



RH2 TECHNICAL

Memorandum

Client: Transpo Group

Project: North Wenatchee Transportation Master Plan

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Reviewed by: Randy Asplund, P.E.

Subject: Cost Estimate, Assumptions, Methodology

Date: November 2010

This memorandum documents the assumptions and methodology used by RH2 Engineering, Inc. (RH2) to estimate the costs of various elements considered in the North Wenatchee Transportation Master Plan (Plan).

Project Description

This memorandum outlines planning-level cost estimates for the various Plan elements to improve traffic in the North Wenatchee corridor. The improvements were estimated in three corridors, as detailed in the Plan: the US 2 Corridor & Connections to North Wenatchee, the Confluence Parkway Corridor, and the North Wenatchee Avenue Corridor. For each corridor, a list of smaller specific projects was provided by Transpo Group for estimating by RH2.

Design Guidelines

Because these are planning-level estimates, only basic design guidelines were considered. The roadway widths were generally estimated based on 11-foot wide driving lanes in residential areas and 12-foot wide driving lanes with 5-foot shoulders in all other areas. The local access roads located in the southern end of the project also included an 8-foot parking lane. The typical section used was 3 inches of hot mix asphalt over 12 inches of crushed rock with thicker sections used in the interchange areas.

Non-motorized improvements were also incorporated. Five-foot-wide sidewalks were included in the sections unless there was an adjacent trail, such as, along the Confluence Parkway. Five-foot-wide shoulders were included to be used as bike lanes where appropriate. The relocated trail along much of the Confluence Parkway and the proposed trails were estimated to be 10 feet wide, including pedestrian bridges.

Cost Estimates

Various roadway section widths were estimated to arrive at a cost-per-linear-foot of roadway improvements. To maintain consistency, five major road construction elements were estimated using the same unit cost for each section: asphalt, crushed rock, excavation, curb and gutter, and sidewalk. Unit costs were determined by reviewing bid tabulations for recent projects in the area. Percentages were then added to these elements for additional construction items, engineering, and contingencies to arrive at a final cost-per-linear foot of roadway construction. Documentation of the costs used to arrive at the total unit cost for the various road sections is detailed in **Attachment 1**.

Approximate lengths of improvements were measured using aerial photos and multiplied by the cost-per-linear-foot for each section of roadway to be improved. Additional costs for large items – such as retaining walls and existing roadway demolition – were added based on local knowledge and site visits, where appropriate. Traffic signal installations and modifications were also included as appropriate. Right of way costs were included as described in a separate section of this memo

Vehicular bridges, pedestrian bridges, and railroad undercrossings were estimated by the square foot using various sources, including bid tabulations and the Washington State Department of Transportation Bridge Design Manual Structural Estimating Aids chart. Additional cost factors were added for railroad impacts, utility impacts, and extraordinary environmental/permitting efforts where applicable. These specific site/corridor related costs were then added to the roadway section cost to arrive at a preliminary planning level cost estimate for each specific element within the corridor. Detail of the cost elements for each of the three corridors is summarized in **Attachment 2a – US 2 Corridor & Connections to North Wenatchee**, **Attachment 2b – North Wenatchee Avenue Corridor**, and **Attachment 2c – Confluence Parkway**.

Once the cost for each section has been estimated using the method described above, it was multiplied by 90 percent to arrive at the low end of the range and 110 percent to arrive at the high end of the range. A summary of the cost estimates is shown in **Attachment C**. It should be noted that these costs are based on the preliminary information presented in the Report and are for comparative and planning purposes only. All improvements should be evaluated in greater detail including pre-design, scoping of potential environmental issues and specific right-of-way requirements prior to before pursuing project funding.

Right of Way

Additional right of way will need to be acquired for many of the proposed improvements. Land Value was estimated in two categories: residential and commercial. Land values were estimated using public tax records. An additional cost factor was also included per acre for property impacts and acquisition administration. For new alignments, right of way needed was estimated at approximately 5 to 10 feet wider than the improvements. For existing roads, additional width was estimated for purchase in even increments based on the increase in width of the improvements. A separate line item was included where a structure would need to be acquired based on inspection of aerial mapping. Detailed right of way research was not performed for this project.

Utility Impacts

Utility impacts were considered where the roadway improvements would have a clear impact on construction costs such as at undercrossings. New utility installations and overhead utility relocations were not included in this estimate.

Environmental Impacts

The locations of the improvements were not reviewed on the ground in enough detail to address specific environmental impacts. In general, the cost estimates included typical percentages for engineering, which are assumed to include environmental costs. The estimate for the proposed Confluence Parkway included additional funds to address the environmental review, which will likely include an Environmental Impact Statement. There are also known environmentally sensitive areas that will have to be considered during design to minimize impacts.



11/22/2010



11/22/2010

Linear foot and Unit Costs for North Wenatchee Master Plan Elements

General Road Construction Costs

HMA (3")	Ton	\$	100.00	Misc Other Construction Items	125%
Rock (12" road, 2" walk)	Ton	\$	25.00	Engineering	25%
Excavation (1.5-ft)	CY	\$	15.00	Tax and Contingency	20%
Curb & Gutter	LF	\$	20.00		
Sidewalk	SY	\$	40.00		

One-Way Frontage: 15-foot Road no curb or Sidewalk, 20-foot R/W

Item	Qty/LF	Unit/LF	Unit Price	Cost/LF
HMA (3")	0.28	Ton	\$ 100.00	\$ 28.47
Rock (12" road)	1.03	Ton	\$ 25.00	\$ 25.69
Excavation (1.5-ft)	0.83	CY	\$ 15.00	\$ 12.50
Curb & Gutter	0	LF	\$ 20.00	\$ -
Sidewalk	0.00	SY	\$ 40.00	\$ -

Major Items Subtotal \$ 66.67

Misc Other Construction Items 125% \$ 83.33

Construction Subtotal \$ 150.00

Engineering 25% \$ 37.50

Tax and Contingency 20% \$ 30.00

Total Generic Construction Cost/LF \$ 217.50

Two-Way Frontage: 24-foot Road no curb or sidewalk 30-foot R/W

Item	Qty/LF	Unit/LF	Unit Price	Cost/LF
HMA (3")	0.46	Ton	\$ 100.00	\$ 45.56
Rock (12" road)	1.64	Ton	\$ 25.00	\$ 41.11
Excavation (1.5-ft)	1.33	CY	\$ 15.00	\$ 20.00
Curb & Gutter	0	LF	\$ 20.00	\$ -
Sidewalk	0.00	SY	\$ 40.00	\$ -

