

Gravel Roads in Washington County:
“An analysis of the condition, engineering solutions, and policy
options for sustaining the gravel road system.”

Section III: Funding and Policy Options

Prepared for
Washington County Board of Supervisors

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Funding and Policy Options

Three issues are affecting the condition of the gravel road system in Washington County:

1. Increased costs coupled with stagnant revenues
2. Increased vehicle loads and vehicle counts
3. Increased citizen expectation

Although inflation and vehicle counts cannot be controlled, there are many ways that the Board of Supervisors can address the remaining issues. These options are summarized on the following pages. Some of the proposed recommendations include policies to address the increased weight and traffic counts while others address funding. The final recommendation deals with resident expectations. In all, thirteen options are presented for the Board of Supervisors to consider. No one policy change will rectify the challenges facing the gravel roads in Washington County. There is no magic bullet. It is a complex system that will take political fortitude, time, and additional resources to restore and maintain the condition of the gravel roads.

Implementation

The Secondary Roads Department has developed a sample three-year maintenance plan to work towards restoring the gravel roads to a sustainable condition. This plan follows the recommendations of the “Engineering Solutions” section of this report. Some work will be completed by the current maintenance staff and some will need to be contracted out. Based on the recommended implementation plan, the maintenance needs exceed the available resources by more than \$1,000,000 each year going forward. Recall that \$500,000 of this amount is directly attributed to the fact that costs have risen so dramatically over the past 5 years. This plan (made available separately) is summarized in the figure below.

	Additional Rock Surfacing	Maintenance Grading Needed	Available from Current Budget	Unfunded Total
Year 1	\$437,800	\$1,187,161	\$200,000	\$1,424,961
Year 2	\$312,950	\$1,508,574	\$250,000	\$1,571,524
Year 3	\$467,500	\$626,701	\$300,000	\$794,201

Figure 14: Three Year Sample Implementation

1. Vacate/Downgrade Road Classifications

Although there are not a significant number of roads that could be downgraded, this solution may be an important part of limiting the future cost exposure to Secondary Roads. Roads with little or no activity cost very little to maintain. However, when new farming operations, houses, or businesses are constructed on these roads, the maintenance requirements (and associated costs) rise dramatically. Although downgrading roads provides minimal immediate cost savings, it protects the county from these future needs.

Pros

- Reduces the future maintenance expenses of the county

Cons

- May affect residents near the downgraded roads
- Takes political fortitude and follow-through
- Would work best if coupled with a construction ban on dirt roads

Cost

- Minimal costs include certified mailing and public notices

2. Embargo Roads

One way to address the heavy truck loads on the gravel roads is to implement targeted or blanket embargoes during all or certain times of the year. Roadway embargoes restrict the weight of vehicles traveling on roadways in order to prevent damage. Under Iowa Code, roads can be generally embargoed for two reasons: weather and construction. Washington County has used embargoes sparingly over the past decade; however, they may be necessary during future spring periods.

Pros

- No cost on part of the County
- Can target most damaging loads during most vulnerable times

Cons

- May be viewed as a “hardship” for some farmers
- Cannot restrict many farming operations and implements of husbandry
- Limited to 90 days per calendar year (unless construction related)
- Must post signs at each road
- Generates significant increase in office and phone traffic to secondary roads

Cost

- Staff time to coordinate permitting process
- Staff time for selected enforcement
- May be possible to raise funds by charging a non-trivial amount for permits

3. Create Designated Truck Routes

It may be possible to focus additional resources on certain arterial gravel roadways in the county and embargo the rest. The roadways selected for this would most likely be comprised of the farm-to-market roads. The roads parallel to the selected routes would be weight embargoed. This would constrain the heavy truck traffic to designated routes and reduce system wide damage done by heavy truck traffic.

Pros

- Allows resources to be concentrated where needed
- County-wide network of roads already set up for this type of function

Cons

- People living along designated routes may be unhappy about additional truck traffic
- Difficult to enforce
- May require large numbers of permits
- Cannot entirely eliminate trucks from non-arterial roadways since farming operations exist on nearly all roadways

Cost

- Includes signage and public announcements
- Staff time for permitting

4. Prevent Building on Dirt Roads

Currently, there are no building restrictions on dirt roadways. Anyone can build a home, business, or expanded farming operation on a dirt road. Although there is a process by which a landowner can upgrade a dirt road to a gravel road, the vast majority of landowners that choose to build on a dirt road do not go through that process. Drawn to parcels of land because of their relative seclusion, sometimes picturesque quality, or simply the reduced price of land, more and more landowners are building on dirt roads. Over the past decade, there have been more than a dozen homes, numerous confinement facilities, and even a subdivision built on dirt roadways. In every case difficulties have arisen after the structures have been completed. These difficulties inevitably become service complaints directed at the Secondary Roads Department.

