

2025 INNOVATION CHAMPIONS CONTEST

Truck Underwash

COUNTY: Bismarck Public Works
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PROBLEM STATEMENT:

The City of Bismarck has 15 to 18 trucks in use weekly. The trucks get dirty or caked with snow and ice. A traditional truck wash did not take care of the underside of the truck.

SOLUTION:

The City staff put together a unit to spray the underside of the trucks as they enter the wash bay. The unit sprays water from a sprayer on the floor that is covered with a drive over metal ramp. The unit was built in the shop with mostly materials on hand.

The truck underwash is portable and can be moved with a skid steer.

LABOR, EQUIPMENT, AND MATERIAL:

Equipment Used: *(to build innovation)*

- Shop equipment was used to build the innovation. Welder, cutter, etc.

Salvaged Materials: *(Example: 2 -9/16 x 3" bolts, 1 shaft 1-3/4" x 10")*

- Used hoses and sprayers left over in the shop

New material:

- Purchased metal for the ramp cover.

Total Labor Hours: *(No. of persons, number of hours for each)*

(Note: Consider time required for design and discussion)

- Labor was approximately 12 hours.

COST SUMMARY: *(approximate cost of each item purchased)*

- Labor, metal and other miscellaneous cost are between \$800 to \$1000.

Total Cost: \$800 to \$1000 plus labor

SAVINGS AND BENEFITS: *(to agency – monetary and/or safety related)*

The benefit to the Bismarck Public Works Department is the equipment is cleaned and unwanted materials are removed to prolong the life of the equipment. Employees do not have to go under the equipment to clean off dirt and ice making it much safer. The driver does not have to worry about someone in the way or under the truck.

ANNUAL OPERATING COSTS:

- Prior to using the innovation – N/A
- After using the innovation – N/A

DRAWING (SCHEMATIC) WITH DETAILS: (label material parts/components in detail):



