

### **Preventive Maintenance Treatments For Local Federal-Aid Roads**

**PLEASE NOTE:** If possible, do not use these unit costs alone to estimate your project costs. These costs have not been updated prior to the 2022-27 TIP update solicitation and they may not apply to some projects which include exceptional, unusual, or innovative features, and they cannot substitute for good engineering judgment and expertise.

CDTC staff has used unit costs for road reconstruction projects that it developed in-house. These unit costs were based on actual costs of similar projects and were updated as needed. They were also tested by checking the final costs of projects for which cost estimates were made in years prior, using this method. The process used to estimate costs of reconstruction projects for local federal-aid roads has been successful.

However, there is now a reduced emphasis on new road reconstruction projects. Instead, candidates are more likely to be limited to treatments less extensive and less costly than reconstructions, such as resurfacing. For these treatments, for the first time, CDTC now has a small body of data upon which to draw to help shape costs estimates. But there is not yet enough information to produce cost estimates with the degree of reliability as it did for reconstructions.

For the last TIP update the New York State Department of Transportation (NYSDOT) provided its unit costs as shown below using pavement repair matrices for state roads. Therefore, based on the repairs for state roads, CDTC staff produced the same type of repair matrix for preventive maintenance repairs for local roads, using the information provided by NYSDOT Region One. When these matrices are compared to the small amount of data CDTC now has for local roads, they are somewhat consistent with recent actual costs for county roads, but not city streets. Therefore, the matrix can be used in that context, and is not intended to replace engineering judgment based on detailed knowledge of specific roads proposed for repair. Also, the below does not apply to Portland Cement (rigid) pavements, since the information available is insufficient to support such a matrix for this type of use. The first table (Treatment Code by Condition & AADT) only shows treatments where a federally-eligible preventive maintenance treatment is considered appropriate.

The costs in the second table (Preventive Maintenance Treatment Costs) are the costs supplied for these treatments by NYSDOT Region One for local federal-aid roads in November 2018. NYSDOT provided unit costs for construction only. CDTC staff added engineering (18%), inspection (12%) and inflation for one year (2%). They do not include any funds for right-of-way. The treatments do not include anything beyond pavement repair. So, any bicycle or pedestrian accommodations, for example, would be at an additional cost.

**Treatment Code by Condition & AADT (Annual Average Vehicles/Day)  
For Federally-Eligible Preventive Maintenance**

<b>Condition</b>	<b>&gt;20 K</b>	<b>8K to 20 K</b>	<b>&lt;8k</b>
7	4	3	2
6	4	4	3
5	NA	4	4
<=4	NA	NA	4

**Preventive Maintenance Treatment Costs by Code  
Costs are in Millions of Dollars  
Costs Include Inflation and All Phases Except ROW**

<b>Code</b>	<b>Treatment</b>	<b>Cost per lane-mile</b>
2	Thin Overlay	0.110
3	1 ½" Hot Mix Overlay	0.170
4	Mill & Fill	0.206 to 0.340