

North

®

Thousands Are Already "Zipping"



"It used to take 2 guys a full day to do what we do in less than 2 hours with the Zipper."

Mike Stenhouse
Street Superintendent
Renton, WA



"The 5-year muni program enabled us to buy an Asphalt Zipper. The Zipper is more productive than we thought, and the savings have far exceeded our annual payment. We couldn't be happier."

Melvin Lanier
Road & Bridge Supervisor
Custer County, ID



"You can't beat it. We are all in the same budget crunch, and the best bang for your dollar is through a machine like this. I haven't seen anything that will equal the Asphalt Zipper. I would recommend it 150%."

Virgil Hardy
Public Works Manager
Siskiyou County, CA



"The material coming out of our Asphalt Zipper is second to none. We also love being able to easily control material size with the adjustable baffle."

Patrick Zellner
Street Maintenance Manager
Renton, WA



"The Zipper has more than paid for itself. In fact, it paid for itself within the first year."

James Dubois
Superintendent
Walsh, CO (pop. 720)



"Budget is ever on my mind. I am constantly looking for things that will save us time and money, and this piece of equipment has saved us both. You can't get any better than that."

Pat Bell
Commissioner
Jackson County, GA



"It's great. The guys love it. It's real simple, easy to transport, and easy to use."

Marty DiAlexander
Street Supervisor
Ft. Lauderdale, FL



"We can do more in a day with the Zipper than we could do the old way with a backhoe in a week."

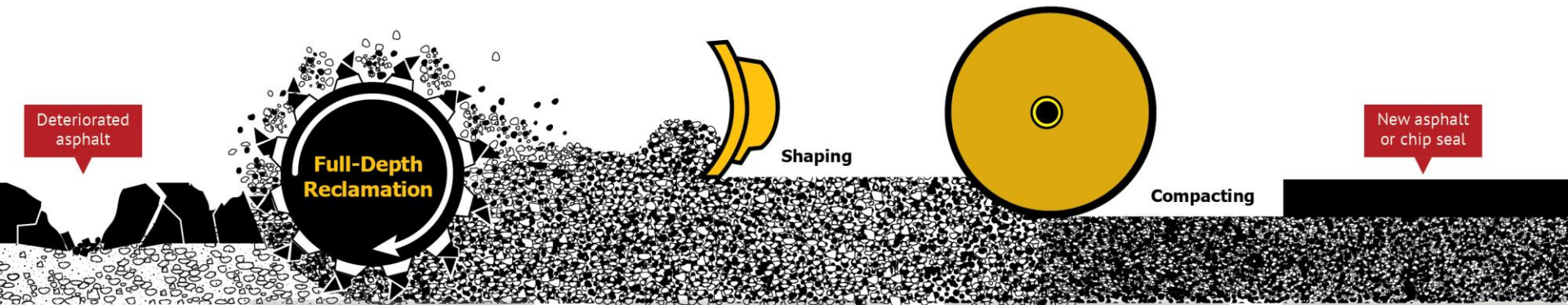
Jake Sones
Road Manager
Lamar County, MS



"Until you see one at work, you won't believe what this machine will do. It will grind a road as good as any big machine I have seen, and cost-wise you can't beat it. This is one of the best pieces of equipment we have bought."

Rodney Colvin
Road Foreman
Lincoln Parish, LA

Longer Lasting Road Repairs for Less Than Half the Cost!



Base problem

Uniform blend of pulverized asphalt and existing base

Compacted, stable base



"Compared to traditional asphalt road reconstruction methods, Full-Depth Reclamation has numerous engineering, economic, and environmental benefits."

Spencer Guthrie, Ph.D.
Professor of Pavement and Materials Engineering
Brigham Young University

Step 1



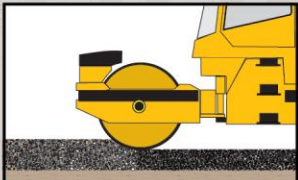
Full-Depth Reclamation

Step 2



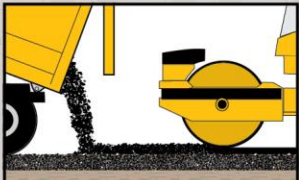
Shaping

Step 3



Compacting

Step 4



Paving

TURN C.R.A.P. (Cracked, Rutted, Alligatored Pavement) **INTO R.A.P.** (Recycled Asphalt Product)