Major Items Subtotal \$ 106.67

Misc Other Construction Items 125% \$ 133.33

Construction Subtotal \$ 240.00

Engineering 25% \$ 60.00

Tax and Contingency 20% \$ 48.00

Total Generic Construction Cost/LF \$ 348.00

Confluence Parkway: 32-foot Road w/16' buffer, no Sidewalks, 50-foot R/W

Item	Qty/LF	Unit/LF	Unit Price	Cost/LF
HMA (3")	0.53	Ton	\$ 100.00	\$ 53.15
Rock (12" road, 0" walk)	2.60	Ton	\$ 25.00	\$ 65.09
Excavation (1.5-ft)	3.00	CY	\$ 15.00	\$ 45.00
Curb & Gutter	4	LF	\$ 20.00	\$ 80.00
Sidewalk	0.00	SY	\$ 40.00	\$ -

Major Items Subtotal \$ 243.24

Misc Other Construction Items 125% \$ 304.05

Construction Subtotal \$ 547.29

Engineering 25% \$ 136.82 25% Recommended

Tax and Contingency 20% \$ 109.46

Total Generic Construction Cost/LF \$ 793.57

2 lane arterial: 34-foot Road (FOC to FOC) w/ no Sidewalks, 50-foot R/W

Item	Qty/LF	Unit/LF	Unit Price	Cost/LF
HMA (3")	0.61	Ton	\$ 100.00	\$ 60.74
Rock (12" road, 0" walk)	2.54	Ton	\$ 25.00	\$ 63.38
Excavation (1.5-ft)	2.06	CY	\$ 15.00	\$ 30.83
Curb & Gutter	2	LF	\$ 20.00	\$ 40.00
Sidewalk	0.00	SY	\$ 40.00	\$ -

Major Items Subtotal \$ **194.95**

Misc Other Construction Items 125% \$ **243.69**

Construction Subtotal \$ **438.65**

Engineering 25% \$ **109.66** 25% Recommended

Tax and Contingency 20% \$ **87.73**

Total Generic Construction Cost/LF \$ **636.04**

2 lane arterial: 34-foot Road (FOC to FOC) w/ 5-foot Sidewalks Each Side, 60-foot R/W

Item	Qty/LF	Unit/LF	Unit Price	Cost/LF
HMA (3")	0.61	Ton	\$ 100.00	\$ 60.74
Rock (12" road, 4" walk)	2.62	Ton	\$ 25.00	\$ 65.61
Excavation (1.5-ft)	2.44	CY	\$ 15.00	\$ 36.67
Curb & Gutter	2	LF	\$ 20.00	\$ 40.00
Sidewalk	1.11	SY	\$ 40.00	\$ 44.44

Major Items Subtotal \$ **247.46**

Misc Other Construction Items 125% \$ **309.32**

Construction Subtotal \$ **556.78**

Engineering 25% \$ **139.20** 25% Recommended

Tax and Contingency 20% \$ **111.36**

Total Generic Construction Cost/LF \$ **807.33**

Local Collectors: 40-foot Road (FOC to FOC) w/ 5-foot Sidewalks Each Side, 60-foot R/W

Item	Qty/LF	Unit/LF	Unit Price	Cost/LF
HMA (3")	0.72	Ton	\$ 100.00	\$ 72.13
Rock (12" road, 4" walk)	3.04	Ton	\$ 25.00	\$ 75.88
Excavation (1.5-ft)	2.78	CY	\$ 15.00	\$ 41.67
Curb & Gutter	2	LF	\$ 20.00	\$ 40.00
Sidewalk	1.11	SY	\$ 40.00	\$ 44.44

Major Items Subtotal \$ **274.13**

Misc Other Construction Items 125% \$ **342.66**

Construction Subtotal \$ **616.78**

Engineering 25% \$ **154.20** 25% Recommended

Tax and Contingency 20% \$ **123.36**

Total Generic Construction Cost/LF \$ **894.33**

5 lane Arterial: 60-foot Road (FOC to FOC), w/ 5-foot Sidewalks Each Side, 80-foot R/W

Item	Qty/LF	Unit/LF	Unit Price	Cost/LF
HMA (3")	1.10	Ton	\$ 100.00	\$ 110.09
Rock (12" road)	4.41	Ton	\$ 25.00	\$ 110.14
Excavation (1.5-ft)	3.89	CY	\$ 15.00	\$ 58.33
Curb & Gutter	2	LF	\$ 20.00	\$ 40.00
Sidewalk	1.11	SY	\$ 40.00	\$ 44.44
Major Items Subtotal			\$	363.01
Misc Other Construction Items			125% \$	453.77
Construction Subtotal			\$	816.78
Engineering			25% \$	204.20
Tax and Contingency			20% \$	163.36
Total Generic Construction Cost/LF			\$	1,184.33

4 lane Highway: 80-foot Road 100-foot R/W

Item	Qty/LF	Unit/LF	Unit Price	Cost/LF
HMA (6")	3.04	Ton	\$ 100.00	\$ 303.70
Rock (12" road)	5.48	Ton	\$ 25.00	\$ 137.04
Excavation/Embankment (5-ft)	12.96	CY	\$ 15.00	\$ 194.44
Precast Barrier	1	LF	\$ 50.00	\$ 50.00
Sidewalk	0.00	SY	\$ 40.00	\$ -
Major Items Subtotal			\$	685.19
Misc Other Construction Items			125% \$	856.48
Construction Subtotal			\$	1,541.67
Engineering			25% \$	385.42
Tax and Contingency			20% \$	308.33
Total Generic Construction Cost/LF			\$	2,235.42

1 lane ramp, 20-foot wide

Item	Qty/LF	Unit/LF	Unit Price	Cost/LF
HMA (6")	0.76	Ton	\$ 100.00	\$ 75.93
Rock (12" road)	1.37	Ton	\$ 25.00	\$ 34.26
Excavation (1.5-ft)	1.11	CY	\$ 15.00	\$ 16.67
Curb & Gutter	0	LF	\$ 20.00	\$ -
Sidewalk	0.00	SY	\$ 40.00	\$ -
Major Items Subtotal			\$	126.85
Misc Other Construction Items			125% \$	158.56
Construction Subtotal			\$	285.42
Engineering			25% \$	71.35
Tax and Contingency			20% \$	57.08
Total Generic Construction Cost/LF			\$	413.85

