



2024 ISSA

Excellence in Pavement Preservation Award Nomination

Nomination

Nominating Member

Rick Patricelli (PE)
Ada County Highway District
Planning – Pavement Management

3775 Adam St.
Garden City, ID 83714
rpatricelli@achdidaho.org

Nominee

Ada County Highway District
Director Bruce Wong

3775 Adam St.
Garden City, ID 83714
(208) 387-6100



Why Recognize ACHD?

For nearly three decades the Ada County Highway District (ACHD) has Preserved Pavement by way of Crack Seal and Chip Seal. This has resulted in an excellent Pavement Condition Index (PCI) with most roadway segments in “Good” condition. In 2023, during chip seal operations, ACHD, by means of innovation and strategic alliances, was able to integrate Pavement Network Safety Enhancements for all users including vehicles, bicycles and pedestrians.



Getting to Know ACHD

- Responsible for all local roads, bridges, streets, and alleyways in Ada County
- Six Cities and unincorporated Ada County
- 511,000 Residents



Getting to Know ACHD

- Established in 1971
- Governed by a five member elected Commission
- Over \$4B in assets and 400+ full time ACHD team members



Getting to Know ACHD

- 5,355 lane miles
- 13,357 roadway intersections
- 2,854 miles of sidewalks
- 419 miles of bike lanes
- 4,362 cul-de-sacs
- 29,466 ped ramps
- 830 bridges



History

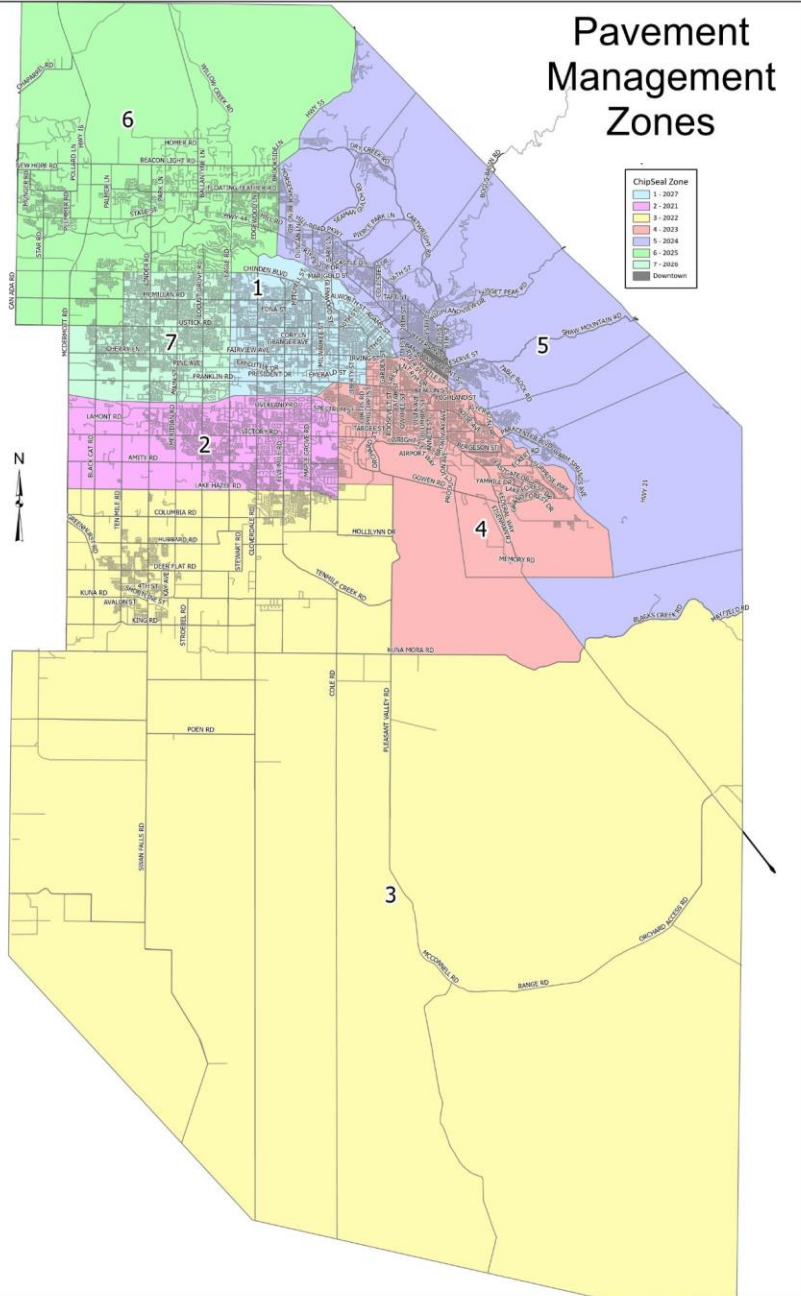
Every summer for nearly 30 years ACHD applies a crack seal and chip seal treatment to several hundred lane miles of Arterial, Collector and Residential Roadways. With a Pavement Network for over 5,300 lane miles, it became very important to apply this preservation treatment to keep ACHD's "Good Roads Good".

