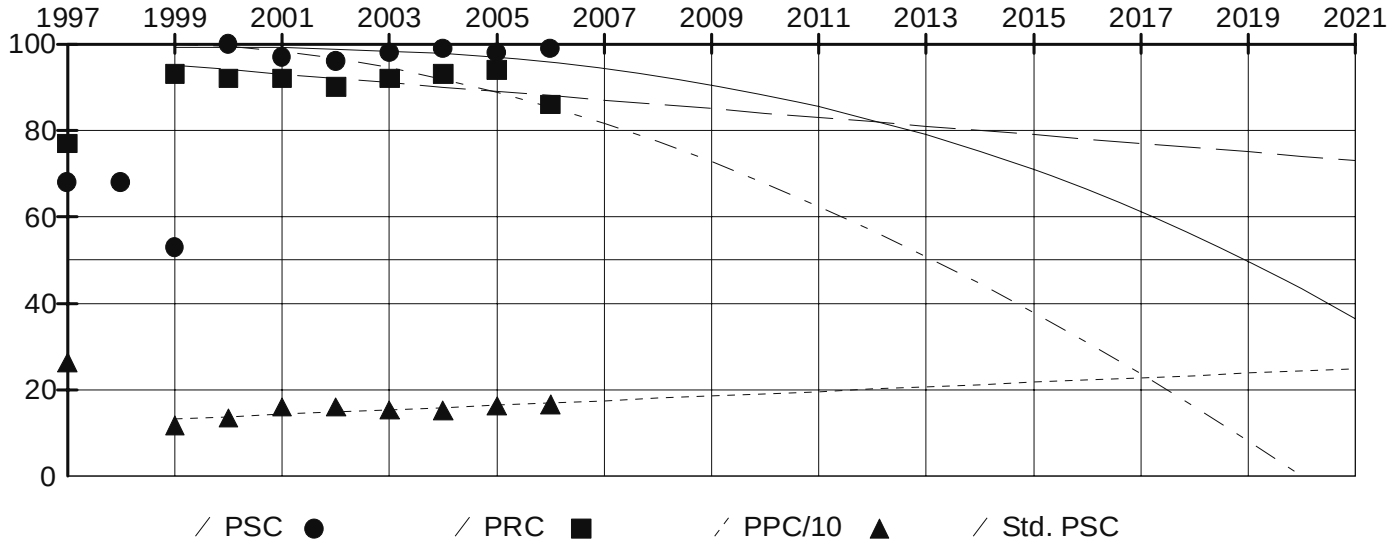
Ad. Date/PIN/Title: 05/2008 100916G - SR-9 Lake Stevens Road to 20th st. SE(Sn(MP 13.70 -14.50)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	68	68	53	100	97	96	98	99	98	99
PRC (Rutting)	77	N/A	93	92	92	90	92	93	94	86
PPC (IRI cm/km)	263	N/A	118	135	161	161	154	153	163	166

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2040	Regression	61.20	11.16	1999	132.83	5.30E+00	1.00
PRC	2044	Regression	95.45	2.94	1999	95.00	-1.00E+00	1.00
PSC	2018	New Year Too Long	99.00	2.00	1999	99.26	-2.77E-02	2.50



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 3	PSC: 99	IRI (cm/km): 166

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0

Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 21837	Ave. Weekday Traffic: 19578
ADT Growth: 3.68%	Single Units: 1671	Double Units: 321
Trains: 53	Total Trucks: 2045	Trucks Percentage: 9.36%
Trucks Growth: 3.68%	Directional Split: 58.00%	Peak Hour: 7.79%
Min. Level of Service: C	Cur. Level of Service: E	15yrs Level of Service: F

Past ESALs: 1,452,302 ESALs after 15yrs: 4,592,598

Analysis Unit: MP 12.21 - 12.25

(Vicinity: From MP 12.21 - BEG BRIDGE - SR 2 To MP 12.25 - END BRIDGE - SR 2)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 12.21	MP End: 12.25	Qualifier:
ARM Begin: 12.21	ARM End: 12.25	Length (Miles): 0.04
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 60.0
Lane Miles: 0.08	Lt Shoulder (ft): 0.0	Rt Shoulder (ft): 0.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: Yes

Year	Contract	Construction	Thickness	Surface Type	Exception
1980	011399	BRIDGE	0.00	PCCP	NONE

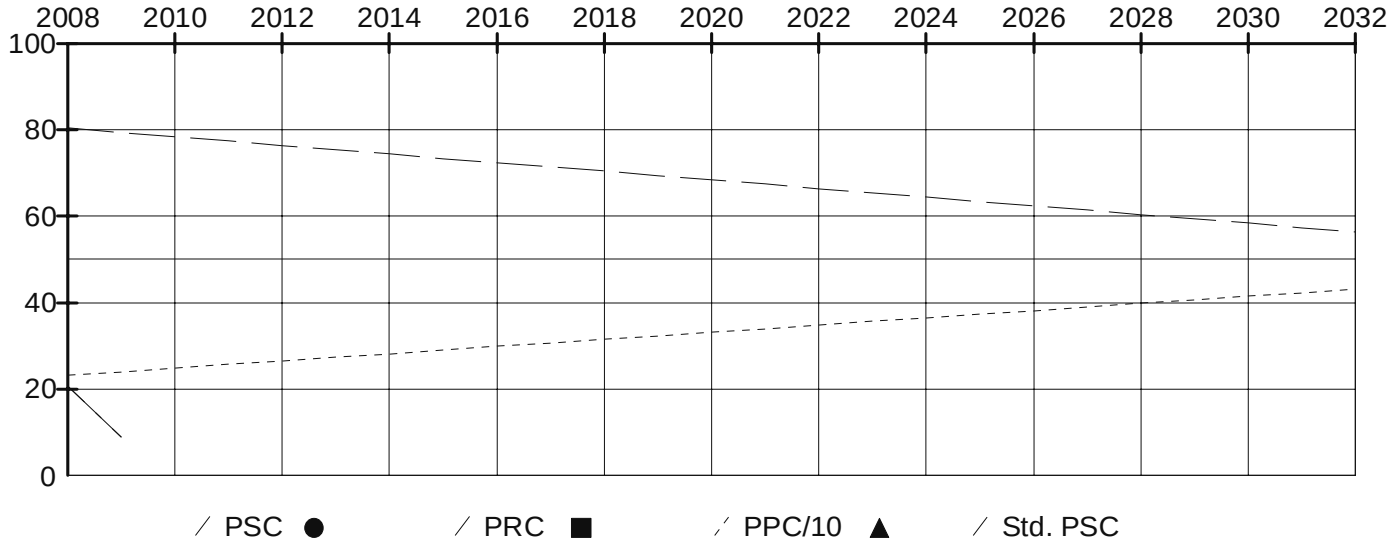
Related Programmed Project: SR 9 Mainline Increasing 8.20 to 14.50

Ad. Date/PIN/Title: 05/2008 100916G - SR-9 Lake Stevens Road to 20th st. SE(Sn(MP 13.70 -14.50)

Analysis Unit Condition and Projection

Friction Year: Friction:

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2022	Regression	7.62	66.83	1980	0.00	8.29E+00	1.00
PRC	2038	Regression	81.72	10.73	1980	108.37	-1.00E+00	1.00
PSC	2004	Standard Equation	100.00	0.00	1980	100.00	-1.29E-04	4.00



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 2	PSC: 100	IRI (cm/km): 200

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 22483	Ave. Weekday Traffic: 22749
ADT Growth: 3.68%	Single Units: 1870	Double Units: 330

Trains: 42	Total Trucks: 2242	Trucks Percentage: 9.97%
Trucks Growth: 3.68%	Directional Split: 59.64%	Peak Hour: 7.87%
Min. Level of Service: C	Cur. Level of Service: E	15yrs Level of Service: F
Past ESALs: 3,127,800	ESALs after 15yrs: 4,901,176	

Analysis Unit: MP 12.25 - 12.36

(Vicinity: From MP 12.25 - END BRIDGE - SR 2 To MP 12.33 - OFF RAMP - SR 2 WB)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 12.25	MP End: 12.36	Qualifier:
ARM Begin: 12.25	ARM End: 12.36	Length (Miles): 0.11
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 24.0
Lane Miles: 0.22	Lt Shoulder (ft): 10.0	Rt Shoulder (ft): 10.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1999	015157	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1980	011298	RECONSTR EXISTING ALIGN	0.70	ACP CLASS B AR4000W	NONE
1980			0.00	N/A	
1980			0.80	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 8.20 to 14.50

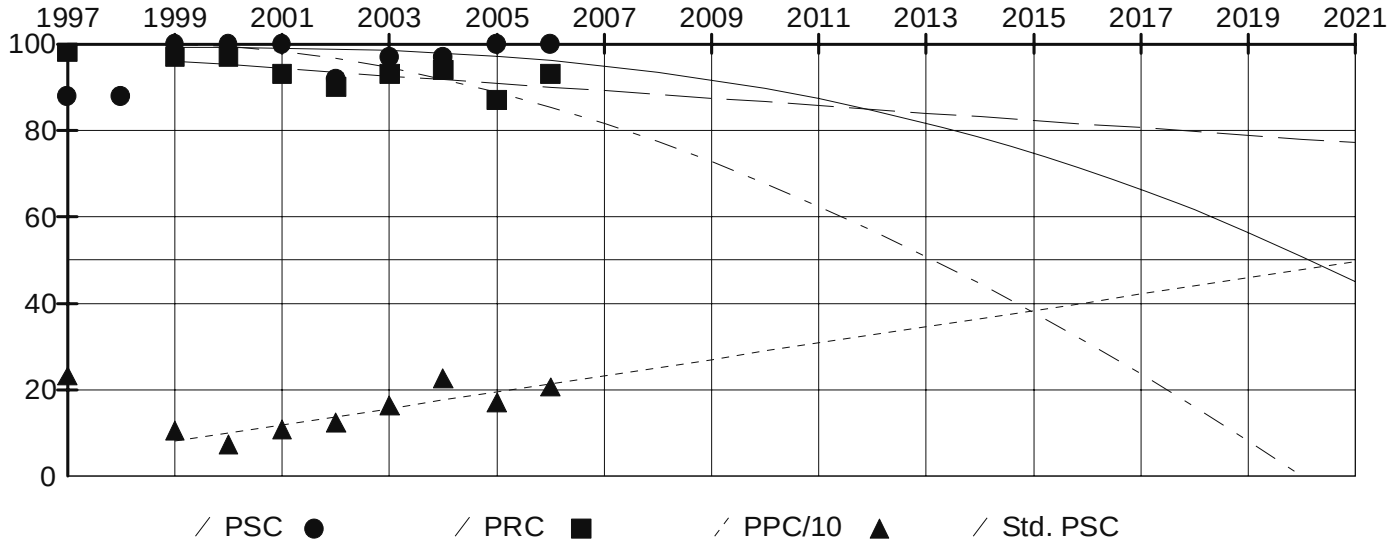
Ad. Date/PIN/Title: 05/2008 100916G - SR-9 Lake Stevens Road to 20th st. SE(Sn(MP 13.70 -14.50)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	88	88	100	100	100	92	97	97	100	100
PRC (Rutting)	98	N/A	97	97	93	90	93	94	87	93
PPC (IRI cm/km)	232	N/A	106	74	108	125	164	226	171	207

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2013	Regression	75.84	28.18	1999	81.58	1.89E+01	1.00
PRC	2053	Regression	39.56	2.80	1999	96.00	-8.57E-01	1.00
PSC	2020	Too Long	99.00	3.00	1999	99.20	-2.39E-02	2.50



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 2	PSC: 100	IRI (cm/km): 207

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0

Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 20960	Ave. Weekday Traffic: 22881
ADT Growth: 3.68%	Single Units: 1744	Double Units: 307
Trains: 39	Total Trucks: 2090	Trucks Percentage: 9.97%
Trucks Growth: 3.68%	Directional Split: 59.20%	Peak Hour: 7.64%
Min. Level of Service: C	Cur. Level of Service: E	15yrs Level of Service: F

Past ESALs: 1,311,516 ESALs after 15yrs: 4,554,699

Analysis Unit: MP 12.36 - 12.50

(Vicinity: From MP 12.33 - OFF RAMP - SR 2 WB To MP 12.33 - OFF RAMP - SR 2 WB)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 12.36	MP End: 12.50	Qualifier:
ARM Begin: 12.36	ARM End: 12.50	Length (Miles): 0.14
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 24.0
Lane Miles: 0.28	Lt Shoulder (ft): 10.0	Rt Shoulder (ft): 10.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1999	015157	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1980	011298	RECONSTR EXISTING ALIGN	0.70	ACP CLASS B AR4000W	NONE
1980			0.00	N/A	
1980			0.80	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 8.20 to 14.50

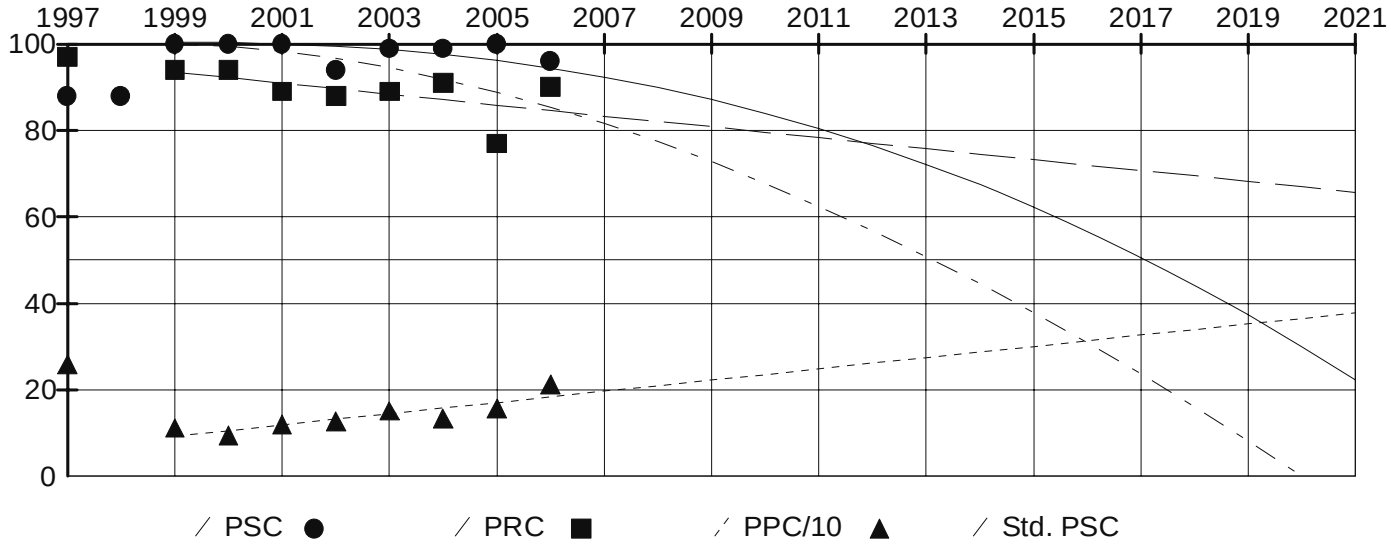
Ad. Date/PIN/Title: 05/2008 100916G - SR-9 Lake Stevens Road to 20th st. SE(Sn(MP 13.70 -14.50)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	88	88	100	100	100	94	99	99	100	96
PRC (Rutting)	97	N/A	94	94	89	88	89	91	77	90
PPC (IRI cm/km)	259	N/A	112	94	120	127	151	134	157	213

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2019	Regression	76.37	19.06	1999	93.17	1.30E+01	1.00
PRC	2033	Regression	33.44	4.71	1999	93.42	-1.26E+00	1.00
PSC	2017	Too Long	99.00	2.00	1999	100.34	-7.45E-02	2.25



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 3	PSC: 96	IRI (cm/km): 213

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0

Longitudinal Cracking	5	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 20278	Ave. Weekday Traffic: 22814
ADT Growth: 3.68%	Single Units: 1686	Double Units: 298
Trains: 38	Total Trucks: 2022	Trucks Percentage: 9.97%
Trucks Growth: 3.68%	Directional Split: 58.70%	Peak Hour: 7.55%
Min. Level of Service: C	Cur. Level of Service: E	15yrs Level of Service: F

Past ESALs: 1,273,277 ESALs after 15yrs: 4,421,901

Analysis Unit: MP 12.50 - 12.57

(Vicinity: From MP 12.33 - OFF RAMP - SR 2 WB To MP 12.33 - OFF RAMP - SR 2 WB)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 12.50	MP End: 12.57	Qualifier:
ARM Begin: 12.50	ARM End: 12.57	Length (Miles): 0.07
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 24.0
Lane Miles: 0.14	Lt Shoulder (ft): 10.0	Rt Shoulder (ft): 10.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2005	016545	RESURFACE EXISTING RDWY	0.15	ACP CLASS 1/2IN PG58-22	NONE
1988	013276	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1971	008989	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1963	000000	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1952	000000	RECONSTR EXISTING ALIGN	0.21	MIXED BITUMINOUS	NONE
1952			0.00	N/A	
1952			0.67	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 8.20 to 14.50

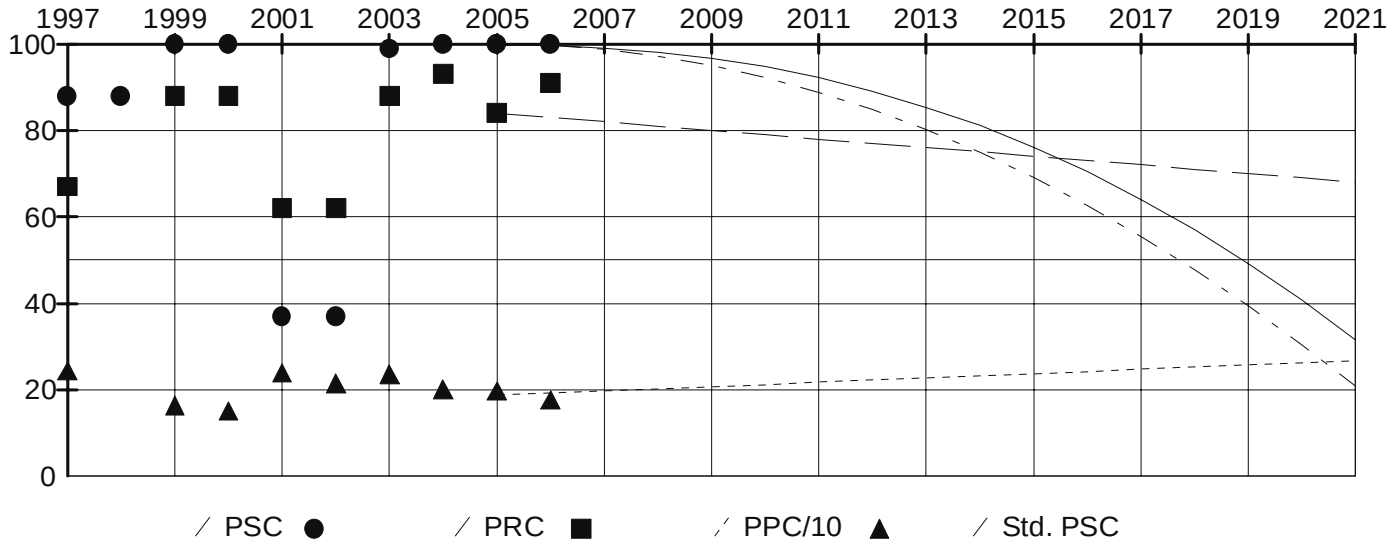
Ad. Date/PIN/Title: 05/2008 100916G - SR-9 Lake Stevens Road to 20th st. SE(Sn(MP 13.70 -14.50)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	88	88	100	100	37	37	99	100	100	100
PRC (Rutting)	67	N/A	88	88	62	62	88	93	84	91
PPC (IRI cm/km)	244	N/A	164	151	239	215	236	201	198	177

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2038	Regression	100.00	0.00	2005	187.50	5.00E+00	1.00
PRC	2039	Regression	100.00	0.00	2005	84.00	-1.00E+00	1.00
PSC	2018	Modified Standard	99.00	1.00	2005	99.70	-1.33E-01	2.25



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 2	PSC: 100	IRI (cm/km): 177

Defect Type	Low	Medium	High

Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 20214	Ave. Weekday Traffic: 22678
ADT Growth: 3.68%	Single Units: 1681	Double Units: 296
Trains: 38	Total Trucks: 2015	Trucks Percentage: 9.97%
Trucks Growth: 3.68%	Directional Split: 58.34%	Peak Hour: 7.57%
Min. Level of Service: C	Cur. Level of Service: E	15yrs Level of Service: F

Past ESALs: 368,020 ESALs after 15yrs: 4,403,173

Analysis Unit: MP 12.57 - 13.99

(Vicinity: From MP 12.33 - OFF RAMP - SR 2 WB To MP 13.99 - BEG BRIDGE - WATER MAIN)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 12.57	MP End: 13.99	Qualifier:
ARM Begin: 12.57	ARM End: 13.99	Length (Miles): 1.42
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 2.84	Lt Shoulder (ft): 8.0	Rt Shoulder (ft): 8.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2005	016545	RESURFACE EXISTING RDWY	0.15	ACP CLASS 1/2IN PG58-22	NONE
1988	013276	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1971	008989	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1963	000000	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1952	000000	RECONSTR EXISTING ALIGN	0.21	MIXED BITUMINOUS	NONE
1952			0.00	N/A	
1952			0.67	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 8.20 to 14.50

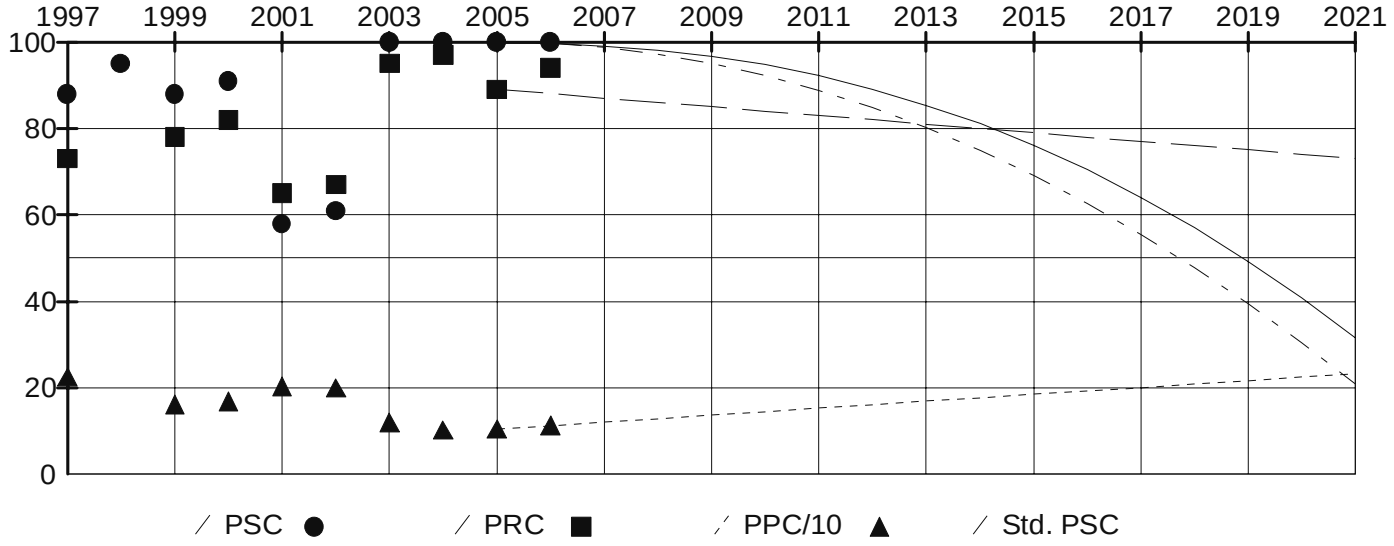
Ad. Date/PIN/Title: 05/2008 100916G - SR-9 Lake Stevens Road to 20th st. SE(Sn(MP 13.70 -14.50)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	88	95	88	91	58	61	100	100	100	100
PRC (Rutting)	73	N/A	78	82	65	67	95	97	89	94
PPC (IRI cm/km)	225	N/A	162	168	204	200	120	103	105	113

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2036	Regression	100.00	0.00	2005	105.00	8.00E+00	1.00
PRC	2044	Regression	100.00	0.00	2005	89.00	-1.00E+00	1.00
PSC	2018	Modified Standard	99.00	1.00	2005	99.70	-1.33E-01	2.25



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 2	PSC: 100	IRI (cm/km): 113

Defect Type	Low	Medium	High

Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 19763 Ave. Weekday Traffic: 21732
ADT Growth: 3.68% Single Units: 1644 Double Units: 290
Trains: 37 Total Trucks: 1971 Trucks Percentage: 9.97%
Trucks Growth: 3.68% Directional Split: 55.86% Peak Hour: 7.67%
Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F
Past ESALs: 359,520 ESALs after 15yrs: 4,301,465

Analysis Unit: MP 13.99 - 14.00

(Vicinity: From MP 13.99 - BEG BRIDGE - WATER MAIN To MP 14.00 - END BRIDGE - WATER MAIN)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 13.99	MP End: 14.00	Qualifier:
ARM Begin: 13.99	ARM End: 14.00	Length (Miles): 0.01
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 36.0
Lane Miles: 0.02	Lt Shoulder (ft): 0.0	Rt Shoulder (ft): 0.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: Yes

Year	Contract	Construction	Thickness	Surface Type	Exception
2005	016545	RESURFACE EXISTING RDWY	0.15	ACP CLASS 1/2IN PG58-22	BRIDGE DECK RESURFACING
2005	016545	PLANING	0.15	GRINDING ACP OR BST	NONE
1988	013276	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1971	008989	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1963	000000	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1950	003999	BRIDGE	0.00	PCCP	NONE

Related Programmed Project: SR 9 Mainline Increasing 8.20 to 14.50

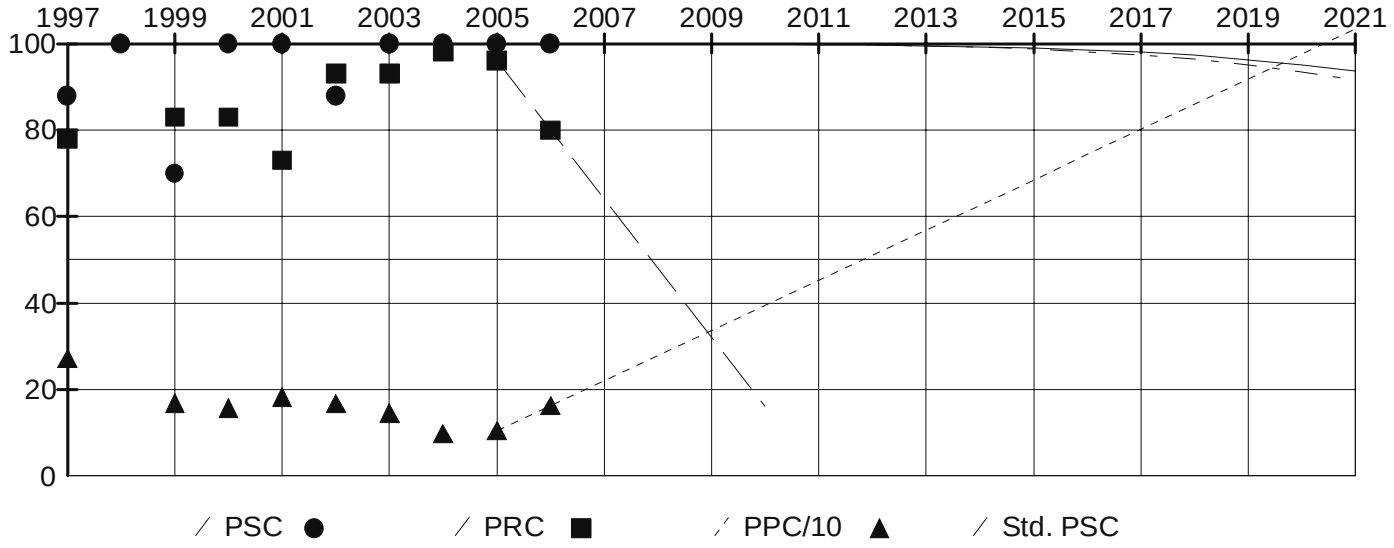
Ad. Date/PIN/Title: 05/2008 100916G - SR-9 Lake Stevens Road to 20th st. SE(Sn(MP 13.70 -14.50)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	88	100	70	100	100	88	100	100	100	100
PRC (Rutting)	78	N/A	83	83	73	93	93	98	96	80
PPC (IRI cm/km)	272	N/A	169	157	183	167	146	98	105	163

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2009	Regression	100.00	0.00	2005	105.00	5.80E+01	1.00
PRC	2008	Regression	100.00	0.00	2005	96.00	-1.60E+01	1.00
PSC	2031	Modified Standard	99.00	0.00	2005	99.84	-4.81E-05	4.25



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 5	PSC: 100	IRI (cm/km): 163

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0

Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 19436	Ave. Weekday Traffic: 21043
ADT Growth: 3.68%	Single Units: 1617	Double Units: 285
Trains: 36	Total Trucks: 1938	Trucks Percentage: 9.97%
Trucks Growth: 3.68%	Directional Split: 54.05%	Peak Hour: 7.74%
Min. Level of Service: C	Cur. Level of Service: E	15yrs Level of Service: F

Past ESALs: 353,401 ESALs after 15yrs: 4,228,256

Analysis Unit: MP 14.00 - 14.08

(Vicinity: From MP 14.00 - END BRIDGE - WATER MAIN To MP 14.03 - INTRSECTN - HEWITT AVE-20TH ST SE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 14.00	MP End: 14.08	Qualifier:
ARM Begin: 14.00	ARM End: 14.08	Length (Miles): 0.08
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 0.16	Lt Shoulder (ft): 8.0	Rt Shoulder (ft): 8.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2005	016545	RESURFACE EXISTING RDWY	0.15	ACP CLASS 1/2IN PG58-22	NONE
1988	013276	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1971	008989	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1963	000000	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1952	000000	RECONSTR EXISTING ALIGN	0.21	MIXED BITUMINOUS	NONE
1952			0.00	N/A	
1952			0.67	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 8.20 to 14.50

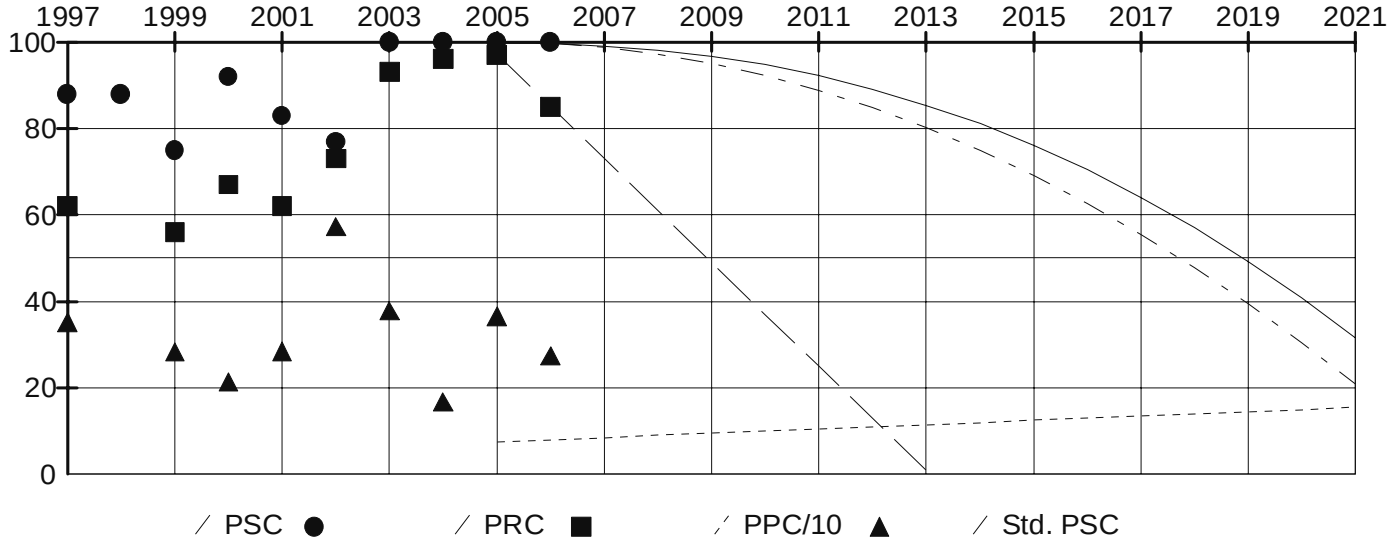
Ad. Date/PIN/Title: 05/2008 100916G - SR-9 Lake Stevens Road to 20th st. SE(Sn(MP 13.70 -14.50)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	88	88	75	92	83	77	100	100	100	100
PRC (Rutting)	62	N/A	56	67	62	73	93	96	97	85
PPC (IRI cm/km)	351	N/A	283	214	285	573	378	167	366	274

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2060	Regression	100.00	0.00	2005	75.00	5.00E+00	1.00
PRC	2009	Regression	100.00	0.00	2005	97.00	-1.20E+01	1.00
PSC	2018	Modified Standard	99.00	1.00	2005	99.70	-1.33E-01	2.25



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 4	PSC: 100	IRI (cm/km): 274

Defect Type	Low	Medium	High

Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 19436 Ave. Weekday Traffic: 21043
ADT Growth: 3.68% Single Units: 1617 Double Units: 285
Trains: 36 Total Trucks: 1938 Trucks Percentage: 9.97%
Trucks Growth: 3.68% Directional Split: 54.05% Peak Hour: 7.74%
Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F
Past ESALs: 353,401 ESALs after 15yrs: 4,228,256

Analysis Unit: MP 14.08 - 15.28

(Vicinity: From MP 14.03 - INTRSECTN - HEWITT AVE-20TH ST SE To MP 15.42 - INTRSECTN - MARKET PL)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 14.08	MP End: 15.28	Qualifier:
ARM Begin: 14.08	ARM End: 15.28	Length (Miles): 1.20
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 24.0
Lane Miles: 2.40	Lt Shoulder (ft): 6.0	Rt Shoulder (ft): 8.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2005	016545	RESURFACE EXISTING RDWY	0.15	ACP CLASS 1/2IN PG58-22	NONE
1988	013276	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1971	008989	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1963	000000	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1952	000000	RECONSTR EXISTING ALIGN	0.21	MIXED BITUMINOUS	NONE
1952			0.00	N/A	
1952			0.67	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 8.20 to 14.50

