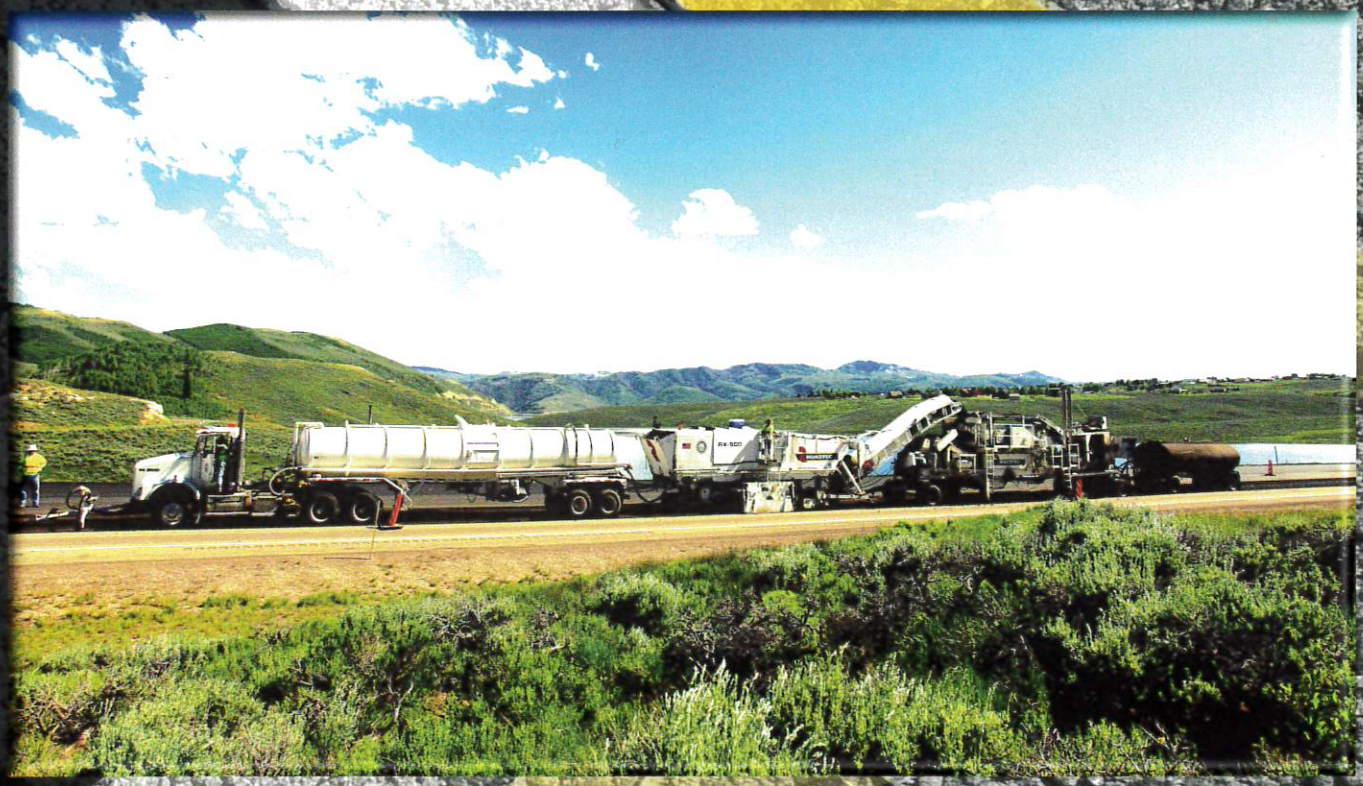
GENERAL ENGINEERING CONTRACTOR

OUGHLIN COMPANY

(435) 634-1266



Cold In-Place Recycling

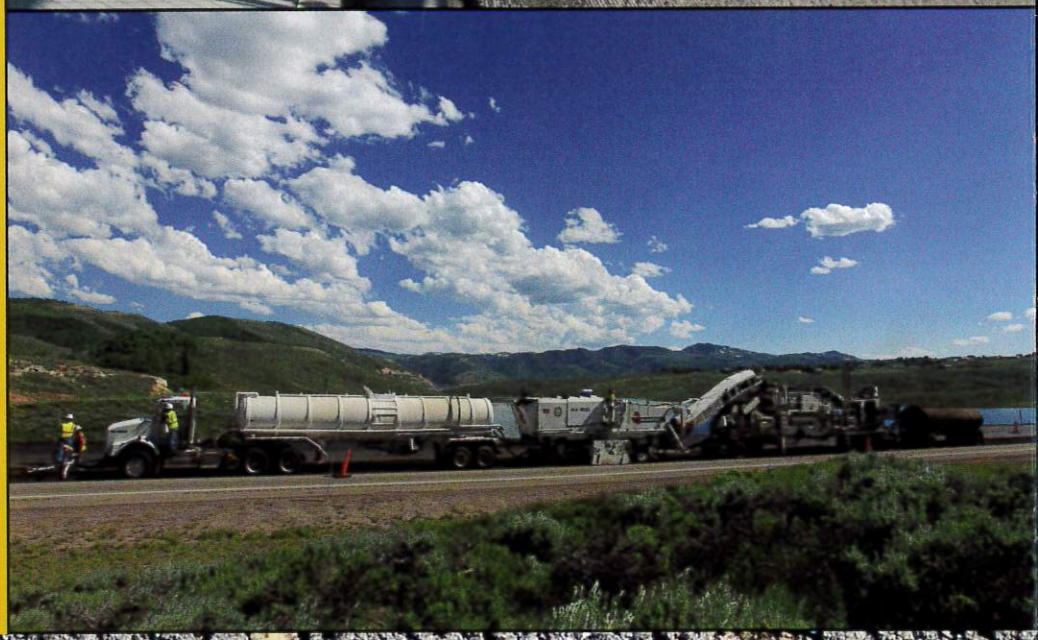
Pavement Preservation

435-634-1266 | coughlincompany.com

809 E. Commerce Dr. | St. George, UT. 84790

COLD IN-PLACE RECYCLING (CIR)

is a partial depth pavement preservation method of rehabilitating an existing asphalt pavement surface. All work is done in-place on the roadway