Brian P. Keierleber
Bridge Maintenance/Repairs
Buchanan County Iowa

- 963 miles of roads
- 260 Bridges over 20’
- 30 Railcar Bridges
- 6 GRA-IBS Abutments
- 2 Cast on Site Slabs
- 1 Press Brake Tub Girder
- 3 UHPC
- 3 Glue – Laminated Bridges
- 3 Internal Curing Concrete Bridges

Continue Using railcar bridges 3 cars on the ground now.

21,000 people, 372,000 pigs
Many of our bridges were old
What we are faced with
Overloads Have A Cumulative Effect
WE KNOW WHAT THE RESULTS WILL BE!
The world and our economy relies on Food
They did not care before
They always made it before
Weight kills
The Bridge does NOT Discriminate
Access is critical to everyone.
Asphalt Over Concrete
Simplify Deck Sealing to Reduce Future Failures
Road Salts are Harmful
Simplified Deck Overlaying
Bridge Deck Patching
Substructures Need Repairs Too
Sometimes there are no GOOD repairs
We have spliced many H-piling in.
Some Repairs are Band-Aids
Piling Posting
Dough boy Bridge Commercial Repairs
Current Concrete Pier Repair
Concrete Pier Repair
Over Time the backwall kicks out
A LONG TERM Solution
My old repair Technique
Old Method of Backwall Repair
Drive sheet piling behind the old abutment
There is a small gap
Current Repair Method
Cut Out Bad Sections
Curve around for stability
Support the Abutment
Encase to Beams $12,000+materials
3Pier Encasements $17,360+ materials
Pier encasement
Concrete Box Repair
Remove the Unsound Concrete and pour it back
Piling extensions
Add a pier to eliminate postings
Cutshaw Bridge
Utilize the timber piling
ANY QUESTIONS?

“No! I Can’t Be Bothered To See Any Crazy Salesman—We’ve Got A Battle To Fight!”