*Asphalt Zipper reclaiming
badly alligatored asphalt*



Before "Zipping"

After



The **Greenest Way to Repair Roads**

- ▶ Recycles asphalt or chip seal into “spec comparable” base material
- ▶ Up to 100% material savings
- ▶ Requires less trucking and other heavy equipment, resulting in lower fuel usage and cleaner air

3 Proven Approaches to Full-Depth Reclamation (FDR)

Basic Stabilization

FDR with existing material



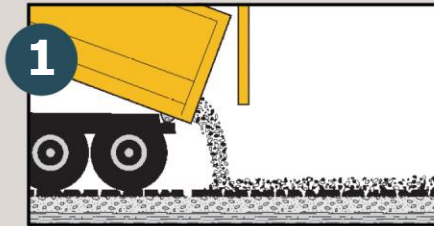
Pulverize old road surface and blend with base.

When Basic Stabilization Is Not Enough ...

then **Mechanical Stabilization** and/or **Chemical Stabilization** may be advisable.

Mechanical Stabilization

FDR with additional material



Spread gravel or additional base material on old road surface.



Pulverize old road surface and blend with base.

Chemical Stabilization

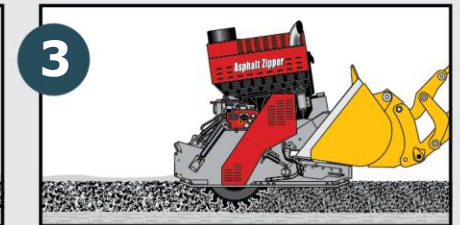
FDR with chemical additives



Pulverize old road surface and blend with base.



Spread additive over blended base.

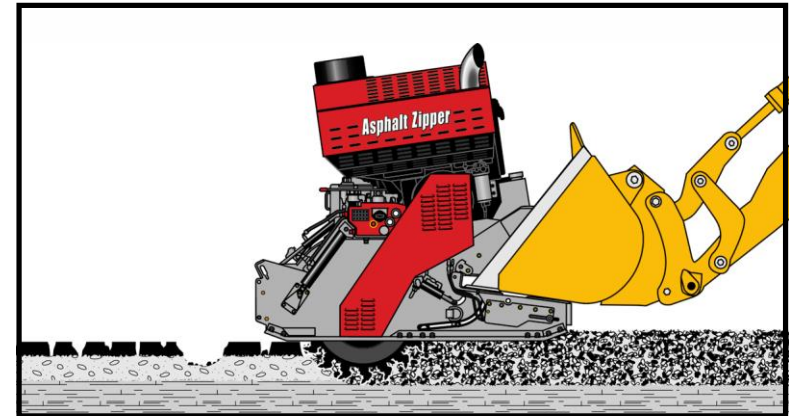


Blend additive into blended base.

1

Basic Stabilization

(Full-Depth Reclamation with Existing Material)



*Pulverize old road surface
and blend with base.*

When Basic Stabilization Is Not Enough

If the sum total of the existing road surface and base material above the native soil is insufficient to produce desired base composition and depth, then **Mechanical Stabilization** and/or **Chemical Stabilization** is recommended, depending on conditions.

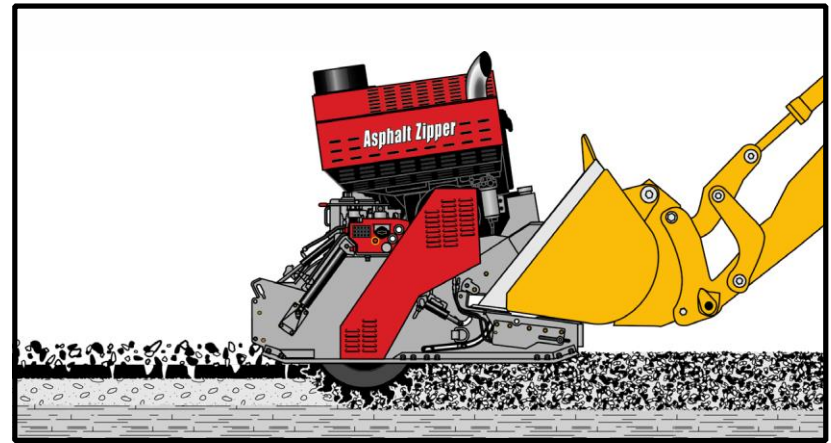
2

Mechanical Stabilization

(Full-Depth Reclamation with Additional Material)



Spread gravel or additional base material on old road surface.