using the existing asphalt assets. The existing asphalt surface material is cold milled to the specified depth, typically 2.5 to 5 inches, sized to the specified gradation, mixed with the specified asphalt stabilizing agents, and placed back on the roadway to the specified width, depth, profile, and cross-slope. CIR treatments are typically covered with a wearing course once cured.

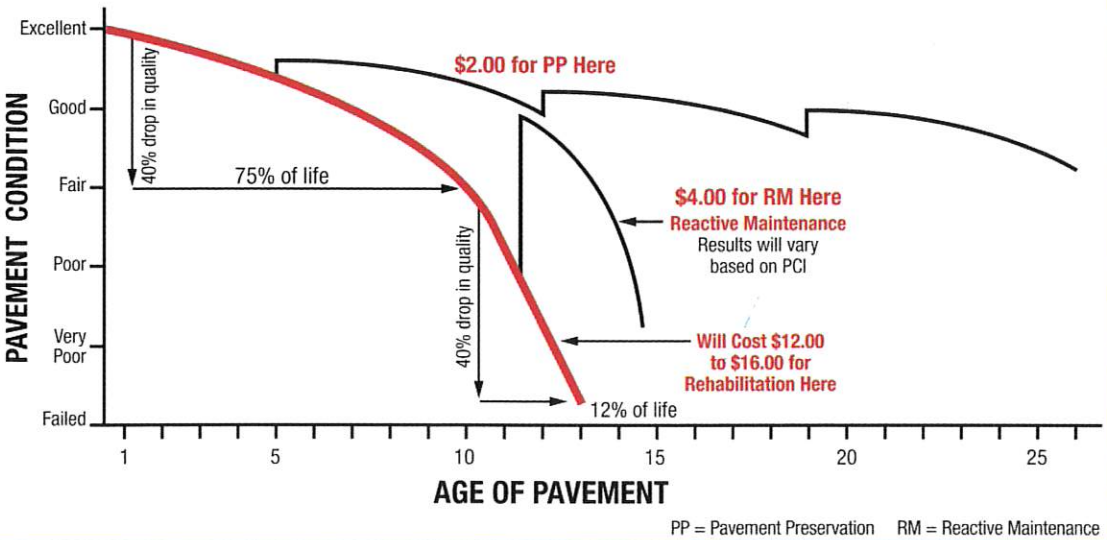


Will it work for you?