During this nearly three-decade timeframe, the Crack Seal and Chip Seal Programs have undergone changes to help streamline the process, become more efficient, and ensure a treatment is applied at the right time.

The chip seal operation is accomplished by using in-house Maintenance Teams and equipment. ACHD mines the rocks from its own Gravel Pits and uses a contractor to crush, separate and create chips. The Crack Seal program is accomplished by using a combination of in-house Maintenance Teams and contractors. This results in a cost-efficient chip seal program.



Pavement Management Zones

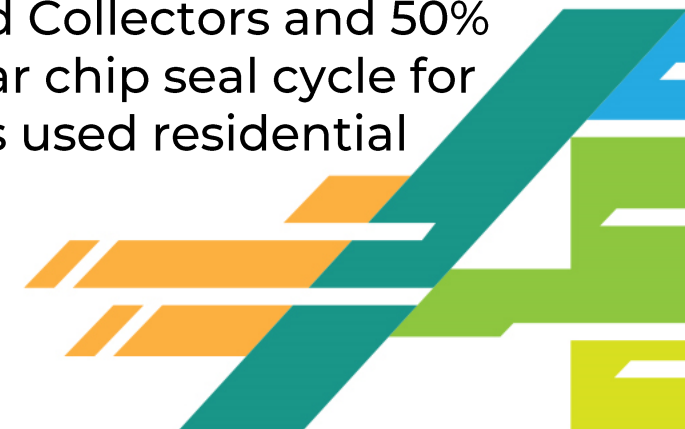


Program

ACHD's Chip Seal Pavement Preservation Program includes both planning and operations.

It all starts with the establishment of Pavement Management Zones (PMZ). Currently there are seven PMZ's. Each year, roadway segments in one PMZ are treated with chip seal. The planning starts the year before as all roadways in the PMZ are crack sealed and spot repairs are completed on areas of roadway failures.

In a typical year, all roadways in a PMZ are crack sealed and chip seal is applied to all the Arterials and Collectors and 50% of the Residentials. This results in a 7-year chip seal cycle for major roadways and 14-year cycle for less used residential roadways.



Process

Year prior to Chip seal

- ✓ Crack seal
- ✓ Spot repairs



Each roadway takes approximately
2-3 weeks from start to completion.

Year of Chip Seal

- ✓ Coordination with residents
- ✓ Street sweeping
- ✓ Remove pavement marking (if applicable)
- ✓ Apply oil/emulsion
- ✓ Apply chip (chip spreader)
- ✓ Roll (rubber tire)
- ✓ Street sweeping (residual chips and recycle)
- ✓ Fog seal
- ✓ Pavement markings



Innovation

In 2023, not only did ACHD have a successful chip seal operation, they incorporated safety enhancements for all users. Multiple ACHD departments worked together to incorporate these improvements. It was a team effort involving Maintenance, Traffic Operations, Communications, Traffic Engineering, Planning, Accessibility and Mobility, and Pavement Management.

Specific safety enhancements included:

- ✓ New and improved bike lanes
- ✓ Buffered bike lanes
- ✓ Speed mitigation treatments
- ✓ Sharrow pavement markings
- ✓ Interim intersection safety improvements
- ✓ ADA Improvements



Strategic Alliances

The following ACHD Departments coordinated together to include new improvements within the chipseal effort with great success:

- ✓ Traffic Control
- ✓ Traffic Operations
- ✓ Traffic Engineering
- ✓ Planning
- ✓ Pavement Management
- ✓ Accessibility and Mobility
- ✓ Communications
- ✓ ACHD Commission



Pavement Treatment Results

*Keeping
the “Good
Pavement
Good”*



*300-500
Lanes
miles of
chip seal
yearly*



*Seamless
Operation –
minimal
impact to
residents*



*Cost
Effective -
\$1.98 SQ
Yard*



Innovation Results

- ✓ 17 miles of new bike lanes
- ✓ Approximately seven miles of bike lane buffers
- ✓ Interim intersection safety improvements
- ✓ Speed mitigation treatments – reduced travel lane widths, lowering posted speed limits, alternating parking for “chicane” effect
- ✓ ADA improvements
- ✓ Marked crosswalks