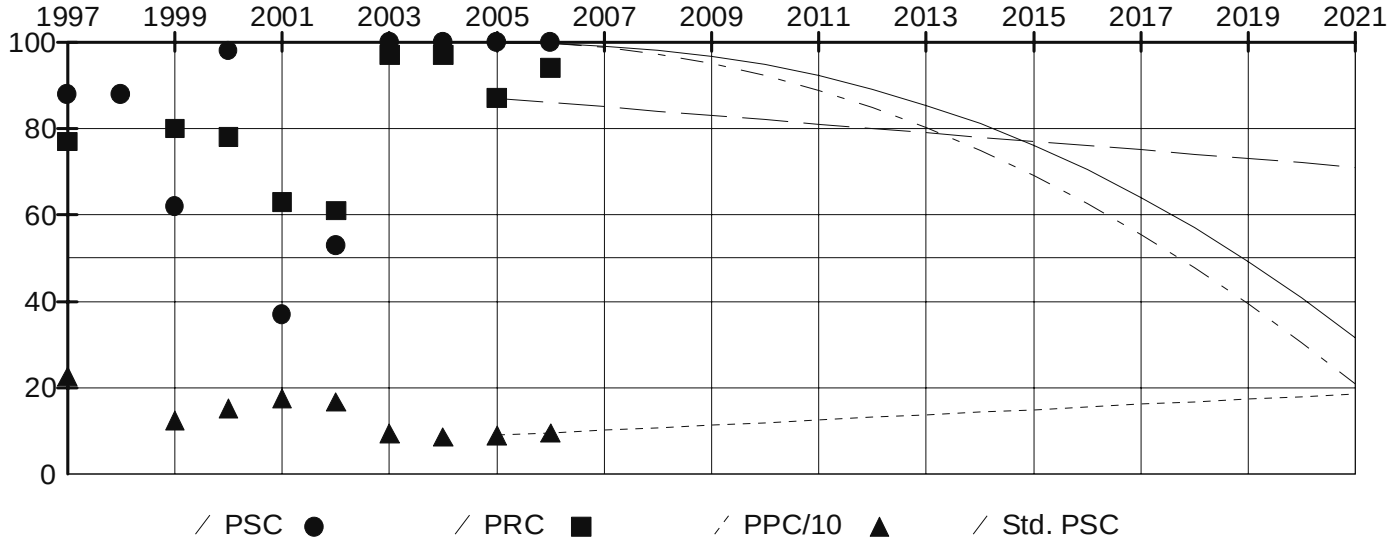
Ad. Date/PIN/Title: 05/2008 100916G - SR-9 Lake Stevens Road to 20th st. SE(Sn(MP 13.70 -14.50)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	88	88	62	98	37	53	100	100	100	100
PRC (Rutting)	77	N/A	80	78	63	61	97	97	87	94
PPC (IRI cm/km)	227	N/A	124	153	175	167	94	86	90	96

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2048	Regression	100.00	0.00	2005	90.00	6.00E+00	1.00
PRC	2042	Regression	100.00	0.00	2005	87.00	-1.00E+00	1.00
PSC	2018	Modified Standard	99.00	1.00	2005	99.70	-1.33E-01	2.25



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 2	PSC: 100	IRI (cm/km): 96

Defect Type	Low	Medium	High

Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 19436 Ave. Weekday Traffic: 21043
ADT Growth: 3.68% Single Units: 1617 Double Units: 285
Trains: 36 Total Trucks: 1938 Trucks Percentage: 9.97%
Trucks Growth: 3.68% Directional Split: 54.05% Peak Hour: 7.74%
Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F
Past ESALs: 353,401 ESALs after 15yrs: 4,228,256

Analysis Unit: MP 15.28 - 15.40

(Vicinity: From MP 15.42 - INTRSECTN - MARKET PL To MP 15.42 - INTRSECTN - MARKET PL)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 15.28	MP End: 15.40	Qualifier:
ARM Begin: 15.28	ARM End: 15.40	Length (Miles): 0.12
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 36.0
Lane Miles: 0.24	Lt Shoulder (ft): 10.0	Rt Shoulder (ft): 7.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2005	016545	RESURFACE EXISTING RDWY	0.15	ACP CLASS 1/2IN PG58-22	NONE
1988	013276	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1971	008989	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1963	000000	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1952	000000	RECONSTR EXISTING ALIGN	0.21	MIXED BITUMINOUS	NONE
1952			0.00	N/A	
1952			0.67	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 14.50 to 19.04

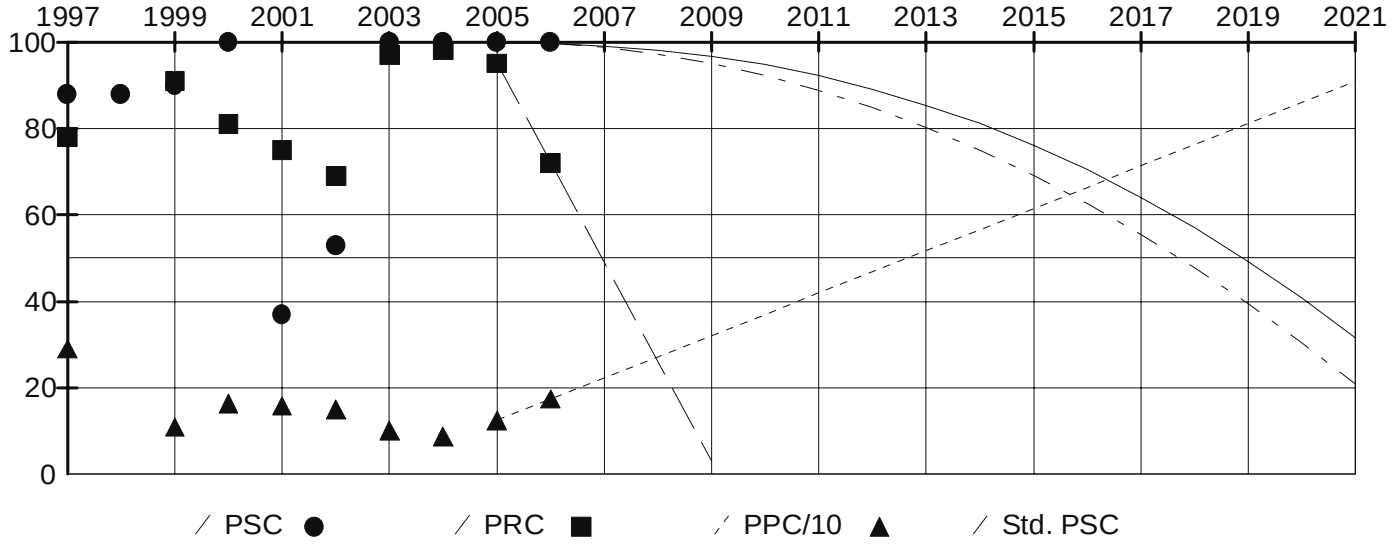
Ad. Date/PIN/Title: 03/2010 100917G - SR-9, Lundeen Parkway to SR 92(MP 16.48 -17.49)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	88	88	90	100	37	53	100	100	100	100
PRC (Rutting)	78	N/A	91	81	75	69	97	98	95	72
PPC (IRI cm/km)	290	N/A	110	164	158	150	102	88	125	174

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2010	Regression	100.00	0.00	2005	125.00	4.90E+01	1.00
PRC	2007	Regression	100.00	0.00	2005	95.00	-2.30E+01	1.00
PSC	2018	Modified Standard	99.00	1.00	2005	99.70	-1.33E-01	2.25



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 6	PSC: 100	IRI (cm/km): 174

Defect Type	Low	Medium	High

Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006
Ave. Daily Traffic: 19436
Ave. Weekday Traffic: 21043
ADT Growth: 3.68%
Single Units: 1617
Double Units: 285
Trains: 36
Total Trucks: 1938
Trucks Percentage: 9.97%
Trucks Growth: 3.68%
Directional Split: 54.05%
Peak Hour: 7.74%
Min. Level of Service: C
Cur. Level of Service: E
15yrs Level of Service: F
Past ESALs: 353,401
ESALs after 15yrs: 4,228,256

Analysis Unit: MP 15.40 - 15.57

(Vicinity: From MP 15.42 - INTRSECTN - MARKET PL To MP 15.57 - ENT FROM - FRONTAGE RD)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 15.40	MP End: 15.57	Qualifier:
ARM Begin: 15.40	ARM End: 15.57	Length (Miles): 0.17
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 50.0
Lane Miles: 0.34	Lt Shoulder (ft): 9.0	Rt Shoulder (ft): 8.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2005	016545	RESURFACE EXISTING RDWY	0.15	ACP CLASS 1/2IN PG58-22	NONE
1988	013276	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1971	008989	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1963	000000	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1952	000000	RECONSTR EXISTING ALIGN	0.21	MIXED BITUMINOUS	NONE
1952			0.00	N/A	
1952			0.67	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 14.50 to 19.04

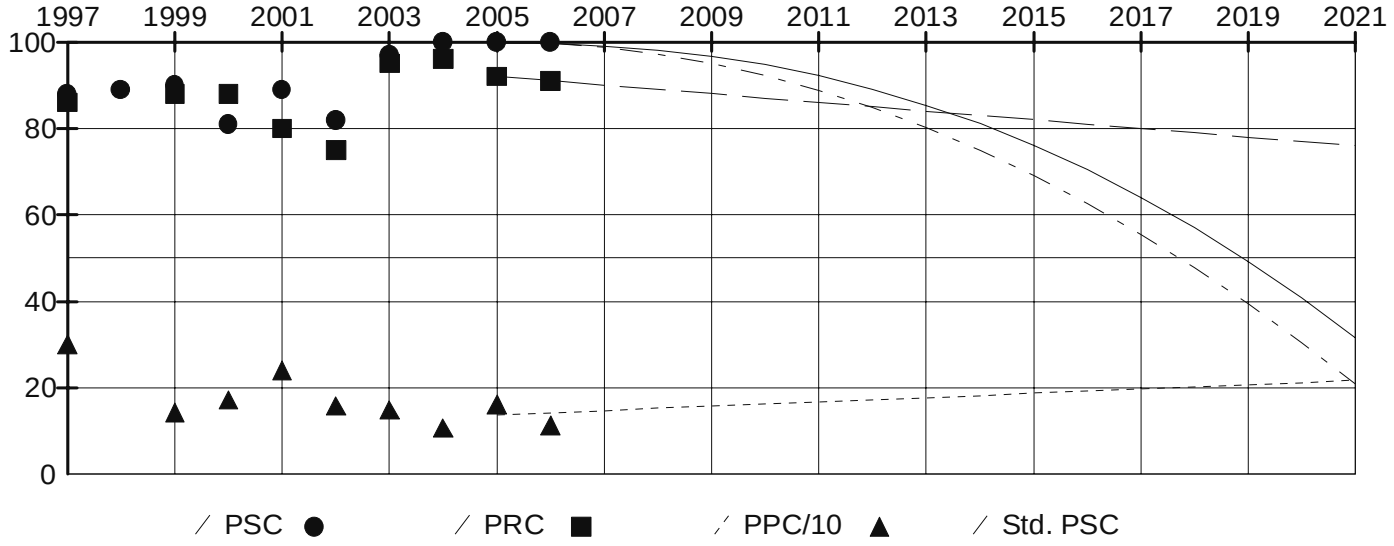
Ad. Date/PIN/Title: 03/2010 100917G - SR-9, Lundeen Parkway to SR 92(MP 16.48 -17.49)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	88	89	90	81	89	82	97	100	100	100
PRC (Rutting)	86	N/A	88	88	80	75	95	96	92	91
PPC (IRI cm/km)	300	N/A	143	172	241	158	149	107	162	113

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2048	Regression	100.00	0.00	2005	137.50	5.00E+00	1.00
PRC	2047	Regression	100.00	0.00	2005	92.00	-1.00E+00	1.00
PSC	2018	Modified Standard	99.00	1.00	2005	99.70	-1.33E-01	2.25



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 2	PSC: 100	IRI (cm/km): 113

Defect Type	Low	Medium	High

Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 19436 Ave. Weekday Traffic: 21043
ADT Growth: 3.68% Single Units: 1617 Double Units: 285
Trains: 36 Total Trucks: 1938 Trucks Percentage: 9.97%
Trucks Growth: 3.68% Directional Split: 54.05% Peak Hour: 7.74%
Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F
Past ESALs: 353,401 ESALs after 15yrs: 4,228,256

Analysis Unit: MP 15.57 - 15.76

(Vicinity: From MP 15.57 - ENT FROM - FRONTAGE RD To MP 15.76 - INTRSECTN - SR 204)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 15.57	MP End: 15.76	Qualifier:
ARM Begin: 15.57	ARM End: 15.76	Length (Miles): 0.19
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Multi-Lane	No .of Lanes: 2	Width (ft): 25.0
Lane Miles: 0.38	Lt Shoulder (ft): 0.0	Rt Shoulder (ft): 8.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2006	016925	RESURFACE EXISTING RDWY	0.15	ACP CLASS 1/2IN PG58-22	NONE
1994	014149	RESURFACE EXISTING RDWY	0.15	ACP CLASS B AR4000W	NONE
1990	013763	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1988	013276	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1973	009501	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1971	008989	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1963	000000	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1952	000000	RECONSTR EXISTING ALIGN	0.21	MIXED BITUMINOUS	NONE
1952			0.00	N/A	
1952			0.67	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 14.50 to 19.04

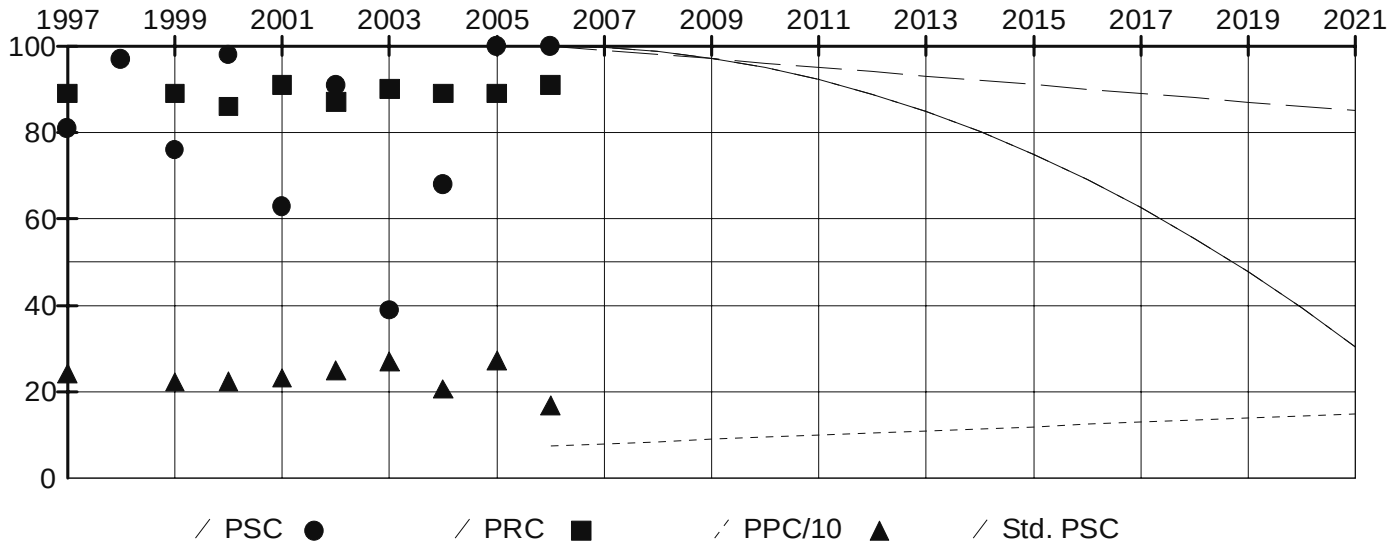
Ad. Date/PIN/Title: 03/2010 100917G - SR-9, Lundeen Parkway to SR 92(MP 16.48 -17.49)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	81	97	76	98	63	91	39	68	100	100
PRC (Rutting)	89	N/A	89	86	91	87	90	89	89	91
PPC (IRI cm/km)	243	N/A	223	224	232	250	270	207	273	169

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2061	Regression	100.00	0.00	2006	75.00	5.00E+00	1.00
PRC	2056	Regression	100.00	0.00	2006	100.00	-1.00E+00	1.00
PSC	2018	Standard Equation	100.00	0.00	2006	100.00	-3.09E-01	2.00



Survey Data

Survey Year: 2006 Pavement: ACP Survey Lane: Right
Rut (mm): 2 PSC: 100 IRI (cm/km): 169

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 10174 Ave. Weekday Traffic: 10705
ADT Growth: 2.91% Single Units: 846 Double Units: 149
Trains: 19 Total Trucks: 1014 Trucks Percentage: 9.97%
Trucks Growth: 2.91% Directional Split: 58.42% Peak Hour: 8.15%
Min. Level of Service: C Cur. Level of Service: B 15yrs Level of Service: C
Past ESALs: 190,037 ESALs after 15yrs: 4,148,535

Analysis Unit: MP 15.76 - 15.91

(Vicinity: From MP 15.76 - INTRSECTN - SR 204 To MP 15.99 - INTRSECTN - VERNON RD)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 15.76	MP End: 15.91	Qualifier:
ARM Begin: 15.76	ARM End: 15.91	Length (Miles): 0.15
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Multi-Lane	No .of Lanes: 2	Width (ft): 37.0
Lane Miles: 0.30	Lt Shoulder (ft): 0.0	Rt Shoulder (ft): 8.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2006	016925	RESURFACE EXISTING RDWY	0.15	ACP CLASS 1/2IN PG58-22	NONE
1994	014149	RESURFACE EXISTING RDWY	0.15	ACP CLASS B AR4000W	NONE
1990	013763	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1973	009501	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1952	000000	RECONSTR EXISTING ALIGN	0.21	MIXED BITUMINOUS	NONE
1952			0.00	N/A	
1952			0.92	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 14.50 to 19.04

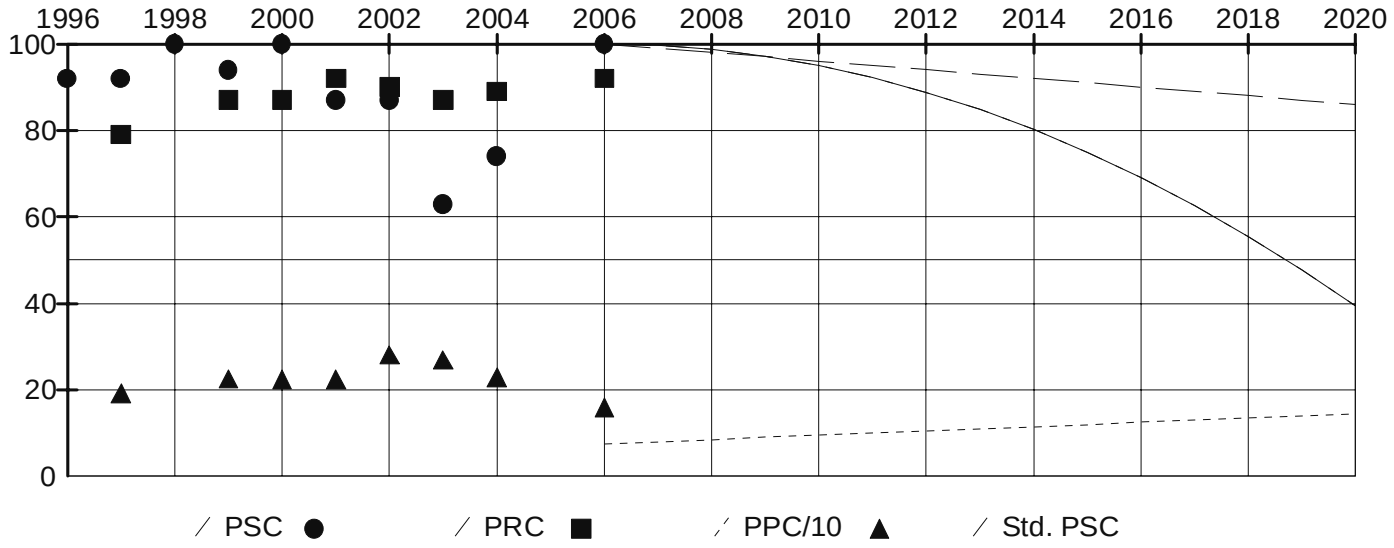
Ad. Date/PIN/Title: 03/2010 100917G - SR-9, Lundeen Parkway to SR 92(MP 16.48 -17.49)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2006
PSC (Structure)	92	92	100	94	100	87	87	63	74	100
PRC (Rutting)	N/A	79	N/A	87	87	92	90	87	89	92
PPC (IRI cm/km)	N/A	192	N/A	225	224	224	281	269	229	159

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2061	Regression	100.00	0.00	2006	75.00	5.00E+00	1.00
PRC	2056	Regression	100.00	0.00	2006	100.00	-1.00E+00	1.00
PSC	2018	Standard Equation	100.00	0.00	2006	100.00	-3.09E-01	2.00



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 2	PSC: 100	IRI (cm/km): 159

Defect Type	Low	Medium	High

Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 16588 Ave. Weekday Traffic: 16991
ADT Growth: 2.15% Single Units: 1380 Double Units: 243
Trains: 31 Total Trucks: 1654 Trucks Percentage: 9.97%
Trucks Growth: 2.15% Directional Split: 61.66% Peak Hour: 7.85%
Min. Level of Service: C Cur. Level of Service: D 15yrs Level of Service: E
Past ESALs: 309,976 ESALs after 15yrs: 6,337,182

Analysis Unit: MP 15.91 - 15.96

(Vicinity: From MP 15.99 - INTRSECTN - VERNON RD To MP 15.99 - INTRSECTN - VERNON RD)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 15.91	MP End: 15.96	Qualifier:
ARM Begin: 15.91	ARM End: 15.96	Length (Miles): 0.05
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Multi-Lane	No .of Lanes: 2	Width (ft): 37.0
Lane Miles: 0.10	Lt Shoulder (ft): 0.0	Rt Shoulder (ft): 8.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2006	016925	RESURFACE EXISTING RDWY	0.15	ACP CLASS 1/2IN PG58-22	NONE
1994	014149	RESURFACE EXISTING RDWY	0.15	ACP CLASS B AR4000W	NONE
1990	013763	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1973	009501	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1959	005786	NEW CONSTR OR ALIGN CHG	0.25	ACP CLASS B AR4000W	NONE
1959			0.00	N/A	
1959			0.84	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 14.50 to 19.04

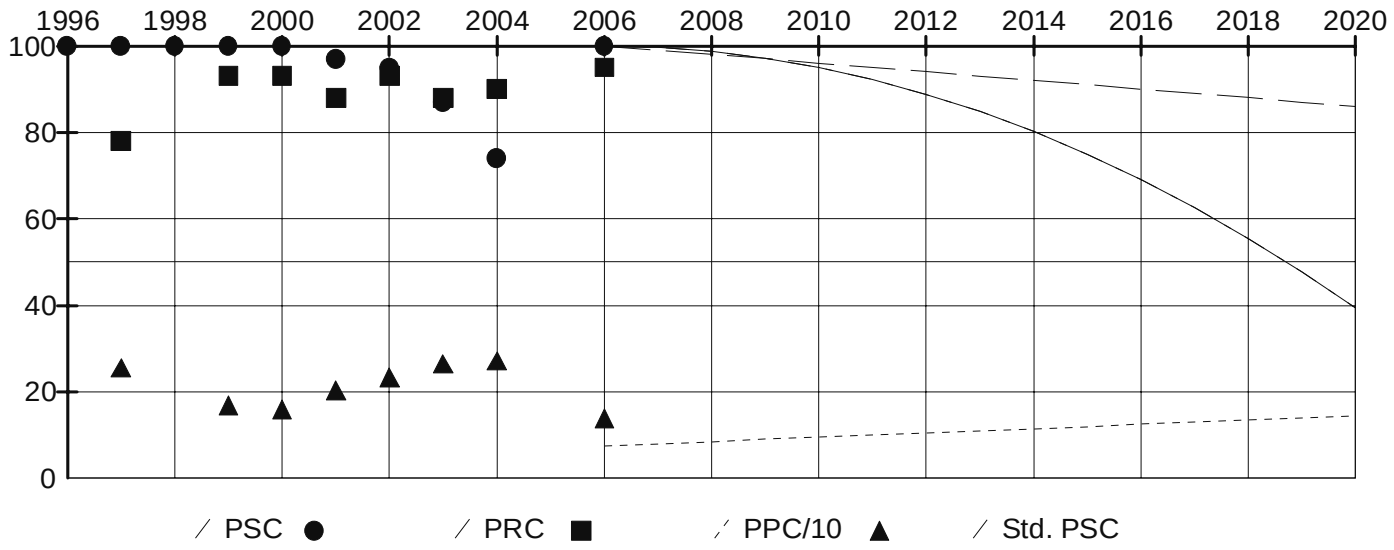
Ad. Date/PIN/Title: 03/2010 100917G - SR-9, Lundeen Parkway to SR 92(MP 16.48 -17.49)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2006
PSC (Structure)	100	100	100	100	100	97	95	87	74	100
PRC (Rutting)	N/A	78	N/A	93	93	88	93	88	90	95
PPC (IRI cm/km)	N/A	255	N/A	168	159	204	233	265	272	138

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2061	Regression	100.00	0.00	2006	75.00	5.00E+00	1.00
PRC	2056	Regression	100.00	0.00	2006	100.00	-1.00E+00	1.00
PSC	2018	Standard Equation	100.00	0.00	2006	100.00	-3.09E-01	2.00



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 1	PSC: 100	IRI (cm/km): 138

Defect Type	Low	Medium	High

Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 16793 Ave. Weekday Traffic: 17201
ADT Growth: 2.15% Single Units: 1397 Double Units: 246
Trains: 32 Total Trucks: 1675 Trucks Percentage: 9.97%
Trucks Growth: 2.15% Directional Split: 61.62% Peak Hour: 7.83%
Min. Level of Service: C Cur. Level of Service: D 15yrs Level of Service: E
Past ESALs: 314,192 ESALs after 15yrs: 6,423,375

Analysis Unit: MP 15.96 - 16.41

(Vicinity: From MP 15.99 - INTRSECTN - VERNON RD To MP 16.48 - INTRSECTN - LUNDEEN PARKWAY)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 15.96	MP End: 16.41	Qualifier:
ARM Begin: 15.96	ARM End: 16.41	Length (Miles): 0.45
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Multi-Lane	No .of Lanes: 2	Width (ft): 25.0
Lane Miles: 0.90	Lt Shoulder (ft): 0.0	Rt Shoulder (ft): 8.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2006	016925	RESURFACE EXISTING RDWY	0.15	ACP CLASS 1/2IN PG58-22	NONE
1994	014149	RESURFACE EXISTING RDWY	0.15	ACP CLASS B AR4000W	NONE
1990	013763	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1973	009501	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1959	005786	NEW CONSTR OR ALIGN CHG	0.25	ACP CLASS B AR4000W	NONE
1959			0.00	N/A	
1959			0.84	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 14.50 to 19.04

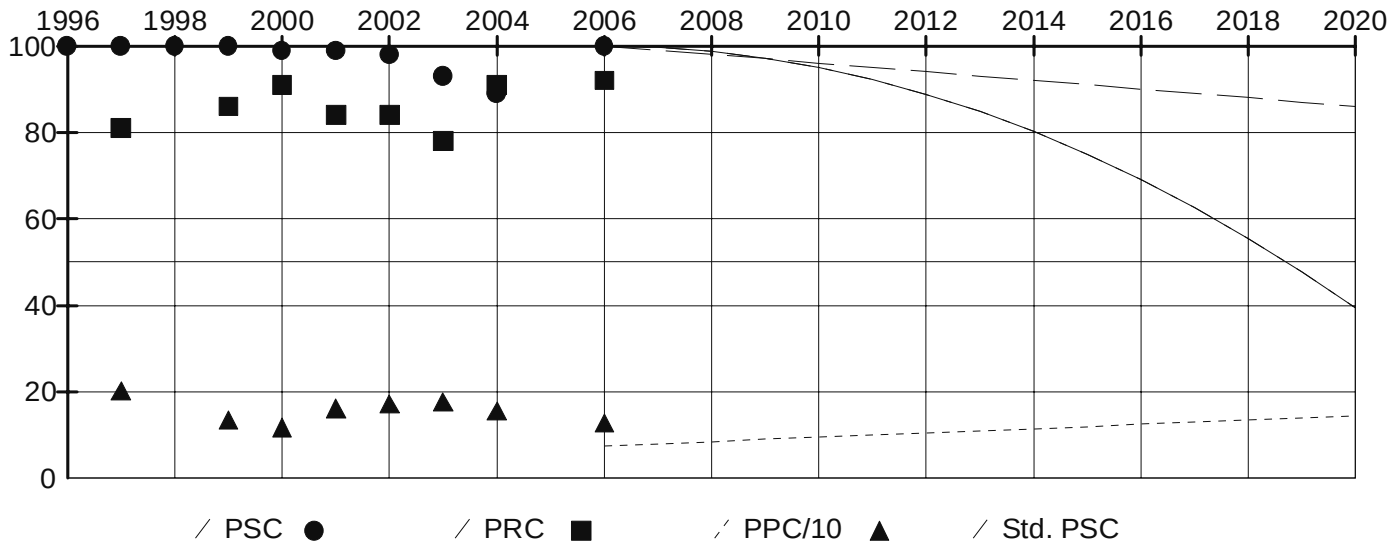
Ad. Date/PIN/Title: 03/2010 100917G - SR-9, Lundeen Parkway to SR 92(MP 16.48 -17.49)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2006
PSC (Structure)	100	100	100	100	99	99	98	93	89	100
PRC (Rutting)	N/A	81	N/A	86	91	84	84	78	91	92
PPC (IRI cm/km)	N/A	202	N/A	135	118	162	172	177	156	128

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2061	Regression	100.00	0.00	2006	75.00	5.00E+00	1.00
PRC	2056	Regression	100.00	0.00	2006	100.00	-1.00E+00	1.00
PSC	2018	Standard Equation	100.00	0.00	2006	100.00	-3.09E-01	2.00



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 2	PSC: 100	IRI (cm/km): 128

Defect Type	Low	Medium	High

Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 16793 Ave. Weekday Traffic: 17201
ADT Growth: 2.15% Single Units: 1397 Double Units: 246
Trains: 31 Total Trucks: 1674 Trucks Percentage: 9.97%
Trucks Growth: 2.15% Directional Split: 61.62% Peak Hour: 7.83%
Min. Level of Service: C Cur. Level of Service: D 15yrs Level of Service: E
Past ESALs: 313,553 ESALs after 15yrs: 6,410,311

Analysis Unit: MP 16.41 - 16.45

(Vicinity: From MP 16.48 - INTRSECTN - LUNDEEN PARKWAY To MP 16.48 - INTRSECTN - LUNDEEN PARKWAY)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 16.41	MP End: 16.45	Qualifier:
ARM Begin: 16.41	ARM End: 16.45	Length (Miles): 0.04
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Extra Lane	No .of Lanes: 3	Width (ft): 74.0
Lane Miles: 0.12	Lt Shoulder (ft): 8.0	Rt Shoulder (ft): 8.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2006	016925	RESURFACE EXISTING RDWY	0.15	ACP CLASS 1/2IN PG58-22	NONE
1994	014149	RESURFACE EXISTING RDWY	0.15	ACP CLASS B AR4000W	NONE
1990	013763	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1973	009501	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1959	005786	NEW CONSTR OR ALIGN CHG	0.25	ACP CLASS B AR4000W	NONE
1959			0.00	N/A	
1959			0.84	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 14.50 to 19.04

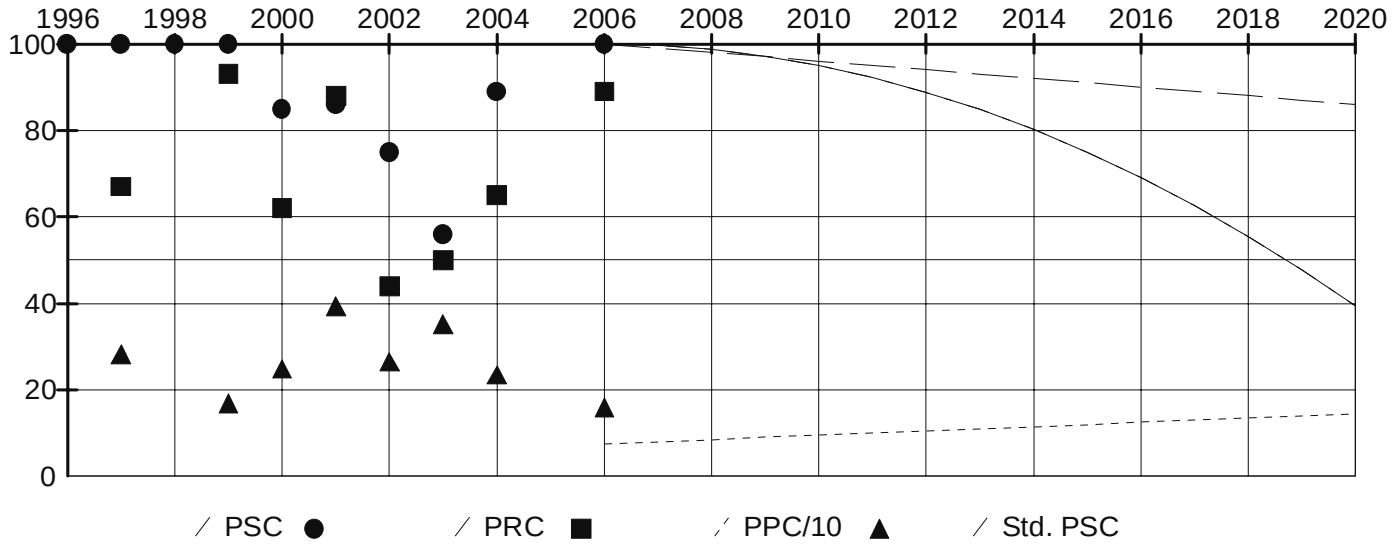
Ad. Date/PIN/Title: 03/2010 100917G - SR-9, Lundeen Parkway to SR 92(MP 16.48 -17.49)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2006
PSC (Structure)	100	100	100	100	85	86	75	56	89	100
PRC (Rutting)	N/A	67	N/A	93	62	88	44	50	65	89
PPC (IRI cm/km)	N/A	282	N/A	168	249	393	265	352	235	159

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2061	Regression	100.00	0.00	2006	75.00	5.00E+00	1.00
PRC	2056	Regression	100.00	0.00	2006	100.00	-1.00E+00	1.00
PSC	2018	Standard Equation	100.00	0.00	2006	100.00	-3.09E-01	2.00



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 3	PSC: 100	IRI (cm/km): 159

Defect Type	Low	Medium	High

Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006
Ave. Daily Traffic: 33986
Ave. Weekday Traffic: 35800
ADT Growth: 2.15%
Single Units: 2827
Double Units: 499
Trains: 64
Total Trucks: 3390
Trucks Percentage: 9.97%
Trucks Growth: 2.15%
Directional Split: 60.58%
Peak Hour: 7.70%
Min. Level of Service: C
Cur. Level of Service: F
15yrs Level of Service: F
Past ESALs: 317,623
ESALs after 15yrs: 6,493,518

Analysis Unit: MP 16.45 - 16.50

(Vicinity: From MP 16.48 - INTRSECTN - LUNDEEN PARKWAY To MP 16.50 - ENTER CITY - LAKE STEVENS)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 16.45	MP End: 16.50	Qualifier:
ARM Begin: 16.45	ARM End: 16.50	Length (Miles): 0.05
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 3	Width (ft): 61.0
Lane Miles: 0.15	Lt Shoulder (ft): 8.0	Rt Shoulder (ft): 8.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1994	014149	RESURFACE EXISTING RDWY	0.15	ACP CLASS B AR4000W	NONE
1990	013763	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1973	009501	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1959	005786	NEW CONSTR OR ALIGN CHG	0.25	ACP CLASS B AR4000W	NONE
1959			0.00	N/A	
1959			0.84	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 14.50 to 19.04