Trail: 10-foot Wide, 15-foot R/W

Item	Qty/LF	Unit/LF	Unit Price	Cost/LF
HMA (3")	0.19	Ton	\$ 100.00	\$ 18.98
Rock (12" road)	0.69	Ton	\$ 25.00	\$ 17.13
Excavation (1.5-ft)	0.56	CY	\$ 15.00	\$ 8.33
Curb & Gutter	0	LF	\$ 20.00	-
Sidewalk	0.00	SY	\$ 40.00	-
Major Items Subtotal			\$	44.44
Misc Other Construction Items			125% \$	55.56
Construction Subtotal			\$	100.00
Engineering			25% \$	25.00
Tax and Contingency			20% \$	20.00
Total Generic Construction Cost/LF			\$	145.00

Tunnel Estimate

Estimate per square foot	\$	800.00
Engineering	25% \$	200.00
	\$	1,000.00

Bridge Estimate**Vehicle**

Estimate per square foot	\$	750.00	(based on 20 x 700 for 12 mil)
Engineering	25% \$	187.50	
	\$	937.50	

Pedestrian

Estimate per square foot	\$	600.00	
Engineering	25% \$	150.00	
	\$	750.00	based on 12' wide, 400' long for 3.5 mil

Railroad Relocation Estimate

Generic Construction Cost/LF	\$	300.00
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Demolition, 34-foot Road with Sidewalks

Item	Qty/LF	Unit/LF	Unit Price	Cost/LF
HMA (3")	0.00	Ton	\$ 100.00	\$ -
Rock (12" road, 4" walk)	0.00	Ton	\$ 25.00	\$ -
Excavation (1.5-ft)	2.44	CY	\$ 15.00	\$ 36.67
Curb & Gutter	0	LF	\$ 20.00	\$ -
Sidewalk	0.00	SY	\$ 40.00	\$ -
Major Items Subtotal			\$	36.67
Misc Other Construction Items			125% \$	45.83
Construction Subtotal			\$	82.50
Engineering			25% \$	20.63
Tax and Contingency			20% \$	16.50
Total Generic Construction Cost/LF			\$	119.63

25% Recommended

Signal/Intersection/Misc Estimates

New Traffic Signal	\$	500,000	
Modified Traffic Signal	\$	250,000	
I/S Striping/Signing Mods	\$	100,000	
Median Barrier	\$	500	per foot
New Transit Pullout	\$	100,000	
New Transit Shelter	\$	10,000	

Add Sidewalk: 5-foot Widening and 5 foot sidewalk, 5-foot R/W

Item	Qty/LF	Unit/LF	Unit Price	Cost/LF
HMA (3")	0.09	Ton	\$ 100.00	\$ 9.49
Rock (12" road)	0.69	Ton	\$ 25.00	\$ 17.13
Excavation (1.5-ft)	0.56	CY	\$ 15.00	\$ 8.33
Curb & Gutter	2	LF	\$ 20.00	\$ 40.00
Sidewalk	0.56	SY	\$ 40.00	\$ 22.22
Major Items Subtotal			\$	97.18
Misc Other Construction Items		125%	\$	121.47
Construction Subtotal			\$	218.65
Engineering		25%	\$	54.66
Tax and Contingency		20%	\$	43.73
Total Generic Construction Cost/LF			\$	317.04

Add Sidewalk: 8-foot sidewalk, 5-foot R/W

Item	Qty/LF	Unit/LF	Unit Price	Cost/LF
HMA (3")	0.06	Ton	\$ 100.00	\$ 5.69
Rock (12" road)	0.82	Ton	\$ 25.00	\$ 20.56
Excavation (1.5-ft)	0.67	CY	\$ 15.00	\$ 10.00
Curb & Gutter	1	LF	\$ 20.00	\$ 20.00
Sidewalk	0.89	SY	\$ 40.00	\$ 35.56
Major Items Subtotal			\$	91.81
Misc Other Construction Items		125%	\$	114.76
Construction Subtotal			\$	206.56
Engineering		25%	\$	51.64
Tax and Contingency		20%	\$	41.31
Total Generic Construction Cost/LF			\$	299.52

Add Lane: 12-foot Widening and 5 foot sidewalk, 15-foot R/W

Item	Qty/LF	Unit/LF	Unit Price	Cost/LF
HMA (3")	0.23	Ton	\$ 100.00	\$ 22.78
Rock (12" road)	1.23	Ton	\$ 25.00	\$ 30.83
Excavation (1.5-ft)	1.00	CY	\$ 15.00	\$ 15.00
Curb & Gutter	1	LF	\$ 20.00	\$ 20.00
Sidewalk	0.56	SY	\$ 40.00	\$ 22.22
Major Items Subtotal			\$	110.83
Misc Other Construction Items		125%	\$	138.54
Construction Subtotal			\$	249.38
Engineering		25%	\$	62.34
Tax and Contingency		20%	\$	49.88
Total Generic Construction Cost/LF			\$	361.59

US 2 Corridor & Connections to North Wenatchee
North Wenatchee Transportation Master Plan Elements

ATTACHMENT 2a

Estimate Range	\$	40,741,854	-	\$	49,830,891	Mid	\$	45,286,372
						Low +/-		10%

SR 2 Mainline realignment (S-1)

Approx Road Length	3000 LF		Road Width	80 LF
Approx ROW Take	0 SF	0.00 Ac	Addl ROW Needed	0 SF

Low End

ROW Cost	\$	-
0 Structures	\$	-
Road Construction Cost	\$	6,035,625
Total Cost	\$	6,035,625

High End

ROW Cost	\$	-
0 Structures	\$	-
Road Construction Cost	\$	7,376,875
Total Cost	\$	7,376,875

New Bridge over SR 2 for I/C (S-1)

Bridge Length	150 LF		Road Width	60 LF
Approx ROW Take	0 SF	0.00 Ac	Addl ROW Needed	0 LF

Low End

ROW Cost	\$	-
0 Structures	\$	-
Bridge Construction Cost	\$	7,593,750
Total Cost	\$	7,593,750

High End

ROW Cost	\$	-
0 Structures	\$	-
Bridge Construction Cost	\$	9,281,250
Total Cost	\$	9,281,250

Ramps for new I/C (S-1)

Approx Length	4000 LF		Road Width	20 LF
Approx ROW Take	0 SF	0.00 Ac	Approx ROW Take	0 SF

Low End

ROW Cost	\$	-
0 Structures	\$	-
Road Construction Cost	\$	1,489,875
Total Cost	\$	1,489,875

High End

ROW Cost	\$	-
0 Structures	\$	-
Road Construction Cost	\$	1,820,958
Total Cost	\$	1,820,958

