# LOW VOLUME ROAD PROJECT REVIEW

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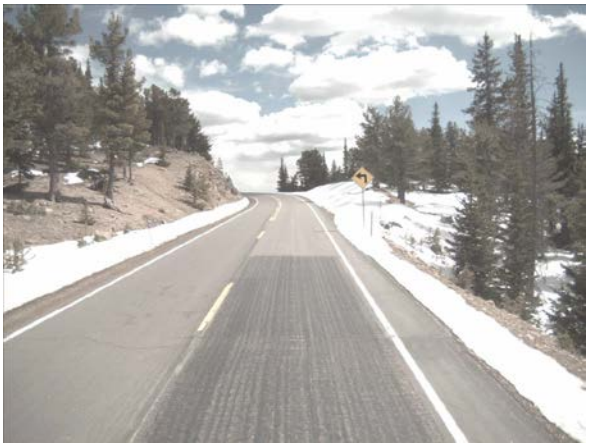
|---|---|
| Highway Name and Location | SH 103A, Milepost 13.3 to 18.0 |
| Treatment Used | 2” Mill and Fill |

2012

2013

2014



2015

2016

2017

# LOW VOLUME ROAD PROJECT REVIEW

2018

| Condition before treatment | See Below: |
|---|---|

| BMP | Emp | Year | Iri | Rut | Fatg | Tran | Long | Crbk | DL | DL_Idx | Cond |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 11.5 | 16.5 | 1983 | 86 | 99 | 98 | 78 | 97 | 0 | 0 | FATG | POOR |
| 16.5 | 21.5 | 1982 | 91 | 100 | 99 | 81 | 99 | 0 | 0 | FATG | POOR |

| Condition after treatment Yr 1 | See Below: |
|---|---|

| BMP | Emp | Year | Iri | Rut | Fatg | Tran | Long | Crbk | DL | DL_Idx | Cond |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.3 | 18.3 | 2013 | 100 | 100 | 100 | 100 | 100 | 0 | 18 | RUT | HIGH |

| Condition after treatment Yr 2 | See Below: |
|---|---|

| BMP | Emp | Year | Iri | Rut | Fatg | Tran | Long | Crbk | DL | DL_Idx | Cond |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.3 | 18.3 | 2013 | 84 | 100 | 100 | 96 | 100 | 0 | 7 | IRI | MODERATE |

| Condition after treatment Yr 3 | See Below: |
|---|---|

| BMP | Emp | Year | Iri | Rut | Fatg | Tran | Long | Crbk | DL | DL_Idx | Cond |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.3 | 18.3 | 2013 | 90 | 98 | 100 | 94 | 100 | 0 | 8 | IRI | MODERATE |

| Condition after treatment Yr 4 | See Below: |
|---|---|

| BMP | Emp | Year | Iri | Rut | Fatg | Tran | Long | Crbk | DL | DL_Idx | Cond |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.3 | 18.3 | 2013 | 90 | 100 | 100 | 90 | 100 | -1 | 10 | TRAN | MODERATE |

| Condition after treatment Yr 4 | See Below: |
|---|---|

| BMP | Emp | Year | Iri | Rut | Fatg | Tran | Long | Crbk | DL | DL_Idx | Cond |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.3 | 18.3 | 2013 | 90 | 100 | 100 | 84 | 100 | -1 | 6 | TRAN | MODERATE |

| Condition after treatment Yr 4 | See Below: |
|---|---|

| BMP | Emp | Year | Iri | Rut | Fatg | Tran | Long | Crbk | DL | DL_Idx | Cond |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.3 | 18.3 | 2013 | 90 | 100 | 100 | 78 | 100 | -1 | 5 | TRAN | MODERATE |

| Change in DL condition documented: | Average DL increase of ~18 years. |
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| Treatment | Quantity | Unit | Treatment Area (SY) | Unit Cost | Cost | Calculated Cost (SY) |
|---|---|---|---|---|---|---|
| Rem of Asphalt Mat (Planing) | 87,446 | SY | 87,446 | $2.50 | $218,615.00 | $2.50 |
| Hydrated Lime | 263 | Ton | 79,709 | $335.00 | $88,105.00 | $1.11 |
| CIR (4" depth) | 79,709 | SY | 79,709 | $5.75 | $458,326.75 | $5.75 |
| HMA (Gr SX) (75)(PG 58-28) (2") | 18,337 | Ton | 167,155 | $74.50 | $1,366,106.50 | $8.17 |
| Emulsified Asphalt (CSS-1) | 115,578 | Gal | 79,709 | $3.10 | $358,291.80 | $4.50 |
| Emulsified Asphalt (Slow Setting) | 8,288 | Gal | 167,155 | $2.00 | $16,576.00 | $0.10 |

| Takeaways | Transverse cracking occurring in spots, very high altitude and harsh weather conditions. After 4 years of perfomance regularly-spaced transverse cracks have occurred throughout the project. These moderate |
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| | severity transverse cracks are most likely caused by environmental freeze-thaw factors. This is the worst perfoming segment of 103A when compared to the segment before it and after. The high-elevation and extreme climate, compared to surrounding projects, may be contributing to the accelerated deterioration. This site is a prime candidate for a maintenance crack seal, which may add an additional 5 years of DL. |