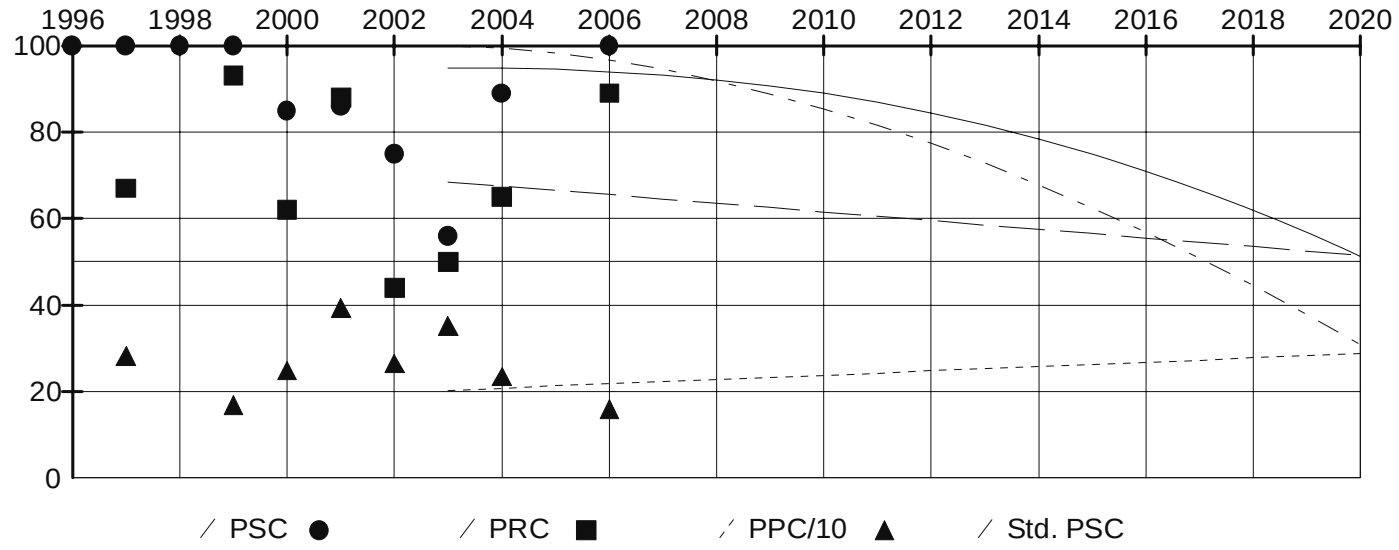
Ad. Date/PIN/Title: 03/2010 100917G - SR-9, Lundeen Parkway to SR 92(MP 16.48 -17.49)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2006
PSC (Structure)	100	100	100	100	85	86	75	56	89	100
PRC (Rutting)	N/A	67	N/A	93	62	88	44	50	65	89
PPC (IRI cm/km)	N/A	282	N/A	168	249	393	265	352	235	159

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2032	Regression	1.15	71.91	2003	202.67	5.00E+00	1.00
PRC	2022	Regression	0.64	21.30	2003	68.50	-1.00E+00	1.00
PSC	2020	New Year Too Long	98.00	5.00	2003	94.85	-7.44E-02	2.25



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 3	PSC: 100	IRI (cm/km): 159

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0

Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 31573	Ave. Weekday Traffic: 35036
ADT Growth: 2.15%	Single Units: 2626	Double Units: 464
Trains: 60	Total Trucks: 3150	Trucks Percentage: 9.98%
Trucks Growth: 2.15%	Directional Split: 57.68%	Peak Hour: 7.34%
Min. Level of Service: C	Cur. Level of Service: F	15yrs Level of Service: F

Past ESALs: 3,104,952 ESALs after 15yrs: 6,042,072

Analysis Unit: MP 16.50 - 16.65

(Vicinity: From MP 16.50 - ENTER CITY - LAKE STEVENS To MP 16.50 - ENTER CITY - LAKE STEVENS)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 16.50	MP End: 16.65	Qualifier:
ARM Begin: 16.50	ARM End: 16.65	Length (Miles): 0.15
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Extra Lane	No .of Lanes: 2	Width (ft): 36.0
Lane Miles: 0.30	Lt Shoulder (ft): 8.0	Rt Shoulder (ft): 8.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2006	016925	RESURFACE EXISTING RDWY	0.15	ACP CLASS 1/2IN PG58-22	NONE
1994	014149	RESURFACE EXISTING RDWY	0.15	ACP CLASS B AR4000W	NONE
1990	013763	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1973	009501	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1959	005786	NEW CONSTR OR ALIGN CHG	0.25	ACP CLASS B AR4000W	NONE
1959			0.00	N/A	
1959			0.84	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 14.50 to 19.04

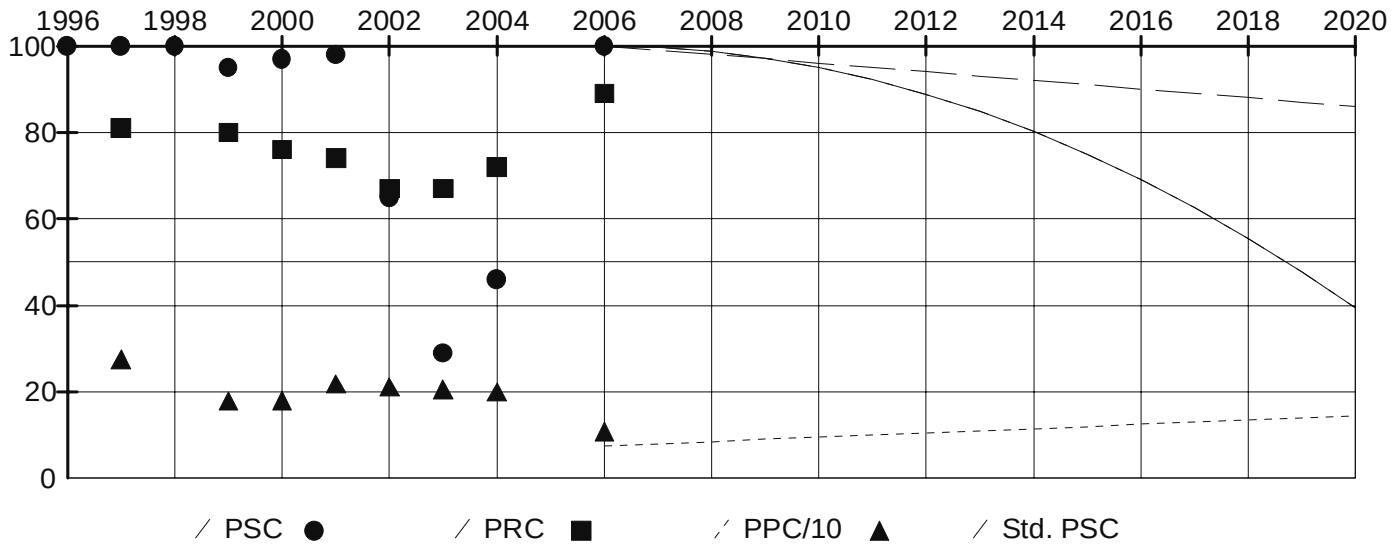
Ad. Date/PIN/Title: 03/2010 100917G - SR-9, Lundeen Parkway to SR 92(MP 16.48 -17.49)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2006
PSC (Structure)	100	100	100	95	97	98	65	29	46	100
PRC (Rutting)	N/A	81	N/A	80	76	74	67	67	72	89
PPC (IRI cm/km)	N/A	275	N/A	179	180	218	211	206	200	108

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2061	Regression	100.00	0.00	2006	75.00	5.00E+00	1.00
PRC	2056	Regression	100.00	0.00	2006	100.00	-1.00E+00	1.00
PSC	2018	Standard Equation	100.00	0.00	2006	100.00	-3.09E-01	2.00



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 3	PSC: 100	IRI (cm/km): 108

Defect Type	Low	Medium	High

Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 26796 Ave. Weekday Traffic: 30066
ADT Growth: 2.15% Single Units: 2228 Double Units: 398
Trains: 53 Total Trucks: 2679 Trucks Percentage: 10.00%
Trucks Growth: 2.15% Directional Split: 55.97% Peak Hour: 7.15%
Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F
Past ESALs: 251,887 ESALs after 15yrs: 5,149,605

Analysis Unit: MP 16.65 - 16.90

(Vicinity: From MP 16.50 - ENTER CITY - LAKE STEVENS To MP 17.05 - INTRSECTN - SOPER HILL RD)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 16.65	MP End: 16.90	Qualifier:
ARM Begin: 16.65	ARM End: 16.90	Length (Miles): 0.25
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 24.0
Lane Miles: 0.50	Lt Shoulder (ft): 8.0	Rt Shoulder (ft): 8.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2006	016925	RESURFACE EXISTING RDWY	0.15	ACP CLASS 1/2IN PG58-22	NONE
1990	013763	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1973	009501	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1959	005786	NEW CONSTR OR ALIGN CHG	0.25	ACP CLASS B AR4000W	NONE
1959			0.00	N/A	
1959			0.84	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 14.50 to 19.04

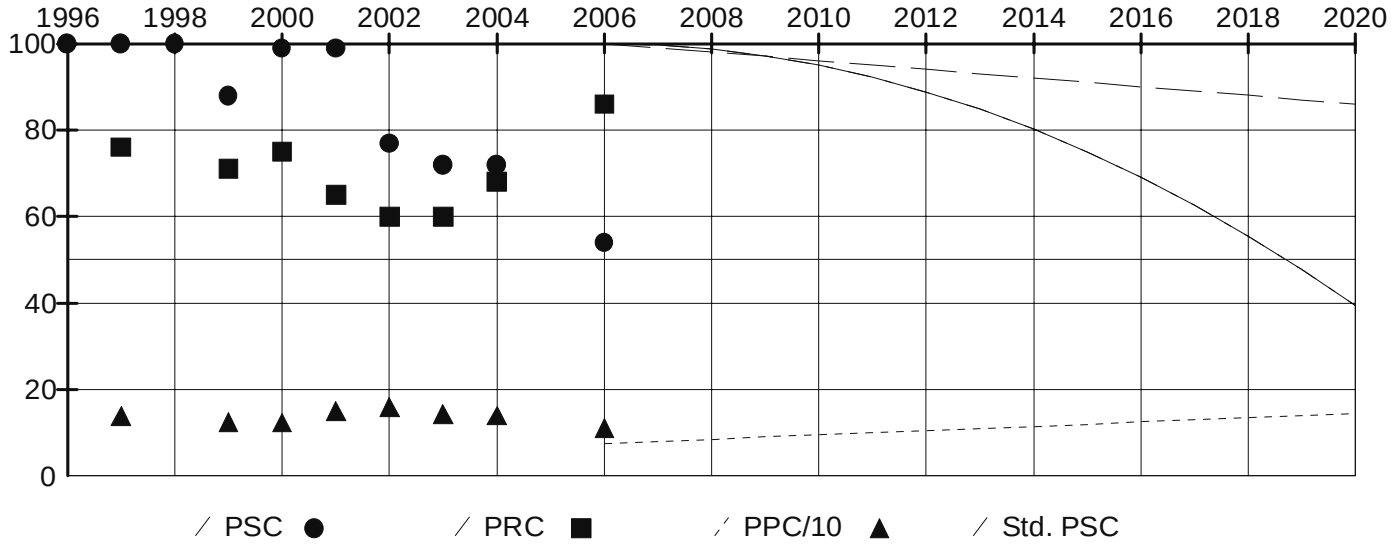
Ad. Date/PIN/Title: 03/2010 100917G - SR-9, Lundeen Parkway to SR 92(MP 16.48 -17.49)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2006
PSC (Structure)	100	100	100	88	99	99	77	72	72	54
PRC (Rutting)	N/A	76	N/A	71	75	65	60	60	68	86
PPC (IRI cm/km)	N/A	138	N/A	124	123	150	159	143	140	111

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2061	Regression	100.00	0.00	2006	75.00	5.00E+00	1.00
PRC	2056	Regression	100.00	0.00	2006	100.00	-1.00E+00	1.00
PSC	2018	Standard Equation	100.00	0.00	2006	100.00	-3.09E-01	2.00



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 4	PSC: 54	IRI (cm/km): 111

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0

Patching	0	18	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006
Ave. Daily Traffic: 26169
Ave. Weekday Traffic: 29185
ADT Growth: 2.15%
Single Units: 2174
Double Units: 418
Trains: 67
Total Trucks: 2659
Trucks Percentage: 10.16%
Trucks Growth: 2.15%
Directional Split: 55.42%
Peak Hour: 7.09%
Min. Level of Service: C
Cur. Level of Service: E
15yrs Level of Service: F
Past ESALs: 256,066
ESALs after 15yrs: 5,235,041

Analysis Unit: MP 16.90 - 17.14

(Vicinity: From MP 17.05 - INTRSECTN - SOPER HILL RD To MP 17.10 - ENT FROM - WEIGH STATION)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 16.90	MP End: 17.14	Qualifier:
ARM Begin: 16.90	ARM End: 17.14	Length (Miles): 0.24
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 24.0
Lane Miles: 0.48	Lt Shoulder (ft): 8.0	Rt Shoulder (ft): 8.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2006	016925	RESURFACE EXISTING RDWY	0.15	ACP CLASS 1/2IN PG58-22	NONE
1994	014383	RESURFACE EXISTING RDWY	0.08	ACP CLASS G AR4000W	NONE
1973	009501	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1959	005786	NEW CONSTR OR ALIGN CHG	0.25	ACP CLASS B AR4000W	NONE
1959			0.00	N/A	
1959			0.84	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 14.50 to 19.04

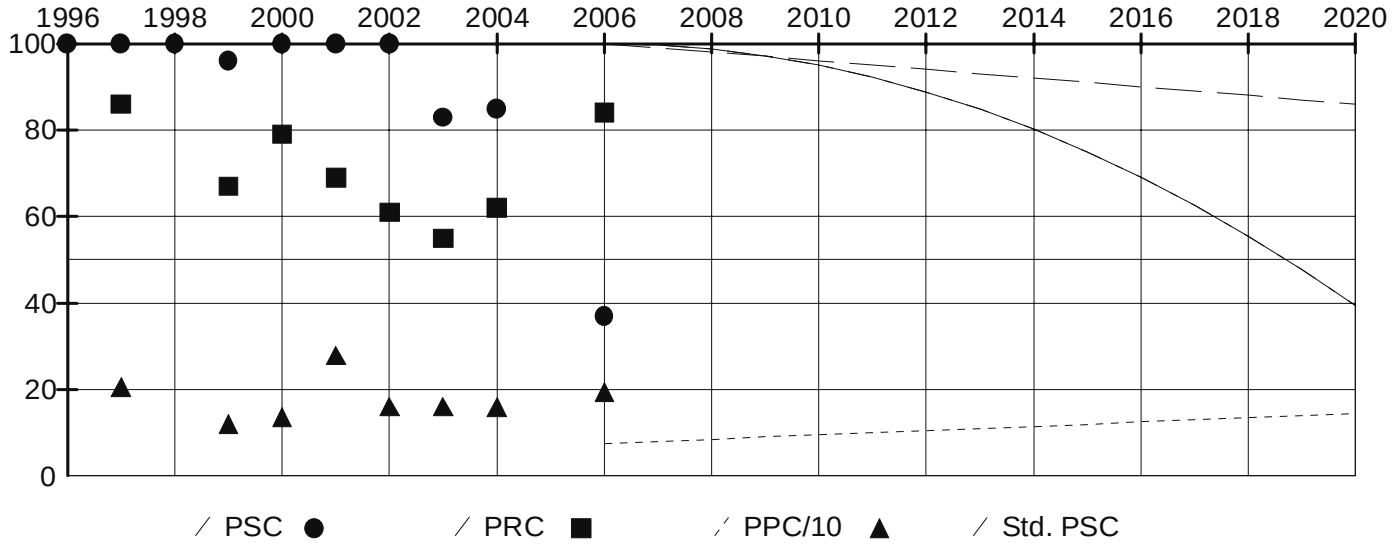
Ad. Date/PIN/Title: 03/2010 100917G - SR-9, Lundeen Parkway to SR 92(MP 16.48 -17.49)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2006
PSC (Structure)	100	100	100	96	100	100	100	83	85	37
PRC (Rutting)	N/A	86	N/A	67	79	69	61	55	62	84
PPC (IRI cm/km)	N/A	206	N/A	120	136	279	161	161	159	194

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2061	Regression	100.00	0.00	2006	75.00	5.00E+00	1.00
PRC	2056	Regression	100.00	0.00	2006	100.00	-1.00E+00	1.00
PSC	2018	Standard Equation	100.00	0.00	2006	100.00	-3.09E-01	2.00



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 4	PSC: 37	IRI (cm/km): 194

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0

Patching	0	96	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 25368	Ave. Weekday Traffic: 28060
ADT Growth: 2.15%	Single Units: 2104	Double Units: 442
Trains: 84	Total Trucks: 2630	Trucks Percentage: 10.37%
Trucks Growth: 2.15%	Directional Split: 54.72%	Peak Hour: 7.01%
Min. Level of Service: C	Cur. Level of Service: E	15yrs Level of Service: F

Past ESALs: 261,085 ESALs after 15yrs: 5,337,650

Analysis Unit: MP 17.14 - 17.96

(Vicinity: From MP 17.10 - ENT FROM - WEIGH STATION To MP 17.92 - INTRSECTN - 42ND ST NE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 17.14	MP End: 17.96	Qualifier:
ARM Begin: 17.14	ARM End: 17.96	Length (Miles): 0.82
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 24.0
Lane Miles: 1.64	Lt Shoulder (ft): 8.0	Rt Shoulder (ft): 8.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2006	016925	RESURFACE EXISTING RDWY	0.15	ACP CLASS 1/2IN PG58-22	NONE
1994	014383	RESURFACE EXISTING RDWY	0.08	ACP CLASS G AR4000W	NONE
1984	012721	RESURFACE EXISTING RDWY	0.04	BST CLASS B CRS-2	NONE
1973	009501	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1959	005786	NEW CONSTR OR ALIGN CHG	0.25	ACP CLASS B AR4000W	NONE
1959			0.00	N/A	
1959			0.84	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 14.50 to 19.04

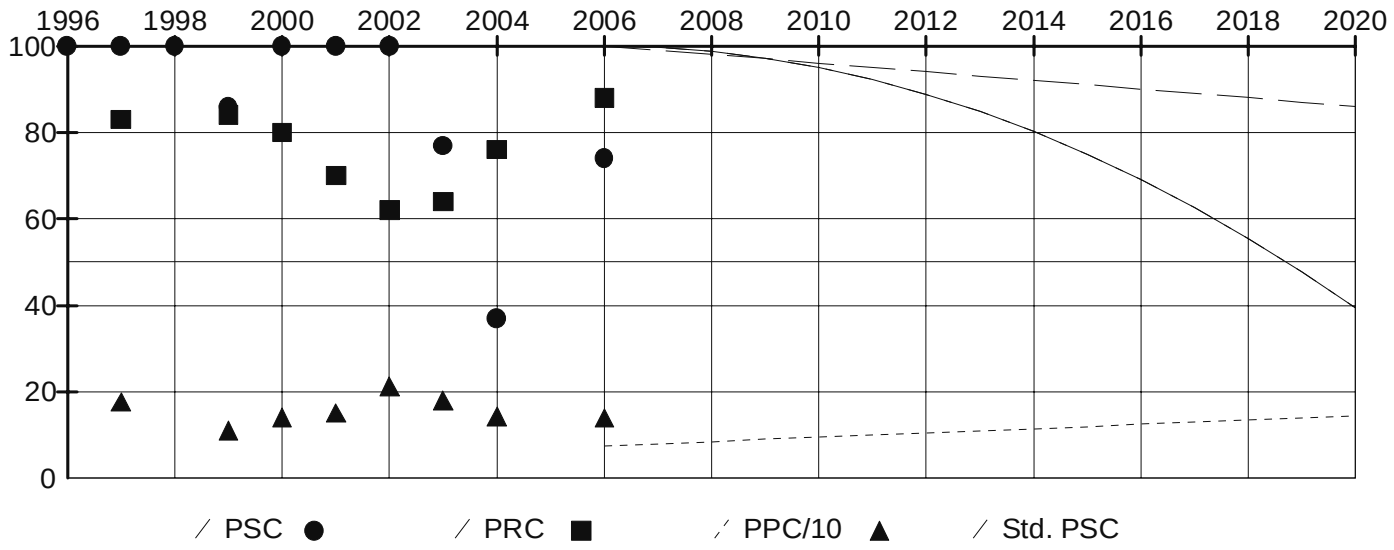
Ad. Date/PIN/Title: 03/2010 100917G - SR-9, Lundeen Parkway to SR 92(MP 16.48 -17.49)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2006
PSC (Structure)	100	100	100	86	100	100	100	77	37	74
PRC (Rutting)	N/A	83	N/A	84	80	70	62	64	76	88
PPC (IRI cm/km)	N/A	177	N/A	111	141	151	212	180	143	140

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2061	Regression	100.00	0.00	2006	75.00	5.00E+00	1.00
PRC	2056	Regression	100.00	0.00	2006	100.00	-1.00E+00	1.00
PSC	2018	Standard Equation	100.00	0.00	2006	100.00	-3.09E-01	2.00



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 3	PSC: 74	IRI (cm/km): 140

Defect Type	Low	Medium	High

Alligator Cracking	0	0	0
Patching	0	6	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 20368 Ave. Weekday Traffic: 22445
ADT Growth: 2.15% Single Units: 1596 Double Units: 329
Trains: 64 Total Trucks: 1989 Trucks Percentage: 9.77%
Trucks Growth: 2.15% Directional Split: 52.66% Peak Hour: 7.06%
Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: E
Past ESALs: 196,808 ESALs after 15yrs: 4,023,564

Analysis Unit: MP 17.96 - 19.04

(Vicinity: From MP 17.92 - INTRSECTN - 42ND ST NE To MP 19.03 - INTRSECTN - 60TH ST NE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 17.96	MP End: 19.04	Qualifier:
ARM Begin: 17.96	ARM End: 19.04	Length (Miles): 1.08
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 24.0
Lane Miles: 2.16	Lt Shoulder (ft): 8.0	Rt Shoulder (ft): 8.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2006	016925	RESURFACE EXISTING RDWY	0.15	ACP CLASS 1/2IN PG58-22	NONE
1994	014383	RESURFACE EXISTING RDWY	0.08	ACP CLASS G AR4000W	NONE
1984	012721	RESURFACE EXISTING RDWY	0.04	BST CLASS B CRS-2	NONE
1973	009501	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1959	005786	NEW CONSTR OR ALIGN CHG	0.25	ACP CLASS B AR4000W	NONE
1959			0.00	N/A	
1959			0.84	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 14.50 to 19.04

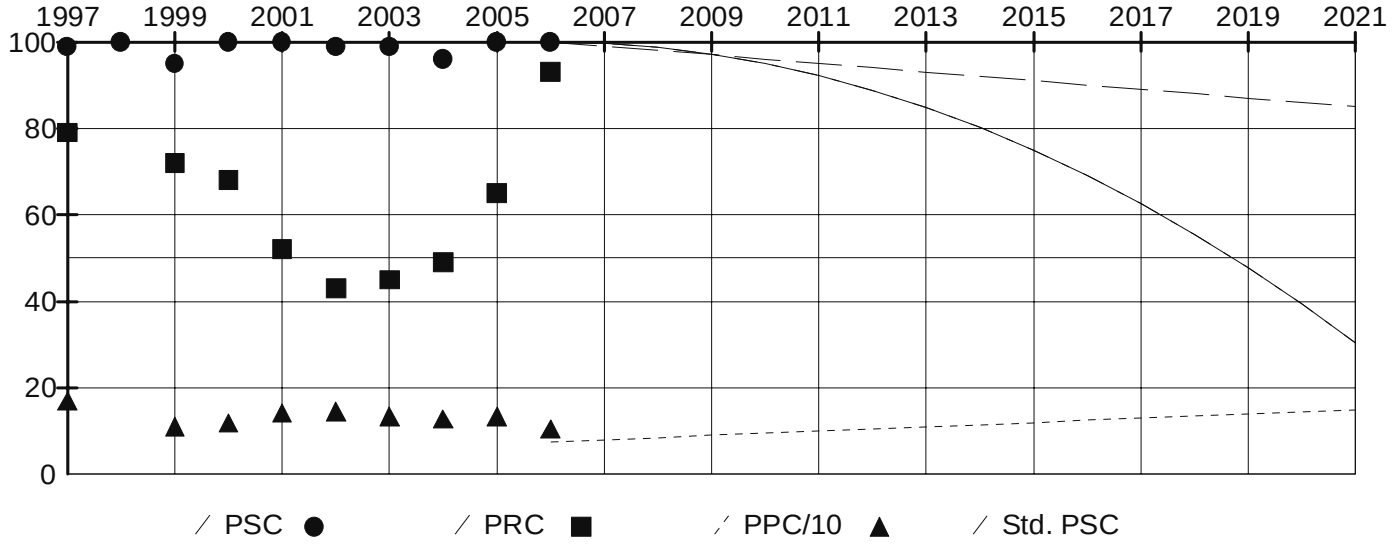
Ad. Date/PIN/Title: 03/2010 100917G - SR-9, Lundeen Parkway to SR 92(MP 16.48 -17.49)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	99	100	95	100	100	99	99	96	100	100
PRC (Rutting)	79	N/A	72	68	52	43	45	49	65	93
PPC (IRI cm/km)	170	N/A	111	119	142	145	134	128	134	105

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2061	Regression	100.00	0.00	2006	75.00	5.00E+00	1.00
PRC	2056	Regression	100.00	0.00	2006	100.00	-1.00E+00	1.00
PSC	2018	Standard Equation	100.00	0.00	2006	100.00	-3.09E-01	2.00



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 2	PSC: 100	IRI (cm/km): 105

Defect Type	Low	Medium	High

Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006
Ave. Daily Traffic: 16963
Ave. Weekday Traffic: 18621
ADT Growth: 2.15%
Single Units: 1073
Double Units: 225
Trains: 33
Total Trucks: 1331
Trucks Percentage: 7.85%
Trucks Growth: 2.15%
Directional Split: 51.49%
Peak Hour: 8.46%
Min. Level of Service: C
Cur. Level of Service: D
15yrs Level of Service: E
Past ESALs: 129,356
ESALs after 15yrs: 2,644,568

Analysis Unit: MP 19.04 - 19.38

(Vicinity: From MP 19.03 - INTRSECTN - 60TH ST NE To MP 19.26 - INTRSECTN - SR 528)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 19.04	MP End: 19.38	Qualifier:
ARM Begin: 19.04	ARM End: 19.38	Length (Miles): 0.34
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: 3R Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 24.0
Lane Miles: 0.68	Lt Shoulder (ft): 8.0	Rt Shoulder (ft): 8.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1998	015339	RESURFACE EXISTING RDWY	0.08	ACP CLASS G AR4000W	NONE
1987	013157	RESURFACE EXISTING RDWY	0.15	ACP CLASS B AR4000W	NONE
1973	009501	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1959	005786	NEW CONSTR OR ALIGN CHG	0.25	ACP CLASS B AR4000W	NONE
1959			0.00	N/A	
1959			0.84	Untreated Base	

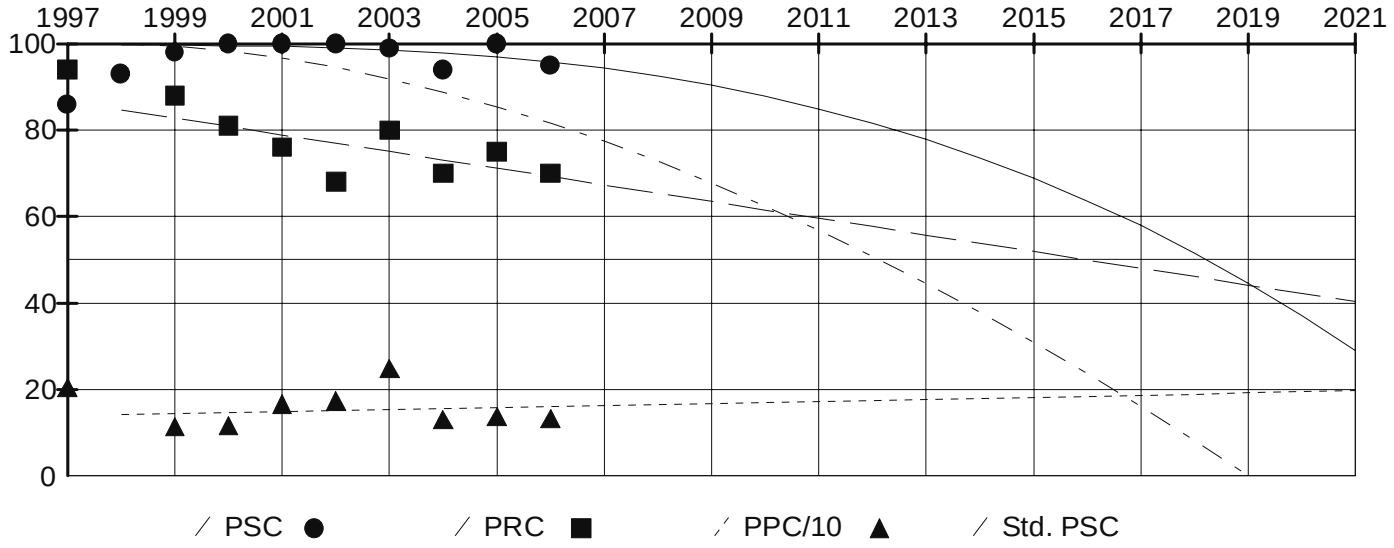
Related Programmed Project: SR 9 Mainline Increasing 19.04 to 26.85
Ad. Date/PIN/Title: 02/2011 100921G - SR-9, SR-9/SR-528 Intersection(MP 19.22 -19.30)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	86	93	98	100	100	100	99	94	100	95
PRC (Rutting)	94	N/A	88	81	76	68	80	70	75	70
PPC (IRI cm/km)	205	N/A	114	117	166	173	249	130	137	133

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2085	Regression	1.74	47.51	1998	141.61	2.39E+00	1.00
PRC	2016	Regression	48.51	5.26	1998	84.68	-1.93E+00	1.00
PSC	2018	Regression	33.00	2.00	1998	99.58	-1.27E-02	2.75



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 7	PSC: 95	IRI (cm/km): 133

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0

Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	8	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 16450	Ave. Weekday Traffic: 18561
ADT Growth: 2.16%	Single Units: 1392	Double Units: 239
Trains: 44	Total Trucks: 1675	Trucks Percentage: 10.18%
Trucks Growth: 2.16%	Directional Split: 54.84%	Peak Hour: 8.56%
Min. Level of Service: C	Cur. Level of Service: E	15yrs Level of Service: E

Past ESALs: 1,239,616 ESALs after 15yrs: 3,255,721

Analysis Unit: MP 19.38 - 20.41

(Vicinity: From MP 19.26 - INTRSECTN - SR 528 To MP 20.55 - INTRSECTN - 84TH ST NE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 19.38	MP End: 20.41	Qualifier:
ARM Begin: 19.38	ARM End: 20.41	Length (Miles): 1.03
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: 3R Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 23.0
Lane Miles: 2.06	Lt Shoulder (ft): 9.0	Rt Shoulder (ft): 9.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1998	015339	RESURFACE EXISTING RDWY	0.08	ACP CLASS G AR4000W	NONE
1989	013415	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1989	013415	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1973	009501	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1959	005786	NEW CONSTR OR ALIGN CHG	0.25	ACP CLASS B AR4000W	NONE
1959			0.00	N/A	
1959			0.84	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 19.04 to 26.85

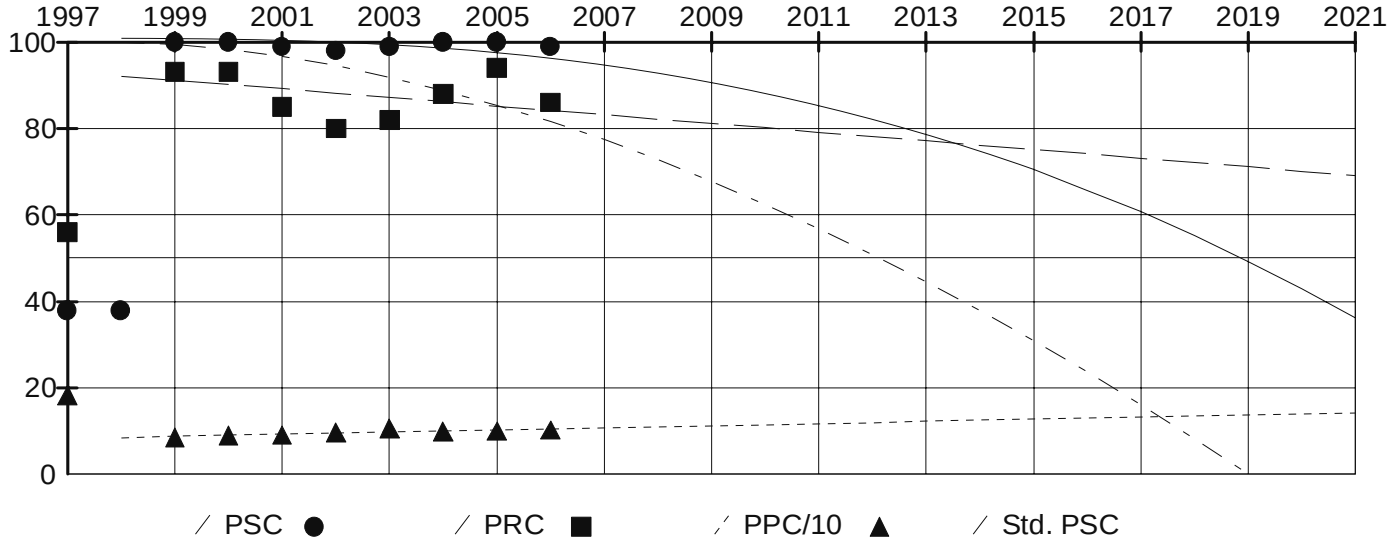
Ad. Date/PIN/Title: 02/2011 100921G - SR-9, SR-9/SR-528 Intersection(MP 19.22 -19.30)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	38	38	100	100	99	98	99	100	100	99
PRC (Rutting)	56	N/A	93	93	85	80	82	88	94	86
PPC (IRI cm/km)	182	N/A	85	90	91	97	106	99	100	103

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2104	Regression	73.06	4.00	1998	85.18	2.49E+00	1.00
PRC	2040	Regression	21.23	5.87	1998	92.13	-1.00E+00	1.00
PSC	2018	Too Long	99.00	1.00	1998	100.78	-2.55E-02	2.50



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 3	PSC: 99	IRI (cm/km): 103

Defect Type	Low	Medium	High

Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	1	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 14220 Ave. Weekday Traffic: 15900
ADT Growth: 2.47% Single Units: 1777 Double Units: 242
Trains: 56 Total Trucks: 2075 Trucks Percentage: 14.59%
Trucks Growth: 2.47% Directional Split: 57.29% Peak Hour: 8.97%
Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: E
Past ESALs: 1,476,606 ESALs after 15yrs: 4,028,447