Easy St Bridge (S-1)

Bridge Length	200 LF		Bridge Width	68 LF
Approx ROW Take	0 SF	0.00 Ac	Addl ROW Needed	0 LF

Low End

ROW Cost	\$	-
0 Structures	\$	-
Bridge Construction Cost	\$	11,475,000
Total Cost	\$	11,475,000

High End

ROW Cost	\$	-
0 Structures	\$	-
Bridge Construction Cost	\$	14,025,000
Total Cost	\$	14,025,000

US 2 Corridor & Connections to North Wenatchee
North Wenatchee Transportation Master Plan Elements

ATTACHMENT 2a

Remove Roads/Ramps (S-1)

Includes: Melody Lane, School St, Ex. Off ramp to EW, and on Ramp to WEN, Penny road connection

Approx Length	2600 LF		Road Width	34 LF
Approx ROW Take	0 SF	0.00 Ac	Approx ROW Take	0 SF

Low End

ROW Cost	\$	-
0 Structures	\$	-
Demolition Cost	\$	279,923
Total Cost	\$	279,923

High End

ROW Cost	\$	-
0 Structures	\$	-
Demolition Cost	\$	342,128
Total Cost	\$	342,128

Sunnyslope Circulation Improvements (S-1)

Includes: New Melody Lane, Alvista Place, Ohme Garden Road, North of SR 2

Approx Length	4000 LF		Road Width	34 LF
Approx ROW Take	200000 SF	4.59 Ac	Approx ROW Take	50 SF

Low End

ROW Cost	\$	1,836,547
4 Structures	\$	1,000,000
Road Construction Cost	\$	2,906,398
Total Cost	\$	5,742,945

High End

ROW Cost	\$	2,295,684
4 Structures	\$	1,100,000
Road Construction Cost	\$	3,552,264
Total Cost	\$	6,947,948

Modify 2 Off Ramps for Euclid I/C and add Signals (S-2)

Approx Length	1000 LF		Road Width	20 LF
Demo Length	2600			
Approx ROW Take	0 SF	0.00 Ac	Approx ROW Take	0 SF
Signals	2			

Low End

ROW Cost	\$	-
0 Structures	\$	-
Road Construction Cost	\$	372,469
Road Demolition Costs	\$	279,923
New Traffic Signal/Modify Intx.	\$	900,000
Total Cost	\$	1,552,391

High End

ROW Cost	\$	-
0 Structures	\$	-
Road Construction Cost	\$	455,240
Road Demolition Costs	\$	342,128
New Traffic Signal/Modify Intx.	\$	1,100,000
Total Cost	\$	1,897,367

Easy St Widening and Signal (S-3)

Approx Road Length	1800 LF		Road Width	68 LF
Approx ROW Take	18000 SF	0.41 Ac	Addl ROW Needed	10 LF
Signals	1			

Low End

ROW Cost	\$	289,256
0 Structures	\$	-
Road Construction Cost	\$	1,918,619
New Traffic Signal/Modify Intx.	\$	450,000
Total Cost	\$	2,657,875

High End

ROW Cost	\$	371,901
0 Structures	\$	-
Road Construction Cost	\$	2,344,979
New Traffic Signal/Modify Intx.	\$	550,000
Total Cost	\$	3,266,880

US 2 Corridor & Connections to North Wenatchee
North Wenatchee Transportation Master Plan Elements

ATTACHMENT 2a

Local Circulation Improvements (S-4)

Includes: Road between Penny and Gunn and road from Penny to Food Pavilion

Approx Length	1500 LF	Road Width	34 LF
Approx ROW Take	37500 SF	0.86 Ac	Addl ROW Needed
			25 SF

Low End

ROW Cost	\$	344,353
2 Structures	\$	-
Road Construction Cost	\$	1,089,899
Total Cost	\$	1,434,252

High End

ROW Cost	\$	430,441
2 Structures	\$	-
Road Construction Cost	\$	1,332,099
Total Cost	\$	1,762,540

Complete Sidewalk/Bike Lanes in Olds Station (S-5)

Includes: Penny Rd, Chester-Kimm, and Olds Station Roads

Approx Length	4000 LF	Road Width	5 LF
Approx ROW Take	0 SF	0.00 Ac	Addl ROW Needed
			0 SF

Low End

ROW Cost	\$	-
0 Structures	\$	-
Road Construction Cost	\$	1,141,331
Total Cost	\$	1,141,331

High End

ROW Cost	\$	-
0 Structures	\$	-
Road Construction Cost	\$	1,394,960
Total Cost	\$	1,394,960

Easy St Pedestrian Route (S-6)

Does not include Penny to SR 2 - assumed that is already complete

Approx Length	2800 LF	Road Width	5 LF
Approx ROW Take	28000 SF	0.64 Ac	Addl ROW Needed
			10 SF

Low End

ROW Cost	\$	449,954
0 Structures	\$	-
Road Construction Cost	\$	798,932
Total Cost	\$	1,248,886

High End

ROW Cost	\$	578,512
0 Structures	\$	-
Road Construction Cost	\$	976,472
Total Cost	\$	1,554,985

Olds Station/Sunnyslope Transit Stops (S-7)

Assume 10

Number of Stops	10
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Low End

Construction Cost	\$	50,000
Total Cost	\$	50,000

High End

Construction Cost	\$	100,000
Total Cost	\$	100,000

Easy Street Intersection/Signal Modification (S-8)

Low End

	Cost	Qty
Modify Intersection	\$	40,000
		1
Total Cost	\$	40,000

High End

	Unit Cost
Modify Intersection	\$
	60,000
Total Cost	\$
	60,000

Grand Total

Low End

Grand Total Cost	\$	40,741,854
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High End

Grand Total Cost	\$	49,830,891
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No. Wenatchee Ave. Improvements

North Wenatchee Transportation Master Plan Elements

Estimate Range	\$ 71,726,503	- \$ 90,720,508	Mid	\$ 81,223,505
			Low +/-	12%

N Wen Ave Misc Improvements (NW-1)

7000' is total length, assume most improvements will be through redevelopment

Approx Length	2500 LF		Approx Length	2500 LF
Approx ROW Take	12500 SF	0.29 Ac	Approx ROW Take	5 SF

Low End

ROW Cost	\$	200,872
Access Control costs	\$	200,000
Road Construction Cost	\$	713,332
Upgrade Illumination	\$	400,000

Total Cost	\$ 1,514,204
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High End