CIR will work for a variety of pavement distresses. We recommend using an engineered approach to determine if CIR is the right method for your project specific issues. CIR rejuvenates and reuses existing pavement assets to create a distress free, structurally sound pavement. Pavement distresses that are typically treated with CIR include:

- Raveling
- Potholes
- Bleeding
- Rutting
- Corrugation
- Shoving, Fatigue, Edge and Block Cracking
- Longitudinal and transverse thermal cracking
- Reflective cracking/cracking in deeper sections of asphalt
- Poor ride quality caused by swelling, bumps sags and depressions.

PAVEMENT CONDITION INDEX



PP = Pavement Preservation RM = Reactive Maintenance

As shown in this table timing is important. Letting your roads slip too far down the PCI curve before applying proper preservation treatments, such as CIR, will cost you more in the long run. Cold Recycling can extend the life of your pavement for a fraction of the cost of conventional rehabilitation methods.

An Engineered Approach

For a successful project we recommend completing an evaluation on your pavement. Typically a visual assessment of the pavement condition, coring for material samples, and laboratory testing will be sufficient to determine which additives, such as a bituminous rejuvenating agent, cement, or lime, and the amounts to be added to accomplish a structurally sound mix design. Other testing methods using a Falling Weight Deflectometer, Dynamic Cone Penetrometer (DCP), or Ground Penetrating Radar may be necessary to determine underlying base issues. Roads with unstable base or sub-grade issues may not be a good candidates for CIR and may require additional treatments to make the necessary repairs before the asphalt can be recycled.

What are the Benefits?

- **Cost Savings** is your biggest benefit. A cost savings of 35-45% is typically realized when using CIR over conventional paving methods.
- **Construction traffic** is minimized since there is no need to haul material to or from the jobsite. The cost savings do not take into account the reduced wear and tear on surrounding infrastructure due to reduced truck traffic.
- **Low Impact to Public**. The driving public is affected less due to quicker construction times and less truck traffic.
- **Conserves Energy** because fuel is not required to heat the asphalt material before it is placed on the project. New materials are typically not needed, and conserves non-renewable resources.
- **Proven Long Term performance.** CIR has a longer life cycle of 15-20 years with less maintenance, because the underlying distresses have been mitigated. Studies have shown that CIR Structural Layer Coefficients are comparable to new HMA asphalt.
- Special funds or grants may be available for use with CIR as a pavement preservation method.

FAQs

Q: What type of overlay is typically used?
A: HMA, Microsurface, Chipseal, Slurry Seal, Fog Seal, High Density Mineral Bond

Q: How long is the train and will it work for my project?
A: The train is approximately 300 feet in length. There are other options such as a single unit train or cold central plant recycling that will work for areas inaccessible to the multi unit train.

Q: Will CIR work in cul-de-sacs/residential settings?
A: Yes Cold Recycling will work in those areas in a Cold Central Plant setting or a single unit train. Contact us to get our opinion on what process will work best for your specific project.

Q: When can traffic be returned to the road
A: Typically traffic can be returned to the newly paved surface within 1-2 hours after compaction is complete.

Q: How much can be done in one day?
A: On a typical day of operations we are able to complete 2-2.5 lane miles of CIR in one day. Productions are dependent upon job specific conditions.

Q: What is a minimum job size that would be considered cost effective?
A: Minimum job quantities would depend highly on mobilization and mix specifications. Contact us with project specific needs and we would let you know if it is a feasible project.

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Coughlin Company also specializes in:

Cold Central Plant Recycling - Full Depth Reclamation
Soil Stabilization - Rotomilling/Cold Planing

To learn more about this and other pavement preservation methods check out our web site or call us today and find out which method is right for your project.

ABOUT US

Coughlin Company is a General Engineering Contractor licensed in the states of Arizona, California, Colorado, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, Oklahoma, Oregon, Texas, Utah, and Wyoming. We provide a commitment to excellence, decades of experience, and concern for our customers. Coughlin Company's professional reputation has been achieved by this long term dedication and perseverance.

Coughlin Company is qualified in many areas of construction and reclamation. We utilize the most up-to-date technology and equipment the industry has to offer. Our employees are the backbone of our company. Their expertise and years of dedication to a job well done provide a finished product unparalleled in the industry. We at Coughlin Company, pride ourselves in getting the job done right the first time, on time, on budget.

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