Analysis Unit: MP 20.41 - 20.56

(Vicinity: From MP 20.55 - INTRSECTN - 84TH ST NE To MP 20.55 - INTRSECTN - 84TH ST NE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 20.41	MP End: 20.56	Qualifier:
ARM Begin: 20.41	ARM End: 20.56	Length (Miles): 0.15
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: 3R Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 23.0
Lane Miles: 0.30	Lt Shoulder (ft): 9.0	Rt Shoulder (ft): 9.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1989	013415	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1989	013415	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE

Related Programmed Project: SR 9 Mainline Increasing 19.04 to 26.85

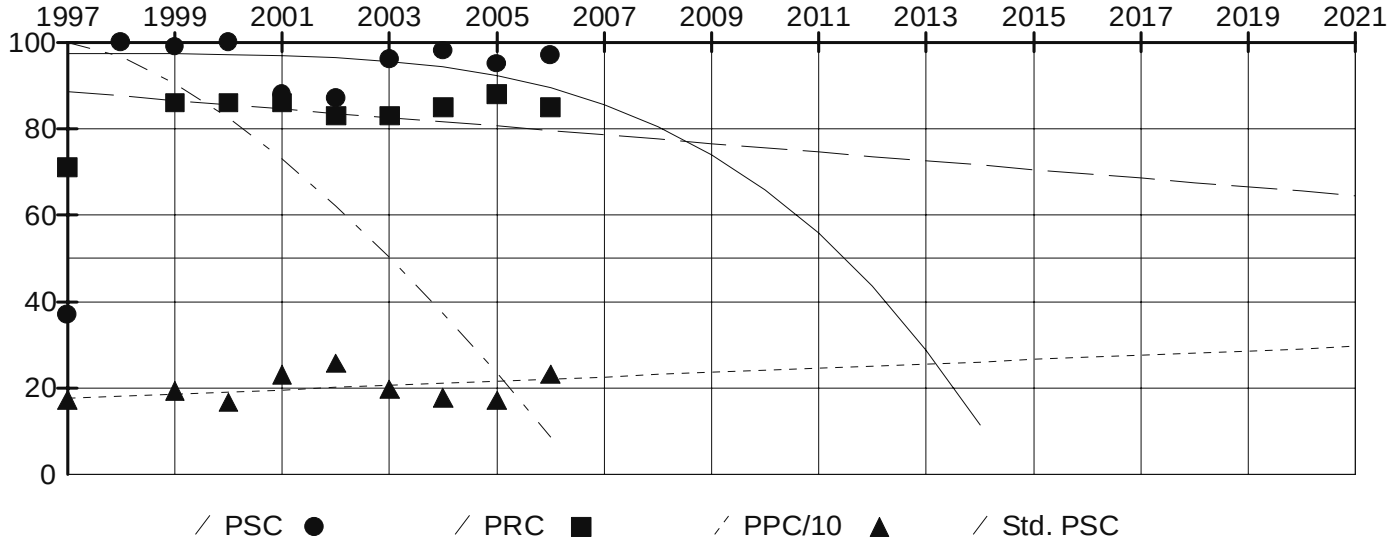
Ad. Date/PIN/Title: 02/2011 100921G - SR-9, SR-9/SR-528 Intersection(MP 19.22 -19.30)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	37	100	99	100	88	87	96	98	95	97
PRC (Rutting)	71	N/A	86	86	86	83	83	85	88	85
PPC (IRI cm/km)	173	N/A	194	167	231	258	198	178	172	232

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2032	Regression	13.76	37.25	1997	176.25	5.00E+00	1.00
PRC	2036	Regression	34.44	7.64	1997	88.56	-1.00E+00	1.00
PSC	2011	New Year Too Long	96.00	5.00	1997	97.30	-2.09E-03	3.75



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 4	PSC: 97	IRI (cm/km): 232

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	4	0	0
Transverse Cracking	0	0	0

Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 13809	Ave. Weekday Traffic: 15079
ADT Growth: 2.77%	Single Units: 1726	Double Units: 234
Trains: 55	Total Trucks: 2015	Trucks Percentage: 14.59%
Trucks Growth: 2.77%	Directional Split: 56.11%	Peak Hour: 9.12%
Min. Level of Service: C	Cur. Level of Service: E	15yrs Level of Service: F

Past ESALs: 2,377,369 ESALs after 15yrs: 4,009,183

Analysis Unit: MP 20.56 - 20.69

(Vicinity: From MP 20.55 - INTRSECTN - 84TH ST NE To MP 20.55 - INTRSECTN - 84TH ST NE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 20.56	MP End: 20.69	Qualifier:
ARM Begin: 20.56	ARM End: 20.69	Length (Miles): 0.13
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: 3R Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 23.0
Lane Miles: 0.26	Lt Shoulder (ft): 9.0	Rt Shoulder (ft): 9.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1989	013415	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1989	013415	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1959	005897	NEW CONSTR OR ALIGN CHG	0.25	ACP CLASS B AR4000W	NONE
1959			0.00	N/A	
1959			0.75	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 19.04 to 26.85

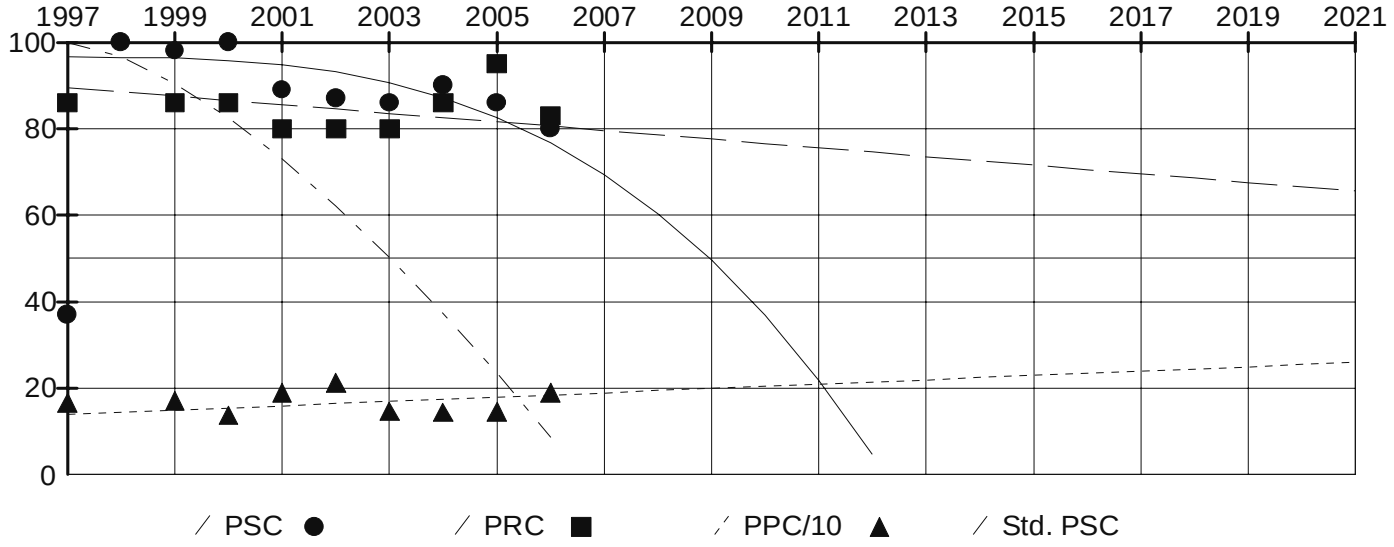
Ad. Date/PIN/Title: 02/2011 100921G - SR-9, SR-9/SR-528 Intersection(MP 19.22 -19.30)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	37	100	98	100	89	87	86	90	86	80
PRC (Rutting)	86	N/A	86	86	80	80	80	86	95	83
PPC (IRI cm/km)	166	N/A	171	137	190	212	147	144	145	189

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2039	Regression	19.56	33.17	1997	139.38	5.00E+00	1.00
PRC	2037	Regression	37.85	6.30	1997	89.56	-1.00E+00	1.00
PSC	2008	New Year Too Long	98.00	4.00	1997	96.54	-2.72E-02	3.00



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 4	PSC: 80	IRI (cm/km): 189

Defect Type	Low	Medium	High
Alligator Cracking	0	0	1
Patching	0	0	0

Raveling	0	0	0
Longitudinal Cracking	41	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 13712	Ave. Weekday Traffic: 14884
ADT Growth: 2.84%	Single Units: 1714	Double Units: 232
Trains: 55	Total Trucks: 2001	Trucks Percentage: 14.59%
Trucks Growth: 2.84%	Directional Split: 55.84%	Peak Hour: 9.16%
Min. Level of Service: C	Cur. Level of Service: E	15yrs Level of Service: F

Past ESALs: 2,349,528 ESALs after 15yrs: 4,006,792

Analysis Unit: MP 20.69 - 21.09

(Vicinity: From MP 20.55 - INTRSECTN - 84TH ST NE To MP 21.09 - RR XING - NUM 0000000 STRUCTURE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 20.69	MP End: 21.09	Qualifier:
ARM Begin: 20.69	ARM End: 21.09	Length (Miles): 0.40
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: 3R Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 23.0
Lane Miles: 0.80	Lt Shoulder (ft): 9.0	Rt Shoulder (ft): 9.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1998	015339	RESURFACE EXISTING RDWY	0.08	ACP CLASS G AR4000W	NONE
1989	013415	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1989	013415	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1959	005897	NEW CONSTR OR ALIGN CHG	0.25	ACP CLASS B AR4000W	NONE
1959			0.00	N/A	
1959			0.75	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 19.04 to 26.85

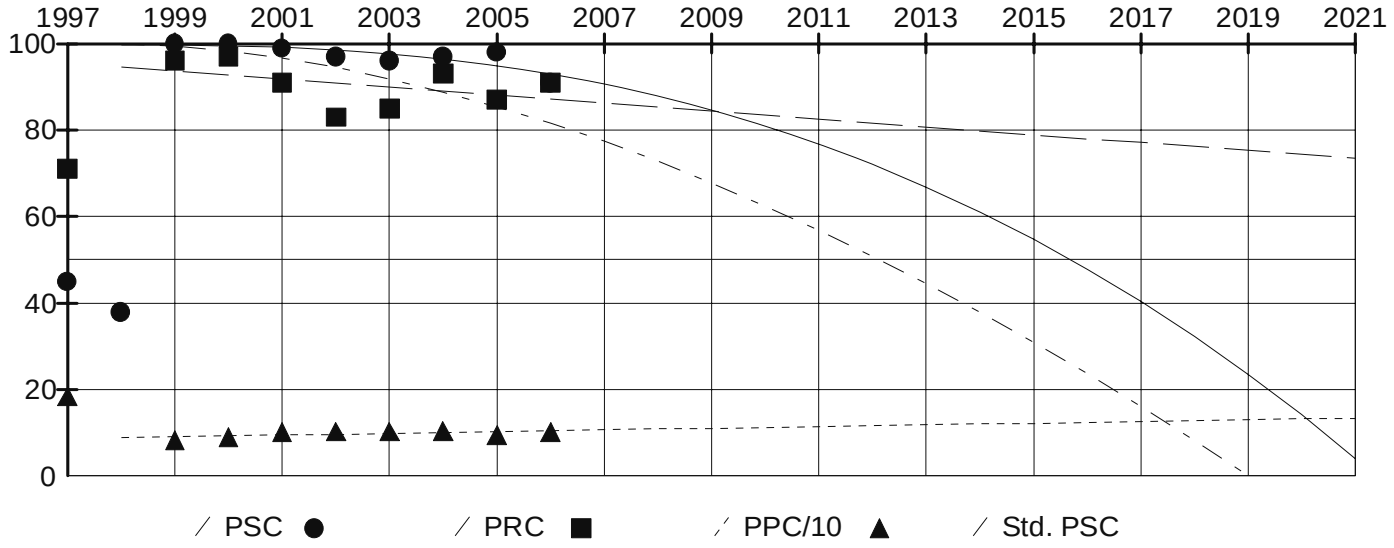
Ad. Date/PIN/Title: 02/2011 100921G - SR-9, SR-9/SR-528 Intersection(MP 19.22 -19.30)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	45	38	100	100	99	97	96	97	98	91
PRC (Rutting)	71	N/A	96	97	91	83	85	93	87	91
PPC (IRI cm/km)	184	N/A	83	90	102	103	103	104	95	102

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2132	Regression	38.53	6.52	1998	88.96	1.95E+00	1.00
PRC	2047	Regression	19.84	4.87	1998	94.50	-9.17E-01	1.00
PSC	2015	Regression	70.00	1.00	1998	99.68	-3.77E-02	2.50



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 2	PSC: 91	IRI (cm/km): 102

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0

Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	3	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 13528	Ave. Weekday Traffic: 14515
ADT Growth: 2.97%	Single Units: 1690	Double Units: 230
Trains: 53	Total Trucks: 1973	Trucks Percentage: 14.58%
Trucks Growth: 2.97%	Directional Split: 55.31%	Peak Hour: 9.23%
Min. Level of Service: C	Cur. Level of Service: E	15yrs Level of Service: F

Past ESALs: 1,376,120 ESALs after 15yrs: 3,992,914

Analysis Unit: MP 21.09 - 21.14

(Vicinity: From MP 21.09 - RR XING - NUM 0000000 STRUCTURE To MP 21.14 - END BRIDGE - GETCHELL RD)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 21.09	MP End: 21.14	Qualifier:
ARM Begin: 21.09	ARM End: 21.14	Length (Miles): 0.05
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: 3R Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 28.0
Lane Miles: 0.10	Lt Shoulder (ft): 0.0	Rt Shoulder (ft): 0.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: Yes

Year	Contract	Construction	Thickness	Surface Type	Exception
1995	014698	RESURFACE EXISTING RDWY	0.12	LATEX MODIFIED PCC	BRIDGE DECK RESURFACING
1995	014698	PLANING	0.12	GRINDING ACP OR BST	NONE
1959	005492	BRIDGE	0.00	PCCP	NONE

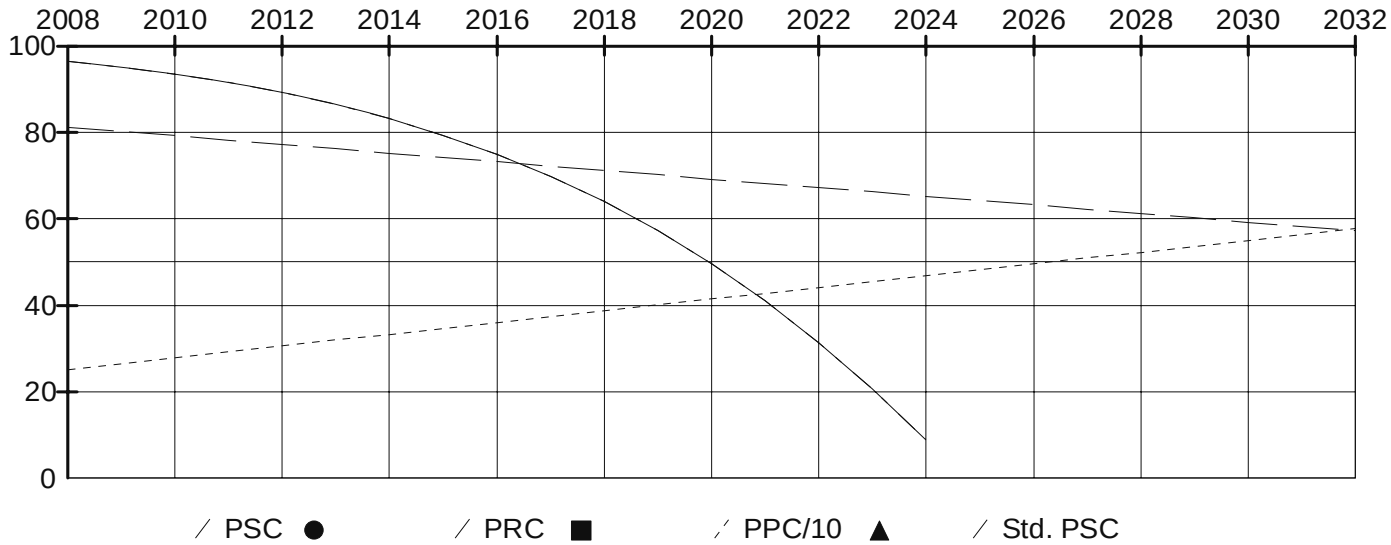
Related Programmed Project: SR 9 Mainline Increasing 19.04 to 26.85

Ad. Date/PIN/Title: 02/2011 100921G - SR-9, SR-9/SR-528 Intersection(MP 19.22 -19.30)

Analysis Unit Condition and Projection

Friction Year: Friction:

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2015	Regression	52.95	33.79	1995	75.64	1.35E+01	1.00
PRC	2039	Regression	39.30	7.81	1995	94.20	-1.00E+00	1.00
PSC	2019	Standard Equation	100.00	0.00	1995	100.00	-1.29E-04	4.00



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 4	PSC: 95	IRI (cm/km): 201

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	1	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 13372	Ave. Weekday Traffic: 14202
ADT Growth: 3.09%	Single Units: 1671	Double Units: 226
Trains: 53	Total Trucks: 1950	Trucks Percentage: 14.58%
Trucks Growth: 3.09%	Directional Split: 54.86%	Peak Hour: 9.28%
Min. Level of Service: C	Cur. Level of Service: E	15yrs Level of Service: F

Past ESALs: 1,693,663 ESALs after 15yrs: 3,983,808

Analysis Unit: MP 21.14 - 21.41

(Vicinity: From MP 21.14 - END BRIDGE - GETCHELL RD To MP 21.14 - END BRIDGE - GETCHELL RD)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 21.14	MP End: 21.41	Qualifier:
ARM Begin: 21.14	ARM End: 21.41	Length (Miles): 0.27
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: 3R Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 23.0
Lane Miles: 0.54	Lt Shoulder (ft): 9.0	Rt Shoulder (ft): 9.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1998	015339	RESURFACE EXISTING RDWY	0.08	ACP CLASS G AR4000W	NONE
1989	013415	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1989	013415	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1978	011003	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1959	005897	NEW CONSTR OR ALIGN CHG	0.25	ACP CLASS B AR4000W	NONE
1959			0.00	N/A	
1959			0.75	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 19.04 to 26.85

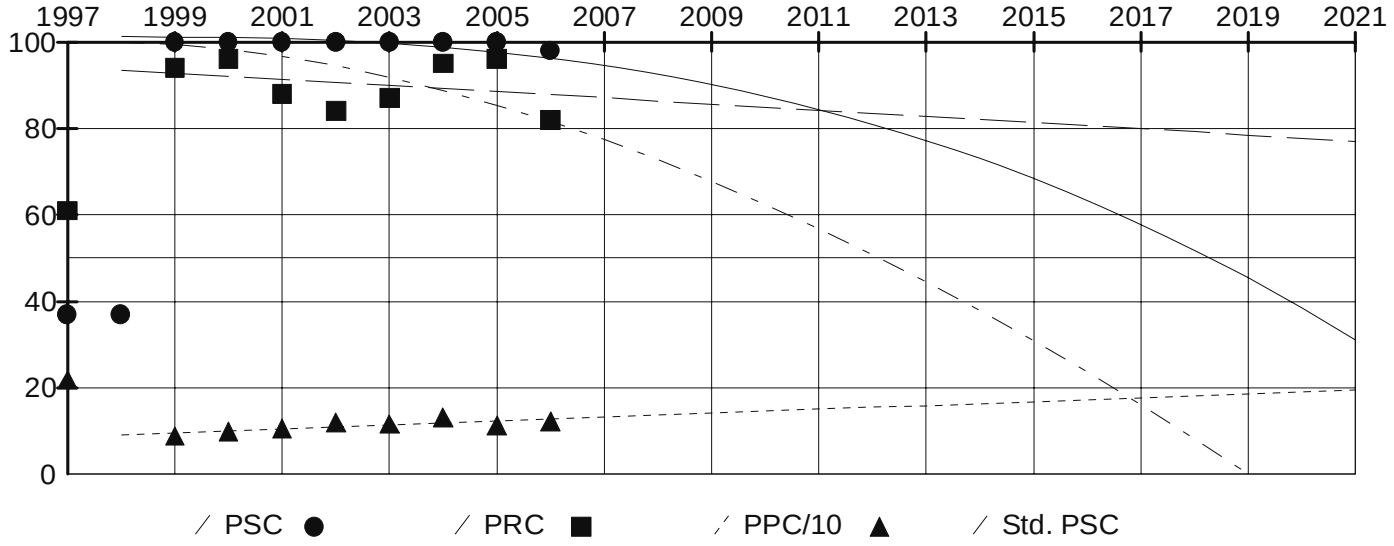
Ad. Date/PIN/Title: 02/2011 100921G - SR-9, SR-9/SR-528 Intersection(MP 19.22 -19.30)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	37	37	100	100	100	100	100	100	100	98
PRC (Rutting)	61	N/A	94	96	88	84	87	95	96	82
PPC (IRI cm/km)	218	N/A	89	99	106	120	117	132	113	122

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2056	Regression	63.58	8.96	1998	92.11	4.48E+00	1.00
PRC	2059	Regression	9.50	5.83	1998	93.46	-7.14E-01	1.00
PSC	2018	Too Short	99.00	1.00	1998	101.17	-2.76E-02	2.50



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 4	PSC: 98	IRI (cm/km): 122

Defect Type	Low	Medium	High

Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 13261 Ave. Weekday Traffic: 13979
ADT Growth: 3.17% Single Units: 1657 Double Units: 224
Trains: 52 Total Trucks: 1933 Trucks Percentage: 14.58%
Trucks Growth: 3.17% Directional Split: 54.54% Peak Hour: 9.33%
Min. Level of Service: C Cur. Level of Service: E 15yrs Level of Service: F
Past ESALs: 1,339,634 ESALs after 15yrs: 3,980,817

Analysis Unit: MP 21.41 - 23.50

(Vicinity: From MP 21.14 - END BRIDGE - GETCHELL RD To MP 23.51 - INTRSECTN - 132ND ST NE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 21.41	MP End: 23.50	Qualifier:
ARM Begin: 21.41	ARM End: 23.50	Length (Miles): 2.09
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: 3R Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 4.18	Lt Shoulder (ft): 8.0	Rt Shoulder (ft): 8.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1998	015339	RESURFACE EXISTING RDWY	0.08	ACP CLASS G AR4000W	NONE
1989	013415	RESURFACE EXISTING RDWY	0.02	BST CLASS A CRS-2 TACK	NONE
1989	013415	RESURFACE EXISTING RDWY	0.04	BST CLASS A CRS-2 PRIME	NONE
1978	011003	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1959	005897	NEW CONSTR OR ALIGN CHG	0.25	ACP CLASS B AR4000W	NONE
1959			0.00	N/A	
1959			0.75	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 19.04 to 26.85

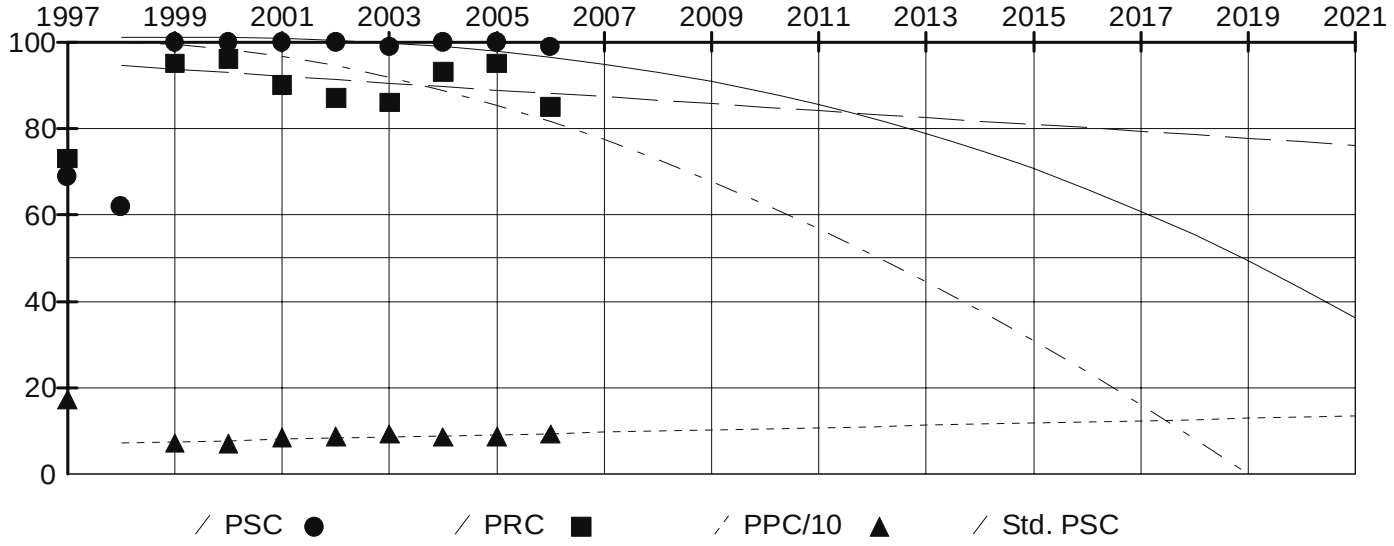
Ad. Date/PIN/Title: 02/2011 100921G - SR-9, SR-9/SR-528 Intersection(MP 19.22 -19.30)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	69	62	100	100	100	100	99	100	100	99
PRC (Rutting)	73	N/A	95	96	90	87	86	93	95	85
PPC (IRI cm/km)	173	N/A	73	72	85	88	93	86	88	93

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2100	Regression	67.34	5.00	1998	72.54	2.71E+00	1.00
PRC	2054	Regression	19.24	4.32	1998	94.46	-7.98E-01	1.00
PSC	2018	Too Short	99.00	1.00	1998	101.11	-2.56E-02	2.50



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 4	PSC: 99	IRI (cm/km): 93

Defect Type	Low	Medium	High

Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 11864 Ave. Weekday Traffic: 12364
ADT Growth: 3.47% Single Units: 1435 Double Units: 220
Trains: 51 Total Trucks: 1706 Trucks Percentage: 14.38%
Trucks Growth: 3.47% Directional Split: 53.81% Peak Hour: 9.24%
Min. Level of Service: C Cur. Level of Service: D 15yrs Level of Service: E
Past ESALs: 1,194,970 ESALs after 15yrs: 3,681,375

Analysis Unit: MP 23.50 - 23.61

(Vicinity: From MP 23.51 - INTRSECTN - 132ND ST NE To MP 23.51 - INTRSECTN - 132ND ST NE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 23.50	MP End: 23.61	Qualifier:
ARM Begin: 23.50	ARM End: 23.61	Length (Miles): 0.11
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: 3R Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 0.22	Lt Shoulder (ft): 8.0	Rt Shoulder (ft): 8.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1998	015339	RESURFACE EXISTING RDWY	0.08	ACP CLASS G AR4000W	NONE
1996	014831	RESURFACE EXISTING RDWY	0.08	ACP CLASS G AR4000W	NONE
1984	012721	RESURFACE EXISTING RDWY	0.04	BST CLASS B CRS-2	NONE
1978	011003	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1959	005897	NEW CONSTR OR ALIGN CHG	0.25	ACP CLASS B AR4000W	NONE
1959			0.00	N/A	
1959			0.75	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 19.04 to 26.85

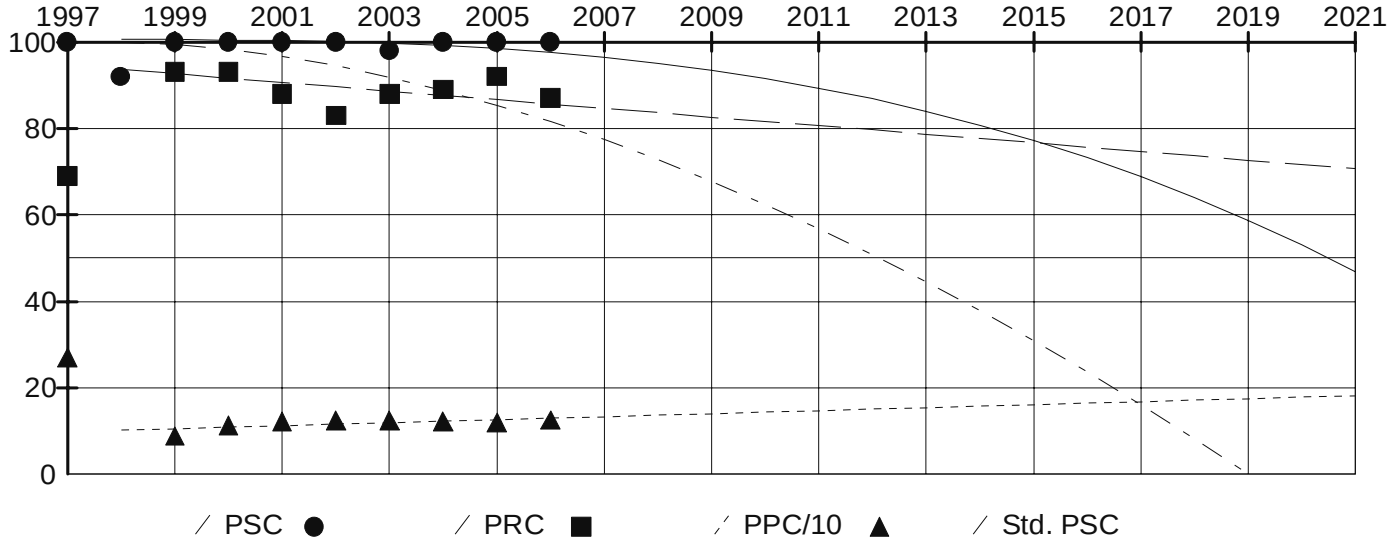
Ad. Date/PIN/Title: 02/2011 100921G - SR-9, SR-9/SR-528 Intersection(MP 19.22 -19.30)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	100	92	100	100	100	100	98	100	100	100
PRC (Rutting)	69	N/A	93	93	88	83	88	89	92	87
PPC (IRI cm/km)	270	N/A	89	113	122	125	125	122	120	126

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2069	Regression	48.38	9.57	1998	102.00	3.50E+00	1.00
PRC	2042	Regression	50.68	3.78	1998	93.63	-1.00E+00	1.00
PSC	2020	Too Long	99.00	1.00	1998	100.50	-9.65E-03	2.75



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 3	PSC: 100	IRI (cm/km): 126

Defect Type	Low	Medium	High

Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 11538 Ave. Weekday Traffic: 12352
ADT Growth: 3.50% Single Units: 1312 Double Units: 247
Trains: 58 Total Trucks: 1617 Trucks Percentage: 14.01%
Trucks Growth: 3.50% Directional Split: 53.27% Peak Hour: 9.12%
Min. Level of Service: C Cur. Level of Service: D 15yrs Level of Service: E
Past ESALs: 1,181,709 ESALs after 15yrs: 3,654,570

Analysis Unit: MP 23.61 - 24.48

(Vicinity: From MP 23.51 - INTRSECTN - 132ND ST NE To MP 25.29 - INTRSECTN - 160TH ST NE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 23.61	MP End: 24.48	Qualifier:
ARM Begin: 23.61	ARM End: 24.48	Length (Miles): 0.87
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: 3R Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 1.74	Lt Shoulder (ft): 8.0	Rt Shoulder (ft): 8.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1996	014831	RESURFACE EXISTING RDWY	0.08	ACP CLASS G AR4000W	NONE
1984	012721	RESURFACE EXISTING RDWY	0.04	BST CLASS B CRS-2	NONE
1978	011003	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1959	005897	NEW CONSTR OR ALIGN CHG	0.25	ACP CLASS B AR4000W	NONE
1959			0.00	N/A	
1959			0.75	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 19.04 to 26.85

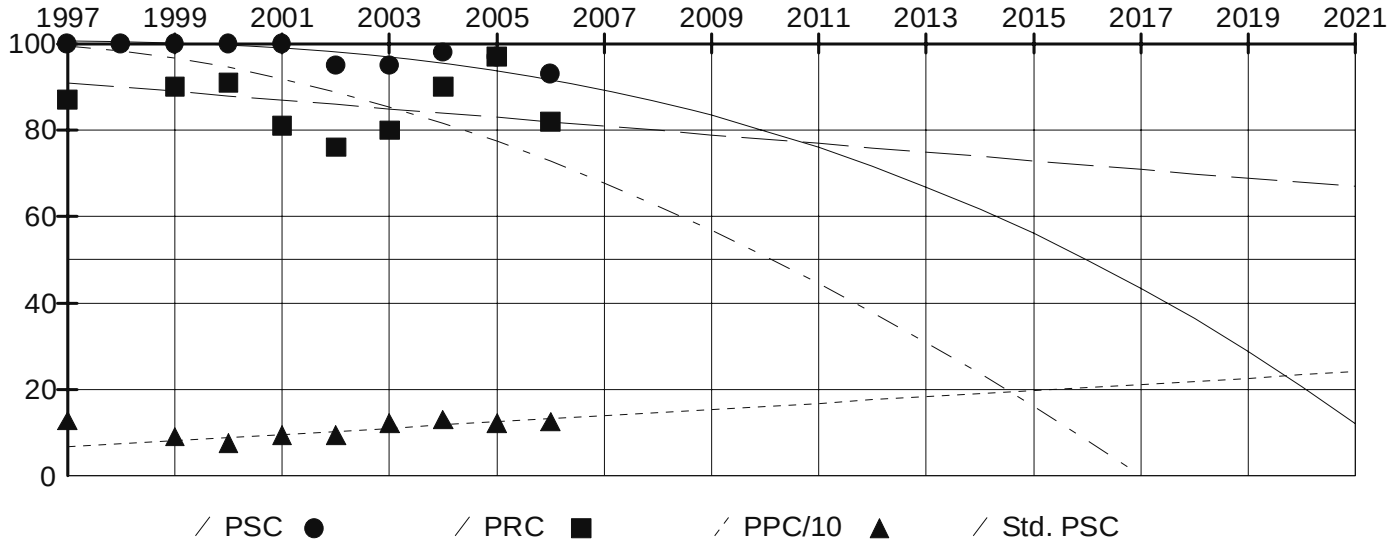
Ad. Date/PIN/Title: 02/2011 100921G - SR-9, SR-9/SR-528 Intersection(MP 19.22 -19.30)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	100	100	100	100	100	95	95	98	97	93
PRC (Rutting)	87	N/A	90	91	81	76	80	90	97	82
PPC (IRI cm/km)	128	N/A	91	76	95	94	122	130	122	126

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2036	Regression	76.67	10.56	1996	59.95	7.24E+00	1.00
PRC	2038	Regression	19.35	7.74	1996	91.89	-1.00E+00	1.00
PSC	2015	Too Long	99.00	1.00	1996	100.59	-2.83E-02	2.50



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 4	PSC: 93	IRI (cm/km): 126

Defect Type	Low	Medium	High
Alligator Cracking	1	0	0

Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 11561	Ave. Weekday Traffic: 12547
ADT Growth: 3.50%	Single Units: 1274	Double Units: 263
Trains: 61	Total Trucks: 1598	Trucks Percentage: 13.82%
Trucks Growth: 3.50%	Directional Split: 52.95%	Peak Hour: 9.09%
Min. Level of Service: C	Cur. Level of Service: D	15yrs Level of Service: E