ROW Cost	\$	258,264
Access Control costs	\$	300,000
Road Construction Cost	\$	871,850
Upgrade Illumination	\$	500,000

Total Cost	\$	1,930,115
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Hawley Underpass (NW-2)

Approx Road Length	1500 LF	Road Width	34 LF
Approx Tunnel Length	300 LF	Tunnel Width	44 LF
Approx ROW Take	30000 SF	0.69 Ac	Add ROW Needed 20 LF

Low End

ROW Cost	\$	275,482
0 Structures	\$	-
Road Construction Cost	\$	1,089,899
Utility Relocation Costs	\$	2,000,000
Temporary RR and Coord	\$	1,000,000
U-xing Construction Cost	\$	11,880,000

Total Cost	\$ 16,245,381
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High End

ROW Cost	\$	344,353
0 Structures	\$	-
Road Construction Cost	\$	1,332,099
Utility Relocation Costs	\$	2,250,000
Temporary RR and Coord	\$	1,100,000
U-xing Construction Cost	\$	14,520,000

Total Cost	\$	19,546,452
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Pedestrian Crossing - Miller to Town Toyota Center (NW-3)

Approx Trail Length	0 LF	Trail Width	0
Approx Bridge Length	800 LF	Bridge Width	12
Ramp Length	720		
Approx ROW Take	0 SF	0.00 Ac	Addl ROW Needed
			0

Low End

ROW Cost	\$	-
0 Structures	\$	-
Ramp Construction Cost	\$	2,916,000
Bridge Construction Cost	\$	6,480,000

Total Cost	\$ 9,396,000
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High End

ROW Cost	\$	-
0 Structures	\$	-
Ramp Construction Cost	\$	3,564,000
Bridge Construction Cost	\$	7,920,000

Total Cost	\$ 11,484,000
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North Wenatchee Transit Center (NW-4)

Total Cost	\$ 10,000,000	Total Cost	\$ 15,000,000
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No. Wenatchee Ave. Improvements
North Wenatchee Transportation Master Plan Elements

Ramp to Technology Center Dr (NW-5)

Approx Length	400 LF		Road Width	20 LF
Approx ROW Take	12000 SF	0.28 Ac	Approx ROW Take	30 SF

Low End

ROW Cost	\$	192,837
0 Structures	\$	-
Road Construction Cost	\$	148,988
Total Cost	\$	341,825

High End

ROW Cost	\$	247,934
0 Structures	\$	-
Road Construction Cost	\$	182,096
Total Cost	\$	430,030

New Trail Section - Horse Lake to Walnut (NW-6)

Approx Trail Length	2300 LF		Trail Width	10
Approx Ped Tunnel Length	200 LF		Ped Tunnel width	10
Approx ROW Take	46000 SF	1.06 Ac	Addl ROW Needed	20

Low End

ROW Cost	\$	739,210
0 Structures	\$	-
Trail Construction Cost	\$	300,150
Ped Tunnel Construction Cost	\$	1,350,000
Total Cost	\$	2,389,360

High End

ROW Cost	\$	950,413
0 Structures	\$	-
Trail Construction Cost	\$	366,850
Ped Tunnel Construction Cost	\$	1,650,000
Total Cost	\$	2,967,263

Frontage Road - Horse Lake to 500' past Maiden (NW-7)

Approx Road Length	1400 LF		Road Width	15 LF	No walk
Approx ROW Take	28000 SF	0.64 Ac	Addl ROW Needed	20 LF	
Transit Stops	2				
Median Barrier Length	700				

Low End

ROW Cost	\$	449,954
0 Structures	\$	-
Road Construction Cost	\$	274,050
Transit Pullouts	\$	180,000
Intersection/Signal Mods	\$	180,000
Median Barrier on Wen Ave	\$	315,000
Total Cost	\$	1,399,004

High End

ROW Cost	\$	578,512
0 Structures	\$	-
Road Construction Cost	\$	334,950
Transit Stops	\$	220,000
Intersection/Signal Mods	\$	220,000
Median Barrier on Wen Ave	\$	385,000
Total Cost	\$	1,738,462

Maiden Lane & Wen Ave I/S (NW-8)

Does not include trail U/X-ing

Approx Road Length	400 LF		Road Width	12
Approx ROW Take	6000 SF	0.14 Ac	Addl ROW Needed	15

Low End

ROW Cost	\$	96,419
0 Structures	\$	-
Road Construction Cost	\$	130,174
Intersection/Signal Mods	\$	90,000
Total Cost	\$	226,592

High End

ROW Cost	\$	123,967
0 Structures	\$	-
Road Construction Cost	\$	159,101
Intersection/Signal Mods	\$	110,000
Total Cost	\$	283,068

No. Wenatchee Ave. Improvements
North Wenatchee Transportation Master Plan Elements

Hawley to Maple - Two-Way Frontage Road (NW-9)

Approx Road Length	2800 LF		Road Width	24 LF	No walk
Approx ROW Take	84000 SF	1.93 Ac	Addl ROW Needed	30 LF	

Low End

ROW Cost	\$	1,349,862
0 Structures	\$	-
Road Construction Cost	\$	876,960
Total Cost	\$	2,226,822

High End

ROW Cost	\$	1,735,537
0 Structures	\$	-
Road Construction Cost	\$	1,071,840
Total Cost	\$	2,807,377

Walnut - Western to Wenatchee Ave (NW-10)

Approx Road Length	3200 LF		Road Width	40 LF
Approx ROW Take	64000 SF	1.47 Ac	Addl ROW Needed	20 LF

Low End

ROW Cost	\$	587,695
0 Structures	\$	-
Road Construction Cost	\$	2,575,679
Total Cost	\$	3,163,374

High End

ROW Cost	\$	734,619
0 Structures	\$	-
Road Construction Cost	\$	3,148,052
Total Cost	\$	3,882,670

McKittrick - Pine to Western (NW-11)

Approx Road Length	3300 LF		Road Width	40 LF
Approx ROW Take	66000 SF	1.52 Ac	Addl ROW Needed	20 LF

Low End

ROW Cost	\$	606,061
0 Structures	\$	-
Road Construction Cost	\$	2,656,168
Total Cost	\$	3,262,229

High End

ROW Cost	\$	757,576
0 Structures	\$	-
Road Construction Cost	\$	3,246,428
Total Cost	\$	4,004,004

McKittrick - Pine to Wenatchee Ave (NW-12)

Approx Road Length	900 LF		Road Width	40 LF
Approx ROW Take	18000 SF	0.41 Ac	Addl ROW Needed	20 LF

