



County road agency maintenance practices

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Road maintenance service levels: Decision making to implementation

Step #1: Determine county road, bridge "service levels."
= "best practices" management + available resources

Major factors considered in setting service levels:

- Traffic safety.
- Safe, efficient local road system – our statutory mandate.
- Preventative maintenance to extend system life.
- Adequate equipment, materials, labor to deliver on service levels.





Road maintenance service levels: Decision making to implementation

Step #2: Commissioners, managers set levels including local gov't, community values.

Step #3: Managers include asset management, future plans in road maintenance decisions.

Step #4: Road agencies ensure funding + asset mgmt. → these service levels.

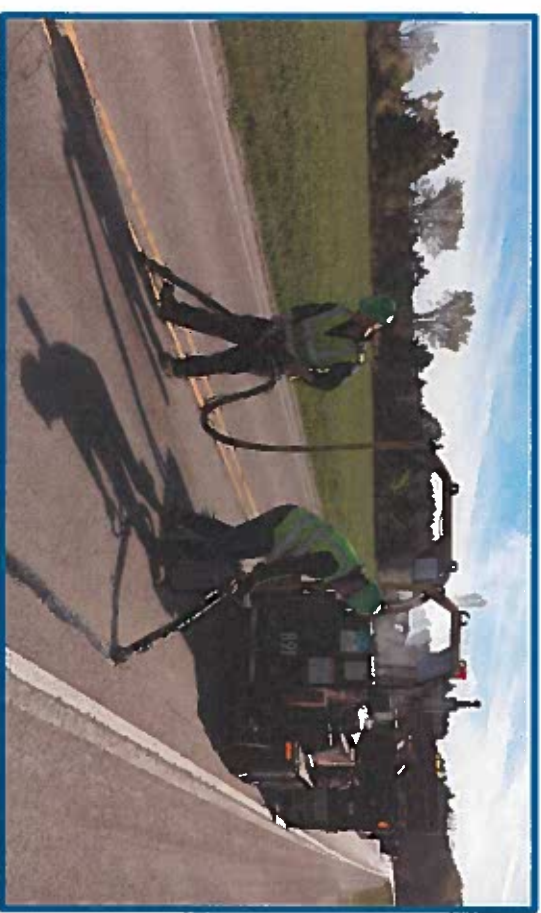




Road maintenance service levels: Decision making to implementation

County road agencies are experts at road maintenance!

- **8% overhead.**
 - **Contracted to maintain MDOT system** in 64 counties.
 - **Year-around staff for winter/summer maintenance.**
- Road maintenance is either...
- *Pro-active or ...*
 - *Reactive.*





Road maintenance service levels: Decision making to implementation

Proactive maintenance activities:

- Replacing signs per schedule.
- Repairing signal, bulbs.
- Grading gravel road.
- Mowing, sweeping.
- Patching potholes.
- Preventative resealing, marking roads.
- Ditch, manhole clean-outs – and more.

** On MDOT routes this is performed in concert with MDOT's regional Transportation Service Center (TSC), and is often mutually agreed upon.*

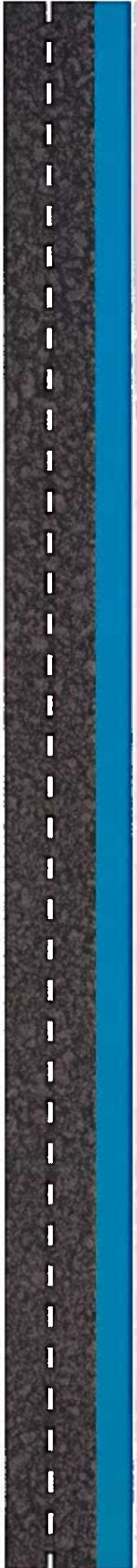


Road maintenance service levels: Decision making to **implementation**



Reactive maintenance activities:

- Plowing snow.
- Urgent pothole patching.
- Clearing fallen trees.
- Responding to flooding, natural disasters.
- Cleaning up after traffic crashes.
- Replacing signs on urgent basis, repairing signals.
- Unscheduled replacing guardrail, crash cushion damage.



Internal challenges to maintain county roads



Roads in rough shape is challenging start point.

NEW DATA: MI county federal-aid roads = **55% poor.**

NEW DATA: MI county federal-aid ineligible roads = **64% poor.**

Years of insufficient funds to move short-term fixes.

- Short-term fixes reduce \$\$ for optimal repairs.

Staff sizes down 40% from 15 years ago.

- Ramifications to service levels; pre-occupied with short-term fixes.

Too-small buildings create inefficiencies.

- e.g., Chippewa CRC removes front blades daily; trucks won't fit in garage.

Old equipment creates inefficiencies and "downtime."





External challenges to maintain county roads



Limited time, resources, materials in recent years.

- Force account ceiling of \$100,000.

New environmental regulations cause delays, higher costs.

- "Bankful width" can turn culvert to bridge.
- T&E species inc. mussels/bats/snakes alter schedules, increase testing.
- Asbestos testing on all bridge work.

Damage, demands of modern agriculture, logging.

Restrictions using federal funds.

- Local Federal Funds Exchange efficiencies; MDOT buy-out?

Increasing, unsupported demands on system.

- Nonmotorized, snowmobiles and ORVs. Private utilities.



County road **maintenance activity determinations**



Within its challenges, road agency management decides implementation strategy with board oversight.

Key decision-making factors include:

- "Best practices" for maintenance.
- Availability of resources.
- Coordination with traffic impact, utility work, adjacent roadwork, other local activity (*schools, community events, etc.*)

Implementation options include:

- In-house maintenance resources.
- Contracted resources.
- Combination.



Overview of road maintenance decision-makers in the county

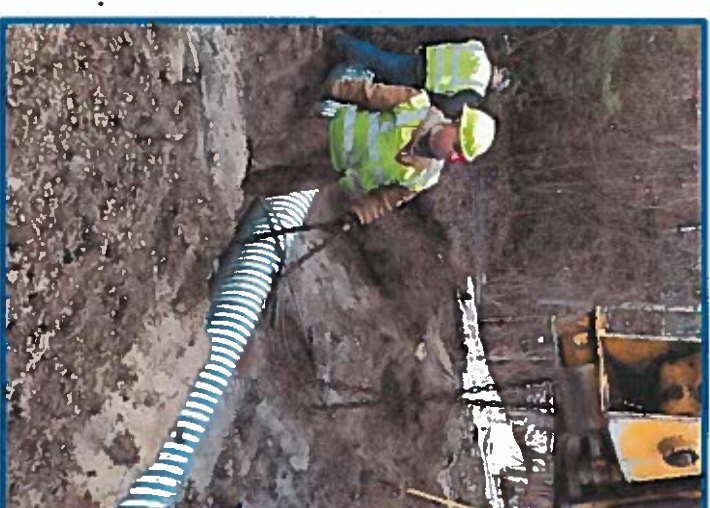


County road agencies decide best maintenance practices on roads under county jurisdiction. (*county primary, local*)

- Counties have 75% of all MI road miles...
- ... and 52% of all MI bridges.
- 64 counties maintain MDOT trunkline system. (*winter and summer*)
- 1 county will exit contract this October 1.

MDOT decides best maintenance practices on roads under MDOT jurisdiction. (8%)

- MDOT determines maintenance service levels.
- MDOT establishes maintenance budgets, communicated piecemeal.
- MDOT/CRA negotiate State Trunkline Maintenance Contract typically every 5 years.
- MDOT audits Contract counties. (separate from Act 51 audit)





County Road Association
OF MICHIGAN

Questions?

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