Past ESALs: 1,386,084 ESALs after 15yrs: 3,672,591

Analysis Unit: MP 24.48 - 25.05

(Vicinity: From MP 25.29 - INTRSECTN - 160TH ST NE To MP 25.29 - INTRSECTN - 160TH ST NE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 24.48	MP End: 25.05	Qualifier:
ARM Begin: 24.48	ARM End: 25.05	Length (Miles): 0.57
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: 3R Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 1.14	Lt Shoulder (ft): 8.0	Rt Shoulder (ft): 8.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1996	014831	RESURFACE EXISTING RDWY	0.08	ACP CLASS G AR4000W	NONE
1994	XE3146	RESURFACE EXISTING RDWY	0.10	ACP CLASS B AR4000W	NONE
1984	012721	RESURFACE EXISTING RDWY	0.04	BST CLASS B CRS-2	NONE
1978	011003	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1959	005897	NEW CONSTR OR ALIGN CHG	0.25	ACP CLASS B AR4000W	NONE
1959			0.00	N/A	
1959			0.75	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 19.04 to 26.85

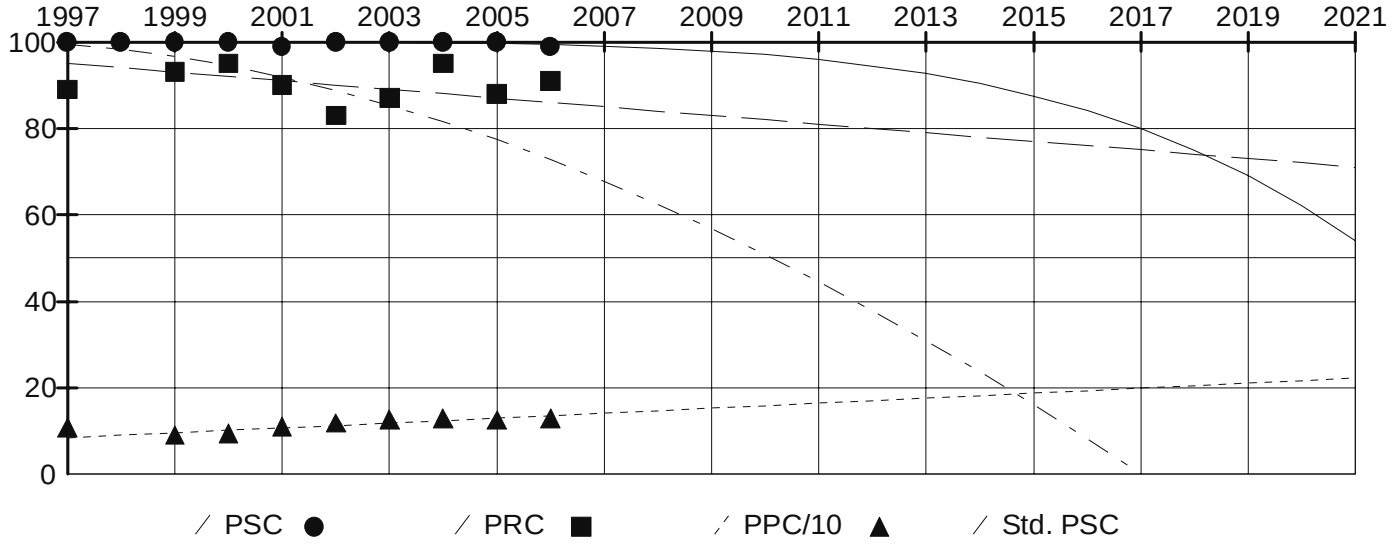
Ad. Date/PIN/Title: 02/2011 100921G - SR-9, SR-9/SR-528 Intersection(MP 19.22 -19.30)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	100	100	100	100	99	100	100	100	100	99
PRC (Rutting)	89	N/A	93	95	90	83	87	95	88	91
PPC (IRI cm/km)	108	N/A	91	95	111	119	127	129	126	129

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2043	Regression	83.71	6.71	1996	78.50	5.75E+00	1.00
PRC	2042	Regression	56.06	4.99	1996	96.00	-1.00E+00	1.00
PSC	2021	Regression	22.00	0.00	1996	99.94	-1.05E-05	4.75



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 2	PSC: 99	IRI (cm/km): 129

Defect Type	Low	Medium	High

Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	1	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 11594 Ave. Weekday Traffic: 12832
ADT Growth: 3.50% Single Units: 1222 Double Units: 286
Trains: 66 Total Trucks: 1574 Trucks Percentage: 13.58%
Trucks Growth: 3.50% Directional Split: 52.47% Peak Hour: 9.03%
Min. Level of Service: C Cur. Level of Service: D 15yrs Level of Service: E
Past ESALs: 1,407,745 ESALs after 15yrs: 3,729,983

Analysis Unit: MP 25.05 - 25.34

(Vicinity: From MP 25.29 - INTRSECTN - 160TH ST NE To MP 25.29 - INTRSECTN - 160TH ST NE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 25.05	MP End: 25.34	Qualifier:
ARM Begin: 25.05	ARM End: 25.34	Length (Miles): 0.29
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: 3R Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 0.58	Lt Shoulder (ft): 8.0	Rt Shoulder (ft): 8.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1996	014831	RESURFACE EXISTING RDWY	0.08	ACP CLASS G AR4000W	NONE
1984	012721	RESURFACE EXISTING RDWY	0.04	BST CLASS B CRS-2	NONE
1978	011003	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1959	005897	NEW CONSTR OR ALIGN CHG	0.25	ACP CLASS B AR4000W	NONE
1959			0.00	N/A	
1959			0.75	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 19.04 to 26.85

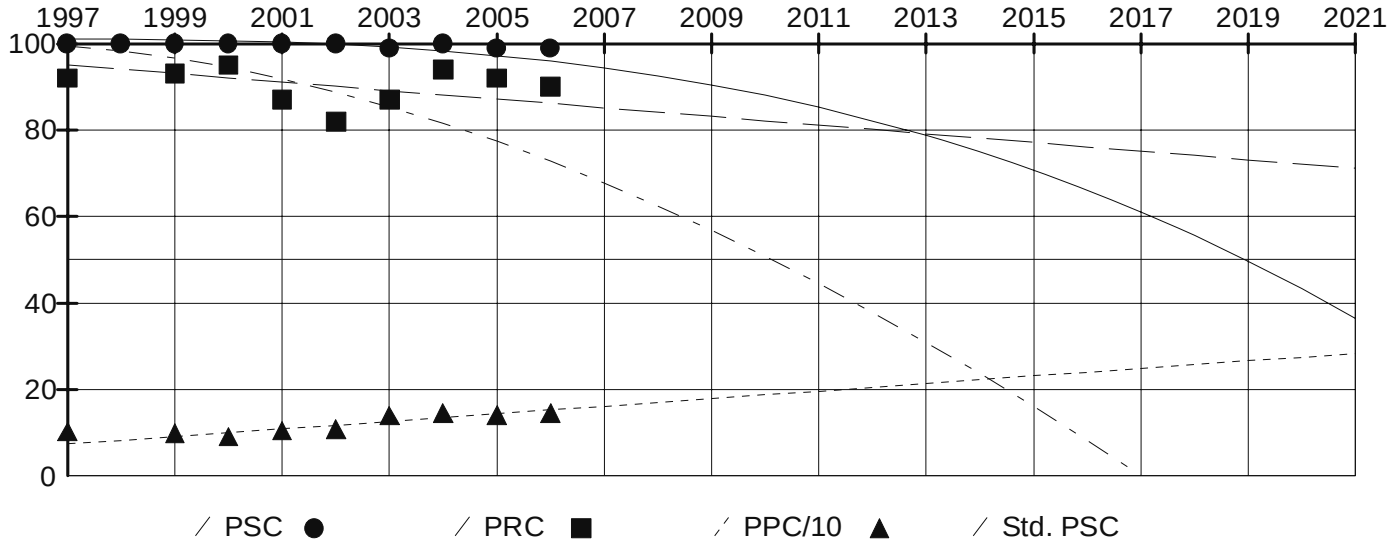
Ad. Date/PIN/Title: 02/2011 100921G - SR-9, SR-9/SR-528 Intersection(MP 19.22 -19.30)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	100	100	100	100	100	100	99	100	99	99
PRC (Rutting)	92	N/A	93	95	87	82	87	94	92	90
PPC (IRI cm/km)	103	N/A	99	91	105	108	140	146	141	146

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2029	Regression	84.13	10.04	1996	65.20	8.74E+00	1.00
PRC	2042	Regression	49.36	5.06	1996	96.11	-1.00E+00	1.00
PSC	2018	Too Long	99.00	1.00	1996	101.11	-9.25E-03	2.75



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 3	PSC: 99	IRI (cm/km): 146

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0

Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	1	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 11614	Ave. Weekday Traffic: 13003
ADT Growth: 3.50%	Single Units: 1190	Double Units: 300
Trains: 69	Total Trucks: 1559	Trucks Percentage: 13.42%
Trucks Growth: 3.50%	Directional Split: 52.19%	Peak Hour: 9.00%
Min. Level of Service: C	Cur. Level of Service: D	15yrs Level of Service: E

Past ESALs: 1,415,178 ESALs after 15yrs: 3,749,679

Analysis Unit: MP 25.34 - 25.75

(Vicinity: From MP 25.29 - INTRSECTN - 160TH ST NE To MP 26.05 - INTRSECTN - 172ND ST NE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 25.34	MP End: 25.75	Qualifier:
ARM Begin: 25.34	ARM End: 25.75	Length (Miles): 0.41
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: 3R Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 0.82	Lt Shoulder (ft): 8.0	Rt Shoulder (ft): 8.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1996	014831	RESURFACE EXISTING RDWY	0.08	ACP CLASS G AR4000W	NONE
1994	XE3146	RESURFACE EXISTING RDWY	0.10	ACP CLASS B AR4000W	NONE
1984	012721	RESURFACE EXISTING RDWY	0.04	BST CLASS B CRS-2	NONE
1978	011003	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1959	005897	NEW CONSTR OR ALIGN CHG	0.25	ACP CLASS B AR4000W	NONE
1959			0.00	N/A	
1959			0.75	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 19.04 to 26.85

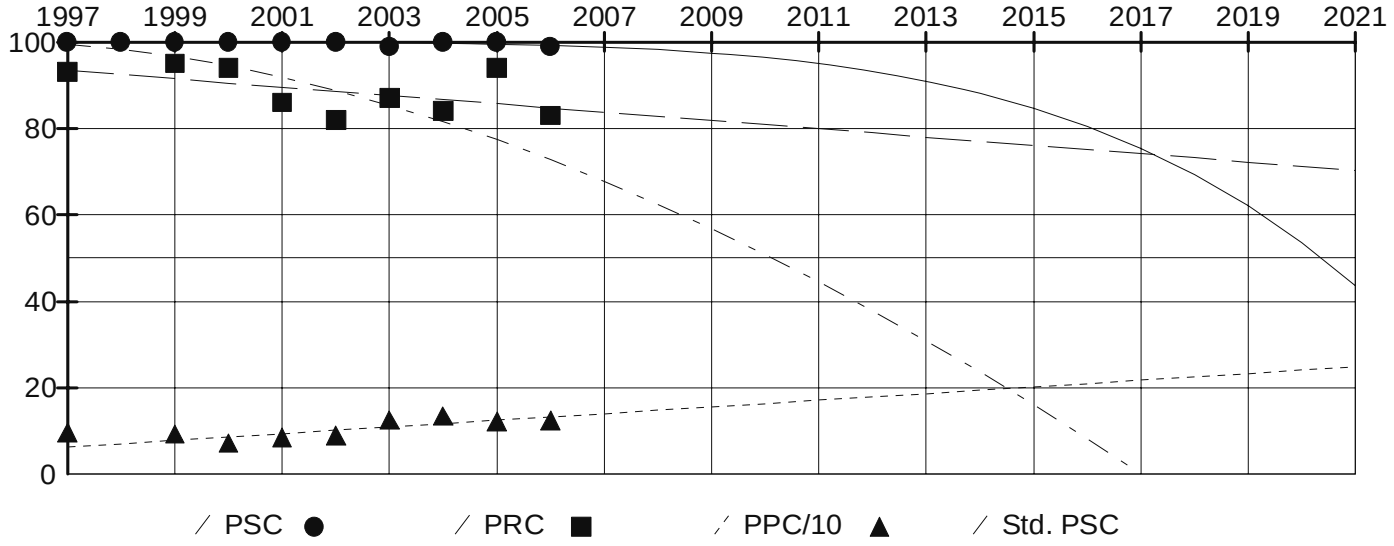
Ad. Date/PIN/Title: 02/2011 100921G - SR-9, SR-9/SR-528 Intersection(MP 19.22 -19.30)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	100	100	100	100	100	100	99	100	100	99
PRC (Rutting)	93	N/A	95	94	86	82	87	84	94	83
PPC (IRI cm/km)	97	N/A	93	73	85	90	126	135	122	124

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2034	Regression	66.19	14.59	1996	55.86	7.71E+00	1.00
PRC	2042	Regression	28.51	4.78	1996	94.34	-9.63E-01	1.00
PSC	2020	Regression	34.00	0.00	1996	99.96	-1.29E-05	4.75



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 4	PSC: 99	IRI (cm/km): 124

Defect Type	Low	Medium	High

Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 11630 Ave. Weekday Traffic: 13142
ADT Growth: 3.50% Single Units: 1164 Double Units: 312
Trains: 72 Total Trucks: 1548 Trucks Percentage: 13.31%
Trucks Growth: 3.50% Directional Split: 51.96% Peak Hour: 8.98%
Min. Level of Service: C Cur. Level of Service: D 15yrs Level of Service: E
Past ESALs: 1,428,772 ESALs after 15yrs: 3,785,698

Analysis Unit: MP 25.75 - 25.87

(Vicinity: From MP 26.05 - INTRSECTN - 172ND ST NE To MP 26.05 - INTRSECTN - 172ND ST NE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 25.75	MP End: 25.87	Qualifier:
ARM Begin: 25.75	ARM End: 25.87	Length (Miles): 0.12
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: 3R Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 22.0
Lane Miles: 0.24	Lt Shoulder (ft): 8.0	Rt Shoulder (ft): 8.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1996	014831	RESURFACE EXISTING RDWY	0.08	ACP CLASS G AR4000W	NONE
1994	014258	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1984	012721	RESURFACE EXISTING RDWY	0.04	BST CLASS B CRS-2	NONE
1978	011003	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1959	005897	NEW CONSTR OR ALIGN CHG	0.25	ACP CLASS B AR4000W	NONE
1959			0.00	N/A	
1959			0.75	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 19.04 to 26.85

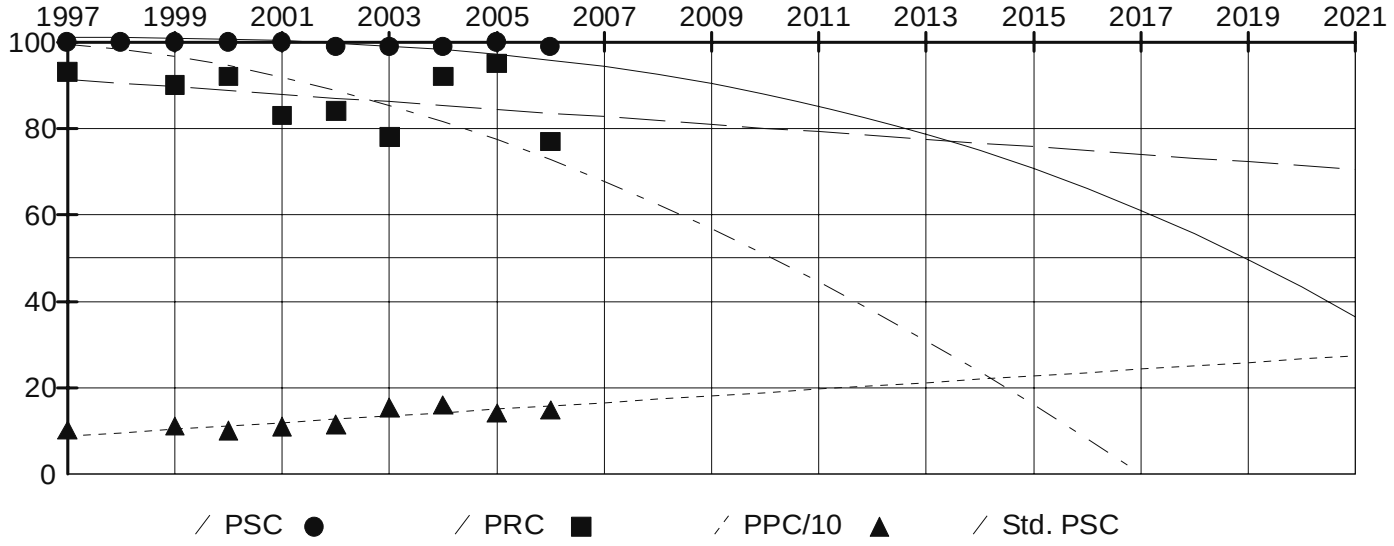
Ad. Date/PIN/Title: 02/2011 100921G - SR-9, SR-9/SR-528 Intersection(MP 19.22 -19.30)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	100	100	100	100	100	99	99	99	100	99
PRC (Rutting)	93	N/A	90	92	83	84	78	92	95	77
PPC (IRI cm/km)	103	N/A	112	102	111	115	155	161	142	149

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2031	Regression	66.35	14.56	1996	80.65	7.73E+00	1.00
PRC	2045	Regression	14.27	6.68	1996	92.23	-8.69E-01	1.00
PSC	2018	Too Long	99.00	1.00	1996	101.02	-9.24E-03	2.75



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 5	PSC: 99	IRI (cm/km): 149

Defect Type	Low	Medium	High

Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	1	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 11642 Ave. Weekday Traffic: 13247
ADT Growth: 3.50% Single Units: 1144 Double Units: 320
Trains: 74 Total Trucks: 1538 Trucks Percentage: 13.21%
Trucks Growth: 3.50% Directional Split: 51.79% Peak Hour: 8.96%
Min. Level of Service: C Cur. Level of Service: D 15yrs Level of Service: E
Past ESALs: 1,434,309 ESALs after 15yrs: 3,800,367

Analysis Unit: MP 25.87 - 26.05

(Vicinity: From MP 26.05 - INTRSECTN - 172ND ST NE To MP 26.05 - INTRSECTN - 172ND ST NE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 25.87	MP End: 26.05	Qualifier:
ARM Begin: 25.87	ARM End: 26.05	Length (Miles): 0.18
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: 3R Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 24.0
Lane Miles: 0.36	Lt Shoulder (ft): 8.0	Rt Shoulder (ft): 8.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1994	014258	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1984	012721	RESURFACE EXISTING RDWY	0.04	BST CLASS B CRS-2	NONE
1978	011003	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1959	005897	NEW CONSTR OR ALIGN CHG	0.25	ACP CLASS B AR4000W	NONE
1959			0.00	N/A	
1959			0.75	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 19.04 to 26.85

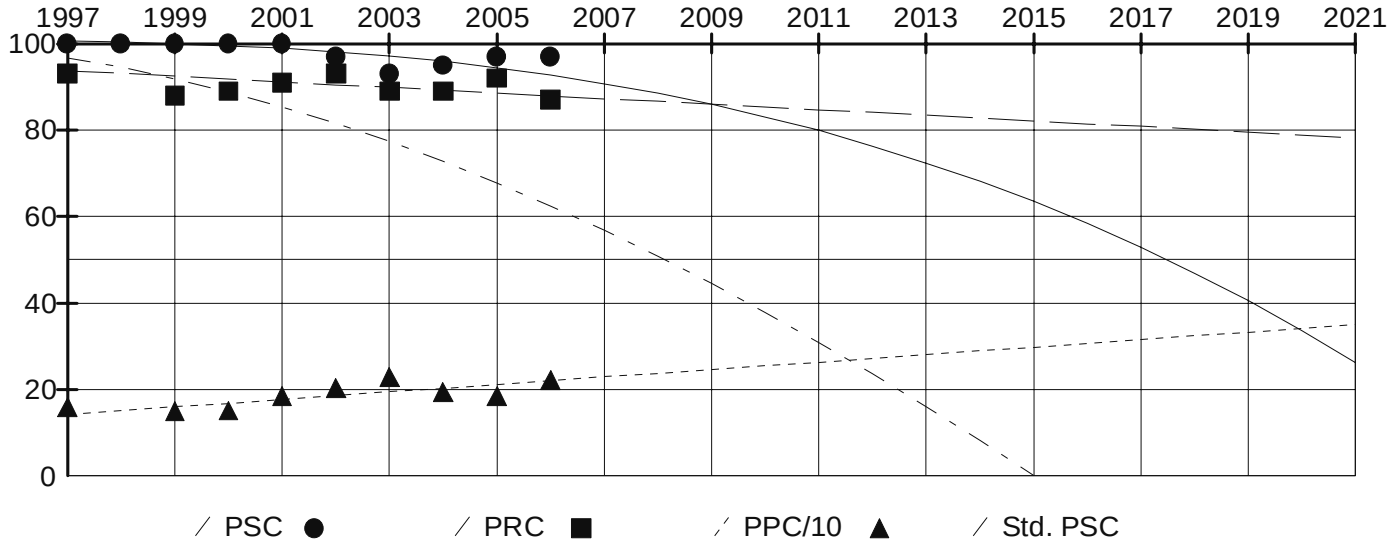
Ad. Date/PIN/Title: 02/2011 100921G - SR-9, SR-9/SR-528 Intersection(MP 19.22 -19.30)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	100	100	100	100	100	97	93	95	97	97
PRC (Rutting)	93	N/A	88	89	91	93	89	89	92	87
PPC (IRI cm/km)	160	N/A	150	151	185	204	229	194	185	222

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2021	Regression	52.92	21.57	1994	116.54	8.64E+00	1.00
PRC	2065	Regression	42.23	2.82	1994	95.65	-6.45E-01	1.00
PSC	2017	Too Long	99.00	2.00	1994	100.70	-8.61E-03	2.75



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 3	PSC: 97	IRI (cm/km): 222

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0

Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	5	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 11649	Ave. Weekday Traffic: 13306
ADT Growth: 3.50%	Single Units: 1132	Double Units: 325
Trains: 76	Total Trucks: 1533	Trucks Percentage: 13.16%
Trucks Growth: 3.50%	Directional Split: 51.69%	Peak Hour: 8.95%
Min. Level of Service: C	Cur. Level of Service: D	15yrs Level of Service: E

Past ESALs: 1,624,941 ESALs after 15yrs: 3,811,685

Analysis Unit: MP 26.05 - 26.23

(Vicinity: From MP 26.05 - INTRSECTN - 172ND ST NE To MP 26.05 - INTRSECTN - SR 531-172ND ST NE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 26.05	MP End: 26.23	Qualifier:
ARM Begin: 26.05	ARM End: 26.23	Length (Miles): 0.18
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: 3R Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 24.0
Lane Miles: 0.36	Lt Shoulder (ft): 8.0	Rt Shoulder (ft): 8.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1994	014258	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1982	012232	RESURFACE EXISTING RDWY	0.04	BST CLASS B CRS-2	NONE
1978	011003	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1959	005897	NEW CONSTR OR ALIGN CHG	0.25	ACP CLASS B AR4000W	NONE
1959			0.00	N/A	
1959			0.75	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 19.04 to 26.85

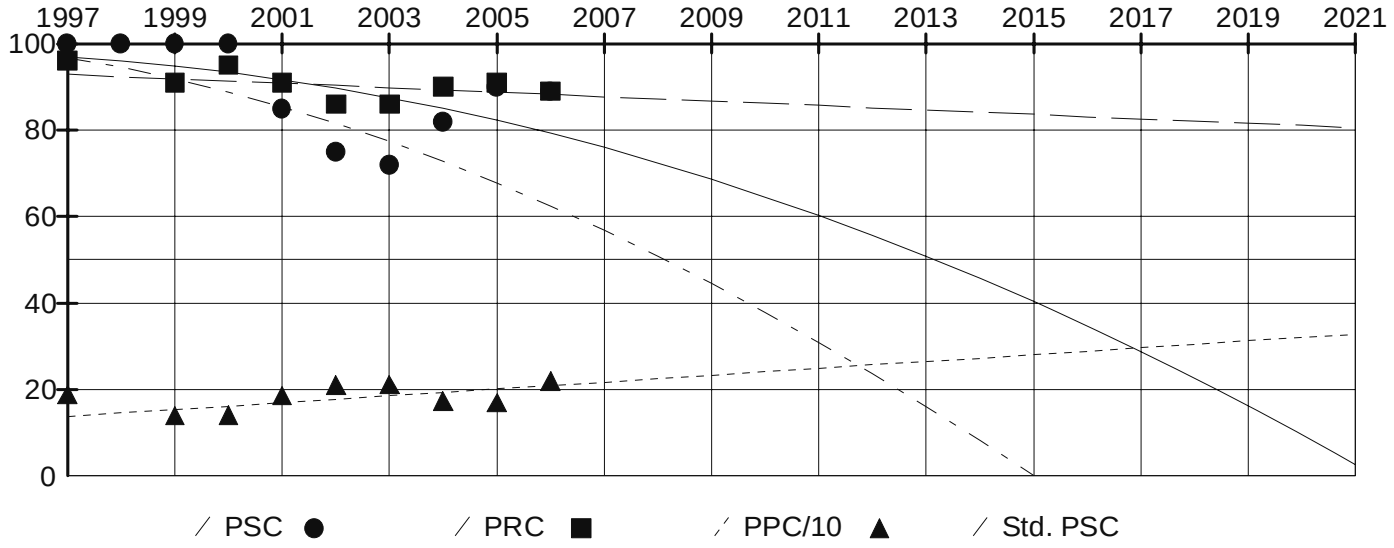
Ad. Date/PIN/Title: 02/2011 100921G - SR-9, SR-9/SR-528 Intersection(MP 19.22 -19.30)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	100	100	100	100	85	75	72	82	90	89
PRC (Rutting)	96	N/A	91	95	91	86	86	90	91	89
PPC (IRI cm/km)	188	N/A	140	141	186	210	211	173	170	220

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2024	Regression	39.22	26.15	1994	113.88	7.94E+00	1.00
PRC	2080	Regression	30.72	2.88	1994	94.40	-5.14E-01	1.00
PSC	2013	Too Long	92.00	8.00	1994	98.08	-1.31E-01	2.00



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 3	PSC: 89	IRI (cm/km): 220

Defect Type	Low	Medium	High
Alligator Cracking	1	0	0

Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	19	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 10420	Ave. Weekday Traffic: 11846
ADT Growth: 3.50%	Single Units: 834	Double Units: 191
Trains: 26	Total Trucks: 1051	Trucks Percentage: 10.09%
Trucks Growth: 3.50%	Directional Split: 52.46%	Peak Hour: 9.30%
Min. Level of Service: C	Cur. Level of Service: D	15yrs Level of Service: E

Past ESALs: 1,016,436 ESALs after 15yrs: 2,384,292

Analysis Unit: MP 26.23 - 26.58

(Vicinity: From MP 26.05 - INTRSECTN - SR 531-172ND ST NE To MP 26.58 - ENTER CITY - ARLINGTON)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 26.23	MP End: 26.58	Qualifier:
ARM Begin: 26.23	ARM End: 26.58	Length (Miles): 0.35
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: 3R Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 24.0
Lane Miles: 0.70	Lt Shoulder (ft): 7.0	Rt Shoulder (ft): 7.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1996	014831	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1982	012232	RESURFACE EXISTING RDWY	0.04	BST CLASS B CRS-2	NONE
1978	011003	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1959	005897	NEW CONSTR OR ALIGN CHG	0.25	ACP CLASS B AR4000W	NONE
1959			0.00	N/A	
1959			0.75	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 19.04 to 26.85

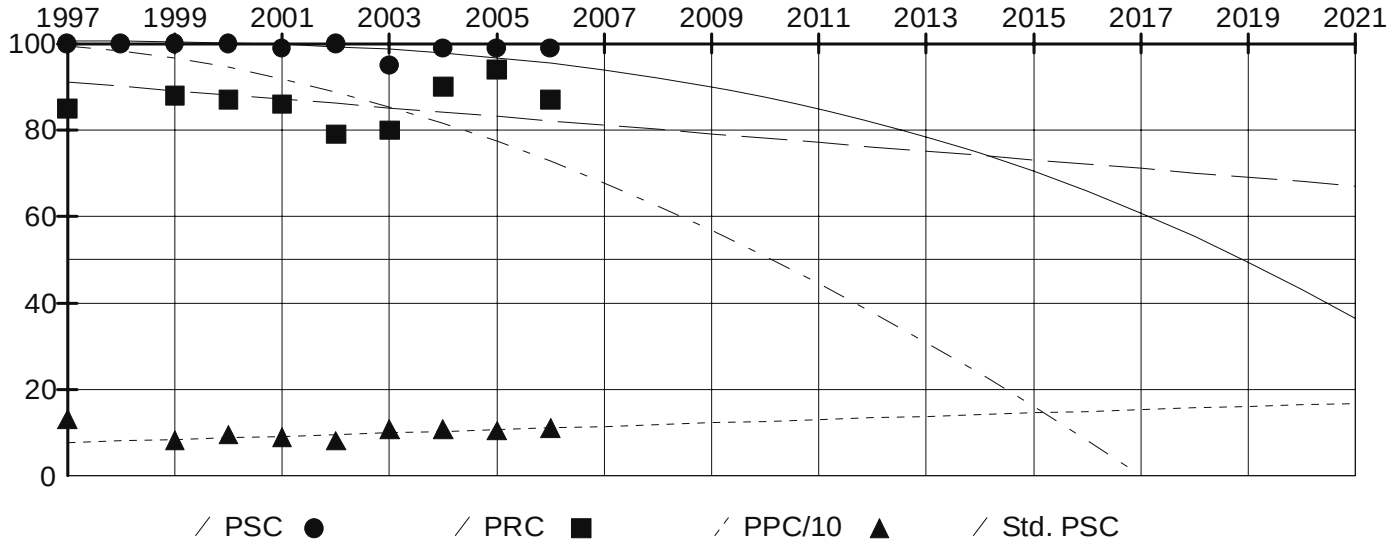
Ad. Date/PIN/Title: 02/2011 100921G - SR-9, SR-9/SR-528 Intersection(MP 19.22 -19.30)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	100	100	100	100	99	100	95	99	99	99
PRC (Rutting)	85	N/A	88	87	86	79	80	90	94	87
PPC (IRI cm/km)	132	N/A	83	96	90	82	108	108	105	111

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2068	Regression	63.44	7.68	1996	73.04	3.82E+00	1.00
PRC	2038	Regression	40.16	6.49	1996	92.11	-1.00E+00	1.00
PSC	2018	Too Long	99.00	1.00	1996	100.57	-9.19E-03	2.75



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 3	PSC: 99	IRI (cm/km): 111

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0

Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	1	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 10586	Ave. Weekday Traffic: 11792
ADT Growth: 3.50%	Single Units: 866	Double Units: 194
Trains: 30	Total Trucks: 1090	Trucks Percentage: 10.30%
Trucks Growth: 3.50%	Directional Split: 52.90%	Peak Hour: 9.30%
Min. Level of Service: C	Cur. Level of Service: D	15yrs Level of Service: E

Past ESALs: 937,491 ESALs after 15yrs: 2,483,992

Analysis Unit: MP 26.58 - 26.85

(Vicinity: From MP 26.58 - ENTER CITY - ARLINGTON To MP 26.97 - INTRSECTN - EAGLEFIELD DR)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 26.58	MP End: 26.85	Qualifier:
ARM Begin: 26.58	ARM End: 26.85	Length (Miles): 0.27
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: 3R Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 24.0
Lane Miles: 0.54	Lt Shoulder (ft): 7.0	Rt Shoulder (ft): 7.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1996	014831	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1982	012232	RESURFACE EXISTING RDWY	0.04	BST CLASS B CRS-2	NONE
1959	005897	NEW CONSTR OR ALIGN CHG	0.25	ACP CLASS B AR4000W	NONE
1959			0.00	N/A	
1959			0.75	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 19.04 to 26.85

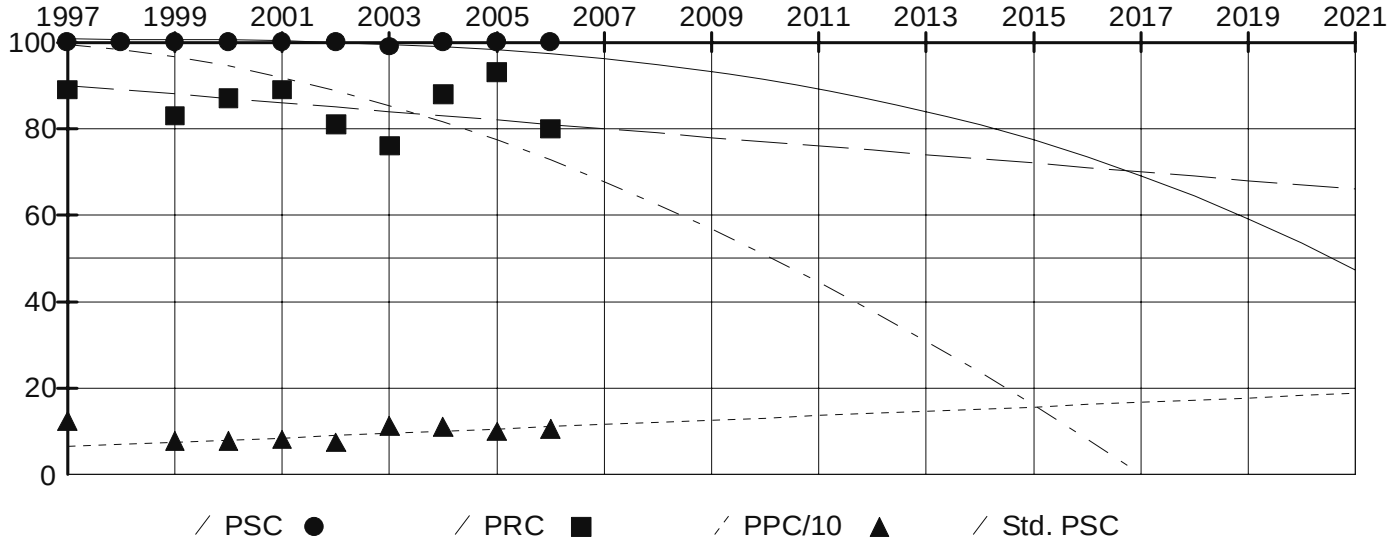
Ad. Date/PIN/Title: 02/2011 100921G - SR-9, SR-9/SR-528 Intersection(MP 19.22 -19.30)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	100	100	100	100	100	100	99	100	100	100
PRC (Rutting)	89	N/A	83	87	89	81	76	88	93	80
PPC (IRI cm/km)	124	N/A	78	78	82	75	113	111	100	106

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2053	Regression	60.20	11.04	1996	59.52	5.13E+00	1.00
PRC	2037	Regression	29.33	6.12	1996	91.00	-1.00E+00	1.00
PSC	2020	Too Long	99.00	1.00	1996	100.70	-3.41E-03	3.00



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 5	PSC: 100	IRI (cm/km): 106

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0
Patching	0	0	0

Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 10780	Ave. Weekday Traffic: 11728
ADT Growth: 3.50%	Single Units: 902	Double Units: 198
Trains: 34	Total Trucks: 1134	Trucks Percentage: 10.52%
Trucks Growth: 3.50%	Directional Split: 53.42%	Peak Hour: 9.30%
Min. Level of Service: C	Cur. Level of Service: D	15yrs Level of Service: E

