PNAAW Road Weight Study Meeting
Discussion Notes from December 20, 2011 at the Chula Vista Resort in Wisconsin Dells

Follow-up questions and comments to the morning presentations:

1. Did the study look at how to build road ditches to keep the subgrade in place? A. No.
2. There is a need to develop recommendations for 2” thick asphalt roads because many county roads are not a think as those studied.
3. Did the farm equipment tested take into account the tractor weight? A. Yes. The study looked at gross weight and axle weight.
4. Did the study look specifically at axle spacing and tandems? A. This is something that needs to be researched and understood more.
5. Tire pressure and type, do they make a difference? A. The tire footprint is smaller as it’s inflated more. The stress is more concentrated. There is not an exact answer to the question of the floatation tire advantage. In general, on thinner pavement, tire type and pressure makes a difference.
6. Was track equipment looked at in this study? A. No.
7. Which axle created the heaviest strain on the 80/102,000? A. The front axle is least loaded. There is an improper balance.
8. What would happen if four floatation tires are put on a single axle?

Afternoon round table discussion questions and follow-up comments:

1. How do the results of this study affect your business or agency?
   1. Need to modify hauling.
   2. Need change in laws for manure hauling equipment.
   3. What should the equipment design look like in the long term?
   4. These challenges all cost money. Who pays the cost?
   5. Industry is moving forward much faster than roads are.
   6. What will consumers pay?
   7. Need additional study on tires.
   8. How do these results affect the bridge formula?
   9. Need to work with local government to increase road design standards to find pavement configurations that work for farm equipment.
   10. Enforcement has caused limited equipment sales this year.
   11. Town governments face road repair issues too.
   12. How effective are one-way roads?
   13. What do I do this spring?
   14. Need better understanding of road regulations.
   15. Need to increase understanding of load bearing.
   16. Try to keep implements of husbandry in the field with a transfer system.
17. Weight restrictions have been in place. Now having enforcement in agriculture.
18. Safety risks of decreasing the weight of the tractor.

2. What are equipment changes that could protect road conditions and the agriculture industry? (Consider manure hauling specifically)

   1. Try to find the right design that allows the implement to be as heavy as possible with tolerable road wear without sacrificing safety.
   2. Need a lot more information about thin pavement, speed, and machinery interactions before making big changes.
   3. In the long term, need to design tractors that will not have overweight problems.
   4. Introduce road design standards. Improve road construction design.
   5. Create equipment standards that manufactures are aware of.
   6.Acknowledge equipment isn’t getting smaller.
   7. Quick attach tools that could be left in the field to decrease road weight and length.
   8. Look at European design concepts. Some concern it is built too light there to last.
   9. Equipment with steerable axels should get more consideration.
  10. Breaks throughout the entire equipment system, not just tractor.
  11. Improve intersection breaking.
  13. Work towards an 80,000 semi-truck road weight pressure equivalent standard.
  14. Use more temporary field storage/nurse tanks/satellite pits.
  15. Use more semis.
  16. What should suspension be like?
  17. More gravel roads? They are easier to maintain.
  18. Better breaking and hitching for safety.
  19. Need to form a working group of farmers/local officials/and companies.
  20. More information on tire design in field and road. Trying to serve two different purposes.
  21. Concern if haulers drop injection equipment to save weight there will be a negative environmental impact.
  22. Create off-loading pads.
  23. Pump to fields underground.
Question 3: What are some possible road weight changes you could support?

1. Get away from gross weight limit and more to axle weight limit or surface PSI limit.
2. Treat Bridge Law as a separate issue from road weight limit. There may be situations where you can haul full over regular roads without crossing over bridges. Need to understand bridge impact more.
3. Don’t create another individual permit for hauling. There are already too many of these.
4. Recommend township minimum bases and thicknesses for new rural roads.
5. Create specific rules for Implements of Husbandry.
6. Need a better understanding of how to talk about the issues of road weight with others in transportation and compare.
7. What is a reasonable short term weight change? 92,000? (15% over 80,000 pounds in the fall)
9. Moratorium on enforcement until rules are revised.
10. Create rules that are science based.
11. Increase allowable length of implement. Tractor+Tank+Tool is long for rules right now.
12. More consistency between town, county, and state.
13. Educate towns, counties and companies more.
14. No weight limit for tractor alone. They can weigh 36,000 pounds plus an attachment.
15. Weigh tractor and tank separately because they have independent suspension.
16. Planning, consider nonfarm residential areas.
17. Encourage manure hauling in the fall. Have sufficient livestock facility storage to do this.
18. Confusing interpretation of laws by enforcers.

Strongest summary themes:

1. As a short term solution, increasing the allowable gross weight 15% over current weight during the fall, like grain hauling, was received very favorably.
2. In the long term, there was widespread support to change from a gross weight system to focusing on road surface pressure, such as PSI or something similar. Heaviest axel weight is an alternative, but there is a table in Chapter 348 that covers this, up to the 80,000 limit.
3. There was mixed support for road construction standards. Many people strongly supported this idea but nearly 20% strongly opposed it also.
4. There is a need to form a state-wide road weight workgroup, to find solutions to an issue far more complex than gross weight.