

## Field Metalizing of Structural Steel for Bridges

### PROJECT TITLE

Field Metalizing of Structural Steel for Bridges

### STUDY TIMELINE

Jan 2020 – Dec 2025

### INVESTIGATORS

N/A

### VTRANS CONTACTS

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More information about the VTrans Research Program, including additional Fact Sheets, can be found at:  
<http://vtrans.vermont.gov/planning/research>

### Problem Statement

Metalized coatings applied to steel structures provide a significant increase in the life cycle of the coating system as compared to painted steel. The vast majority of metalizing for structural steel is performed in the shop. This project is to determine the life cycle cost of metalizing a bridge in the field.



### Methodology

Plans were developed to contract a construction project to completely remove the existing paint coating and field metalize the structural steel. The metalized coating will be monitored during subsequent bi-annual bridge inspections to determine how well the metalized coating is performing.

### Next Steps

If the life cycle cost and performance of the metalized coating performs as expected, this type of coating application may become a more routine application for use in the bridge preservation program.

### Potential Impacts and VTrans Benefits

Field painting of structural steel is a significant cost to be performed at 25-30 year intervals. Metalizing has demonstrated a much longer life span thereby extending the interval needed to maintain a protective coating.