Past ESALs: 977,658 ESALs after 15yrs: 2,590,419

Analysis Unit: MP 26.85 - 27.06

(Vicinity: From MP 26.97 - INTRSECTN - EAGLEFIELD DR To MP 26.97 - INTRSECTN - CROWN RIDGE BLVD)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 26.85	MP End: 27.06	Qualifier:
ARM Begin: 26.85	ARM End: 27.06	Length (Miles): 0.21
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: 3R Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 24.0
Lane Miles: 0.42	Lt Shoulder (ft): 7.0	Rt Shoulder (ft): 7.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1982	012232	RESURFACE EXISTING RDWY	0.04	BST CLASS B CRS-2	NONE
1959	005897	NEW CONSTR OR ALIGN CHG	0.25	ACP CLASS B AR4000W	NONE
1959			0.00	N/A	
1959			0.75	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 26.85 to 27.06

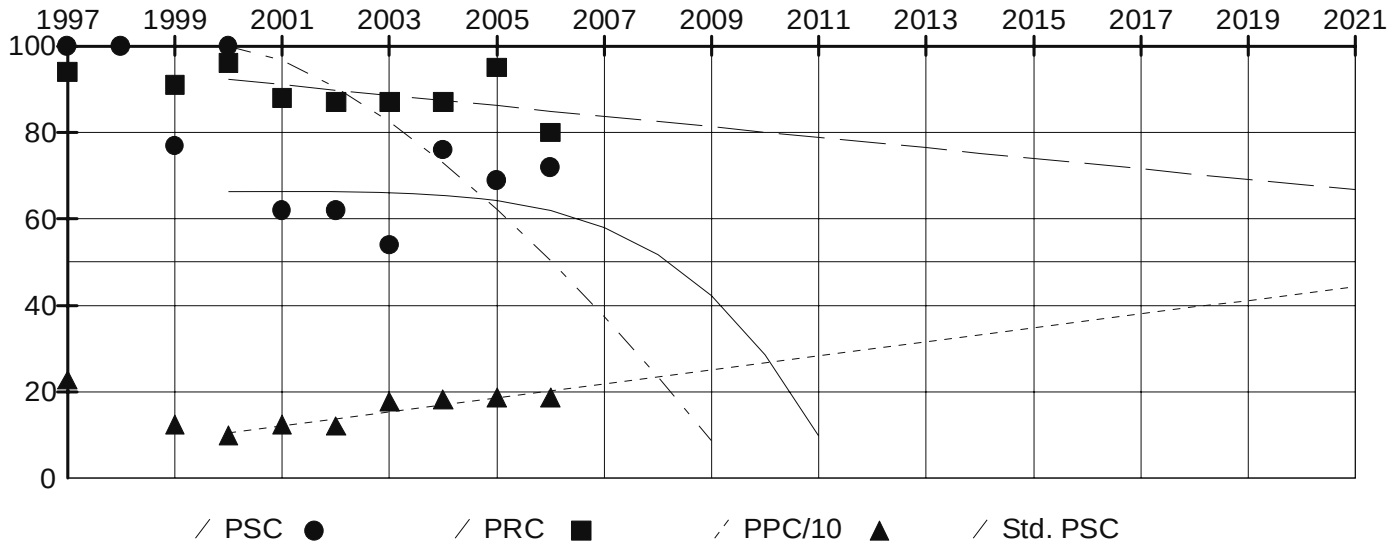
Ad. Date/PIN/Title: 03/2010 100928A - SR 9/Eaglefield Dr Vicinity to Pilchuck(MP 26.85 -34.85)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	100	100	77	100	62	62	54	76	69	72
PRC (Rutting)	94	N/A	91	96	88	87	87	87	95	80
PPC (IRI cm/km)	228	N/A	125	99	124	121	178	182	187	187

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2015	Regression	84.94	16.05	2000	105.68	1.61E+01	1.00
PRC	2035	Regression	23.23	5.22	2000	92.21	-1.21E+00	1.00
PSC	2008	New Year Too Long	89.00	8.00	2000	66.26	-2.12E-03	4.25



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 5	PSC: 72	IRI (cm/km): 187

Defect Type	Low	Medium	High
Alligator Cracking	9	0	0
Patching	0	0	0
Raveling	0	0	0

Longitudinal Cracking	22	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 10930	Ave. Weekday Traffic: 11679
ADT Growth: 3.50%	Single Units: 929	Double Units: 200
Trains: 38	Total Trucks: 1167	Trucks Percentage: 10.68%
Trucks Growth: 3.50%	Directional Split: 53.83%	Peak Hour: 9.30%
Min. Level of Service: C	Cur. Level of Service: D	15yrs Level of Service: E

Past ESALs: 1,698,399 ESALs after 15yrs: 2,671,685

Analysis Unit: MP 27.06 - 28.12

(Vicinity: From MP 26.97 - INTRSECTN - CROWN RIDGE BLVD To MP 28.21 - INTRSECTN - 204TH ST NE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 27.06	MP End: 28.12	Qualifier:
ARM Begin: 27.06	ARM End: 28.12	Length (Miles): 1.06
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: 3R Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 24.0
Lane Miles: 2.12	Lt Shoulder (ft): 7.0	Rt Shoulder (ft): 7.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
1996	014831	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1982	012232	RESURFACE EXISTING RDWY	0.04	BST CLASS B CRS-2	NONE
1959	005897	NEW CONSTR OR ALIGN CHG	0.25	ACP CLASS B AR4000W	NONE
1959			0.00	N/A	
1959			0.75	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 27.06 to 30.16

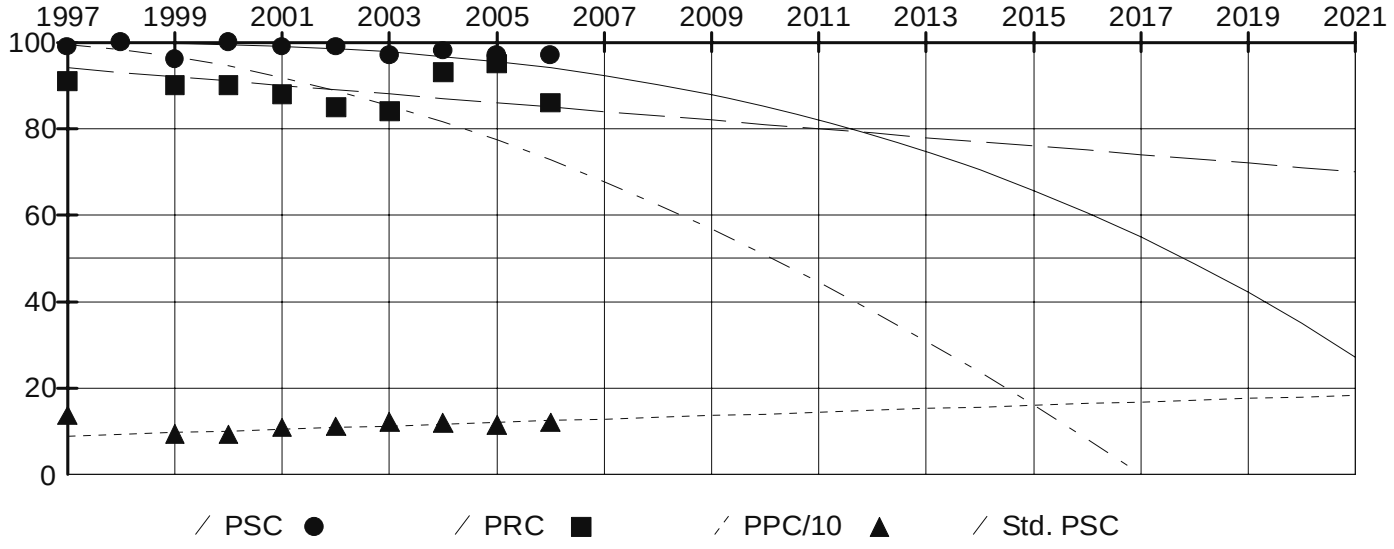
Ad. Date/PIN/Title: 03/2010 100928A - SR 9/Eaglefield Dr Vicinity to Pilchuck(MP 26.85 -34.85)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	99	100	96	100	99	99	97	98	97	97
PRC (Rutting)	91	N/A	90	90	88	85	84	93	95	86
PPC (IRI cm/km)	137	N/A	95	93	110	112	122	120	115	121

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2063	Regression	72.90	6.38	1996	85.31	3.95E+00	1.00
PRC	2041	Regression	63.27	4.90	1996	95.00	-1.00E+00	1.00
PSC	2017	Too Long	99.00	1.00	1996	99.89	-1.04E-02	2.75



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 3	PSC: 97	IRI (cm/km): 121

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0
Patching	0	0	0

Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 11326	Ave. Weekday Traffic: 11548
ADT Growth: 3.50%	Single Units: 1002	Double Units: 208
Trains: 47	Total Trucks: 1257	Trucks Percentage: 11.10%
Trucks Growth: 3.50%	Directional Split: 54.89%	Peak Hour: 9.29%
Min. Level of Service: C	Cur. Level of Service: D	15yrs Level of Service: E

Past ESALs: 1,089,919 ESALs after 15yrs: 2,887,867

Analysis Unit: MP 28.12 - 28.22

(Vicinity: From MP 28.21 - INTRSECTN - 204TH ST NE To MP 28.21 - INTRSECTN - 204TH ST NE)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 28.12	MP End: 28.22	Qualifier:
ARM Begin: 28.12	ARM End: 28.22	Length (Miles): 0.10
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: 3R Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 24.0
Lane Miles: 0.20	Lt Shoulder (ft): 5.0	Rt Shoulder (ft): 4.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2005	016347	RESURFACE EXISTING RDWY	0.15	ACP CLASS B PG58-22	NONE
1982	012232	RESURFACE EXISTING RDWY	0.04	BST CLASS B CRS-2	NONE
1959	005897	NEW CONSTR OR ALIGN CHG	0.25	ACP CLASS B AR4000W	NONE
1959			0.00	N/A	
1959			0.75	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 27.06 to 30.16

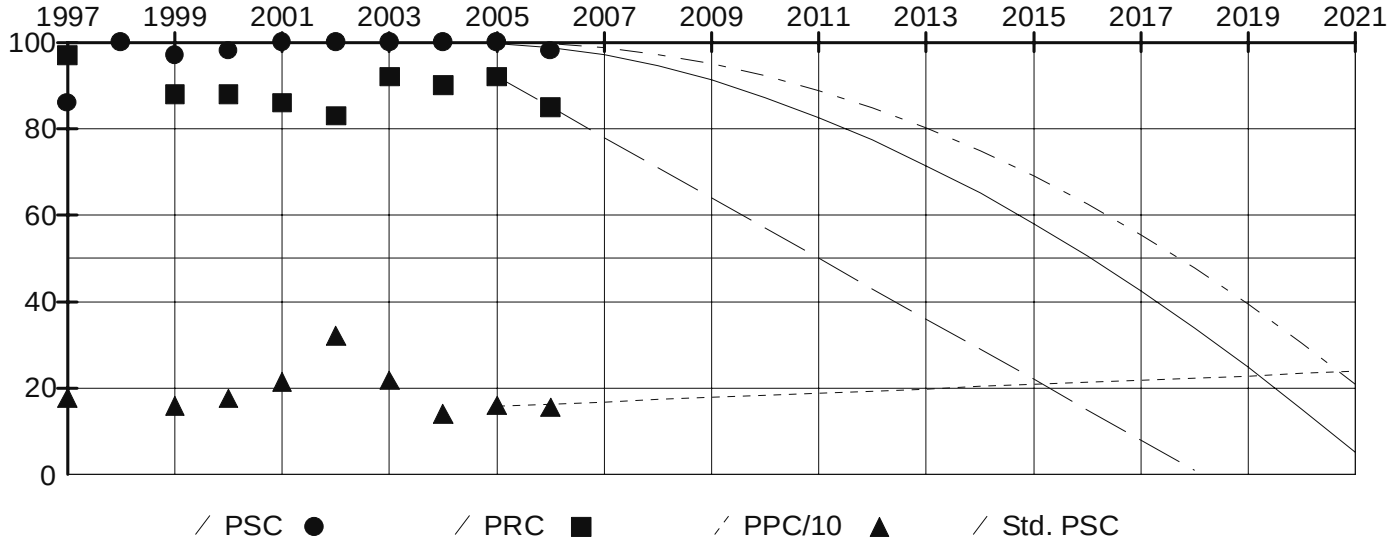
Ad. Date/PIN/Title: 03/2010 100928A - SR 9/Eaglefield Dr Vicinity to Pilchuck(MP 26.85 -34.85)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	86	100	97	98	100	100	100	100	100	98
PRC (Rutting)	97	N/A	88	88	86	83	92	90	92	85
PPC (IRI cm/km)	178	N/A	159	177	215	321	218	141	161	156

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2043	Regression	100.00	0.00	2005	158.50	5.00E+00	1.00
PRC	2011	Regression	100.00	0.00	2005	92.00	-7.00E+00	1.00
PSC	2016	Modified Standard	99.00	0.00	2005	99.57	-7.38E-01	1.75



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 4	PSC: 98	IRI (cm/km): 156

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0
Patching	0	0	0

Raveling	0	0	0
Longitudinal Cracking	2	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 11690	Ave. Weekday Traffic: 11428
ADT Growth: 3.50%	Single Units: 1071	Double Units: 214
Trains: 56	Total Trucks: 1341	Trucks Percentage: 11.47%
Trucks Growth: 3.50%	Directional Split: 55.86%	Peak Hour: 9.29%
Min. Level of Service: C	Cur. Level of Service: D	15yrs Level of Service: E

Past ESALs: 263,480 ESALs after 15yrs: 3,100,284

Analysis Unit: MP 28.22 - 28.32

(Vicinity: From MP 28.21 - INTRSECTN - 204TH ST NE To MP 28.38 - BEG BRIDGE - PORTAGE CREEK)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 28.22	MP End: 28.32	Qualifier:
ARM Begin: 28.22	ARM End: 28.32	Length (Miles): 0.10
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: 3R Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 24.0
Lane Miles: 0.20	Lt Shoulder (ft): 5.0	Rt Shoulder (ft): 4.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2005	016347	RESURFACE EXISTING RDWY	0.15	ACP CLASS B PG58-22	NONE
1990	013596	RESURFACE EXISTING RDWY	0.08	ACP CLASS B AR4000W	NONE
1982	012232	RESURFACE EXISTING RDWY	0.04	BST CLASS B CRS-2	NONE
1961	000000	RECONSTR EXISTING ALIGN	0.42	ACP CLASS B AR4000W	NONE
1961			0.00	N/A	
1961			0.25	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 27.06 to 30.16

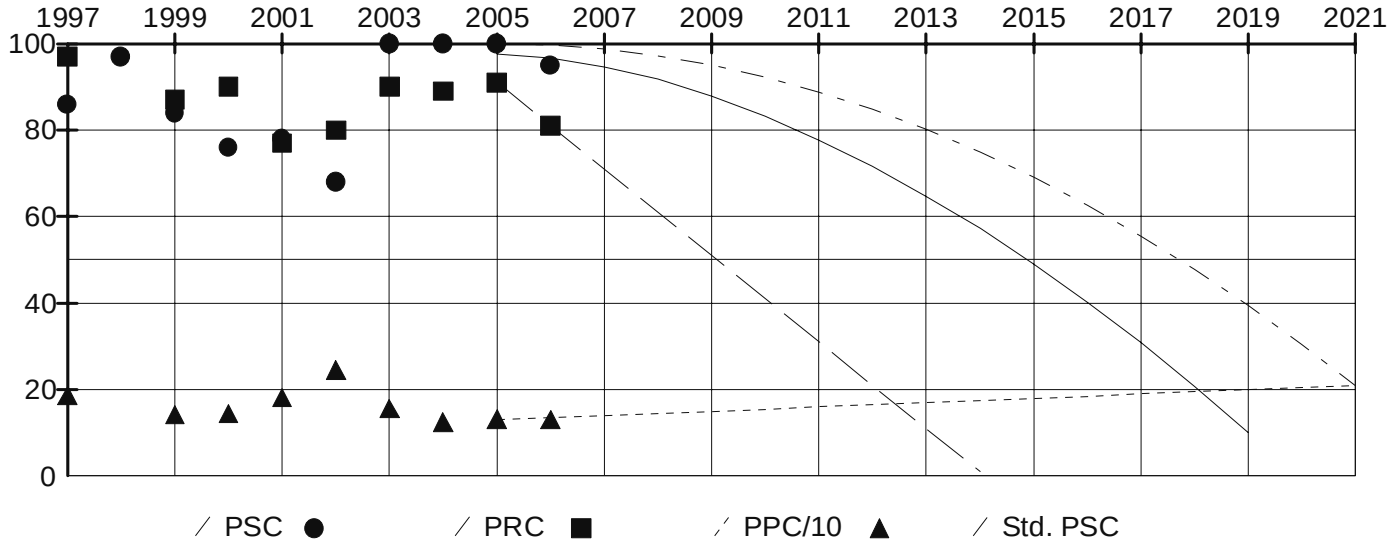
Ad. Date/PIN/Title: 03/2010 100928A - SR 9/Eaglefield Dr Vicinity to Pilchuck(MP 26.85 -34.85)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	86	97	84	76	78	68	100	100	100	95
PRC (Rutting)	97	N/A	87	90	77	80	90	89	91	81
PPC (IRI cm/km)	186	N/A	142	144	181	245	156	125	131	130

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2049	Regression	100.00	0.00	2005	129.50	5.00E+00	1.00
PRC	2009	Regression	100.00	0.00	2005	91.00	-1.00E+01	1.00
PSC	2014	Modified Standard	99.00	2.00	2005	97.57	-8.63E-01	1.75



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 4	PSC: 95	IRI (cm/km): 130

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0

Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	9	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 11752	Ave. Weekday Traffic: 11408
ADT Growth: 3.50%	Single Units: 1082	Double Units: 216
Trains: 58	Total Trucks: 1356	Trucks Percentage: 11.54%
Trucks Growth: 3.50%	Directional Split: 56.03%	Peak Hour: 9.29%
Min. Level of Service: C	Cur. Level of Service: D	15yrs Level of Service: E

Past ESALs: 267,148 ESALs after 15yrs: 3,143,442

Analysis Unit: MP 28.32 - 28.38

(Vicinity: From MP 28.38 - BEG BRIDGE - PORTAGE CREEK To MP 28.38 - BEG BRIDGE - PORTAGE CREEK)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 28.32	MP End: 28.38	Qualifier:
ARM Begin: 28.32	ARM End: 28.38	Length (Miles): 0.06
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: 3R Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 24.0
Lane Miles: 0.12	Lt Shoulder (ft): 8.0	Rt Shoulder (ft): 10.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2005	016347	RESURFACE EXISTING RDWY	0.15	ACP CLASS B PG58-22	NONE
1990	013596	RESURFACE EXISTING RDWY	0.08	ACP CLASS B AR4000W	NONE
1982	012232	RESURFACE EXISTING RDWY	0.04	BST CLASS B CRS-2	NONE
1961	000000	RECONSTR EXISTING ALIGN	0.42	ACP CLASS B AR4000W	NONE
1961			0.00	N/A	
1961			0.25	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 27.06 to 30.16

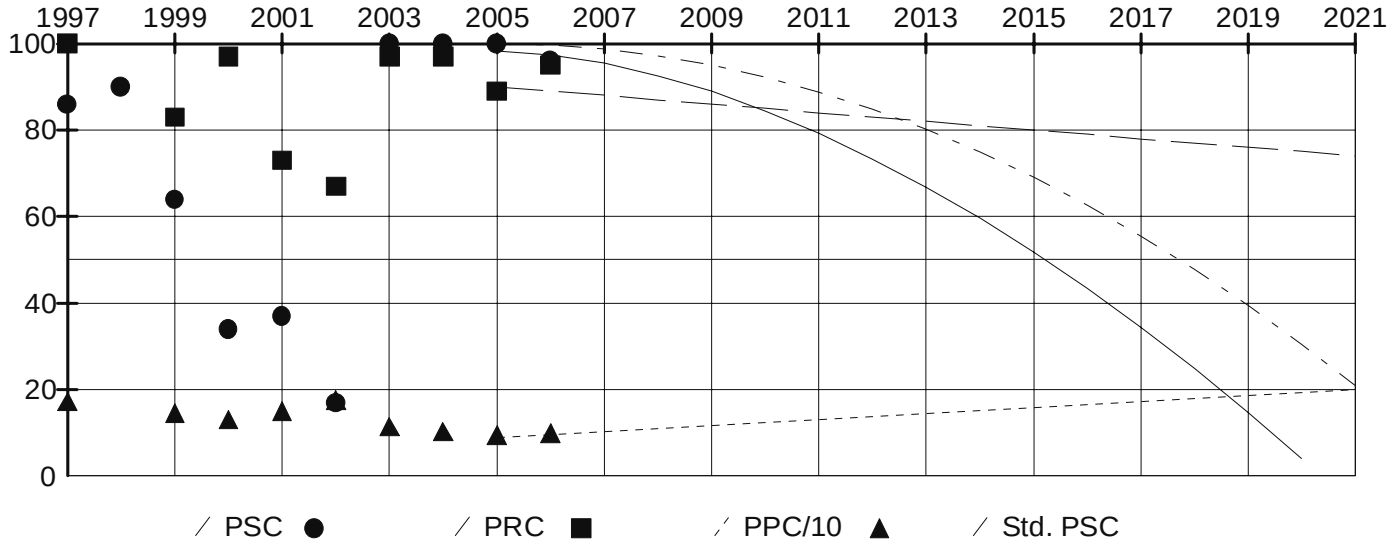
Ad. Date/PIN/Title: 03/2010 100928A - SR 9/Eaglefield Dr Vicinity to Pilchuck(MP 26.85 -34.85)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	86	90	64	34	37	17	100	100	100	96
PRC (Rutting)	100	N/A	83	97	73	67	97	97	89	95
PPC (IRI cm/km)	172	N/A	145	130	150	175	114	103	94	99

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2042	Regression	100.00	0.00	2005	88.00	7.00E+00	1.00
PRC	2045	Regression	100.00	0.00	2005	90.00	-1.00E+00	1.00
PSC	2015	Modified Standard	99.00	1.00	2005	98.22	-8.25E-01	1.75



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 2	PSC: 96	IRI (cm/km): 99

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0

Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	6	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 11802	Ave. Weekday Traffic: 11391
ADT Growth: 3.50%	Single Units: 1092	Double Units: 218
Trains: 58	Total Trucks: 1368	Trucks Percentage: 11.59%
Trucks Growth: 3.50%	Directional Split: 56.16%	Peak Hour: 9.29%
Min. Level of Service: C	Cur. Level of Service: D	15yrs Level of Service: E

Past ESALs: 269,284 ESALs after 15yrs: 3,168,580

Analysis Unit: MP 28.38 - 28.39

(Vicinity: From MP 28.38 - BEG BRIDGE - PORTAGE CREEK To MP 28.39 - END BRIDGE - PORTAGE CREEK)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 28.38	MP End: 28.39	Qualifier:
ARM Begin: 28.38	ARM End: 28.39	Length (Miles): 0.01
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: 3R Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 24.0
Lane Miles: 0.02	Lt Shoulder (ft): 8.0	Rt Shoulder (ft): 10.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: Yes

Year	Contract	Construction	Thickness	Surface Type	Exception
2005	016347	RESURFACE EXISTING RDWY	0.60	ACP CLASS B PG58-22	BRIDGE DECK RESURFACING
2005	016347	BRIDGE	0.00	PCCP	NONE

Related Programmed Project: SR 9 Mainline Increasing 27.06 to 30.16

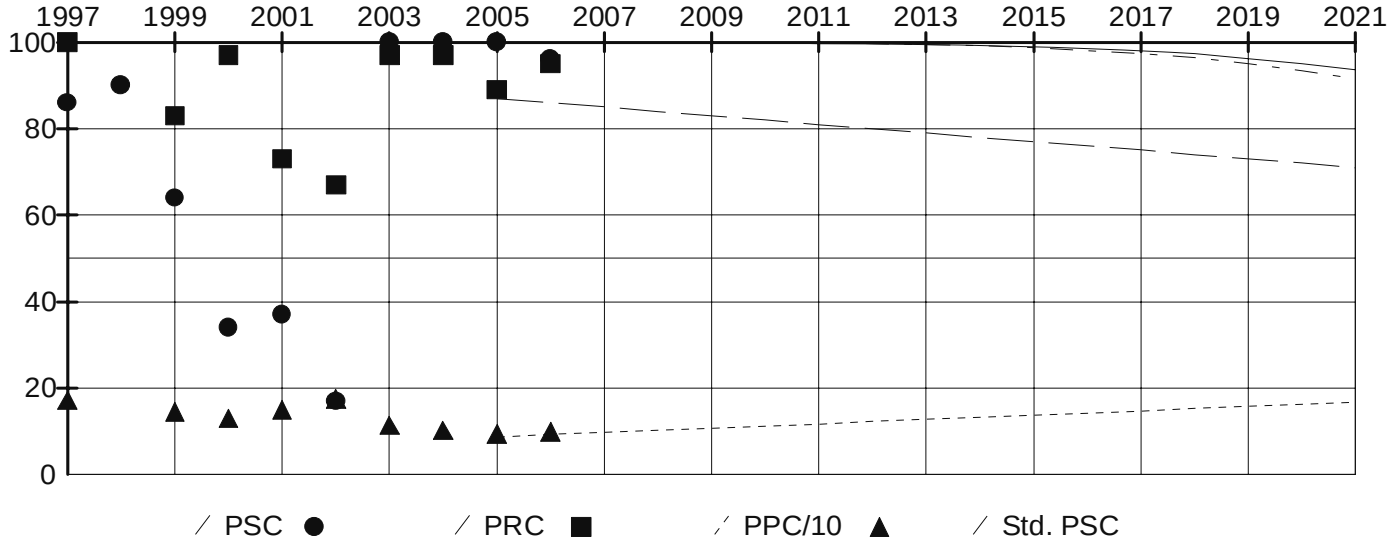
Ad. Date/PIN/Title: 03/2010 100928A - SR 9/Eaglefield Dr Vicinity to Pilchuck(MP 26.85 -34.85)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	86	90	64	34	37	17	100	100	100	96
PRC (Rutting)	100	N/A	83	97	73	67	97	97	89	95
PPC (IRI cm/km)	172	N/A	145	130	150	175	114	103	94	99

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2058	Regression	100.00	0.00	2005	87.50	5.00E+00	1.00
PRC	2042	Regression	100.00	0.00	2005	87.00	-1.00E+00	1.00
PSC	2031	Modified Standard	99.00	0.00	2005	99.84	-4.81E-05	4.25



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 2	PSC: 96	IRI (cm/km): 99

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	6	0	0
Transverse Cracking	0	0	0

Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 11824	Ave. Weekday Traffic: 11384
ADT Growth: 3.50%	Single Units: 1096	Double Units: 217
Trains: 59	Total Trucks: 1372	Trucks Percentage: 11.60%
Trucks Growth: 3.50%	Directional Split: 56.22%	Peak Hour: 9.29%
Min. Level of Service: C	Cur. Level of Service: D	15yrs Level of Service: E

Past ESALs: 269,142 ESALs after 15yrs: 3,166,904

Analysis Unit: MP 28.39 - 28.64

(Vicinity: From MP 28.39 - END BRIDGE - PORTAGE CREEK To MP 28.70 - INTRSECTN - HIGHLAND DR)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 28.39	MP End: 28.64	Qualifier:
ARM Begin: 28.39	ARM End: 28.64	Length (Miles): 0.25
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: 3R Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 24.0
Lane Miles: 0.50	Lt Shoulder (ft): 8.0	Rt Shoulder (ft): 10.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2005	016347	RESURFACE EXISTING RDWY	0.15	ACP CLASS B PG58-22	NONE
1990	013596	RESURFACE EXISTING RDWY	0.08	ACP CLASS B AR4000W	NONE
1982	012232	RESURFACE EXISTING RDWY	0.04	BST CLASS B CRS-2	NONE
1961	000000	RECONSTR EXISTING ALIGN	0.42	ACP CLASS B AR4000W	NONE
1961			0.00	N/A	
1961			0.25	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 27.06 to 30.16

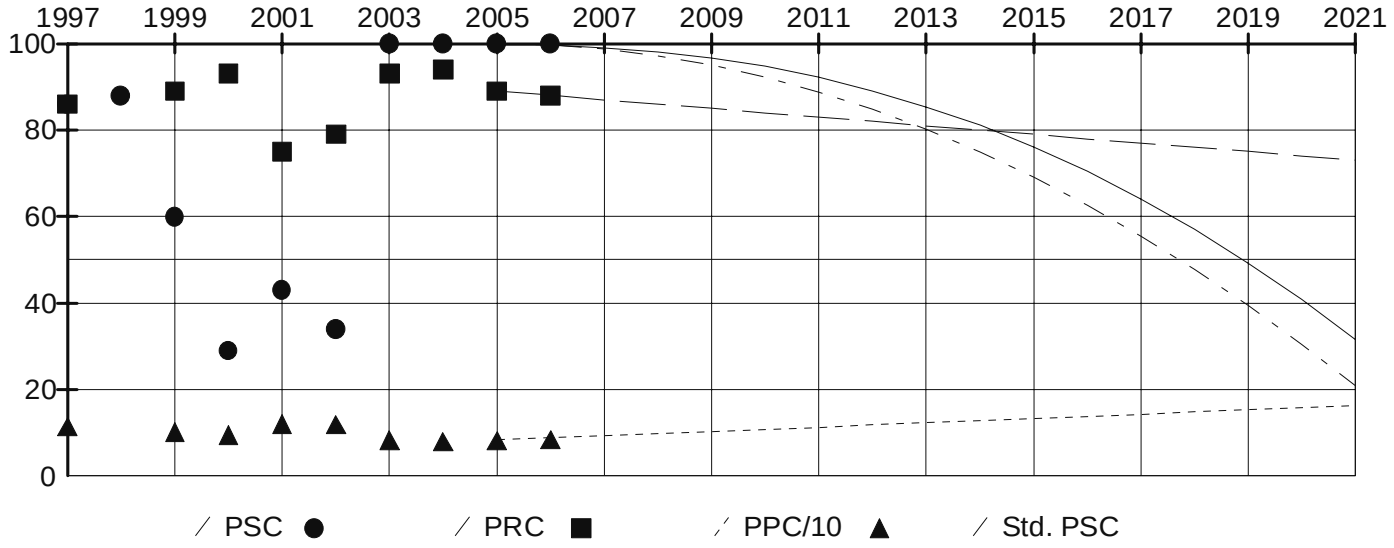
Ad. Date/PIN/Title: 03/2010 100928A - SR 9/Eaglefield Dr Vicinity to Pilchuck(MP 26.85 -34.85)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	86	88	60	29	43	34	100	100	100	100
PRC (Rutting)	86	N/A	89	93	75	79	93	94	89	88
PPC (IRI cm/km)	114	N/A	101	94	120	119	83	79	82	84

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2058	Regression	100.00	0.00	2005	83.00	5.00E+00	1.00
PRC	2044	Regression	100.00	0.00	2005	89.00	-1.00E+00	1.00
PSC	2018	Modified Standard	99.00	1.00	2005	99.70	-1.33E-01	2.25



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 3	PSC: 100	IRI (cm/km): 84

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0

Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 11905	Ave. Weekday Traffic: 11357
ADT Growth: 3.50%	Single Units: 1110	Double Units: 218
Trains: 61	Total Trucks: 1389	Trucks Percentage: 11.67%
Trucks Growth: 3.50%	Directional Split: 56.44%	Peak Hour: 9.29%
Min. Level of Service: C	Cur. Level of Service: D	15yrs Level of Service: E

Past ESALs: 273,094 ESALs after 15yrs: 3,213,414

Analysis Unit: MP 28.64 - 28.74

(Vicinity: From MP 28.70 - INTRSECTN - HIGHLAND DR To MP 28.70 - INTRSECTN - HIGHLAND DR)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 28.64	MP End: 28.74	Qualifier:
ARM Begin: 28.64	ARM End: 28.74	Length (Miles): 0.10
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: 3R Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 24.0
Lane Miles: 0.20	Lt Shoulder (ft): 4.0	Rt Shoulder (ft): 4.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2005	016347	RESURFACE EXISTING RDWY	0.15	ACP CLASS B PG58-22	NONE
2005	016347	RESURFACE EXISTING RDWY	0.15	ACP CLASS B PG58-22	LN TURN ADDED-STRIPING
1990	013596	RESURFACE EXISTING RDWY	0.08	ACP CLASS B AR4000W	NONE
1982	012232	RESURFACE EXISTING RDWY	0.04	BST CLASS B CRS-2	NONE
1961	000000	RECONSTR EXISTING ALIGN	0.42	ACP CLASS B AR4000W	NONE
1961			0.00	N/A	
1961			0.25	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 27.06 to 30.16

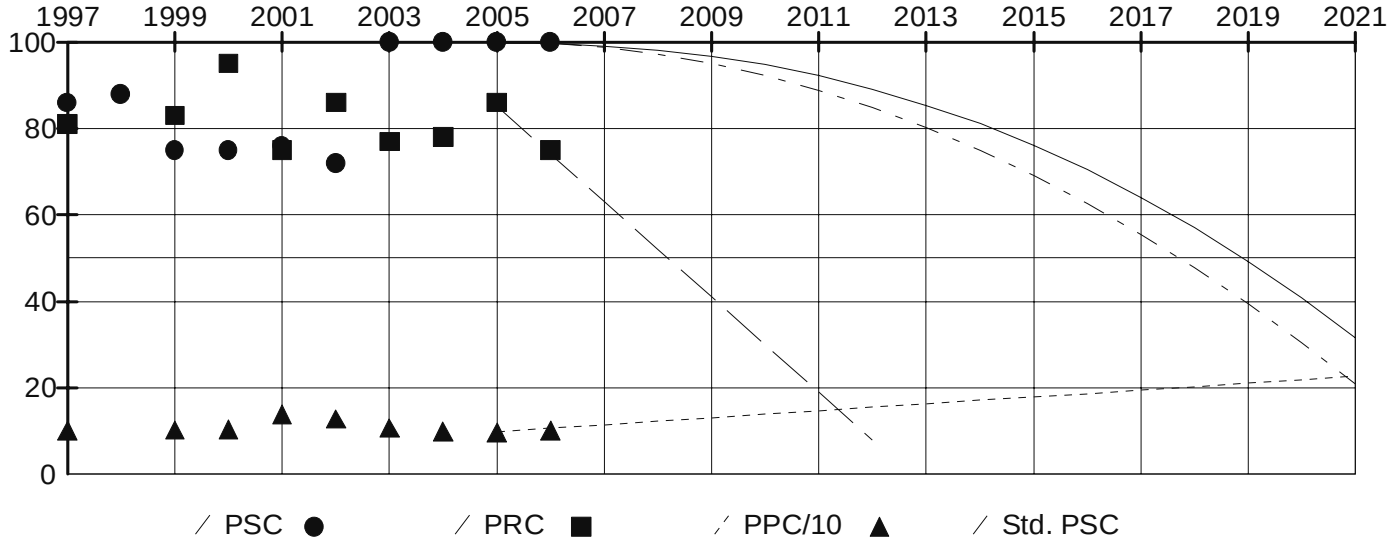
Ad. Date/PIN/Title: 03/2010 100928A - SR 9/Eaglefield Dr Vicinity to Pilchuck(MP 26.85 -34.85)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	86	88	75	75	76	72	100	100	100	100
PRC (Rutting)	81	N/A	83	95	75	86	77	78	86	75
PPC (IRI cm/km)	102	N/A	103	104	139	128	107	99	97	101

