

The Adams County Public Works Department manages the Gravel Road Resurfacing Program for residents in eastern Adams County. The intent of this program is to fund safe and efficient gravel roads which have been identified as unstable and hazardous. The county is using a new approach to gravel roads, incorporating manufactured material and polymers to create a surface that provides a better driving experience, durability and less maintenance. We appreciate your patience, the county manages approximately 1,700 miles of gravel roads.

The primary Gravel Road Maintenance functions include:

- Routine Servicing (grading)
- Fugitive Dust Control
- Gravel Resurfacing Program
- Gravel Reclaiming Program

To report a road issue, please [click here](#).

Resurfacing Projects by Year

- [2021 Gravel Reconstruct & Surfacing Program List](#)
- [2020 Gravel Resurfacing](#)
- [2019 Gravel Road Rehab Program List](#)
- [Gravel Road Prioritization](#)
- [2018 Gravel Dust Control](#)
- [2018 Gravel Resurfacing](#)
- [2018 Gravel Re-Claiming](#)
- [2017 Gravel Resurfacing](#)

Gravel Road Rehabilitation Program

Gravel Maintenance and repair is a process of treating roads at the optimum time to maximize their useful life, thus enhancing gravel longevity at the lowest cost. If gravel maintenance and repair is deferred for extended periods of time, roads will rapidly deteriorate and ultimately escalate to failure. Experience shows that spending \$1 on gravel maintenance will save or delay spending \$6 to \$10 on future rehabilitation or reconstruction costs.



The majority of the gravel road network has rapidly worsened from deferred maintenance, weather and traffic impacts; requiring reconstruction.



Rate of failure is outpacing repairs, escalating complaints and road safety concerns.

CHALLENGES FOR ROAD MANAGERS

Typical Problems with Gravel Road Networks

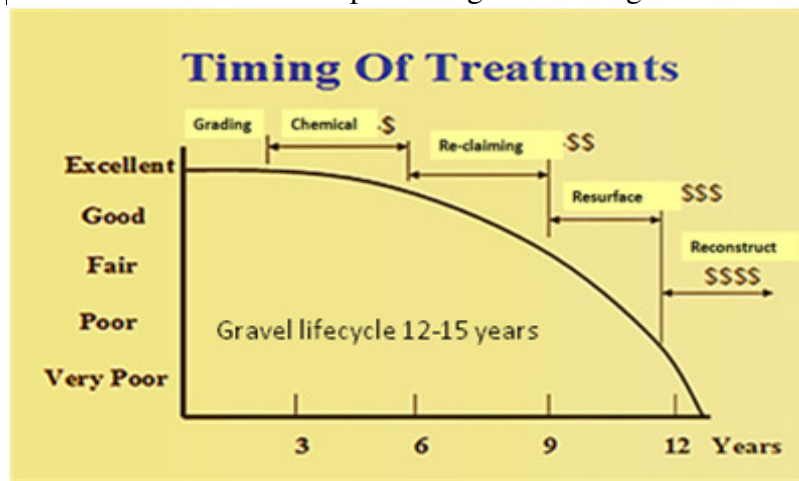
Citizen complaints and demands

Internal request and demands

Other responsibilities and priorities

The roadway traffic volume and type, resource availability and maintenance capability ultimately dictate how a gravel road is constructed and surfaced. Though gravel roads are typically less expensive to construct, and often less to maintain, the monitoring and maintenance service is more frequent.

When average daily traffic volumes (ADT) are within 300 cars per day, the lifespan of a gravel road is between 12 and 15 years. In order to sustain this lifespan anticipation, proper maintenance chemical treatments and replenishing of surface gravel must be provide



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Reconstruction

When necessary, replace/install drainage infrastructure to convey drainage and runoff. When necessary, widen or narrow road to meet minimum surfacing width of 24' with minimum 2' shoulder. Correct roadway alignment (vertical and horizontal). Strengthen known "soft spots."



Rebuild Sub-Base

When able, to reduce construction cost, blend existing materials by balancing the predominate negative material. This may include importing reduced volume of material and mixing it on-site to counter balance.



When necessary, re-establish proper road elevation for drainage and cross-section crown. Build hard stable sub-layer capable of supporting traffic loads and reduce susceptibility to adverse weather affects and wash-out erosion.