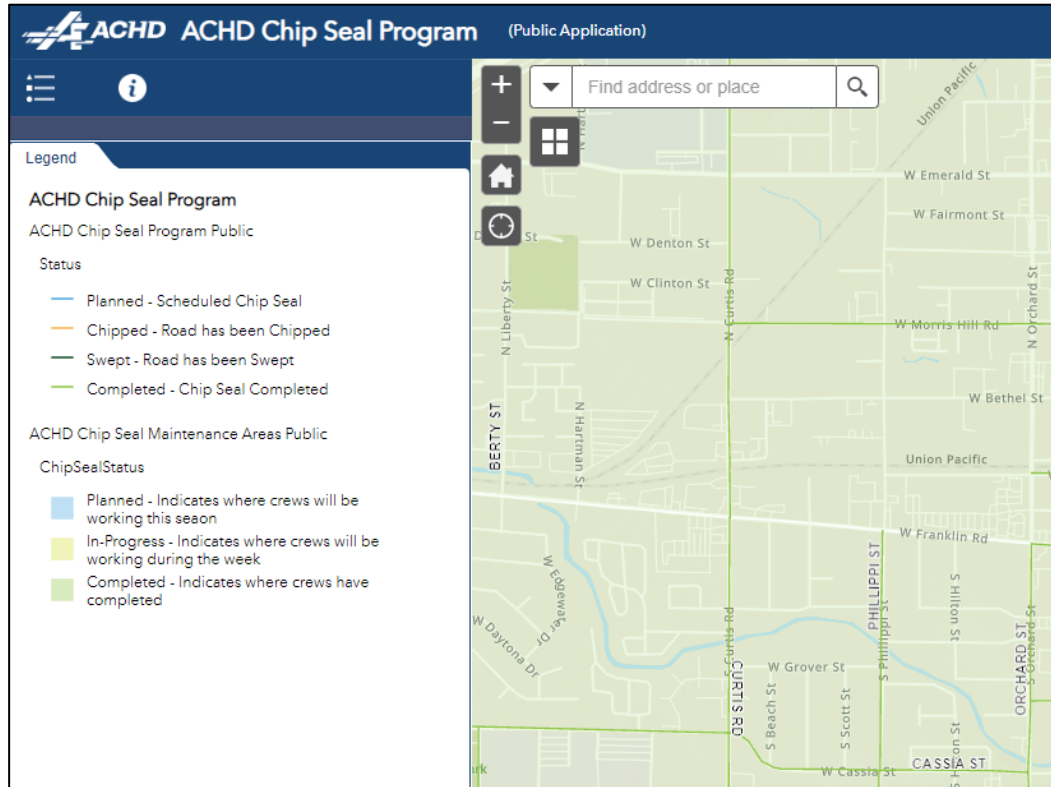
Results & Successes

Addition of buffered bike lanes



Results & Successes

Innovative public outreach



Public facing Interactive Map tracking progress

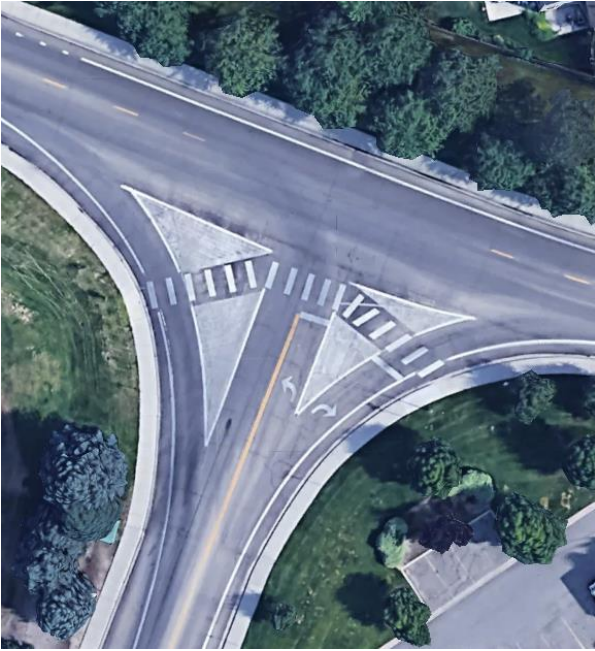


Video Detailing Process



Intersection Safety Improvements

Before



Results & Successes

After safety improvements



- ✓ Free running right turns removed
- ✓ Protected bike lanes
- ✓ Channelized pedestrian crossing
- ✓ Detectable warning surfaces



Results & Successes

Addition of bike lanes



Summary

It is with great pleasure that I nominate ACHD, for the 2024 ISSA Excellence in Pavement Preservation Award. ACHD's innovation and use of strategic alliances was game changing during the Chip Seal Pavement Preservation Operation. The advanced planning, coordination, and implementation during an extremely intense chip seal operation was stellar. The results will allow all users to safely navigate ACHD's pavement network, while strengthening elected official support for the program for years to come.

Thank You!