

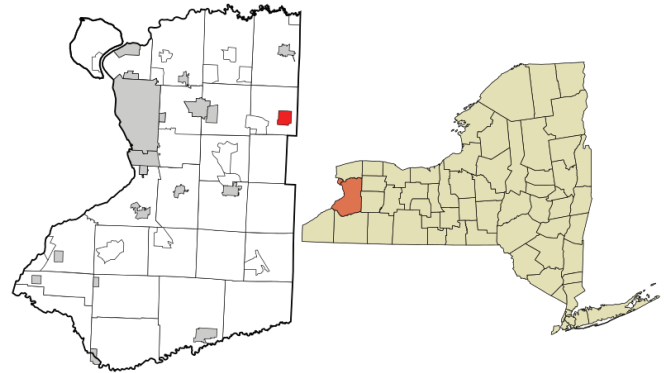
# ERIE COUNTY (NEW YORK) PREVENTATIVE MAINTENANCE BRIDGE BUNDLING PROGRAM

Erie County uses a series of bridge bundling contracts to address preventative maintenance issues on its bridges. The bridges are bundled primarily by work type. Location is also a consideration, but sometimes contracts are countywide. There are four types of bundled maintenance contracts: steel repair contracts, deck repair contracts, bridge washing contracts, and deck sealing contracts.

The contracts are assembled by the county bridge engineer. Erie County is reliant on assistance from Federal funds to pay for 80% of the cost to complete the work. The county submits a bridge preventative maintenance work plan to NYSDOT for consideration, which then makes a determination on funding. NYSDOT places an emphasis on awarding preventative maintenance contracts (dependent on available funding) and sometimes covers up to 15% of the local match.

The steel repair contracts cover repair work such as maintaining continuity of simple spans for joint elimination; replacing armored joints; repairing webs, flanges, and bearings; and painting bridges. These contracts include detailed plans by location. There is typically one contract awarded every other year at a value of around \$1 million. On average, the steel repair contract includes three to four bridges, depending on the type of work required. Erie County paints their bridges on a 12-year cycle.

The deck repair contracts address repair work, such as patching spalls and delaminated concrete, maintaining deck overlays, repairing and replacing joints, and replacing membranes and asphalt overlays. These contracts include detailed plans by location. There is typically one contract awarded every other year at a value of around \$1 million. These deck repair and steel repair contracts alternate years. On average, the deck repair contract includes three to four bridges,



New York State Department of Transportation Regions.

depending on the type of work required. Only critical work is performed.

The bridge washing and deck sealing contracts are true preventative maintenance contracts. The bridge washing contract is usually around \$250 thousand and is done every other year. All non-culvert bridges with spans over 20 ft (approximately 240 bridges) are washed. Deck sealing contracts are put out every year at an approximate value of \$200 thousand. Erie County has about 150 bridges over 20 ft in length with bare concrete decks. These decks are sealed on a 6-year cycle, so approximately 25 bridges are sealed every year. The locations and quantities for both the bridge washing and deck sealing contracts are determined in design. Plans are put together in a proposal format and awarded based on low bid.

In total, Erie County spends \$1 million–\$1.5 million per year on preventative bridge maintenance activities, which is 40% of their bridge budget on average. NYSDOT encourages the counties of New York State to spend Federal dollars on preventative maintenance, because it believes that it is of critical importance to preserve its existing assets.

**Name of Agency:** Erie County

**Location:** Erie County, NY

**Project Delivery Method:** Design–Bid–Build (D-B-B)

**Procurement Method:** Low Bid

**Total Project Cost:** \$1 million every other year (steel repair)  
\$1 million every other year (deck repair)  
\$250 thousand every other year (bridge washing)

\$200 thousand per year (deck sealing)

Current funding is \$1 million to \$1.5 million per year.

**Funding Source:** All contracts are 80% federally funded. The 20% match is provided by Erie County. Sometimes the New York State Department of Transportation (NYSDOT) covers 15% of the matching funds.

**Construction Schedule:** The maintenance contracts are assigned times based on the work.

**Project Website:** None

## SUMMARY

Program Goals	Goal for preventative maintenance contracts is to extend the service life of bridges by addressing small maintenance items early through bundling. Bundling by location and similar work type also saves money through economy of scale.
Bridge Selection Criteria	Bridges are selected for work by the Erie County bridge engineer. Work is generated from inspections and communication with bridge maintenance personnel.
Delivery and Procurement Method	Design-Bid-Build, Low Bid
Funding Sources, Financing Strategy	All contracts are 80% federally funded. The 20% match is provided by Erie County. Sometimes NYSDOT covers 15% of the matching funds.
Environmental, Right-of-Way, and Utility Considerations	Bridge maintenance work. No third party involvement.
Risks	The maintenance work is generally low risk.
Owner Management/Quality Assurance	Contracts are put together by the Erie County bridge engineer and submitted to NYSDOT for consideration. Construction inspection is performed by NYSDOT.
Stakeholder Communication	Communication is limited to notifications for road and lane closures to do the work.