Low End

ROW Cost	\$	165,289
0 Structures	\$	-
Road Construction Cost	\$	724,410
Total Cost	\$	889,699

High End

ROW Cost	\$	206,612
0 Structures	\$	-
Road Construction Cost	\$	885,389
Total Cost	\$	1,092,001

No. Wenatchee Ave. Improvements
North Wenatchee Transportation Master Plan Elements

Pine - Walnut to McKittrick (NW-13)

Approx Road Length	1300 LF		Road Width	40 LF
Approx ROW Take	26000 SF	0.60 Ac	Addl ROW Needed	20 LF

Low End

ROW Cost	\$	238,751
0 Structures	\$	-
Road Construction Cost	\$	1,046,369
Total Cost	\$	1,285,121

High End

ROW Cost	\$	298,439
0 Structures	\$	-
Road Construction Cost	\$	1,278,896
Total Cost	\$	1,577,335

Pine/Princeton Extension, McKittrick to Maple - (NW-14)

added in Tacoma cul-de-sacs - 200' each

Approx Road Length	3000 LF		Road Width	40 LF
Approx ROW Take	180000 SF	4.13 Ac	Addl ROW Needed	60 LF

Low End

ROW Cost	\$	1,652,893
5 Structures	\$	1,500,000
Road Construction Cost	\$	2,414,699
Total Cost	\$	5,567,591

High End

ROW Cost	\$	2,066,116
5 Structures	\$	1,600,000
Road Construction Cost	\$	2,951,298
Total Cost	\$	6,617,414

Princeton from Maple to Springwater (NW-15)

Approx Road Length	1900 LF		Road Width	40 LF
Approx ROW Take	38000 SF	0.87 Ac	Addl ROW Needed	20 LF

Low End

ROW Cost	\$	348,944
0 Structures	\$	-
Road Construction Cost	\$	1,529,309
Total Cost	\$	1,878,253

High End

ROW Cost	\$	436,180
0 Structures	\$	-
Road Construction Cost	\$	1,869,156
Total Cost	\$	2,305,336

Hawley Sidewalk/Bicycle Upgrades (NW-18)

Approx Road Length	1600 LF		Road/Sidewalk Width	10 LF
Approx ROW Take	16000 SF	0.37 Ac	Addl ROW Needed	10 LF

Low End

ROW Cost	\$	257,117
Road Construction Cost	\$	456,533
RR Xing Costs	\$	75,000
Total Cost	\$	788,649

High End

ROW Cost	\$	330,579
Road Construction Cost	\$	557,984
RR Xing Costs	\$	100,000
Total Cost	\$	988,563

No. Wenatchee Ave. Improvements
North Wenatchee Transportation Master Plan Elements

Widen Sidewalks S of Miller (NW-19)

Approx Road Length	500 LF		Road/Sidewalk Width	10 LF
Approx ROW Take	5000 SF	0.11 Ac	Addl ROW Needed	10 LF

Low End

ROW Cost	\$	80,349
Road Construction Cost	\$	142,666

Total Cost	\$	223,015
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High End

ROW Cost	\$	103,306
Road Construction Cost	\$	174,370

Total Cost	\$	277,676
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N Wenatchee Interim Ped/Bike Improvements (NW-20)

Total Cost	\$	300,000	Total Cost	\$	500,000
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McKittrick Signal (NW-21)

transit pullout included in u-turn widening

Approx Road Length	500 LF		Road/Sidewalk Width	12 LF
Approx ROW Take	7500 SF	0.17 Ac	Addl ROW Needed	15 LF
Transit Stops	2			

Low End

ROW Cost	\$	120,523
1 Structures	\$	300,000
Road Construction Cost	\$	162,717
Transit Shelter	\$	18,000
New Signal	\$	450,000

Total Cost	\$	1,051,241
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High End

ROW Cost	\$	154,959
1 Structures	\$	500,000
Road Construction Cost	\$	198,877
Transit Shelter	\$	22,000
New Signal	\$	550,000

Total Cost	\$	1,425,835
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Maple/Wen Ave Intersection modification (NW-22)

U turn widening included in transit pullout

Approx Road Length	400 LF		Road/Sidewalk Width	12 LF
Approx ROW Take	6000 SF	0.14 Ac	Addl ROW Needed	15 LF
Transit Stops	2			
Median	1500			

Low End

ROW Cost	\$	96,419
0 Structures	\$	-
Road Construction Cost	\$	130,174
Transit Pullouts	\$	18,000
New Signal	\$	450,000
Median	\$	675,000

Total Cost	\$	1,369,592
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High End

ROW Cost	\$	123,967
0 Structures	\$	-
Road Construction Cost	\$	159,101
Transit Pullouts	\$	22,000
New Signal	\$	550,000
Median	\$	825,000

Total Cost	\$	1,680,068
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No. Wenatchee Ave. Improvements
North Wenatchee Transportation Master Plan Elements

Miller Street & N Wen Ave I/S (NW-23)

Approx Road Length	100 LF		Road Width	60
Approx ROW Take	0 SF	0.00 Ac	Addl ROW Needed	0

Low End

ROW Cost	\$	-
0 Structures	\$	-
Road Construction Cost	\$	106,590
Intersection/Signal Mods	\$	90,000

Total Cost \$ **196,590**

High End

ROW Cost	\$	-
0 Structures	\$	-
Road Construction Cost	\$	130,277
Intersection/Signal Mods	\$	110,000

Total Cost \$ **240,277**

Hawley Street & N Wen Ave I/S (NW-24)

Approx Road Length	500 LF		Road Width	60
Approx ROW Take	7500 SF	0.17 Ac	Addl ROW Needed	15

Low End

ROW Cost	\$	120,523
1 Access/Parking issue	\$	50,000
Road Construction Cost	\$	532,950
Intersection/Signal Mods	\$	90,000

Total Cost \$ **793,473**

High End

ROW Cost	\$	154,959
1 Access/Parking issue	\$	100,000
Road Construction Cost	\$	651,383
Intersection/Signal Mods	\$	110,000

Total Cost \$ **1,016,342**

Miller/Wen Ave Signal System Interconnects (NW-25)

Assume 10 signals at \$25,000 each

Total Cost	\$	200,000	Total Cost	\$	300,000
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Bridge for Trail crossing (NW-26)

Low End

Bridge Length	650 LF	
Approx ROW Take	0 SF	0.00 Ac

ROW Cost	\$	-
Bridge Construction Cost	\$	6,581,250

Total Cost \$ **6,581,250**

High End

Bridge Width	12 LF	
Approx ROW Take	0 SF	

ROW Cost	\$	-
Bridge Construction Cost	\$	8,043,750

Total Cost \$ **8,043,750**

Miller Street Sidewalk Improvements (NW-27)

