Garrett County
Shale Gas Advisory Committee

Transportation Issues

The Garrett County Roads Division is responsible for the upkeep of approximately 680 miles of roads and 127 bridges. This includes the design, management and construction of County roads, bridges and associated structures.

The Garrett County Roads Division is divided into 3 service and maintenance areas; Accident, Grantsville, and Oakland garages. The Director of Public Works oversees this division. Each garage is under the supervision of an Assistant Roads Division Chief who receives direction from the Division Chief.

Garrett County roads are one of our most valuable assets. We spend in excess of $17 million dollars annually (21.75% of Budget) to maintain county roads.

There currently is no clear cost for full replacement of roads in Garrett County, but a safe estimate would be in excess of $1.5 billion. There is a need to assess the inventory of roads in the county to determine the actual replacement cost for all roads under county control.

Heavy truck traffic generally causes more damage to roads because, by some estimates, each passing of a single large truck is the equivalent of approximately 9,000 passing automobiles.

Currently Garrett County does not have the authority to protect the infrastructure from commercial or industrial use.

There are several mechanisms for protecting roads from excessive wear and damage from commercial or industrial truck traffic:

– Road Bonding Authority
– Road Restrictions
– Trucking Permits

Prior to development of any program to protect Garrett County roads and infrastructure there are questions that need to be answered:

– The County needs to have a complete inventory of all roads under county control, to include;
  • Right of way
  • Design
  • Base
  • Surface material
  • Culverts
  • Stormwater systems
  • Bridges
• Any current restriction or prescribed uses
  – GIS mapping of roads with layered information
• Road inventory
• School bus routes
• Traffic Survey to identify:
  – Road hazards to include steep grades, narrow roadways
  – Residential impacts

Discussion regarding the above issues posed several questions, which in turn were submitted to the County for consideration. See Appendix A for the response to the Committees questions.

In a recently completed economic study from RESI, truck trips were estimated based on studies from New York and Pennsylvania using the projected pad development scenarios outlined in RESI’s study with 6 wells per pad and under the 2017 projects of 4 pads this would equate to 22,848 trips per pad and 91,392 total truck trips in Garrett County that first year. Each following year these numbers go up for the next 10 years.

With the amount of truck traffic identified there are two (2) separate considerations; Fiscal Impacts and Public Safety.

Discussion continued regarding costs for road damage and how best to mitigate the impact to the County prior to financial input from the severance tax.

Beyond the road wear/damage issue, the committee discussed impacts to local events (Autumn Glory, Deep Creek Dunk, and Fair Week to name a few) and school bus routes. Congestion could impact events and limit travel when heavy, and studies show there are increased accidents with the influx from the trucks. 

Supplemental documentation can be found in Appendix B

**Recommendations:**

Based on the information supplied by the County regarding the submitted transportation questions, Garrett County will need to:

• Establish GIS mapping to include above listed areas of concern
• Seek new legislative authority to:
  o Enact bonding
  o Create a truck permitting program addressing both congestion and safety issues by managing truck routes and schedules.

These recommendations are also contained in the separate SGAC input to the Commissioners in response to their 24 April tasking.

Based on the Multi-State Shale Research Collaborative, Garrett County should also consider creating a Shale specific central clearinghouse to deal with crosscutting issues within County government, State government, Stakeholders and Industry.

Appendix A – County response to Committee questions

MEMORANDUM
PUBLIC MEMORANDUM:

DATE: July 22, 2014

TO: John Quilty, Chairperson, Garrett County Shale Gas Advisory Committee
FROM: Mike Koch, Executive Director
Garrett County Department of Community Planning & Development
CC: Garrett County Board of Commissioners
SUBJECT: Responses to Transportation-Related Questions

Thank you for submitting your issues and questions related to transportation in the context of potential shale gas development in Garrett County.

We have reviewed the questions and consulted with the appropriate county departments and staff members. Below you will find written summary responses to each question. Please review these responses and let me know if you have additional questions.

We appreciate the time and energy you put into your service to this committee.

Questions and Answers:

Question:

1. Road Inventory:
   a. It would benefit the County to have an updated, complete inventory of all roads under county control, to include:
      i. Rights of way
      ii. Design
      iii. Base
      iv. Surface material
      v. Culverts
      vi. Stormwater systems
      vii. Bridges
      viii. Any current restrictions or prescribed uses
   b. What is the cost analysis for completing the inventory?
   c. Can this inventory be integrated into the County’s current GIS mapping with layers for each individual category as a tool for future reference on bonding or permitting?