Pros

- No cost outlay to the county
- Stops development in places that are not suitable

Cons

- Places additional restrictions on agricultural property

Cost

- Does not create additional expense for the county or produce additional revenue.

5. Enact County Zoning

The revenue generated by new houses built on gravel roads does not offset the additional maintenance needs the same houses generate. As such, every new house built on a gravel road increases the gap between current resources and needs. *This document was not prepared in an effort to advocate for zoning.* However, from a fiscal standpoint, **the service needs of new rural houses outweigh the increase in tax revenue they generate.** Zoning is a complicated issue with many political and social facets. From a gravel road perspective, zoning would help to control the rising traffic volumes (and maintenance costs) generated by new rural houses.

Pros

- Would immediately address rising traffic levels
- Would help to curtail expectations of city residents moving to the countryside.

Cons

- Politically divisive issue
- Does not address heavy vehicle traffic
- Will not address confinement facilities

Cost

- Would require additional staffing to oversee and enforce a zoning ordinance (estimated to be \$60,000 per year)

6. Increase the Maximum Levy Available to Secondary Roads

The amount of money raised through local property taxes is controlled by a levy rate that has been the same for decades. Of the 99 counties in Iowa, more than half of them are at that the maximum rate. In the remaining counties, there are typically large revenue generating sources (large shopping centers, casinos, and large industries) to lower the need for local property tax.

Pros

- Would allow additional discretion at the local level about how to allocate local funds
- Could raise a substantial amount of money for roads
- Can direct the money exactly where it is needed
- Provides a longer term source of funding

Cons

- Requires state level legislation change
- Places all of the burden on local taxpayers
- Would only provide a partial solution

Additional Revenue Potential

- Currently \$1,500,000 is raised for Secondary Roads through property tax
- A 20% increase in this levy would raise \$300,000 but would raise property taxes by just 1%.

7. Lobby for Increase in Road Use Tax

Nearly sixty percent of revenues for maintenance on the gravel road system come from the Road Use Tax Fund (RUTF). Nearly fifty percent of the RUTF comes from a per-gallon tax on gasoline and diesel. Since it is on a per gallon basis, gas tax revenue does not increase with the price of fuel. Increases only come from increased consumption. As vehicles get more efficient, they use less gas and produce less revenue. As gas prices rise, consumers actually drive less. The last increase in the gas tax was in 1987 (when the average price of gasoline was under \$1.00 per gallon). Over the past 20 years, while gas prices climbed to 2008's summer average price of over \$4.00 per gallon, the tax level remained the same. Increasing the per-gallon tax on gasoline would provide the most immediate increase in funding for the gravel roads.

Pros

- Has the potential to produce the most significant increase in funding
- Only revenue source to reach beyond the state borders

Cons

- Requires local political leaders to actively lobby at the state level
- Would probably be the last gas tax increase in our lifetime

Additional Revenue Potential

- A 10 cent increase in the gas tax would produce an estimated \$600,000 extra per year for Washington County.

8. Utilize LOST Revenue for Secondary Roads

The current LOST (Local Option Sales Tax) referendum directs LOST revenues towards property tax relief. In several counties in Iowa, LOST revenue is directed towards Secondary Road maintenance and improvements. Delaware County, for example, directs all LOST revenue towards new hard surfaced roadways. Several have referendums to direct LOST revenues towards secondary road improvements. Adjusting the allocation of LOST revenues would provide the largest increase in funding available for the gravel roads.

Pros

- Would immediately increase the revenue stream coming to Secondary Roads
- This funding stream is inherently tied to inflation and increases correspondingly

Cons

- Would require a vote
- Creates additional local tax burden

Additional Revenue Potential

- Directing LOST revenue to Secondary Roads could raise as much as \$800,000 per year

9. Secondary Road Assessment Districts

One method that is available to raise money for roadway improvements is through the creation of secondary road assessment districts. These districts (similar to water or sewer districts) assess taxpayers in a specific area for improvements done to their road. These districts require that residents pay for at least 50% of the project costs and are voluntary.

