

Project Case Studies

1. I-5 Everett, SR 526 to US 2 HOV

Widens I-5 to add HOV and auxiliary lanes

Project cost: **\$219.2M**

Approximately **24.4%** of the total project cost will be used for noise walls, detention facilities to control stormwater runoff, and wetlands replacement.

2. I-405 Kirkland, SR 520 to SR 522

Constructs 10.5 lane miles of additional capacity and interchange improvements

Project cost: **\$164M**

Approximately **21%** of the total project cost will be allocated for noise walls, detention facilities to control stormwater runoff, wetlands replacement and restoration, and fish barrier.

3. I-5 Tacoma HOV improvements

Widens I-5 to add HOV and auxiliary lanes

Project cost: **\$107.6M**

Approximately **6.9%** of the total project cost will be used for noise walls and detention facilities to control stormwater runoff.

4. SR 16 HOV improvements – Union Avenue to Jackson

Widens SR 16 to add HOV and auxiliary lanes

Project cost: **\$72.0M**

Approximately **13.1%** of the total project cost will be used for noise walls, detention facilities to control stormwater runoff, and wetlands replacement and restoration.

5. I-5 Tukwila – HOV Pierce to Tukwila Stage 4

Widens I-5 to provide NB and SB HOV lanes from Pierce County line to S. 320th Street

Project cost: **\$38.7M**

Approximately **7%** of the total project cost will be used for noise walls and detention facilities to control stormwater runoff.

6. SR 270 Pullman to Idaho State Line

Widens from two lanes to four lanes

Project cost: **\$29.9M**

Approximately **10%** of the total project cost will be used for stream enhancement and detention facilities to control stormwater runoff.

7. US 12 Walla Walla – Attalia Vicinity

Added two lanes to create a 3-mile, 4-lane highway

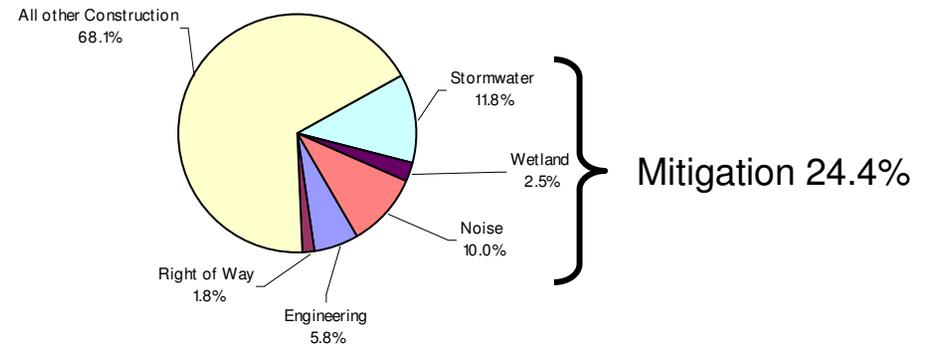
Project cost: **\$10.3M**

Approximately **1%** of the total project cost was used for facilities to control stormwater runoff.

How mitigation costs affect the cost per lane mile:



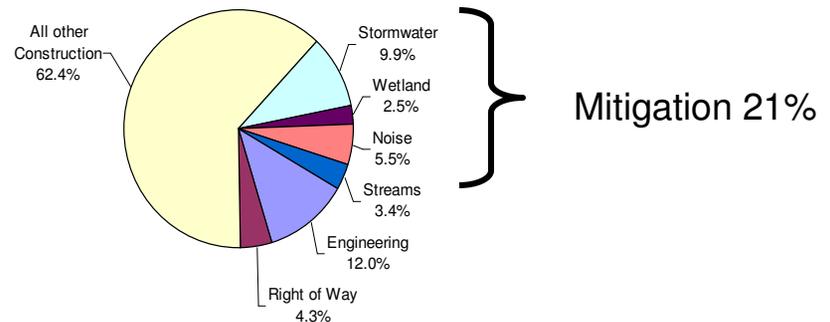
Congestion relief and HOV lanes are \$17.4M per lane mile.
 Total project cost is \$219.2M for 12.6 new lane miles.



I-5 Everett – HOV



Congestion relief is \$15.6M per lane mile.
 Total project cost is \$163.7M for 10.5 new lane miles.



I-405, SR 520 to SR 522

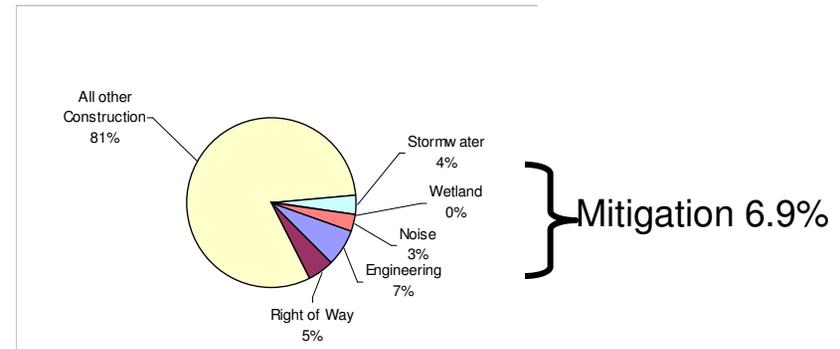
Note: Mitigation percentages include R/W, engineering, construction and applicable taxes

How mitigation costs affect the cost per lane mile:



Congestion relief and HOV lanes are \$14.5M per lane mile.

Total project cost is \$107.6M for 7.4 new lane miles.

