

# Pothole Cost Savings Calculator - Summary Page Usage of Perma-Patch can drive significant cost savings in municipal and DOT road repair.



|                               | Per SHF                        | RP Test*                       |  | Starting number of potholes: |                           |                         |                                      |  |  |  |  |  |  |
|-------------------------------|--------------------------------|--------------------------------|--|------------------------------|---------------------------|-------------------------|--------------------------------------|--|--|--|--|--|--|
| Repair<br>Method              | 18<br>Month<br>Failure<br>Rate | 4.5<br>Year<br>Failure<br>Rate | Total<br>Pothole<br>Repairs in<br>4.5 yrs. | Total<br>Material            | Total<br>Labor &<br>Truck | Total Cost<br>4.5 Years | Wasted Dollars<br>vs.<br>Perma-Patch |  |  |  |  |  |  |
| Perma-Patch                   | 18                             | 22                             | 14,886                                     | \$ 217,092                   | \$ 347,347                | \$ 564,440              |                                      |  |  |  |  |  |  |
| Bulk "Premium"<br>Cold Patch  | 26                             | 32                             | 16,548                                     | \$ 101,125                   | \$ 851,028                | \$ 952,153              | \$ 387,713                           |  |  |  |  |  |  |
| Bulk "Local"<br>Cold Patch    | 52                             | 65                             | 20,194                                     | \$ 103,940                   | \$ 1,038,553              | \$ 1,142,493            | \$ 578,053                           |  |  |  |  |  |  |
| Bagged Cold Patch<br>Products | 52                             | 65                             | 20,194                                     | \$ 336,568                   | \$ 514,031                | \$ 850,599              | \$ 286,159                           |  |  |  |  |  |  |
| Water Activated**             | 18                             | 22                             | 14,886                                     | \$ 792,648                   | \$ 416,817                | \$ 1,209,465            | \$ 645,026                           |  |  |  |  |  |  |

<sup>\*</sup> SHRP = Strategic Highway Research Project SHRP-H-358, National Research Council.

## MAKE INPUTS ON 2ND WORKSHEET

|                        | ,,,,,     |                         |         |        |  |  |  |
|------------------------|-----------|-------------------------|---------|--------|--|--|--|
|                        |           | ·                       | Lak     | or and |  |  |  |
|                        | Tota      | tal Truck   Truck \$ pe |         |        |  |  |  |
| Application Method     | pe        | r Day                   | Pothole |        |  |  |  |
| Bagged w/ Pickup Truck | \$        | 280                     | \$      | 23.33  |  |  |  |
| Bulk w/ Large Truck +  | \$        | 800                     | Ś       | 51.43  |  |  |  |
| Flaggers               | φ 600<br> |                         | ٦       | 31.43  |  |  |  |
| Water Activated w/     | \$ 280    |                         | Ś       | 28.00  |  |  |  |
| Pickup Truck           | ڔ         | 280                     | ب       | 23.00  |  |  |  |
| Bagged Cold Patch      | \$        | 280                     | Ś       | 25.45  |  |  |  |
| Product w/ Pickup      | ۶         | 200                     | Ą       | 25.45  |  |  |  |

### Additional Benefits of Using Perma-Patch:

- Simple application by light/solitary crew.
- Less repairs = less exposure to traffic and other hazards for your crews.
- · DELIVERED TO YOU.
- Keep on hand w/ 2 Year Shelf Life GUARANTEED AND DATE STAMPED.
- · Always ready to go for emergency or one-off repairs.
- Easy, Fast Application "Comes right out of the bag."
- Consistent high quality product always the same.
- Little to no preparation no edge cutting required.
  Displaces water: Can be dropped into water-filled potholes.

<sup>\*\*</sup> Performance set as equal to Perma Patch if not in SHRP test. User reported failure of water-activated materials has been higher than Perma-Patch.

# Pothole Cost Savings Calculator – Calculator Details Usage of Perma-Patch can drive significant cost savings in municipal and DOT road repair.



### **Perma-Patch Cost Savings Calculator**

This sheet can be used to calculate estimate cost savings.

It relies on external inputs, using test data for various materials.

Use for estimation purposes only. Perma-Patch makes no warranty or guaranty or actual cost savings.