Pros

- Would raise specific funding for specific projects
- Improvements would be paid for by those who use them

Cons

- Asking the improvement burden to be borne by a few would be cost prohibitive in most cases
- Require additional work by many county departments
- Entirely voluntary and as such may have low participation
- Not everyone can afford to contribute to roadway improvements

Cost

- Would vary depending on proposed improvement.
- There are some minor additional costs since the projects are constructed now and paid for over time.

10. Bond for Future Road Projects

In 2007, the Iowa legislature changed the Iowa Code to allow counties to bond for roadway improvement projects. The process of a roadway improvement bond issuance is similar to that of a General Obligation bond. The bond would be placed on the debt service to be repaid over the next several years. Projects funded through bonding may include road and bridge projects but must be generally tied to economic development. Black Hawk County passed a bond referendum in 2007 for roadway surfacing projects. Story County is currently working towards an \$8.5 million bond issuance. This method could raise substantial funds for resurfacing allowing other funding sources to be spent on gravel road improvements.

Pros

- Since the bonds are placed on the debt service, they are not affected by TIF districts (everyone contributes)
- One of the few ways to raise substantial amounts of capital specifically for roads
- Money directed towards specific projects

Cons

- Must be tied to economic development
- Entire burden is on local taxpayers

Additional Revenue Potential

- Overall cost is cost of proposed projects
- Overall cost of the projects is slightly higher because of interest costs

11. Pursue Additional Taxation on Truck Generating Facilities

In theory, it makes sense to seek additional funds for gravel road repairs from the facilities that generate heavy truck traffic. Adding a surtax on agricultural and industrial facilities that generate additional traffic would accomplish this. Under the current Iowa Code, counties are heavily restricted on how they can tax agricultural facilities, and so this may not be a current possibility. It is, however, probably the most equitable method for raising funds for the gravel roads.

Pros

- Targets fund raising to heavy haulers

Cons

- Difficult to administer
- Currently not allowable under Iowa Law

Additional Revenue Potential

- This solution would require additional research, but by way of example, if the 942 confinement facilities each paid \$100, it would generate \$94,200.

12. Capture Future Tax Revenue Generated by Wind Farms

It may be possible to capture the future property tax revenue generated by the proposed wind farm for roadway improvements. It is likely that the construction phase of the proposed wind farm will have a significant impact on the road system in the area of the wind farm. But after construction, the impact on county services (schools, safety center, and snow removal for example) should be minimal.

Pros

- Would create a new revenue stream that has minimal maintenance needs associated with it
- Improvements would be in the same area as the money generated

Cons

- Would likely require a TIF district, in which case money would have to be spent before development occurs
- Would take money from other taxing entities
- Taxation on new wind farms is phased in over time and caps at 30% of actual value
- Would take several years to phase in revenues after construction

Additional Revenue Potential

- Each new windmill will generate approximately \$13,000 in taxes and \$1,350 for secondary roads (phased in over 5 years)
- 250 new windmills will produce approximately \$3,400,000 for the county

13. Address Rural Resident Expectations

If additional resources are not made available for the maintenance of the gravel road system in Washington County, it will not be possible to meet the current expectations of rural farmers and residents. If this becomes the case, it may become necessary to educate rural residents about what level of service to expect in the coming years. This could be done through the news media, through mailings, or by producing educational media. Although rural residents enjoy lower taxes and the relative beauty and seclusion of country living, they should understand that this comes with a different level of service than is found in the cities.

Pros

- No additional taxes required

Cons

- Would be difficult for public to understand
- Difficult to change public expectations
- Requires a Board of Supervisors who are willing to stand behind existing policies
- The increased trend of frustrated phone calls to Secondary Roads and the Board of Supervisors will likely continue until expectations are adjusted

Cost

- Minimal publication costs

Conclusion

It is recommended that the Board of Supervisors make a serious and comprehensive effort to address the current needs of the gravel road system. The gravel roads system in Washington County is critical to our agricultural economy as well as to the residents who live there. If action is not taken, the overall condition of the gravel roads will continue to get worse. Damage is simply being done faster than it can be repaired with current resources. Recognizing that the Board cannot control costs and existing traffic counts cannot be changed, it is recommended that the Board increase departmental revenues and consider policies that will help manage vehicle weights for the future. If county citizens will not support the Board in making these changes, it is recommended that the Board assist the Secondary Roads department in helping citizens have realistic and achievable expectations with respect to the future condition of the gravel roads.