“The oxidative aging of pavements begins at the time of construction and continues throughout a pavements life. However, most aging occurs in the first two to four years of service life.”

FOUNDATION for PAVEMENT PRESERVATION

The life of asphalt pavement is its density- 95+% density water does not get into near as much as one say 90% density – so less water – less oxidation – less freeze thaw damage – water expands 10% and breaks the asphalt bond between particles and results in a pot hole or ravel (stones coming loose from the surface)

Pavements placed at 95% density sounds good however that still leaves 5% that is taking on water oxidizing the asphalt and causing it to ravel and with freeze thaw cycle causing even more damage

When I make the statement “Asphalt is not as good as it used to be” No one will argue with me

Yet for the most part we continue to build roads the same. We do have a number of things working against us today- MORE TRAFFIC—LESS MONEY—RISING COSTS as well as LOWER QUALITY ASPHALT –

MORE TRAFFIC – I don’t believe we can change this one

LESS MONEY – Getting a road levy passed would help – but in today’s climate not very popular

RISING COSTS- Not much any of us her in the room can do about this one either

But – knowing of a LOWER QUALITY ASPHALT as we have discussed we can take a much more aggressive approach in the way we take care of it.

The crews place the asphalt much the same.

And those people in charge of the roads take care of them in pretty much the same as the people before him

Even though we know asphalt is not as good as it used to be we do things much the same

If anything I see a tendency to pave with thinner lifts of asphalt. Many of us use an 1" overlay and expect to see 12-15 years life – and they are disappointed when they see reflective cracking show thru in 6 months all in an effort to make our dollar stretch farther

I'm sure most you will agree if concrete strength drops 50% I am going to insist that we use twice as much on that bridge!

Yet unless we are going to fall off that bridge we do not worry about it. What about that financial bridge we are coming to.

We can't afford to pave the roads in a timely manner (every 10-12 years) to keep up with their deterioration

We have scene a few areas start to chip seal roads right behind the paver but that's not an acceptable practice in many areas. Not that it's a bad one –we are keeping water OUT of the pavement but in many- MOST –maybe ALL subdivisions it's just not acceptable

Biorestor – Agricultural rejuvenating seal can help – it is not the cure all that we are looking for –

We have not found that product yet. BUT

Biorestor can replace the oils that have been cooked out by the hot mix plant – put some flexibility back into the road-

Bowser Morner a private laboratory showed that the product when looked at after five years of ageing showed that the penetration of the asphalt(20%) – the viscosity of the asphalt (49%)– and the Marshall Stability (90%)of the treated asphalt all showed significant improvements .

HIGHER TRAFFIC WE CAN'T CONTROL

RAISING TAXES – LETS SKIP THAT ONE AGAIN

RISING PRICES- we can do something about this in our road industry

In fact by NOT taking good care of our roads we are in fact demanding more petroleum --IF every 8-10 years we are repaving –we are increasing demand and raising the prices. If we could make sure that between each overlay of say 15 years we utilized 2 preservation treatments to extend the life of the

road. This would lower the demand – for every square yard 2” thick we need 3 gallon of petroleum. If we just extended our paving cycle to 12or 13 years we would in effect be improving our highway miles/gallon by 20 to 30 %

“The oxidative aging of pavements begins at the time of construction and continues throughout a pavements life. However, most aging occurs in the first two to four years of service life.”

FOUNDATION for PAVEMENT PRESERVATION

This statement expressed another way – After two years I have watched 51% of my investment disappear—The part of your investment that has disappeared is the pavement flexibility

If it gives it won’t break .