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2036	Regression	100.00	0.00	2005	99.00	8.00E+00	1.00
PRC	2008	Regression	100.00	0.00	2005	85.00	-1.10E+01	1.00
PSC	2018	Modified Standard	99.00	1.00	2005	99.70	-1.33E-01	2.25



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 6	PSC: 100	IRI (cm/km): 101

Defect Type	Low	Medium	High

Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006
Ave. Daily Traffic: 11939
Ave. Weekday Traffic: 11468
ADT Growth: 3.50%
Single Units: 1112
Double Units: 219
Trains: 65
Total Trucks: 1396
Trucks Percentage: 11.69%
Trucks Growth: 3.50%
Directional Split: 56.60%
Peak Hour: 9.40%
Min. Level of Service: C
Cur. Level of Service: D
15yrs Level of Service: E
Past ESALs: 275,871
ESALs after 15yrs: 3,246,081

Analysis Unit: MP 28.74 - 28.82

(Vicinity: From MP 28.70 - INTRSECTN - HIGHLAND DR To MP 28.88 - BEG BRIDGE - BN RR)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 28.74	MP End: 28.82	Qualifier:
ARM Begin: 28.74	ARM End: 28.82	Length (Miles): 0.08
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: 3R Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 24.0
Lane Miles: 0.16	Lt Shoulder (ft): 4.0	Rt Shoulder (ft): 4.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2005	016347	RESURFACE EXISTING RDWY	0.15	ACP CLASS B PG58-22	NONE
1990	013596	RESURFACE EXISTING RDWY	0.08	ACP CLASS B AR4000W	NONE
1982	012232	RESURFACE EXISTING RDWY	0.04	BST CLASS B CRS-2	NONE
1961	000000	RECONSTR EXISTING ALIGN	0.42	ACP CLASS B AR4000W	NONE
1961			0.00	N/A	
1961			0.25	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 27.06 to 30.16

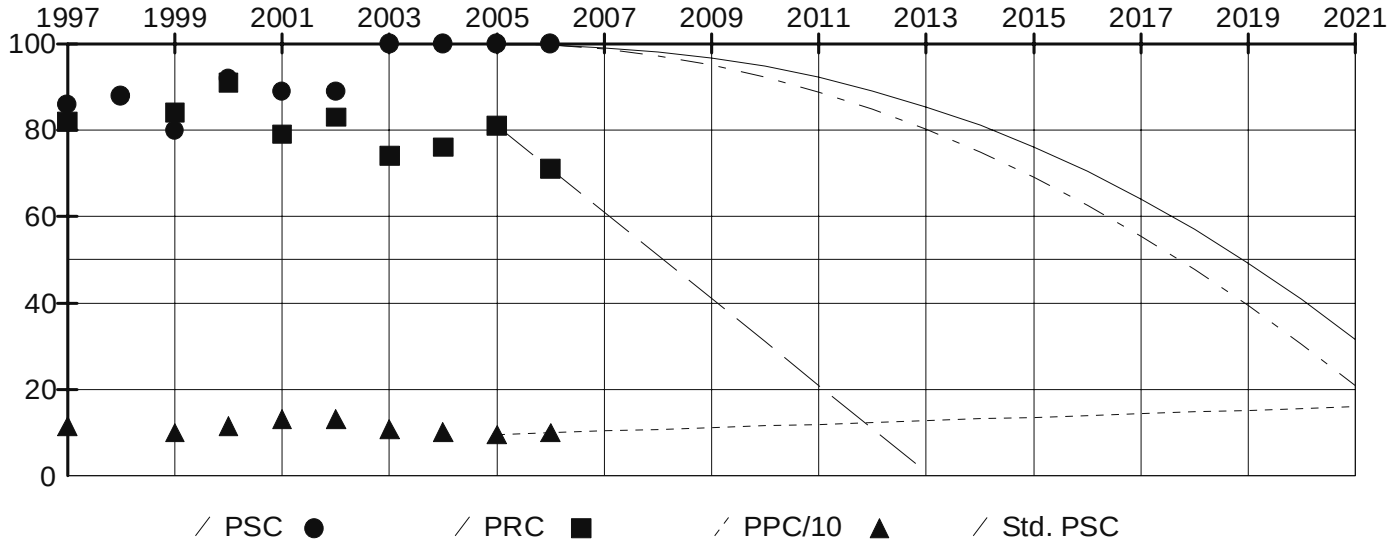
Ad. Date/PIN/Title: 03/2010 100928A - SR 9/Eaglefield Dr Vicinity to Pilchuck(MP 26.85 -34.85)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	86	88	80	92	89	89	100	100	100	100
PRC (Rutting)	82	N/A	84	91	79	83	74	76	81	71
PPC (IRI cm/km)	115	N/A	100	116	131	131	109	102	96	100

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2068	Regression	100.00	0.00	2005	96.00	4.00E+00	1.00
PRC	2008	Regression	100.00	0.00	2005	81.00	-1.00E+01	1.00
PSC	2018	Modified Standard	99.00	1.00	2005	99.70	-1.33E-01	2.25



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 6	PSC: 100	IRI (cm/km): 100

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0

Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 11585	Ave. Weekday Traffic: 12217
ADT Growth: 3.50%	Single Units: 1018	Double Units: 209
Trains: 72	Total Trucks: 1299	Trucks Percentage: 11.21%
Trucks Growth: 3.50%	Directional Split: 55.98%	Peak Hour: 9.97%
Min. Level of Service: C	Cur. Level of Service: D	15yrs Level of Service: E

Past ESALs: 263,907 ESALs after 15yrs: 3,105,311

Analysis Unit: MP 28.82 - 28.88

(Vicinity: From MP 28.88 - BEG BRIDGE - BN RR To MP 28.88 - BEG BRIDGE - BN RR)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 28.82	MP End: 28.88	Qualifier:
ARM Begin: 28.82	ARM End: 28.88	Length (Miles): 0.06
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: 3R Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 24.0
Lane Miles: 0.12	Lt Shoulder (ft): 8.0	Rt Shoulder (ft): 10.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2005	016347	RESURFACE EXISTING RDWY	0.15	ACP CLASS B PG58-22	NONE
1990	013596	RESURFACE EXISTING RDWY	0.08	ACP CLASS B AR4000W	NONE
1982	012232	RESURFACE EXISTING RDWY	0.04	BST CLASS B CRS-2	NONE
1961	000000	RECONSTR EXISTING ALIGN	0.42	ACP CLASS B AR4000W	NONE
1961			0.00	N/A	
1961			0.25	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 27.06 to 30.16

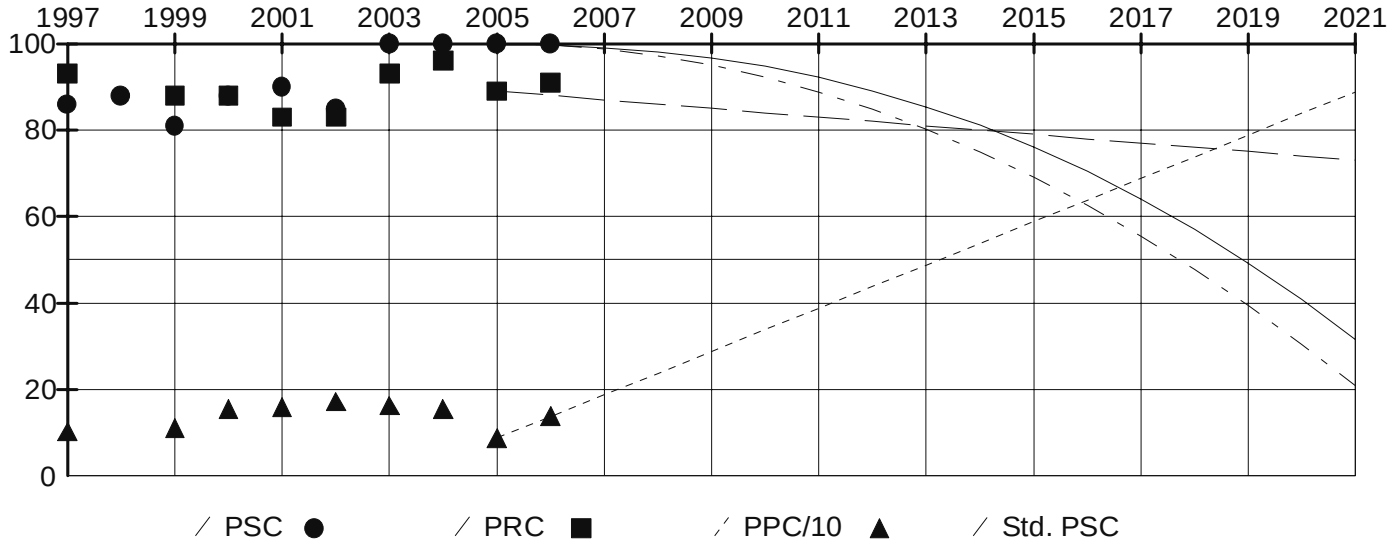
Ad. Date/PIN/Title: 03/2010 100928A - SR 9/Eaglefield Dr Vicinity to Pilchuck(MP 26.85 -34.85)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	86	88	81	88	90	85	100	100	100	100
PRC (Rutting)	93	N/A	88	88	83	83	93	96	89	91
PPC (IRI cm/km)	103	N/A	111	155	159	172	163	155	88	138

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2010	Regression	100.00	0.00	2005	88.00	5.00E+01	1.00
PRC	2044	Regression	100.00	0.00	2005	89.00	-1.00E+00	1.00
PSC	2018	Modified Standard	99.00	1.00	2005	99.70	-1.33E-01	2.25



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 2	PSC: 100	IRI (cm/km): 138

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0

Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 11579	Ave. Weekday Traffic: 12228
ADT Growth: 3.50%	Single Units: 1017	Double Units: 209
Trains: 72	Total Trucks: 1298	Trucks Percentage: 11.21%
Trucks Growth: 3.50%	Directional Split: 55.97%	Peak Hour: 9.98%
Min. Level of Service: C	Cur. Level of Service: D	15yrs Level of Service: E

Past ESALs: 263,622 ESALs after 15yrs: 3,101,960

Analysis Unit: MP 28.88 - 28.94

(Vicinity: From MP 28.88 - BEG BRIDGE - BN RR To MP 28.94 - END BRIDGE - BN RR)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 28.88	MP End: 28.94	Qualifier:
ARM Begin: 28.88	ARM End: 28.94	Length (Miles): 0.06
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: 3R Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 33.0
Lane Miles: 0.12	Lt Shoulder (ft): 0.0	Rt Shoulder (ft): 0.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: Yes

Year	Contract	Construction	Thickness	Surface Type	Exception
1961	006412	BRIDGE	0.00	PCCP	NONE

Related Programmed Project: SR 9 Mainline Increasing 27.06 to 30.16

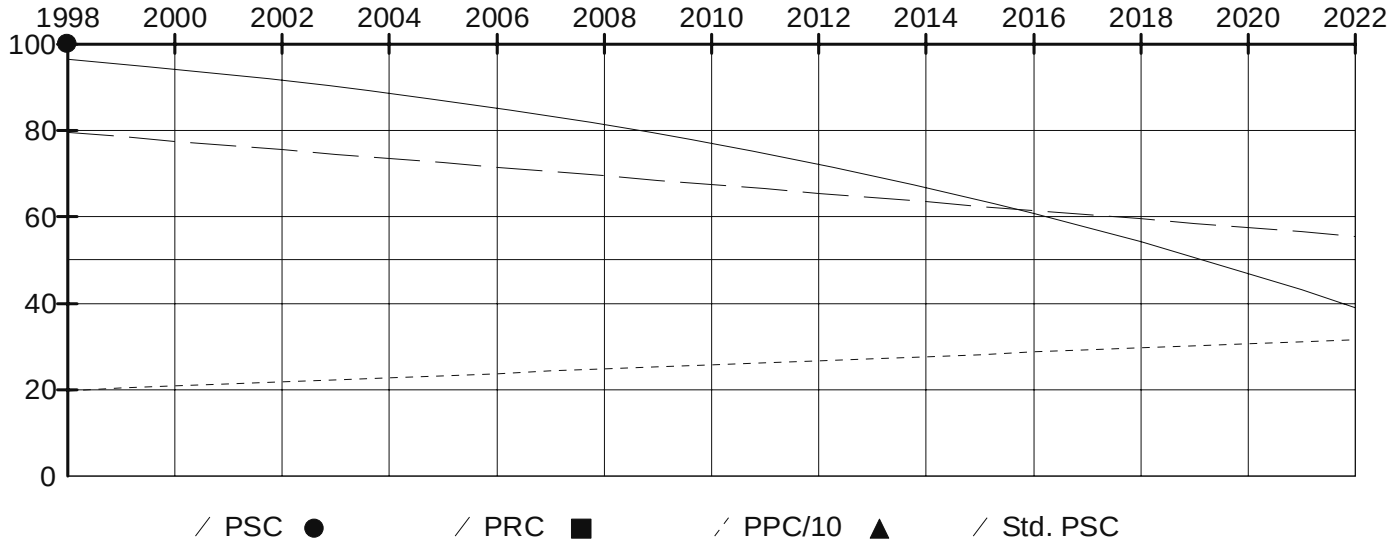
Ad. Date/PIN/Title: 03/2010 100928A - SR 9/Eaglefield Dr Vicinity to Pilchuck(MP 26.85 -34.85)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1998
PSC (Structure)	100
PRC (Rutting)	N/A
PPC (IRI cm/km)	N/A

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2029	Regression	21.00	25.17	1961	17.20	4.90E+00	1.00
PRC	2027	Regression	54.66	23.22	1961	116.48	-1.00E+00	1.00
PSC	2019	Modified Standard	93.00	14.00	1961	106.84	-1.37E-05	3.75



Survey Data

Survey Year: 2006	Pavement: PCCP	Survey Lane: Right
Rut (mm): 1	PSC: N/A	IRI (cm/km): 214

Defect Type	Low	Medium	High
Slab Cracking	0	0	0
Patching	0	0	0
Scaling	0	0	0
Faulting	0	0	0
Joint/Crack Spalling	0	0	0
Pumping	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 11579	Ave. Weekday Traffic: 12228
ADT Growth: 3.50%	Single Units: 1017	Double Units: 209
Trains: 72	Total Trucks: 1298	Trucks Percentage: 11.21%
Trucks Growth: 3.50%	Directional Split: 55.97%	Peak Hour: 9.98%
Min. Level of Service: C	Cur. Level of Service: D	15yrs Level of Service: E

Past ESALs: 2,483,486 ESALs after 15yrs: 3,101,960

Analysis Unit: MP 28.94 - 29.03

(Vicinity: From MP 28.94 - END BRIDGE - BN RR To MP 28.98 - LEAVE CITY - ARLINGTON)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 28.94	MP End: 29.03	Qualifier:
ARM Begin: 28.94	ARM End: 29.03	Length (Miles): 0.09
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: 3R Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 24.0
Lane Miles: 0.18	Lt Shoulder (ft): 5.0	Rt Shoulder (ft): 8.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2005	016347	RESURFACE EXISTING RDWY	0.15	ACP CLASS B PG58-22	NONE
1990	013596	RESURFACE EXISTING RDWY	0.08	ACP CLASS B AR4000W	NONE
1982	012232	RESURFACE EXISTING RDWY	0.04	BST CLASS B CRS-2	NONE
1961	000000	RECONSTR EXISTING ALIGN	0.42	ACP CLASS B AR4000W	NONE
1961			0.00	N/A	
1961			0.25	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 27.06 to 30.16

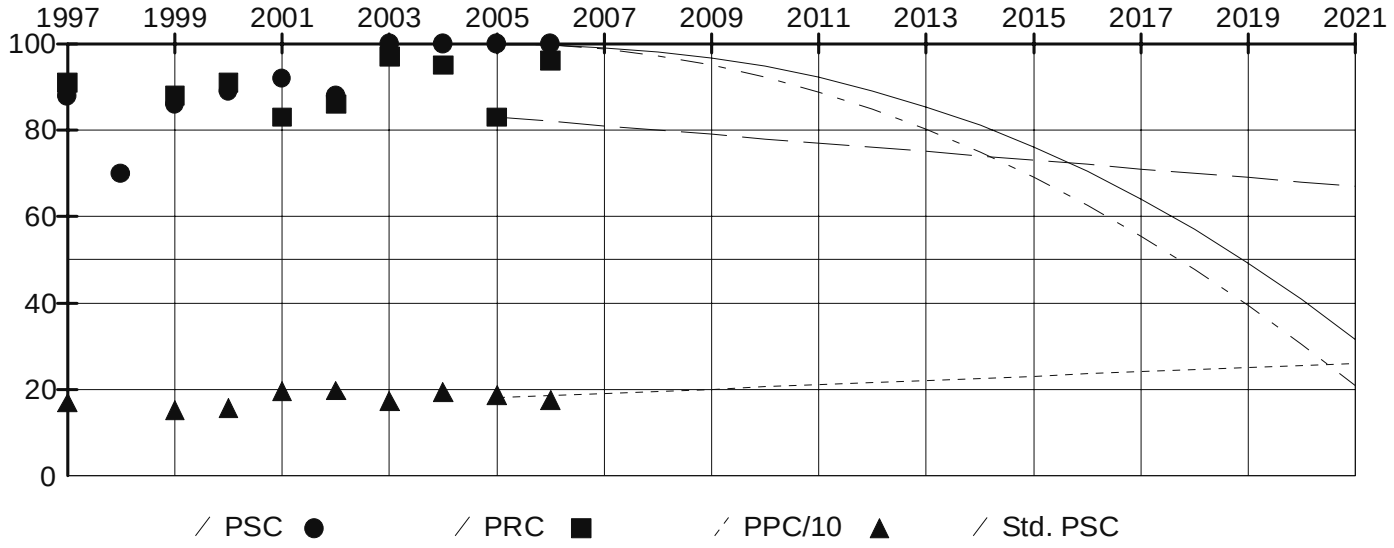
Ad. Date/PIN/Title: 03/2010 100928A - SR 9/Eaglefield Dr Vicinity to Pilchuck(MP 26.85 -34.85)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	88	70	86	89	92	88	100	100	100	100
PRC (Rutting)	91	N/A	88	91	83	86	97	95	83	96
PPC (IRI cm/km)	170	N/A	152	157	197	198	173	194	187	175

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2039	Regression	100.00	0.00	2005	181.00	5.00E+00	1.00
PRC	2038	Regression	100.00	0.00	2005	83.00	-1.00E+00	1.00
PSC	2018	Modified Standard	99.00	1.00	2005	99.70	-1.33E-01	2.25



Survey Data

Survey Year: 2006	Pavement: PCCP	Survey Lane: Right
Rut (mm): 1	PSC: N/A	IRI (cm/km): 214

Defect Type	Low	Medium	High
Slab Cracking	0	0	0

Patching	0	0	0
Scaling	0	0	0
Faulting	0	0	0
Joint/Crack Spalling	0	0	0
Pumping	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 11579	Ave. Weekday Traffic: 12228
ADT Growth: 3.50%	Single Units: 1017	Double Units: 209
Trains: 72	Total Trucks: 1298	Trucks Percentage: 11.21%
Trucks Growth: 3.50%	Directional Split: 55.97%	Peak Hour: 9.98%
Min. Level of Service: C	Cur. Level of Service: D	15yrs Level of Service: E

Past ESALs: 263,622 ESALs after 15yrs: 3,101,960

Analysis Unit: MP 29.03 - 29.14

(Vicinity: From MP 28.98 - LEAVE CITY - ARLINGTON To MP 29.13 - ENTER CITY - ARLINGTON)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 29.03	MP End: 29.14	Qualifier:
ARM Begin: 29.03	ARM End: 29.14	Length (Miles): 0.11
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: 3R Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 24.0
Lane Miles: 0.22	Lt Shoulder (ft): 7.0	Rt Shoulder (ft): 8.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2005	016347	RESURFACE EXISTING RDWY	0.15	ACP CLASS B PG58-22	NONE
1990	013596	RESURFACE EXISTING RDWY	0.08	ACP CLASS B AR4000W	NONE
1982	012232	RESURFACE EXISTING RDWY	0.04	BST CLASS B CRS-2	NONE
1961	000000	RECONSTR EXISTING ALIGN	0.42	ACP CLASS B AR4000W	NONE
1961			0.00	N/A	
1961			0.25	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 27.06 to 30.16

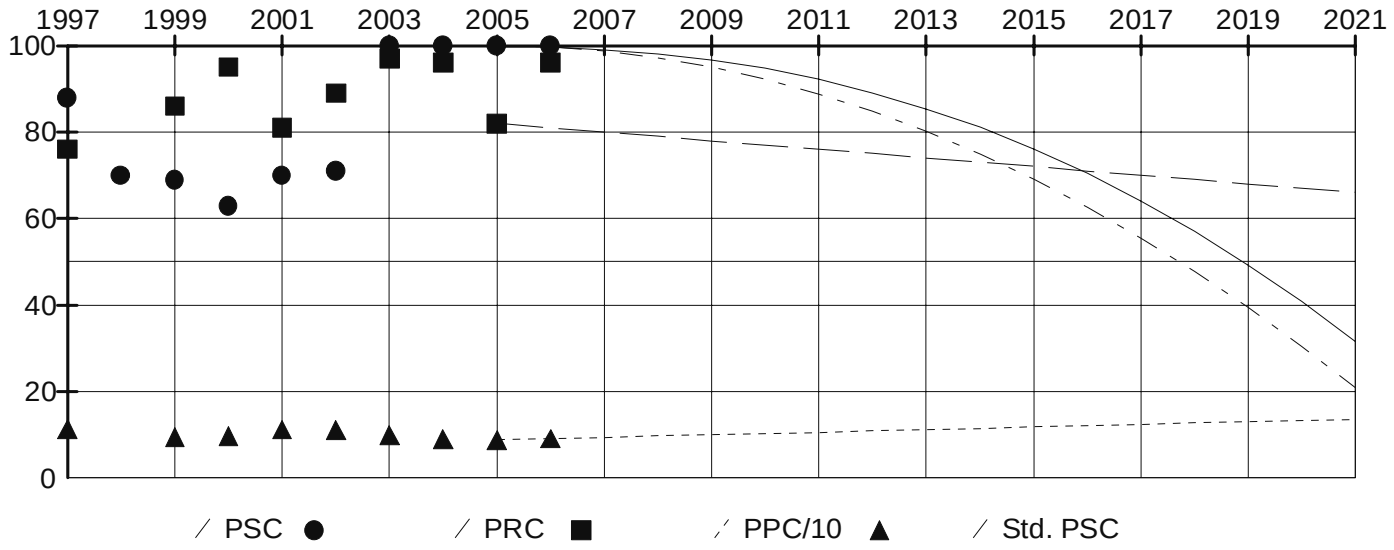
Ad. Date/PIN/Title: 03/2010 100928A - SR 9/Eaglefield Dr Vicinity to Pilchuck(MP 26.85 -34.85)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	88	70	69	63	70	71	100	100	100	100
PRC (Rutting)	76	N/A	86	95	81	89	97	96	82	96
PPC (IRI cm/km)	113	N/A	95	97	112	111	99	90	88	91

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2092	Regression	100.00	0.00	2005	88.00	3.00E+00	1.00
PRC	2037	Regression	100.00	0.00	2005	82.00	-1.00E+00	1.00
PSC	2018	Modified Standard	99.00	1.00	2005	99.70	-1.33E-01	2.25



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 1	PSC: 100	IRI (cm/km): 91

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0

Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 11579	Ave. Weekday Traffic: 12228
ADT Growth: 3.50%	Single Units: 1017	Double Units: 209
Trains: 72	Total Trucks: 1298	Trucks Percentage: 11.21%
Trucks Growth: 3.50%	Directional Split: 55.97%	Peak Hour: 9.98%
Min. Level of Service: C	Cur. Level of Service: D	15yrs Level of Service: E

Past ESALs: 263,622 ESALs after 15yrs: 3,101,960

Analysis Unit: MP 29.14 - 29.34

(Vicinity: From MP 29.13 - ENTER CITY - ARLINGTON To MP 29.32 - LEAVE CITY - ARLINGTON)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 29.14	MP End: 29.34	Qualifier:
ARM Begin: 29.14	ARM End: 29.34	Length (Miles): 0.20
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: 3R Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 24.0
Lane Miles: 0.40	Lt Shoulder (ft): 10.0	Rt Shoulder (ft): 10.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2005	016347	RESURFACE EXISTING RDWY	0.15	ACP CLASS B PG58-22	NONE
1990	013596	RESURFACE EXISTING RDWY	0.08	ACP CLASS B AR4000W	NONE
1982	012232	RESURFACE EXISTING RDWY	0.04	BST CLASS B CRS-2	NONE
1961	000000	RECONSTR EXISTING ALIGN	0.42	ACP CLASS B AR4000W	NONE
1961			0.00	N/A	
1961			0.25	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 27.06 to 30.16

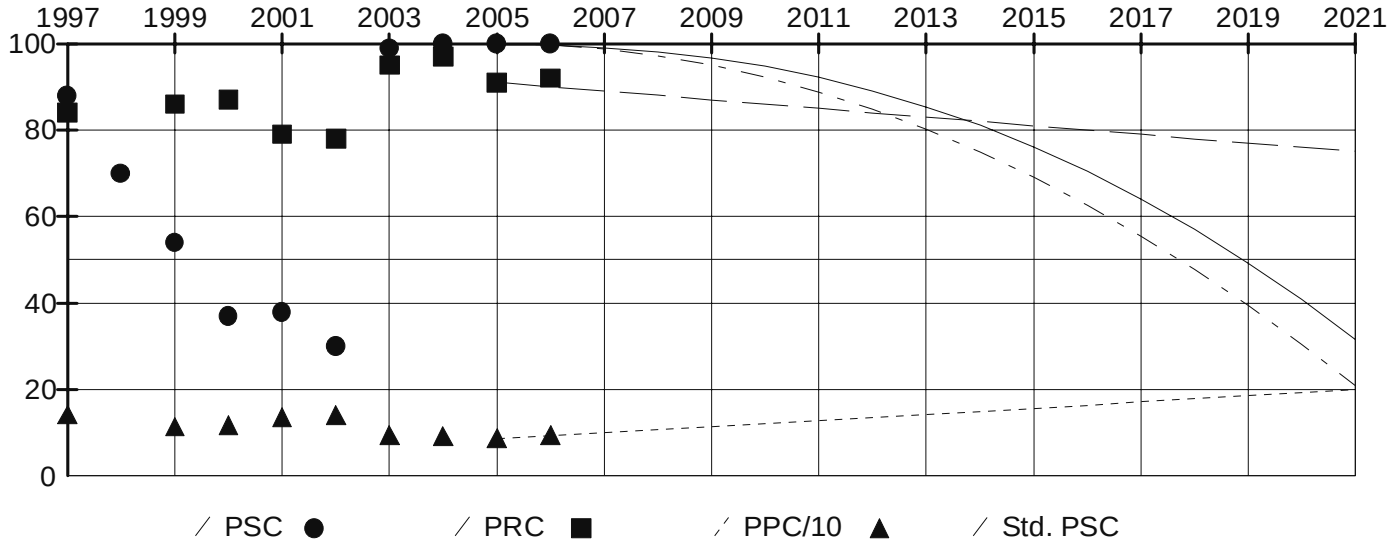
Ad. Date/PIN/Title: 03/2010 100928A - SR 9/Eaglefield Dr Vicinity to Pilchuck(MP 26.85 -34.85)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	88	70	54	37	38	30	99	100	100	100
PRC (Rutting)	84	N/A	86	87	79	78	95	97	91	92
PPC (IRI cm/km)	142	N/A	114	118	136	141	95	92	87	94

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2043	Regression	100.00	0.00	2005	87.00	7.00E+00	1.00
PRC	2046	Regression	100.00	0.00	2005	91.00	-1.00E+00	1.00
PSC	2018	Modified Standard	99.00	1.00	2005	99.70	-1.33E-01	2.25



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 2	PSC: 100	IRI (cm/km): 94

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0

Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 11597	Ave. Weekday Traffic: 12299
ADT Growth: 3.50%	Single Units: 1018	Double Units: 209
Trains: 72	Total Trucks: 1299	Trucks Percentage: 11.20%
Trucks Growth: 3.50%	Directional Split: 56.11%	Peak Hour: 9.92%
Min. Level of Service: C	Cur. Level of Service: D	15yrs Level of Service: E

Past ESALs: 263,907 ESALs after 15yrs: 3,105,311

Analysis Unit: MP 29.34 - 29.46

(Vicinity: From MP 29.32 - LEAVE CITY - ARLINGTON To MP 29.46 - INTRSECTN - SR 530)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 29.34	MP End: 29.46	Qualifier:
ARM Begin: 29.34	ARM End: 29.46	Length (Miles): 0.12
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: 3R Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 24.0
Lane Miles: 0.24	Lt Shoulder (ft): 10.0	Rt Shoulder (ft): 10.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2005	016347	RESURFACE EXISTING RDWY	0.15	ACP CLASS B PG58-22	NONE
1990	013596	RESURFACE EXISTING RDWY	0.08	ACP CLASS B AR4000W	NONE
1982	012232	RESURFACE EXISTING RDWY	0.04	BST CLASS B CRS-2	NONE
1968	008345	RESURFACE EXISTING RDWY	0.17	ACP CLASS B AR4000W	NONE
1961	000000	RECONSTR EXISTING ALIGN	0.42	ACP CLASS B AR4000W	NONE
1961			0.00	N/A	
1961			0.25	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 27.06 to 30.16

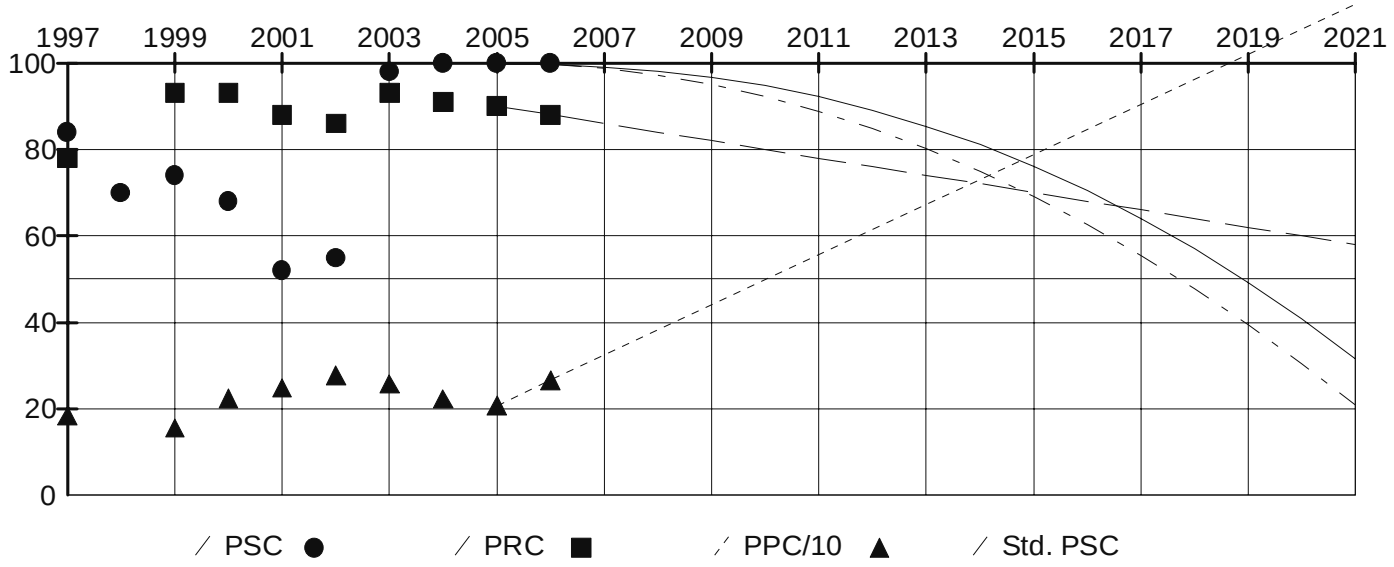
Ad. Date/PIN/Title: 03/2010 100928A - SR 9/Eaglefield Dr Vicinity to Pilchuck(MP 26.85 -34.85)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	84	70	74	68	52	55	98	100	100	100
PRC (Rutting)	78	N/A	93	93	88	86	93	91	90	88
PPC (IRI cm/km)	184	N/A	156	224	249	278	258	223	208	266

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2007	Regression	100.00	0.00	2005	208.00	5.80E+01	1.00
PRC	2025	Regression	100.00	0.00	2005	90.00	-2.00E+00	1.00
PSC	2018	Modified Standard	99.00	1.00	2005	99.70	-1.33E-01	2.25



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 3	PSC: 100	IRI (cm/km): 266

Defect Type	Low	Medium	High

Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 11813 Ave. Weekday Traffic: 13181
ADT Growth: 3.50% Single Units: 1038 Double Units: 213
Trains: 74 Total Trucks: 1325 Trucks Percentage: 11.22%
Trucks Growth: 3.50% Directional Split: 57.78% Peak Hour: 9.14%
Min. Level of Service: C Cur. Level of Service: D 15yrs Level of Service: E
Past ESALs: 269,427 ESALs after 15yrs: 3,170,256

Analysis Unit: MP 29.46 - 29.57

(Vicinity: From MP 29.46 - INTRSECTN - SR 530 To MP 29.57 - INTRSECTN - SR 530)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 29.46	MP End: 29.57	Qualifier:
ARM Begin: 29.46	ARM End: 29.57	Length (Miles): 0.11
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: N/A	Lev. of Dev.: 3R Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 24.0
Lane Miles: 0.22	Lt Shoulder (ft): 4.0	Rt Shoulder (ft): 4.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2001	015305	RECONSTR EXISTING ALIGN	0.35	ACP CLASS B AR4000W	NONE
2001			0.40	ATB	
2001			0.30	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 27.06 to 30.16

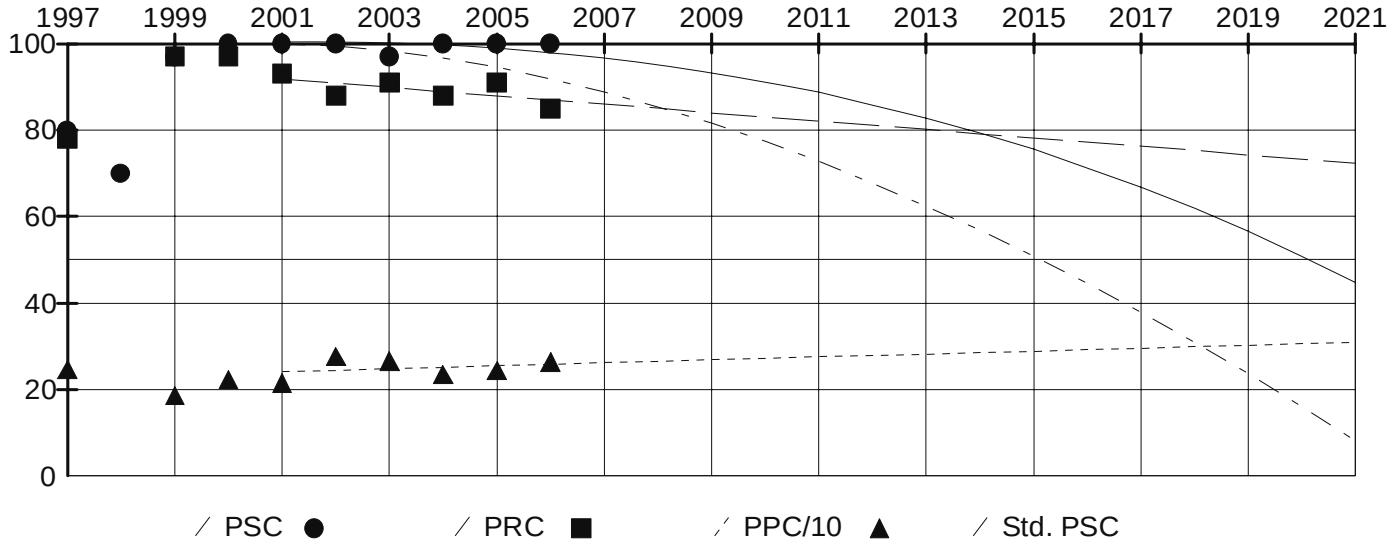
Ad. Date/PIN/Title: 03/2010 100928A - SR 9/Eaglefield Dr Vicinity to Pilchuck(MP 26.85 -34.85)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	80	70	97	100	100	100	97	100	100	100
PRC (Rutting)	78	N/A	97	97	93	88	91	88	91	85
PPC (IRI cm/km)	246	N/A	186	223	215	276	266	235	244	264