Answer:
There is broad agreement that such an inventory would be beneficial. The County’s Office of
Planning and Land Management and its recently hired GIS lead are currently working the State Highway Administration (SHA) on a multi-year mapping project which seeks similar outcomes. Counties across the state are providing geometrical centerline data for existing road inventories. This data will be used to build out a comprehensive, shared and distributed GIS database which will form the foundation for the layered inventory you describe. Once the core GIS data is collected, attribute data layers may be added representing the various characteristics and attributes you list.

While to our knowledge a specific ROI for this work has not been generated, it seems clear that a shared, distributed, layered database will create much value and drive process efficiencies in permitting, inspection, and maintenance activities.

*Question:*
2. Under a Board of County Commissioner form of County government, what would be the best Legislative language to use in order for the County to receive explicit Road Bonding authority?

*Answer:*
The County does not maintain a legislative affairs office. Any proposed legislation seeking to secure for the County specific road bonding authority would need to be generated via collaboration between the current County Attorney and the respective legislative affairs departments of appropriate elected State Officials.

It should be noted that the county does possess specific and limited road bonding authority under its Subdivision Ordinance for roads in designated subdivisions.

The County has very limited authority to place limits on the use of County Roads. The existing provisions of the State Code provide for weight and size limitations. While we have the authority and obligation to determine the weight limits on County Roads (generally dictated by bridge weight limits), the real problem is not individual weights but the intensity of use by specific industries. We have reached agreements with wind energy companies but our authority comes from their need for specific permits because the weight/size of their vehicles exceeds the State limits. Where we have difficulty is in those circumstances where the individual vehicles being used are not in excess of the limits but the intensity of their use destroys or damages the roads. Without authority from the State, we do not currently have the authority to impose such an obligation. Without that authority little is to be gained, if anything, from a County Roads Ordinance.

*Question:*
3. Does the County have the authority to limit County road usage based on weight or the number of axles? If not, is such authority possible, and how would the County pursue it?
Answer:
Generally speaking, road use and weight restrictions are governed by the State. County Code weight limit restrictions reflect these SHA standards. County staff, working with our elected State Officials, has in the past attempted to legislatively achieve an increase in these SHA weight restrictions on targeted roads that provide egress and ingress to neighboring West Virginia where increased weight limits exist in an attempt to accommodate existing commercial transport. All such legislative efforts have failed to date.

As noted above, the County does not have the authority to limit road usage based on weight except in respect to bridge weight limits. The County generally exercises authority in the form of powers delegated by the State. The County has no inherent powers. The State has not delegated the power to the county to regulate vehicle traffic on the basis of weight.

It should be noted that road standards and design guidelines are clearly documented by the American Association of State Highway Transportation Officials (AASHTO).

It should be further noted that attempts to further regulate County road usage based on weight, number of axels, or other attributes would need to be carefully considered in order to mitigate unintended impacts on legacy commercial activity supporting agri-business (lumber, dairy, etc.).

Question:
4. Under what authority could the County designate truck routes on state roads within the county?

Answer:
None. The county has no authority or jurisdiction over State roads.

If trucks are over the State-established weight/size and need a permit from the County, there may be an opportunity for the County to determine the "best" route for them to take and condition the County Permit on the use of that specific route. To the extent possible we could then seek to maximize the use of State Roads.

Question:
5. Does a Board of County Commissioner form of County government have the authority to issue road use permits and under what limitations?

Answer:
The County issues road-use permits for vehicles whose weight or size exceeds the limits set by the State (maximum weights/width/height). We have no authority to limit or regulate use except
in that instance. If we are to exercise such additional controls, we first have to have legislation delegating such authority to the county.

It should be noted that attempts to further regulate County road usage via additionally required permitting would need to be carefully considered in order to mitigate unintended impacts on legacy commercial activity supporting agri-business (lumber, dairy, etc.).

Question:
6. If the county were to adopt a permitting program for roads, would the Public Works department establish a department for permitting? Or would the permitting be achieved through the current department structure?

Answer:
Should a road use permitting process be established, the process and the resources required to support the process would need to be carefully considered. At this juncture, County staff believes that the existing Office of Permits and Inspections could provide support for such a process. This office currently collaborates closely with the Department of Public Works and would envision doing so similarly to support this process.

