

Dealing with Gravel Shortages Clay County, SD Experience

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Our Problem

- No suitable gravel available within our county.
- We will not use gravel that doesn't meet SD Gravel Surfacing specification.
- Nearest source outside our county makes approx 40 mile haul average (one-way).
- Fortunately, we do not have a lot of gravel roads.

Other Limitations

- Only own tandem end-dump trucks – not good for long hauls.
- We rent a trailer for our semi-tractor at times.
- Do not have time for a lot of hauling.
- Our gravel cost is running approx \$15 per ton in-place on the road.

How we try to solve the problem

- We do aggressive gravel recovery on our roads.
- Two methods:
 - A small tractor-mounted disk for shoulder work.
 - A wing-mounted disk on a motorgrader for recovering material from the in-slope.

Gravel Recovery

- We ran the tractor-mounted disk on both shoulders all gravel roads in 2010.
 - That recovers most gravel lost from snow plowing and whip-off from traffic.
- We do more aggressive gravel recovery projects working to the toe of the in-slope as time allows.
- We estimate recovery of 450 to 500 tons per mile!

How we do common shoulder recovery:





2010/04/19



2010/04/19



2010/04/19

How we do more aggressive recovery:

- One motorgrader with wing mounted disk mulching and processing material.
- Second motorgrader working and shaping material on the roadway.
- Use up to four rubber tired rollers.
- One water truck.
- Traffic control – signs only.





















This work is weather sensitive!



But end result has been very good



Finished project



All recovered material – no virgin gravel here.