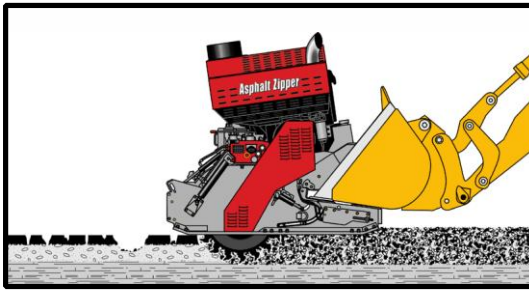


Pulverize old road surface and blend with base.

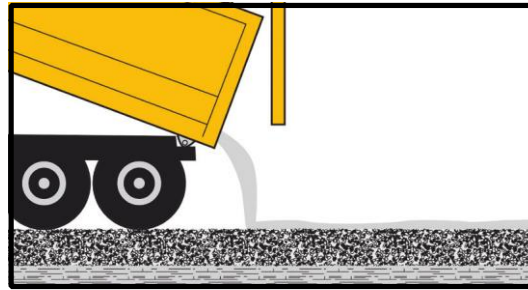
3

Chemical Stabilization

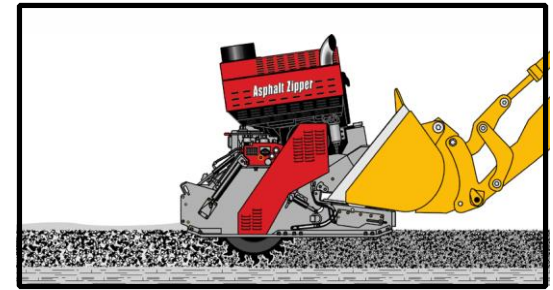
(Full-Depth Reclamation with Chemical Additives)



Pulverize old road surface and blend with base.



Spread additive over blended base.



Blend additive into blended base.



Cement Stabilization



"Our Asphalt Zippers have enabled us to cement-stabilize 503 miles of our roads over the past 12 years, because we can now do in a day what used to take 2 weeks."

Richie Beyer, P.E.

County Engineer and past President of NACE (National Association of County Engineers)
Elmore County, AL