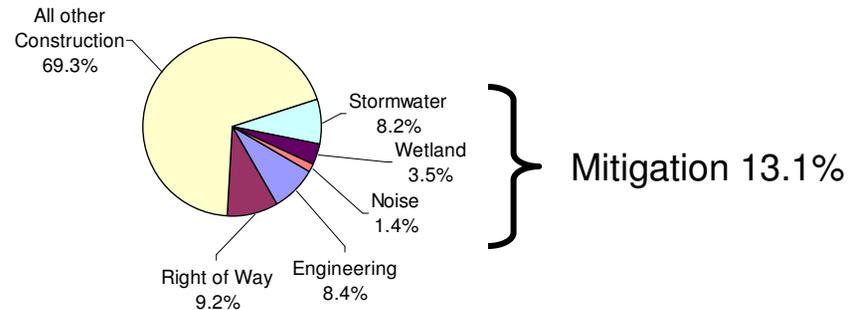


I-5 Tacoma HOV – South 48th St. to Pacific



Congestion relief and HOV lanes are \$3.1M per lane mile.

Total project cost is \$72.0M for 23 new lane miles.



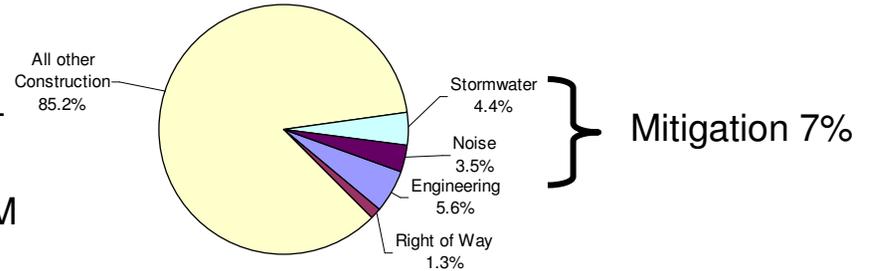
SR 16 HOV – Union to Jackson

Note: Mitigation percentages include R/W, engineering, construction and applicable taxes

How mitigation costs affect the cost per lane mile:



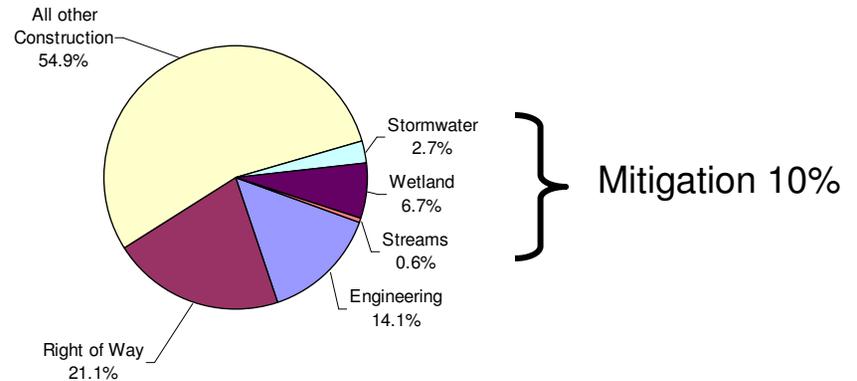
Add two new HOV lanes—
\$5.0M per lane mile.
Total project cost is \$38.7M
for 7.76 new lane miles.



I-5 Pierce Co. Line to Tukwila – HOV



Rural capacity improvement
\$1.5M per lane mile.
Total project cost is \$29.9M
for 20 lane miles.



SR 270 Pullman to Idaho State Line

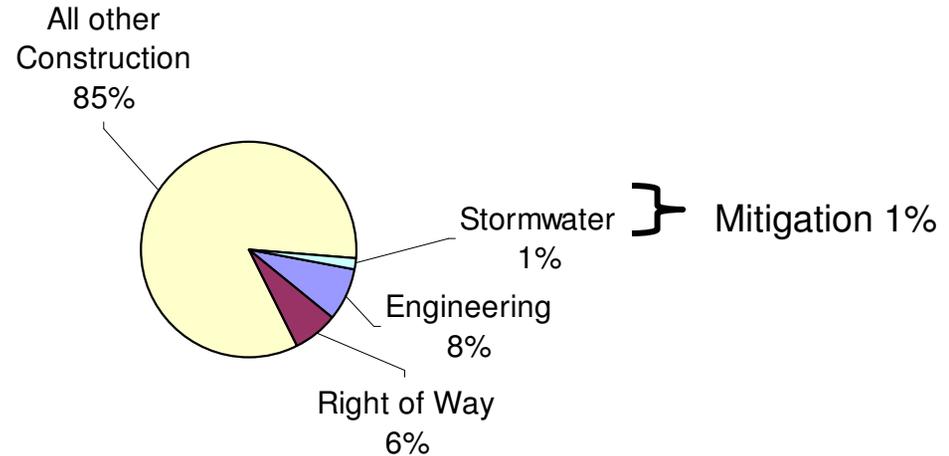
Note: Mitigation percentages include R/W, engineering, construction and applicable taxes

How mitigation costs affect the cost per lane mile:



Add two new lanes for 3.2 miles; \$2.4M per lane mile.

Total project cost is \$15.5M for 6.4 new lane miles.



US 12 – Attalia Vicinity

Note: Mitigation percentages include R/W, engineering, construction and applicable taxes

For these case studies, the cost per lane mile varied from \$1.5M per lane mile to \$17.4M per lane mile. This was mostly due to the complexities of the projects, not the mitigation items. The urban projects with complex structures and retaining walls have a much higher cost per lane mile than the rural widening projects.