Approx Road Length	900 LF		Road/Sidewalk Width	10 LF
Approx ROW Take	9000 SF	0.21 Ac	Addl ROW Needed	10 LF

Low End

ROW Cost	\$	144,628
Road Construction Cost	\$	242,608

Total Cost \$ **387,236**

High End

ROW Cost	\$	185,950
Road Construction Cost	\$	296,520

Total Cost \$ **482,471**

No. Wenatchee Ave. Improvements
North Wenatchee Transportation Master Plan Elements

N Wen Ave Transit (NW-30)			
Total Cost	\$	50,000	Total Cost \$ 100,000
Grand Total			
Low End		High End	
Grand Total Cost	\$	71,726,503	Grand Total Cost \$ 90,720,508

Confluence Parkway**North Wenatchee Transportation Master Plan Elements**

Estimate Range	\$	66,274,844	-	\$	81,100,947	Mid	\$	73,687,896
						Range +/-		10%

Miller Street 5-lane to underpass (CP-1)

Approx Road Length	900 LF		Road Width	60 LF
Approx ROW Take	18000 SF	0.41 Ac	Addl ROW Needed	20 LF

Low End

ROW Cost	\$	165,289
5 Structures	\$	1,500,000
Road Construction Cost	\$	959,310
Total Cost	\$	2,624,599

High End

ROW Cost	\$	206,612
5 Structures	\$	1,600,000
Road Construction Cost	\$	1,172,489
Total Cost	\$	2,979,101

Miller Street Underpass/Walla Walla Cul-de-sac (CP-1)

Approx Road Length	200 LF		Road Width	34 LF
Approx U-xing Length	700 LF		U-xing Width	28 LF No Walk
Approx ROW Take	0 SF	0.00 Ac	Addl ROW Needed	0 LF

Low End

ROW Cost	\$	-
0 Structures	\$	-
Road Construction Cost	\$	145,320
Utility Relocation Costs	\$	4,000,000
Temporary RR and Coord	\$	1,000,000
U-xing Construction Cost	\$	17,640,000

High End

ROW Cost	\$	-
0 Structures	\$	-
Road Construction Cost	\$	177,613
Utility Relocation Costs	\$	5,000,000
Temporary RR and Coord	\$	1,300,000
U-xing Construction Cost	\$	21,560,000

Total Cost	\$	22,785,320
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Total Cost	\$	28,037,613
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Conf. Parkway S of river, Incl. trail relocation (CP-1)

Approx Road Length	5500 LF		Road Width	32 LF plus buffer
Approx Trail Length	5000 LF		Trail Width	10 LF
Approx ROW Take	375000 SF	8.61 Ac	ROW Width	50 LF For Road
New Signals	2 EA			20 LF For Trail

Low End

ROW Cost	\$	3,443,526
2 Structures	\$	600,000
Retaining Walls (1500')	\$	900,000
Relocate Trail	\$	652,500
Road Construction Cost	\$	3,928,186
New Signals	\$	900,000

High End

ROW Cost	\$	4,304,408
2 Structures	\$	700,000
Retaining Walls (1500')	\$	1,125,000
Relocate Trail	\$	797,500
Road Construction Cost	\$	4,801,116
New Signals	\$	1,100,000

Total Cost	\$	9,524,212
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Total Cost	\$	11,728,024
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Confluence Parkway**North Wenatchee Transportation Master Plan Elements****Railroad U/C before Wen. River Bridge (CP-1)**

Approx Length	30 LF		Road Width	34 LF
Approx ROW Take	0 SF	0.00 Ac	Addl ROW Needed	0 LF

Low End

ROW Cost	\$	-
0 Structures	\$	-
U-xing Cost (no sidewalk)	\$	918,000
Total Cost	\$	918,000

High End

ROW Cost	\$	-
0 Structures	\$	-
U-xing Cost (no sidewalk)	\$	1,122,000
Total Cost	\$	1,122,000

New Wen. River Bridge w/o sidewalk (CP-1)

Approx Length	600 LF		Road Width	34 LF
Approx ROW Take	0 SF	0.00 Ac	Addl ROW Needed	0 LF

Low End

ROW Cost	\$	-
0 Structures	\$	-
Bridge Cost (no sidewalk)	\$	17,212,500
Total Cost	\$	17,212,500

High End

ROW Cost	\$	-
0 Structures	\$	-
Bridge Cost (no sidewalk)	\$	21,037,500
Total Cost	\$	21,037,500

Conf. Parkway North of River (CP-1)**Low End**

Approx Length	3200 LF		
Approx ROW Take	160000 SF	3.67 Ac	
New Signals	2 EA		
ROW Cost	\$	1,469,238	
2 Structures	\$	1,000,000	
Road Construction Cost	\$	1,831,785	
New Signals	\$	900,000	
Total Cost	\$	4,301,023	

High End

Road Width	34 LF	No Walk
Addl ROW Needed	50 LF	
ROW Cost	\$	1,836,547
2 Structures	\$	1,200,000
Road Construction Cost	\$	2,238,848
New Signals	\$	1,100,000
Total Cost	\$	5,275,396

Euclid Ave. Improvements (CP-1)

Approx Length	2600 LF		Road Width	60
Approx ROW Take	52000 SF	1.19 Ac	Addl ROW Needed	20

Low End

ROW Cost	\$	835,629
0 Structures	\$	-
Road Construction Cost	\$	2,771,339
Total Cost	\$	3,606,968

High End

ROW Cost	\$	1,074,380
0 Structures	\$	-
Road Construction Cost	\$	3,387,192
Total Cost	\$	4,461,572

Confluence Parkway**North Wenatchee Transportation Master Plan Elements****Misc Road Imp. into Confluence Parkway (CP-1)**

Includes: 5 intersections at 100' per intersection

Approx Length	500 LF		Road Width	34
Approx ROW Take	5000 SF	0.11 Ac	Addl ROW Needed	10

Low End

ROW Cost	\$	80,349
0 Structures	\$	-
Road Construction Cost	\$	363,300

Total Cost	\$	443,649
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High End

ROW Cost	\$	103,306
0 Structures	\$	-
Road Construction Cost	\$	444,033

Total Cost	\$	547,339
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Environmental (CP-1)

Environmental	\$	6,000,000	Environmental	\$	7,000,000
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Total Cost	\$	6,000,000	Total Cost	\$	7,000,000
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Relocate Railroad (CP-1)