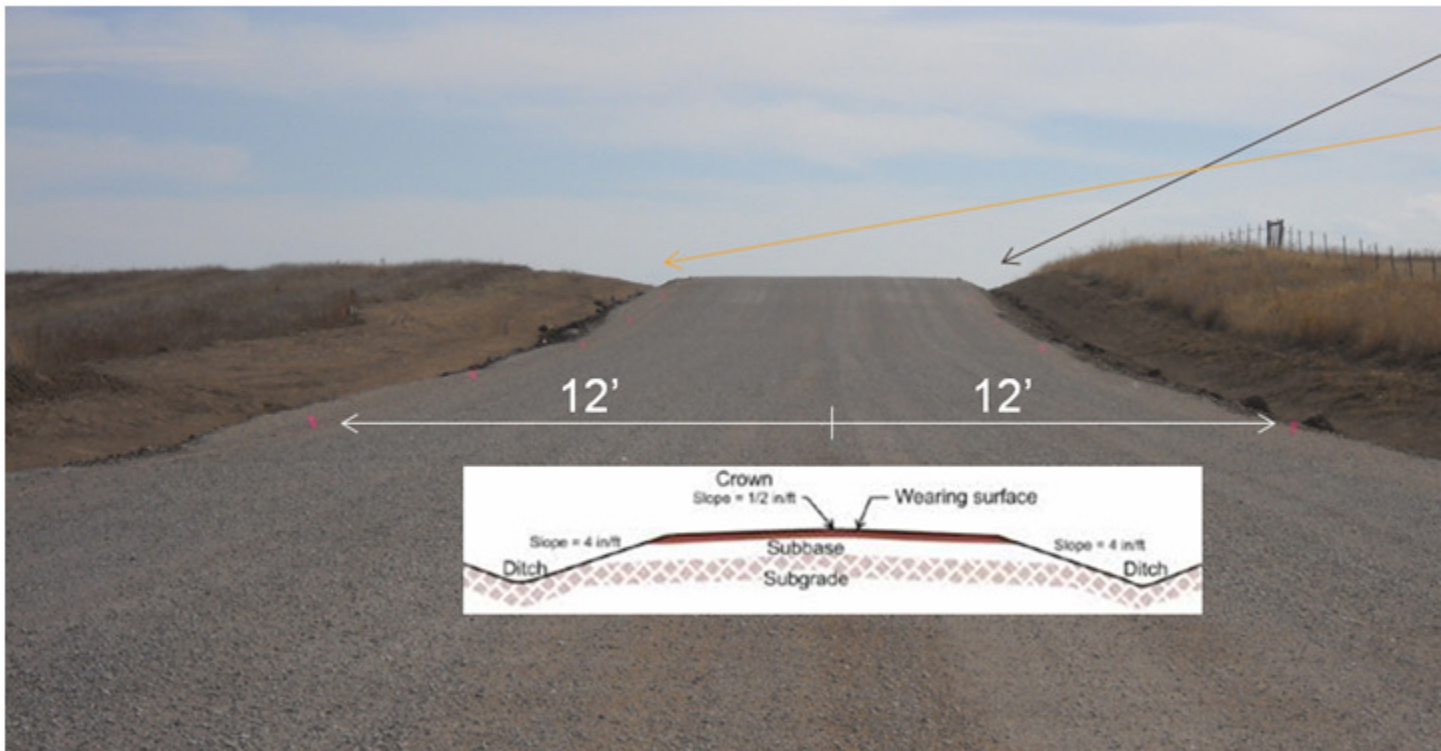
Install Base Coarse

When necessary, add base coarse for additional strength on high traffic/loaded roads. Provides a hard and smooth base layer for surface gravel placement. Base coarse allows grader operators to differentiate materials when service grading and prevent over cutting.



Roadway Alignment

Establish roadway schematics to preferred maintenance design standard. Pin (whisker) consistent road width, helping guide equipment operators in placing materials. Establish safe and proper ditch profiles. Establish drive surface and shoulder widths.



Transportation

Material hauling can be the largest obstacle; having too many or not enough trucks can make or break the project schedule. It is estimated that transporting materials to the project is 50-60 percent of the total project cost. Managing long-haul distances with truckload capacity is vital.



Gravel Surface Placement

Place surface gravel material, preferably using paver to ensure consistent thickness, crown slope, and lane width. Paver is more efficient and productive by eliminating the number of passes and haul truck wait time. Paver also reduces surface compaction prior to chemical application when used. Surface thickness is vital for continued maintenance grading.



Chemical Application

When necessary, chemical application is used to reduce vehicle-generated dust and to improve hardening (binding) of surface gravel. Depending on the chemical and gravel materials, application ranges between .25 gal - 1.75 gal f³.



Compaction

Because of long graveling distances, initial compaction is achieved using three loaded dump trucks, splitting (offsetting) their wheel tracks. This process expedites compaction efforts while moisture is present within the gravel.



Scratch Pass

A final scratch pass is done to smooth out compaction wheel ruts and relieve vapor build-up from chemical application trapped below the surface. Scratch pass is conducted 1-2 days after completion. Final compaction is done with steel drum and rubber tire rollers, sealing in chemical and aggregates.



Results

Gravel roads will always have distress and need service, specifically after heavy moisture. Weather impacts can be reduced when quality materials and construction practices are used. Drainage, road profile, good gravel and chemical stabilizing must be part of the process.



Our Vision: Adams County is the most innovative and inclusive county in America for all families and businesses.