Question:
7. To establish specific travel times and avoid delays with school buses, a complete list of all bus routes and pick-up and delivery times countywide each year would be beneficial.

Answer:
A bus routing layer does not currently exist in the County’s GIS database. However, as noted above, we can not limit or dictate road usage in the manner suggested except for overweight or oversize vehicles without an additional grant of authority by the State.
Appendix B – Supplemental documents

Traffic accidents and fatalities skyrocket in shale boom areas. Karnes County, Texas in the Eagle Ford Shale experienced an increase of over 1,000% in commercial motor vehicle accidents from 2008 to 2011. Eagle Ford Shale by county increases in traffic accidents from 2008 to 2011 (Source):

- Atascosa: .......... +56%
- DeWitt:............. +67%
- Dimmit:............+175%
- Frio:...............+200%
- Gonzalez:........+204%
- Karnes:.........+1,050%
- La Salle:..........+418%
- Maverick: .......+100%
- McMullen:....+1,050%

KARNES CITY, TEXAS -- Many counties within the Eagle Ford Shale play receive “donations” from oil companies or have “gentleman agreements” to provide materials for road repair. But officials in several South Texas counties estimate it will take hundreds of millions of dollars to fix the roads and bridges that are worn down, ground up, and spit out by 18-wheels of constant use from oil and gas trucks.

(video of damaged roads)

The Texas Tribune reported yesterday on legislative attempts to address the damage done to Texas roads by drilling:

“The Texas Department of Transportation has estimated that maintaining infrastructure impacted by the drilling boom will cost $4 billion a year. Advocates are urging lawmakers to tap the state’s Rainy Day Fund to help repair — and, in some cases, widen — roads in the counties where drilling is most active. This week, the Senate unanimously passed Senate Joint Resolution 1, which would ask voters to approve spending $5.7 billion from the fund, including $2.9 billion for transportation debt. But little, if any, of that money is likely to go toward repairing roads in areas hit hardest by the drilling boom.”

Click here to read the article

Possible costs of road damage caused by natural gas drilling activity in New York were estimated in a NYS Dept. of Transportation document in 2011, as outlined in the articles linked to below. Excerpts from the executive summary:

“The potential transportation impacts are ominous... this Discussion Paper suggests that it will be necessary to reconstruct hundreds of miles of roads and scores of bridges and undertake safety and operational improvements in many areas....

“The annual costs to undertake these transportation projects are estimated to range from $90 to $156 million for State roads and from $121-$222 million for local roads. There is no mechanism
in place allowing State and local governments to absorb these additional transportation costs without major impacts to other programs and other municipalities in the State.”
- See more at: http://www.damascuscitizensforsustainability.org/2013/04/fracked-up-roads-texas-ny/#sthash.us19qokP.dpuf

**County Leaders Propose Tax Rate to Help Fund Road Repairs**
In January, the commissioner’s court hired Naismith Engineering of Corpus Christi to study the county road system.
The study evaluated 394 miles of DeWitt County roads and determined that the cost of providing a road system suitable for the public and the oil and gas industry could cost as much as $432 million.
The study revealed that 45 miles of annual road maintenance would cost $80,000 per mile with 187 miles of basic reconstruction at $920,000 per mile and 99 miles of major reconstruction at $1.9 million per mile.
“Rural counties do not have limitless income potential just because the tax base is exploding.” The dilemma lies in how much money will be needed to repair the county’s roads that are being ravaged by the increase in large truck traffic from the Eagle Ford Shale play.
The tax rate could be set at the effective rate of 32.617 cents per $100 of assessed valuation, which would generate the same amount of revenue as last year’s budget.
But commissioners – Curtis Afflerbach, John Oliver, James Pilchik and Donald Kuecker – and DeWitt County Judge Daryl Fowler have proposed a 2012-13 tax rate of 50.203 cents per $100 of valuation.

Additional reference materials:
Pennsylvania’s Posted and Bonded Roadway Program
http://www.papostedroads.pa.gov/
Estimating The Consumptive Use Costs of Shale Natural Gas Extraction on Pennsylvania Roadways
http://repository.cmu.edu/cgi/viewcontent.cgi?article=1065&context=cee
The impact of natural gas extraction and fracking on state and local roadways
Posting and Bonding Local Roads
Fracking Roads Costs Taxpayers
http://www.nofrackingway.us/2013/10/16/fracking-roads/
Garrett County Budget 2014