Approx Length	2000 LF		Railroad Width	12
Approx ROW Take	20000 SF	0.46 Ac	Addl ROW Needed	10

Low End

ROW Cost	\$	321,396
1 Structures	\$	500,000
Construction Cost	\$	540,000
RR Coord and Misc	\$	600,000

Total Cost	\$	1,961,396
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High End

ROW Cost	\$	413,223
1 Structures	\$	600,000
Construction Cost	\$	660,000
RR Coord and Misc	\$	700,000

Total Cost	\$	2,373,223
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Arterial from Walla Walla Ave to Miller/Hawley (CP-2)

Approx Length	1600 LF		Road Width	34 LF
Approx ROW Take	80000 SF	1.84 Ac	Addl ROW Needed	50 LF

Low End

ROW Cost	\$	734,619
4 Structures	\$	1,000,000
Road Construction Cost	\$	1,162,559

Total Cost	\$	2,897,178
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High End

ROW Cost	\$	918,274
4 Structures	\$	1,200,000
Road Construction Cost	\$	1,420,906

Total Cost	\$	3,539,179
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Transit Improvements (CP-3)**Low End**

Total Cost	\$	-
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High End

Total Cost	\$	-
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Grand Total**Low End**

Grand Total Cost	\$	66,274,844
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High End

Grand Total Cost	\$	81,100,947
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Range of Costs for North Wenatchee Transportation Master Plan Elements

US 2 Corridor

Element	Low-Range (Millions of 2010 dollars)	High-Range (Millions of 2010 dollars)
SR 2 Mainline realignment (S-1)	\$6.1	\$7.4
New Bridge over SR 2 for I/C (S-1)	\$7.6	\$9.3
Ramps for new I/C (S-1)	\$1.5	\$1.9
Easy St Bridge (S-1)	\$11.5	\$14.0
Remove Roads/Ramps (S-1)	\$0.3	\$0.4
Sunnyslope Circulation Improvements (S-1)	\$6.0	\$7.0
S-1 Subtotal	\$33.0	\$40.0
Modify 2 Off Ramps for Euclid I/C and add Signals (S-2)	\$1.6	\$1.9
Easy St Widening and Signal (S-3)	\$2.7	\$3.3
Local Circulation Improvements (S-4)	\$1.5	\$1.8
Complete Sidewalk/Bike Lanes in Olds Station (S-5)	\$1.2	\$1.4
Easy St Pedestrian Route (S-6)	\$1.3	\$1.6
Olds Station/Sunnyslope Transit Stops (S-7)	\$0.05	\$0.1
Easy Street Intersection/Signal Modification (S-8)	\$0.04	\$0.06
Total Cost Range	\$41.4	\$50.2

Confluence Parkway

Element	Low-Range (Millions of 2010 dollars)	High-Range (Millions of 2010 dollars)
Miller Street 5-lane to underpass (CP-1)	\$2.7	\$3.0
Miller Street Underpass/Walla Walla Cul-de-sac (CP-1)	\$22.8	\$28.1
Conf. Parkway S of river, Incl. trail relocation (CP-1)	\$9.6	\$11.8
Railroad U/C before Wen. River Bridge (CP-1)	\$1.0	\$1.2
New Wen. River Bridge w/o sidewalk (CP-1)	\$17.3	\$21.1
Conf. Parkway North of River (CP-1)	\$4.4	\$5.3
Euclid Ave. Improvements (CP-1)	\$3.7	\$4.5
Misc Road Imp. into Confluence Parkway (CP-1)	\$0.5	\$0.6
Environmental (CP-1)	\$6.0	\$7.0
Relocate Railroad (CP-1)	\$2.0	\$2.4
CP-1 Subtotal	\$70.0	\$85.0
Arterial from Walla Walla Ave to Miller/Hawley (CP-2)	\$2.9	\$3.6
Transit Improvements (CP-3)	\$0.0	\$0.0
Total Cost Range	\$72.9	\$88.6

Range of Costs for North Wenatchee Transportation Master Plan Elements

North Wenatchee Ave Improvements

Element	Low-Range (Millions of 2010 dollars)	High-Range (Millions of 2010 dollars)
N Wen Ave Misc Improvements (NW-1)	\$1.5	\$2.0
Hawley Underpass (NW-2)	\$17.0	\$20.0
Pedestrian Crossing - Miller to Town Toyota Center (NW-3)	\$10.0	\$12.0
North Wenatchee Transit Center (NW-4)	\$10.0	\$15.0
Ramp to Technology Center Dr (NW-5)	\$0.4	\$0.5
New Trail Section - Horse Lake to Walnut (NW-6)	\$2.4	\$3.0
Frontage Road - Horse Lake to 500' past Maiden (NW-7)	\$1.4	\$1.8
Maiden Lane & Wen Ave I/S (NW-8)	\$0.2	\$0.3
Hawley to Maple - Two-Way Frontage Road (NW-9)	\$2.3	\$2.9
Walnut - Western to Wenatchee Ave (NW-10)	\$3.2	\$3.9
McKittrick - Pine to Western (NW-11)	\$3.3	\$4.0
McKittrick - Pine to Wenatchee Ave (NW-12)	\$0.9	\$1.1
Pine - Walnut to McKittrick (NW-13)	\$1.3	\$1.6
Pine/Princeton Extension, McKittrick to Maple - (NW-14)	\$5.6	\$6.6
Princeton from Maple to Springwater (NW-15)	\$1.9	\$2.3
Hawley Sidewalk/Bicycle Upgrades (NW-18)	\$0.8	\$1.0
Widen Sidewalks S of Miller (NW-19)	\$0.2	\$0.3
N Wenatchee Interim Ped/Bike Improvements (NW-20)	\$0.3	\$0.5
McKittrick Signal (NW-21)	\$1.1	\$1.5
Maple/Wen Ave Intersection modification (NW-22)	\$1.4	\$1.7
Miller Street & N Wen Ave I/S (NW-23)	\$0.2	\$0.3
Hawley Street & N Wen Ave I/S (NW-24)	\$0.8	\$1.1
Miller/Wen Ave Signal System Interconnects (NW-25)	\$0.2	\$0.3
Bridge for Trail crossing (NW-26)	\$6.6	\$8.0
Miller Street Sidewalk Improvements (NW-27)	\$0.4	\$0.5
N Wen Ave Transit (NW-30)	\$0.05	\$0.1
Total Cost Range	\$73.5	\$92.3