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2033	Regression	7.61	24.57	2001	241.57	3.37E+00	1.00
PRC	2044	Regression	39.95	2.49	2001	91.76	-9.71E-01	1.00
PSC	2020	Too Long	99.00	1.00	2001	100.33	-6.56E-02	2.25



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 4	PSC: 100	IRI (cm/km): 264

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0

Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 11644	Ave. Weekday Traffic: 13923
ADT Growth: 3.50%	Single Units: 1199	Double Units: 263
Trains: 84	Total Trucks: 1546	Trucks Percentage: 13.28%
Trucks Growth: 3.50%	Directional Split: 63.36%	Peak Hour: 7.98%
Min. Level of Service: C	Cur. Level of Service: D	15yrs Level of Service: E

Past ESALs: 860,904 ESALs after 15yrs: 3,721,190

Analysis Unit: MP 29.57 - 29.70

(Vicinity: From MP 29.57 - INTRSECTN - SR 530 To MP 29.70 - BEG BRIDGE - STILLAGUAMISH RIVER)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 29.57	MP End: 29.70	Qualifier:
ARM Begin: 29.57	ARM End: 29.70	Length (Miles): 0.13
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: N/A	Lev. of Dev.: 3R Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 24.0
Lane Miles: 0.26	Lt Shoulder (ft): 4.0	Rt Shoulder (ft): 4.0
Fed. Aid Type: Secondary	Fed. Aid No: S317	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2001	015305	RECONSTR EXISTING ALIGN	0.35	ACP CLASS B AR4000W	NONE
2001			0.40	ATB	
2001			0.30	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 27.06 to 30.16

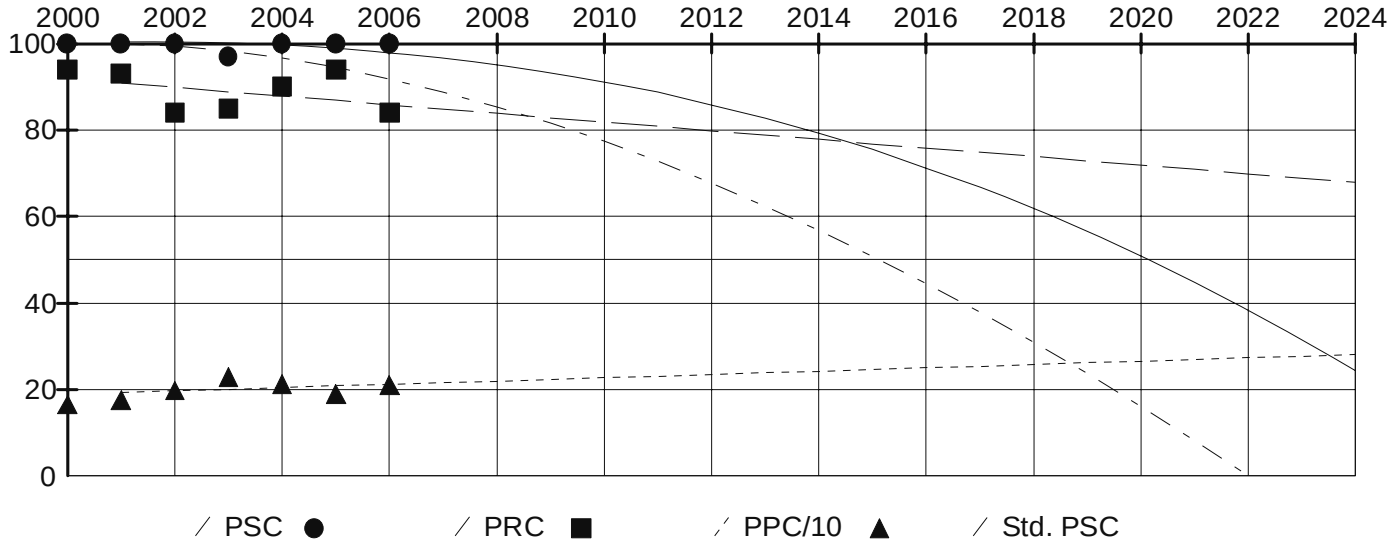
Ad. Date/PIN/Title: 03/2010 100928A - SR 9/Eaglefield Dr Vicinity to Pilchuck(MP 26.85 -34.85)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	100	100	100	97	100	100	100
PRC (Rutting)	94	93	84	85	90	94	84
PPC (IRI cm/km)	165	175	198	229	212	190	210

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2042	Regression	14.40	19.52	2001	192.76	3.83E+00	1.00
PRC	2042	Regression	16.61	5.31	2001	90.83	-1.00E+00	1.00
PSC	2020	Too Long	99.00	1.00	2001	100.33	-6.56E-02	2.25



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 4	PSC: 100	IRI (cm/km): 210

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0

Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 8162	Ave. Weekday Traffic: 9760
ADT Growth: 3.50%	Single Units: 854	Double Units: 150
Trains: 23	Total Trucks: 1027	Trucks Percentage: 12.58%
Trucks Growth: 3.50%	Directional Split: 59.18%	Peak Hour: 8.26%
Min. Level of Service: C	Cur. Level of Service: C	15yrs Level of Service: D

Past ESALs: 513,806 ESALs after 15yrs: 2,220,887

Analysis Unit: MP 29.70 - 29.83

(Vicinity: From MP 29.70 - BEG BRIDGE - STILLAGUAMISH RIVER To MP 29.83 - END BRIDGE - STILLAGUAMISH RIVER)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 29.70	MP End: 29.83	Qualifier:
ARM Begin: 29.70	ARM End: 29.83	Length (Miles): 0.13
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: N/A	Lev. of Dev.: 3R Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 36.0
Lane Miles: 0.26	Lt Shoulder (ft): 0.0	Rt Shoulder (ft): 0.0
Fed. Aid Type: Secondary	Fed. Aid No: S317	Bridge: Yes

Year	Contract	Construction	Thickness	Surface Type	Exception
2001	015305	BRIDGE	0.00	PCCP	NONE

Related Programmed Project: SR 9 Mainline Increasing 27.06 to 30.16

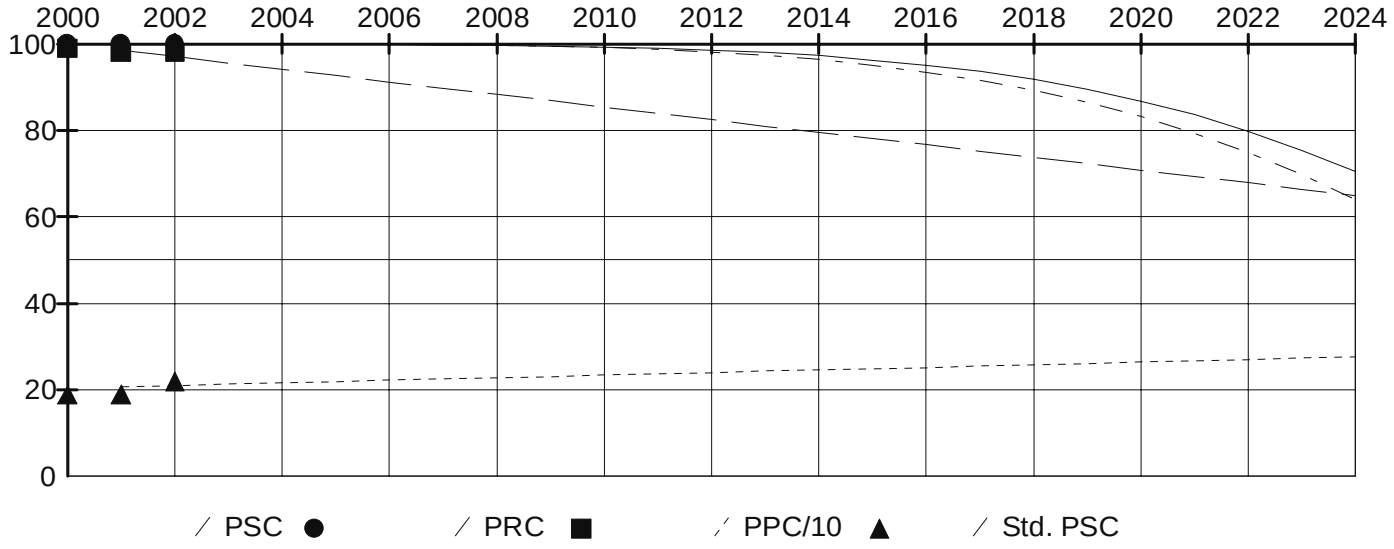
Ad. Date/PIN/Title: 03/2010 100928A - SR 9/Eaglefield Dr Vicinity to Pilchuck(MP 26.85 -34.85)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	2000	2001	2002
PSC (Structure)	100	100	100
PRC (Rutting)	99	98	98
PPC (IRI cm/km)	188	190	219

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2049	Regression	18.20	13.30	2001	207.00	3.00E+00	1.00
PRC	2034	Regression	24.31	5.38	2001	98.48	-1.46E+00	1.00
PSC	2027	Modified Standard	99.00	0.00	2001	99.84	-4.81E-05	4.25



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 3	PSC: 100	IRI (cm/km): 211

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 8155	Ave. Weekday Traffic: 9594
ADT Growth: 3.50%	Single Units: 853	Double Units: 150
Trains: 23	Total Trucks: 1026	Trucks Percentage: 12.58%
Trucks Growth: 3.50%	Directional Split: 59.08%	Peak Hour: 8.35%
Min. Level of Service: C	Cur. Level of Service: C	15yrs Level of Service: D

Past ESALs: 513,031 ESALs after 15yrs: 2,217,535

Analysis Unit: MP 29.83 - 30.16

(Vicinity: From MP 29.83 - END BRIDGE - STILLAGUAMISH RIVER To MP 29.95 - INTRSECTN - SCHLOMAN RD)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Increasing
MP Begin: 29.83	MP End: 30.16	Qualifier:
ARM Begin: 29.83	ARM End: 30.07	Length (Miles): 0.24
Region: Northwest	County: Snohomish	Fun. Class: Rural Major Col.
Access Control: N/A	Lev. of Dev.: 3R Standard	Terrain: Rolling
Highway Type: Simple Two Way	No .of Lanes: 2	Width (ft): 24.0
Lane Miles: 0.48	Lt Shoulder (ft): 4.0	Rt Shoulder (ft): 6.0
Fed. Aid Type: Secondary	Fed. Aid No: S317	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2001	015305	RECONSTR EXISTING ALIGN	0.35	ACP CLASS B AR4000W	NONE
2001			0.40	ATB	
2001			0.30	Untreated Base	

Related Programmed Project: SR 9 Mainline Increasing 27.06 to 30.16

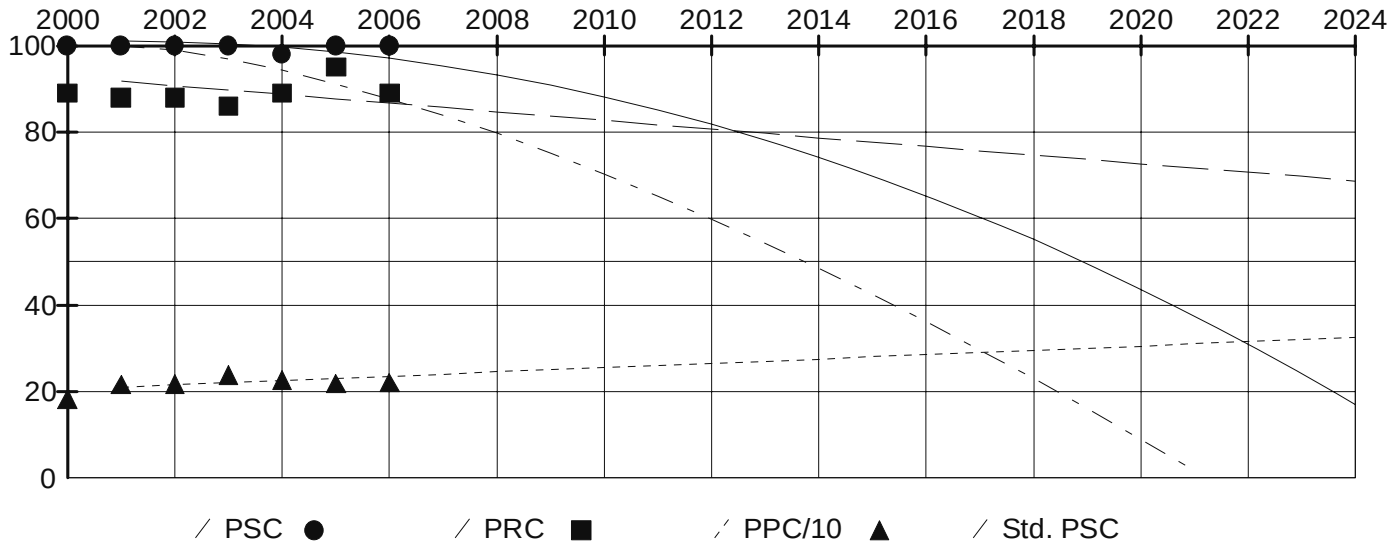
Ad. Date/PIN/Title: 03/2010 100928A - SR 9/Eaglefield Dr Vicinity to Pilchuck(MP 26.85 -34.85)

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	2000	2001	2002	2003	2004	2005	2006
PSC (Structure)	100	100	100	100	98	100	100
PRC (Rutting)	89	88	88	86	89	95	89
PPC (IRI cm/km)	182	216	217	238	226	218	221

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2029	Regression	125.96	13.27	2001	210.17	5.00E+00	1.00
PRC	2043	Regression	37.37	4.83	2001	91.67	-1.00E+00	1.00
PSC	2018	Too Long	99.00	1.00	2001	101.03	-1.59E-01	2.00



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 3	PSC: 100	IRI (cm/km): 221

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0

Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006	Ave. Daily Traffic: 8042	Ave. Weekday Traffic: 7944
ADT Growth: 3.50%	Single Units: 834	Double Units: 148
Trains: 23	Total Trucks: 1005	Trucks Percentage: 12.50%
Trucks Growth: 3.50%	Directional Split: 58.26%	Peak Hour: 9.26%
Min. Level of Service: C	Cur. Level of Service: C	15yrs Level of Service: E

Past ESALs: 504,114 ESALs after 15yrs: 2,178,991

Analysis Unit: MP 15.57 - 15.76

(Vicinity: From MP 15.57 - ENT FROM - FRONTAGE RD To MP 15.76 - INTRSECTN - SR 204)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Decreasing
MP Begin: 15.57	MP End: 15.76	Qualifier:
ARM Begin: 15.57	ARM End: 15.76	Length (Miles): 0.19
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Multi-Lane	No .of Lanes: 2	Width (ft): 25.0
Lane Miles: 0.38	Lt Shoulder (ft): 8.0	Rt Shoulder (ft): 0.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2006	016925	RESURFACE EXISTING RDWY	0.15	ACP CLASS 1/2IN PG58-22	NONE
1994	014149	RESURFACE EXISTING RDWY	0.15	ACP CLASS B AR4000W	NONE
1990	013763	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1988	013276	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1973	009501	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1971	008989	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1963	000000	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1952	000000	RECONSTR EXISTING ALIGN	0.21	MIXED BITUMINOUS	NONE
1952			0.00	N/A	
1952			0.67	Untreated Base	

Related Programmed Project: SR 9 Mainline Decreasing 15.57 to 16.41

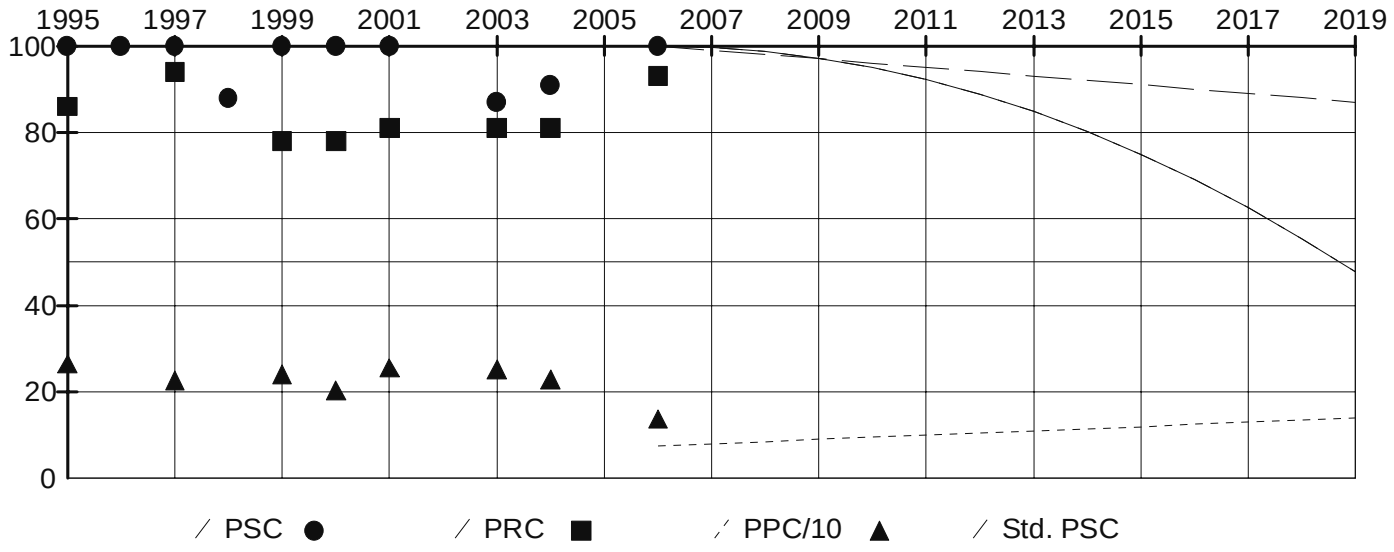
Ad. Date/PIN/Title: Not Scheduled

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1995	1996	1997	1998	1999	2000	2001	2003	2004	2006
PSC (Structure)	100	100	100	88	100	100	100	87	91	100
PRC (Rutting)	86	N/A	94	N/A	78	78	81	81	81	93
PPC (IRI cm/km)	265	N/A	227	N/A	240	203	255	252	229	137

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2061	Regression	100.00	0.00	2006	75.00	5.00E+00	1.00
PRC	2056	Regression	100.00	0.00	2006	100.00	-1.00E+00	1.00
PSC	2018	Standard Equation	100.00	0.00	2006	100.00	-3.09E-01	2.00



Survey Data

Survey Year: 2006 Pavement: ACP Survey Lane: Right
Rut (mm): 2 PSC: 100 IRI (cm/km): 137

Defect Type	Low	Medium	High
Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 10174 Ave. Weekday Traffic: 10705
ADT Growth: 2.91% Single Units: 846 Double Units: 149
Trains: 19 Total Trucks: 1014 Trucks Percentage: 9.97%
Trucks Growth: 2.91% Directional Split: 58.42% Peak Hour: 8.15%
Min. Level of Service: C Cur. Level of Service: B 15yrs Level of Service: C
Past ESALs: 190,037 ESALs after 15yrs: 4,148,535

Analysis Unit: MP 15.76 - 15.91

(Vicinity: From MP 15.76 - INTRSECTN - SR 204 To MP 15.99 - INTRSECTN - VERNON RD)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Decreasing
MP Begin: 15.76	MP End: 15.91	Qualifier:
ARM Begin: 15.76	ARM End: 15.91	Length (Miles): 0.15
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Multi-Lane	No .of Lanes: 2	Width (ft): 37.0
Lane Miles: 0.30	Lt Shoulder (ft): 8.0	Rt Shoulder (ft): 0.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2006	016925	RESURFACE EXISTING RDWY	0.15	ACP CLASS 1/2IN PG58-22	NONE
1994	014149	RESURFACE EXISTING RDWY	0.15	ACP CLASS B AR4000W	NONE
1990	013763	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1973	009501	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1952	000000	RECONSTR EXISTING ALIGN	0.21	MIXED BITUMINOUS	NONE
1952			0.00	N/A	
1952			0.92	Untreated Base	

Related Programmed Project: SR 9 Mainline Decreasing 15.57 to 16.41

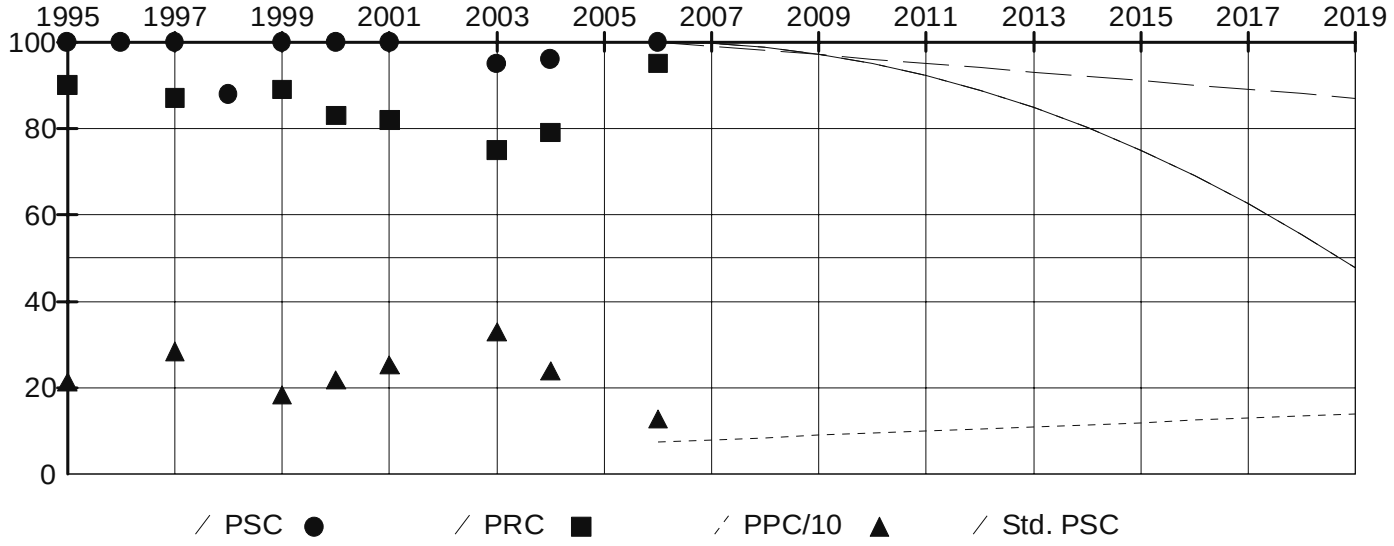
Ad. Date/PIN/Title: Not Scheduled

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1995	1996	1997	1998	1999	2000	2001	2003	2004	2006
PSC (Structure)	100	100	100	88	100	100	100	95	96	100
PRC (Rutting)	90	N/A	87	N/A	89	83	82	75	79	95
PPC (IRI cm/km)	214	N/A	284	N/A	184	218	253	330	239	128

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2061	Regression	100.00	0.00	2006	75.00	5.00E+00	1.00
PRC	2056	Regression	100.00	0.00	2006	100.00	-1.00E+00	1.00
PSC	2018	Standard Equation	100.00	0.00	2006	100.00	-3.09E-01	2.00



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 1	PSC: 100	IRI (cm/km): 128

Defect Type	Low	Medium	High

Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 16588 Ave. Weekday Traffic: 16991
ADT Growth: 2.15% Single Units: 1380 Double Units: 243
Trains: 31 Total Trucks: 1654 Trucks Percentage: 9.97%
Trucks Growth: 2.15% Directional Split: 61.66% Peak Hour: 7.85%
Min. Level of Service: C Cur. Level of Service: D 15yrs Level of Service: E
Past ESALs: 309,976 ESALs after 15yrs: 6,337,182

Analysis Unit: MP 15.91 - 15.96

(Vicinity: From MP 15.99 - INTRSECTN - VERNON RD To MP 15.99 - INTRSECTN - VERNON RD)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Decreasing
MP Begin: 15.91	MP End: 15.96	Qualifier:
ARM Begin: 15.91	ARM End: 15.96	Length (Miles): 0.05
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Multi-Lane	No .of Lanes: 2	Width (ft): 37.0
Lane Miles: 0.10	Lt Shoulder (ft): 8.0	Rt Shoulder (ft): 0.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2006	016925	RESURFACE EXISTING RDWY	0.15	ACP CLASS 1/2IN PG58-22	NONE
1994	014149	RESURFACE EXISTING RDWY	0.15	ACP CLASS B AR4000W	NONE
1990	013763	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1973	009501	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1959	005786	NEW CONSTR OR ALIGN CHG	0.25	ACP CLASS B AR4000W	NONE
1959			0.00	N/A	
1959			0.84	Untreated Base	

Related Programmed Project: SR 9 Mainline Decreasing 15.57 to 16.41

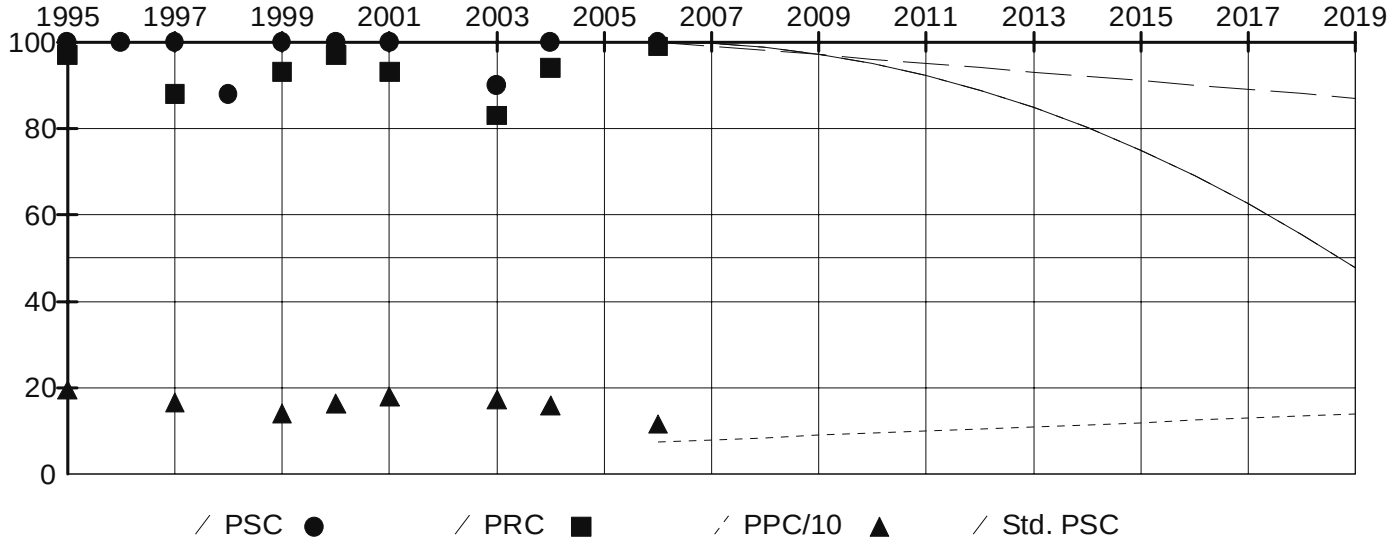
Ad. Date/PIN/Title: Not Scheduled

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1995	1996	1997	1998	1999	2000	2001	2003	2004	2006
PSC (Structure)	100	100	100	88	100	100	100	90	100	100
PRC (Rutting)	97	N/A	88	N/A	93	97	93	83	94	99
PPC (IRI cm/km)	195	N/A	166	N/A	141	164	180	173	160	117

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2061	Regression	100.00	0.00	2006	75.00	5.00E+00	1.00
PRC	2056	Regression	100.00	0.00	2006	100.00	-1.00E+00	1.00
PSC	2018	Standard Equation	100.00	0.00	2006	100.00	-3.09E-01	2.00



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 0	PSC: 100	IRI (cm/km): 117

Defect Type	Low	Medium	High

Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 16793 Ave. Weekday Traffic: 17201
ADT Growth: 2.15% Single Units: 1397 Double Units: 246
Trains: 32 Total Trucks: 1675 Trucks Percentage: 9.97%
Trucks Growth: 2.15% Directional Split: 61.62% Peak Hour: 7.83%
Min. Level of Service: C Cur. Level of Service: D 15yrs Level of Service: E
Past ESALs: 314,192 ESALs after 15yrs: 6,423,375

Analysis Unit: MP 15.96 - 16.41

(Vicinity: From MP 15.99 - INTRSECTN - VERNON RD To MP 16.48 - INTRSECTN - LUNDEEN PARKWAY)

Analysis Unit Detail

State Route: 9	Roadway Type: Mainline	Direction: Decreasing
MP Begin: 15.96	MP End: 16.41	Qualifier:
ARM Begin: 15.96	ARM End: 16.41	Length (Miles): 0.45
Region: Northwest	County: Snohomish	Fun. Class: Urban Prin. Art.
Access Control: Partial	Lev. of Dev.: Design Standard	Terrain: Rolling
Highway Type: Multi-Lane	No .of Lanes: 2	Width (ft): 25.0
Lane Miles: 0.90	Lt Shoulder (ft): 8.0	Rt Shoulder (ft): 0.0
Fed. Aid Type: Primary	Fed. Aid No: 0009	Bridge: No

Year	Contract	Construction	Thickness	Surface Type	Exception
2006	016925	RESURFACE EXISTING RDWY	0.15	ACP CLASS 1/2IN PG58-22	NONE
1994	014149	RESURFACE EXISTING RDWY	0.15	ACP CLASS B AR4000W	NONE
1990	013763	RESURFACE EXISTING RDWY	0.12	ACP CLASS B AR4000W	NONE
1973	009501	RESURFACE EXISTING RDWY	0.06	ACP CLASS B AR4000W	NONE
1959	005786	NEW CONSTR OR ALIGN CHG	0.25	ACP CLASS B AR4000W	NONE
1959			0.00	N/A	
1959			0.84	Untreated Base	

Related Programmed Project: SR 9 Mainline Decreasing 15.57 to 16.41

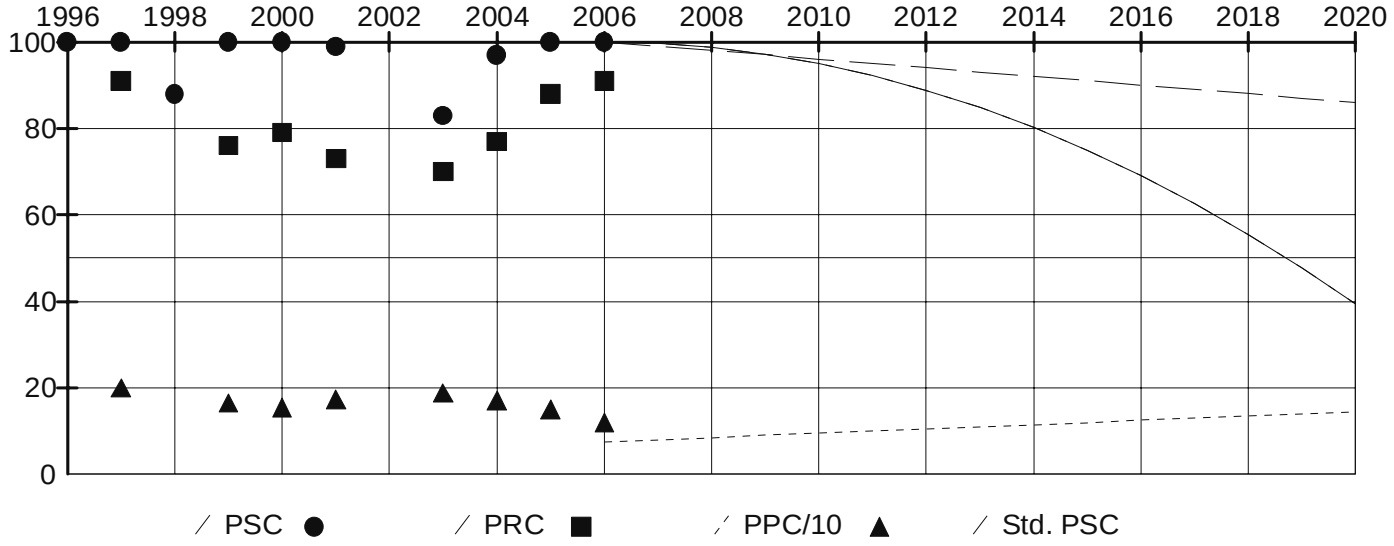
Ad. Date/PIN/Title: Not Scheduled

Analysis Unit Condition and Projection

Friction Year: Friction:

Year	1996	1997	1998	1999	2000	2001	2003	2004	2005	2006
PSC (Structure)	100	100	88	100	100	99	83	97	100	100
PRC (Rutting)	N/A	91	N/A	76	79	73	70	77	88	91
PPC (IRI cm/km)	N/A	200	N/A	165	155	173	188	171	150	120

	Due Year	Equation Type	Fit	RMSE	Begin	Constant	Coefficient	Power
PPC	2061	Regression	100.00	0.00	2006	75.00	5.00E+00	1.00
PRC	2056	Regression	100.00	0.00	2006	100.00	-1.00E+00	1.00
PSC	2018	Standard Equation	100.00	0.00	2006	100.00	-3.09E-01	2.00



Survey Data

Survey Year: 2006	Pavement: ACP	Survey Lane: Right
Rut (mm): 2	PSC: 100	IRI (cm/km): 120

Defect Type	Low	Medium	High

Alligator Cracking	0	0	0
Patching	0	0	0
Raveling	0	0	0
Longitudinal Cracking	0	0	0
Transverse Cracking	0	0	0
Flushing	0	0	0

Traffic Data

Traffic Year: 2006 Ave. Daily Traffic: 16793 Ave. Weekday Traffic: 17201
ADT Growth: 2.15% Single Units: 1397 Double Units: 246
Trains: 31 Total Trucks: 1674 Trucks Percentage: 9.97%
Trucks Growth: 2.15% Directional Split: 61.62% Peak Hour: 7.83%
Min. Level of Service: C Cur. Level of Service: D 15yrs Level of Service: E
Past ESALs: 313,553 ESALs after 15yrs: 6,410,311