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One Machine, Multiple Uses

Patches



Alleyways



Parking Lots



Blocks



Full Roads



Shoulders



Gravel Roads



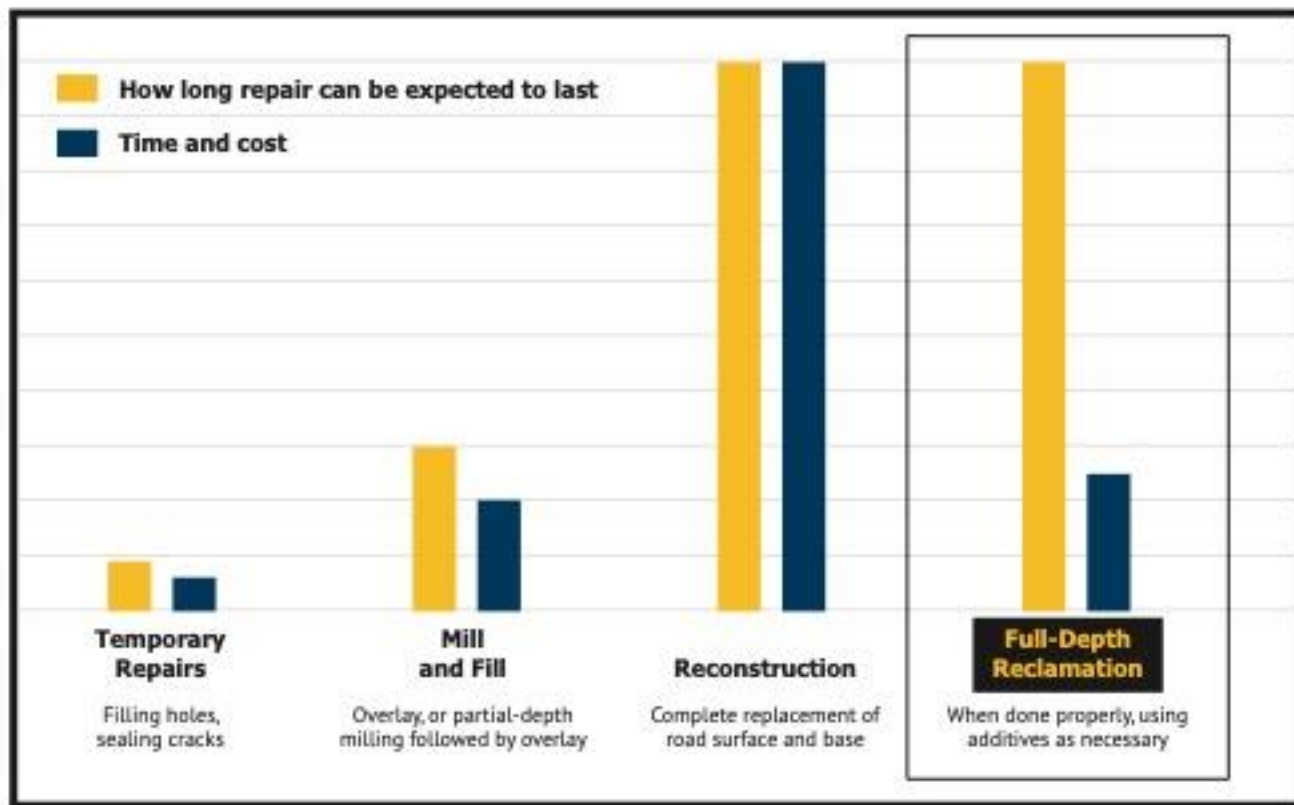
Surface Milling



Utility Trenching



Full-Depth Reclamation Compared to Other Repair Methods

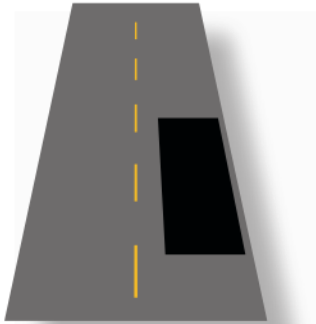


"For us FDR means more than Full-Depth Reclamation; it also means Finally Done Right."

Fred Nardini
Commissioner, San Patricio County, TX

Full-Depth Reclamation can give you virtually all the benefits of complete reconstruction for little more than you now spend on temporary repairs.

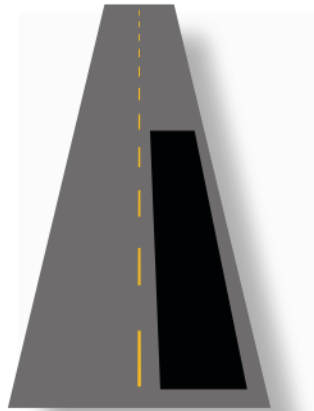
For All Sizes of Road Repairs



SMALL

(A few hundred square feet or less)

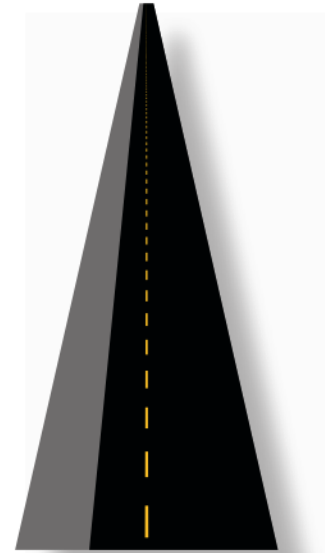
Do in **1 to 2 hours**
what used to
take **all day.**



MEDIUM

(Up to a city block)

Do in **a day**
what used to take
a week or two.



LARGE

(Up to a half mile or more)

Do in **a couple of days**
what used to
take **weeks.**

Zip up to 2 Miles per Day



Spec-comparable Material



Easy, Affordable, Very Durable



Summary

- ▶ **Do in a day what used to take a week or longer**
- ▶ **Enjoy cost and time savings of up to 70% or more**
- ▶ **Make repairs that last up to 3 to 5 times longer**