

Lessons Learned in Turning Paved Surface to Gravel – Kingsbury County Perspective

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Kingsbury County Road Inventory

- 352 miles total
- 158 miles with gravel surface
- 194 miles with asphalt surface
 - Mostly paved, some still blotter surfaced
- Cannot afford to maintain all of the asphalt

Decision making process:

- The planning process is challenging.
- Have convinced all five commissioners to go out to a road section in one situation.
- Budget falls far short of level needed to preserve 194 miles with asphalt surface.
- Turning some sections back to gravel, dig out weak sections, use geotextile fabric
- Observe for one to two years, if base is stable, plan to reblotter.
- If not, roads will remain gravel surfaced.

Maintenance decisions are particularly difficult right now due to impact of flooding.

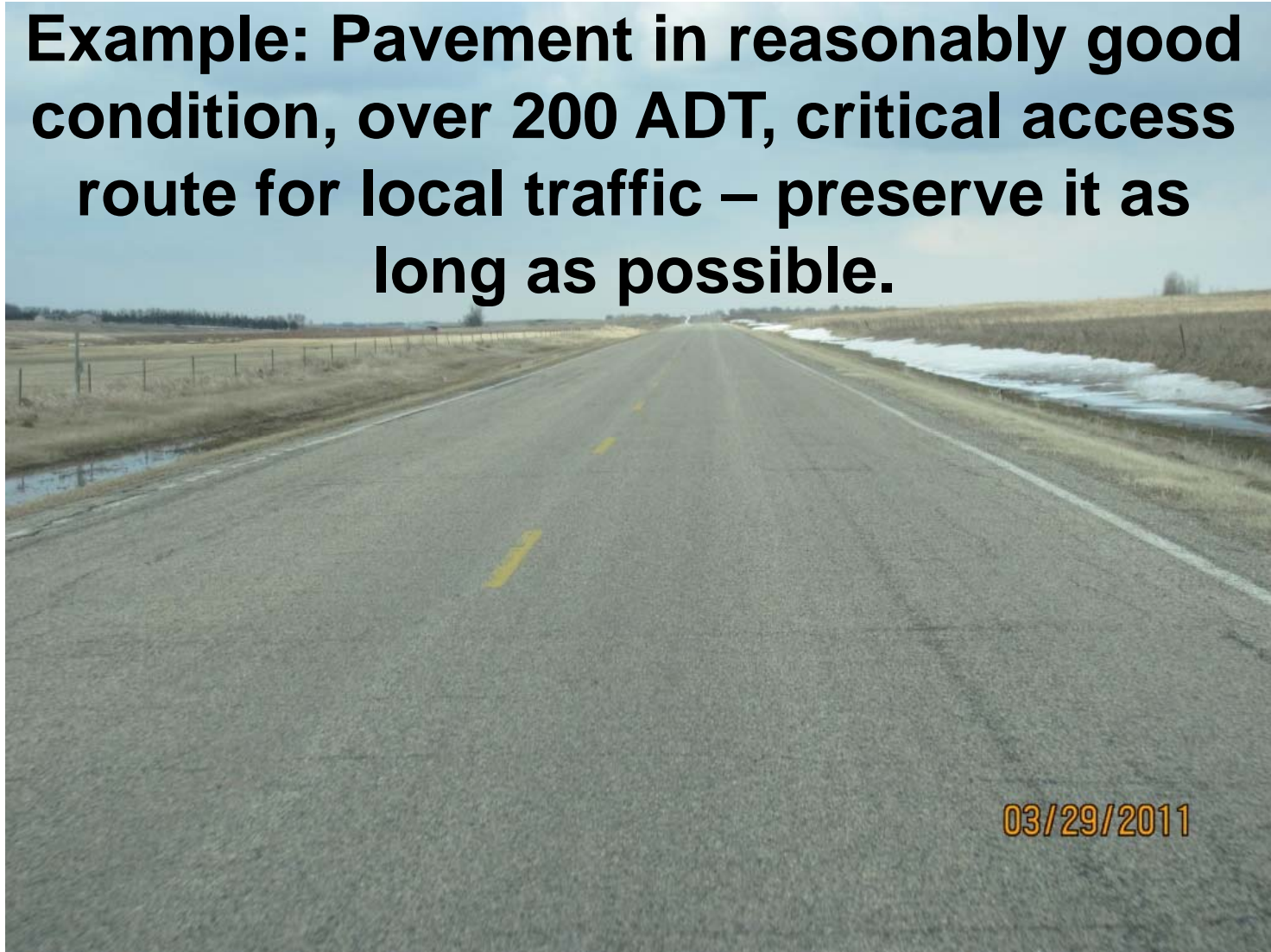






Decisions are not easy: Which roads to preserve, and which to revert to gravel.

Example: Pavement in reasonably good condition, over 200 ADT, critical access route for local traffic – preserve it as long as possible.



Some deterioration, but can be preserved.



Another road: Still in fair condition, will preserve as long as possible.



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Paver patching and seal coat maintenance as budget allows



Another Road: Close inspection shows this road is not as good as it looks



Distress is so severe and extensive, there is no way to maintain this surface



**Some roads simply cannot be
maintained as asphalt surfaces**



Reversion process:

- Hire recycling contractor to mill up existing surface and four \pm inches of base.
- Pick up and windrow all material.
- Relay in thin lifts.
- Close control of moisture and compaction.
- Add three inches (compacted depth) of virgin gravel as new surface.

The use of a vibratory pad-drum roller is important to us



**Gives
greater
density
and
stability –
especially
in areas
with thick
reclaimed
asphalt.**

Example of before/after condition on 2011 Project



Cost data on 2011 project:

- \$11,500 per mile which includes:
 - Recycling
 - Motorgrader
 - Water truck
 - Compaction
 - Labor

Surface gravel just now being applied and cost not yet available.

It's not free, but much cheaper than asphalt rehabilitation.

**Five years performance on one road
turned back to gravel – ADT is only 55**



Example of 10 years performance on another road:



**Some objection to dust, but appreciation
for smooth driving surface**



Overall reaction from public and elected officials:

- Initial negative reaction from citizens.
- Actually get some compliments later!
- Public accepts this over time and understand the funding shortfall.
- County Commission has become very supportive after seeing success.
- Commission has approved \$150,000 extra funding for this work next year.

Thanks for your attention