| Starting number of p          | othol | es:       | 10000            |                          | Use | Inputs | 5               |    |                              |                             |                             |                              |                            |                            |   |  |                   |                        |                         |                          |    |
|-------------------------------|-------|-----------|------------------|--------------------------|-----|--------|-----------------|----|------------------------------|-----------------------------|-----------------------------|------------------------------|----------------------------|----------------------------|---|--|-------------------|------------------------|-------------------------|--------------------------|----|
|                               |       |           |                  |                          |     |        |                 |    |                              | Per SHF                     | RP Test*                    |                              |                            |                            |   |  |                   |                        |                         |                          |    |
| Repair<br>Method              | Uı    | nit Price | Per              | Percent<br>Useable<br>** | Co  | st/ton | Mater<br>Cost p | er | Labor<br>Cost Per<br>Pothole | 18 Month<br>Failure<br>Rate | 4.5 Year<br>Failure<br>Rate | Starting #<br>of<br>Potholes | Replace<br>at 18<br>Months | Replace<br>at 36<br>Months | Replace<br>at 54<br>Months<br>(4.5 yrs) | Total<br>Pothole<br>Repairs in<br>4.5 yrs. | Total<br>Material | Total<br>Labor & Truck | Total Cost 4.5<br>Years | Wasted<br>Dollars<br>vs. |    |
| Perma-Patch                   | \$    | 17.50     | 60 Lb.<br>Bag    | 100                      | \$  | 583    | \$ 14.          | 58 | \$ 23                        | 18                          | 22                          | 10000                        | 1800                       | 1476                       | 1610                                    | 14886                                      | \$ 217,092        | \$ 347,347             | \$ 564,440              | Perma-Pat                | cn |
| Bulk "Premium"<br>Cold Patch  | \$    | 220.00    | Ton              | 90                       | \$  | 244    | \$ 6.3          | 11 | \$ 51                        | 26                          | 32                          | 10000                        | 2600                       | 1924                       | 2024                                    | 16548                                      | \$ 101,125        | \$ 851,028             | \$ 952,153              | \$ 387,7                 | 13 |
| Bulk "Local" Cold<br>Patch    | \$    | 175.00    | Ton              | 85                       | \$  | 206    | \$ 5.:          | 15 | \$ 51                        | 52                          | 65                          | 10000                        | 5200                       | 2496                       | 2498                                    | 20194                                      | \$ 103,940        | \$ 1,038,553           | \$ 1,142,493            | \$ 578,0                 | 53 |
| Bagged Cold Patch<br>Products | \$    | 15.00     | 50 Lb.<br>Bag    | 90                       | \$  | 667    | \$ 16.0         | 57 | \$ 25                        | 52                          | 65                          | 10000                        | 5200                       | 2496                       | 2498                                    | 20194                                      | \$ 336,568        | \$ 514,031             | \$ 850,599              | \$ 286,1                 | 59 |
| Water Activated**             | \$    | 41.00     | 55 Lb.<br>Bucket | 70                       | \$  | 2,130  | \$ 53.2         | 25 | \$ 28                        | 18                          | 22                          | 10000                        | 1800                       | 1476                       | 1610                                    | 14886                                      | \$ 792,648        | \$ 416,817             | \$ 1,209,465            | \$ 645,0                 | 26 |

<sup>\*</sup> SHRP = Strategic Highway Research Project SHRP-H-358, National Research Council. Performance set as equal to Perma Patch if not in SHRP test.

<sup>\*\*\*</sup> Adjusts for typical wastage rate. Calculation for all products assumes 40 potholes per usable ton of material.

| Application Method                     | # Personnel | Hours | <br>abor | Potholes<br>per Day | Rat | Rate per La |    | Total<br>Labor per<br>Day |    | Total<br>Truck per<br>Day |    | oor and<br>ruck \$<br>per<br>othole |
|--|-------------|-------|----------|---------------------|-----|-------------|----|---------------------------|----|---------------------------|----|-------------------------------------|
| Bagged w/ Pickup<br>Truck              | 2           | 8     | \$<br>70 | 60                  | \$  | 35          | \$ | 1,120                     | \$ | 280                       | \$ | 23.33                               |
| Bulk w/ Large Truck<br>+ Flaggers      | 5           | 8     | \$<br>70 | 70                  | \$  | 100         | \$ | 2,800                     | \$ | 800                       | \$ | 51.43                               |
| Water Activated w/<br>Pickup Truck     | 2           | 8     | \$<br>70 | 50                  | \$  | 35          | \$ | 1,120                     | \$ | 280                       | \$ | 28.00                               |
| Bagged Cold Patch<br>Product w/ Pickup | 2           | 8     | \$<br>70 | 55                  | \$  | 35          | \$ | 1,120                     | \$ | 280                       | \$ | 25.45                               |

# **Additional Benefits of Using Perma-Patch:**

Simple application by light/solitary crew.

Less repairs = less exposure to traffic and other hazards for your crews.

DELIVERED TO YOU.

Keep on hand w/ 2 Year Shelf Life GUARANTEED AND DATE STAMPED.

Always ready to go for emergency or one-off repairs.

Easy, Fast Application - "Comes right out of the bag."

Consistent high quality product - always the same.

Little to no preparation - no edge cutting required.

Displaces water: Can be dropped into water-filled potholes.

Displaces water, can be dropped into water fined potrioles

Works in cold conditions down to 0° F (-18° C) and below

<sup>\*\*</sup> Performance set as equal to Perma Patch if not in SHRP test. User reported failure of water-activated materials has been higher than Perma-Patch.