

# Chip Seal – Hart's Location, Bartlett, and Albany



# Why a bicycling review of chip seal?

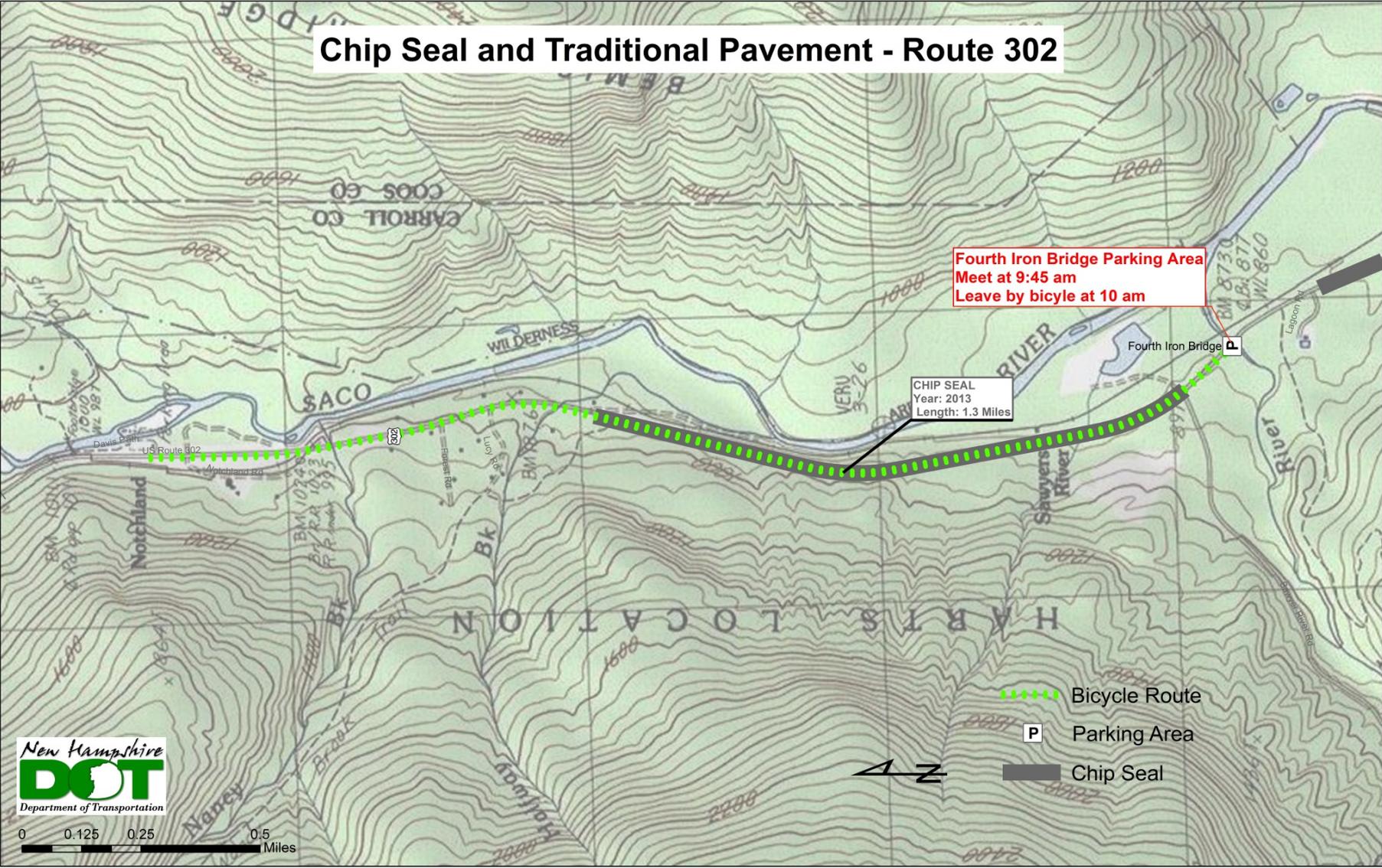
- Complaints/ concerns from bicyclists
- Discuss and document concerns
- Determine potential solutions/  
recommendations

# Why does DOT install chip seal?

- Road preservation
  - Keep good roads from deteriorating
- Cost effective
  - Comparable to cost of conventional pavement
  - Lasts 2 to 3 times longer



# Chip Seal and Traditional Pavement - Route 302



# Chip Seal

- Route 302
- Installed 2013

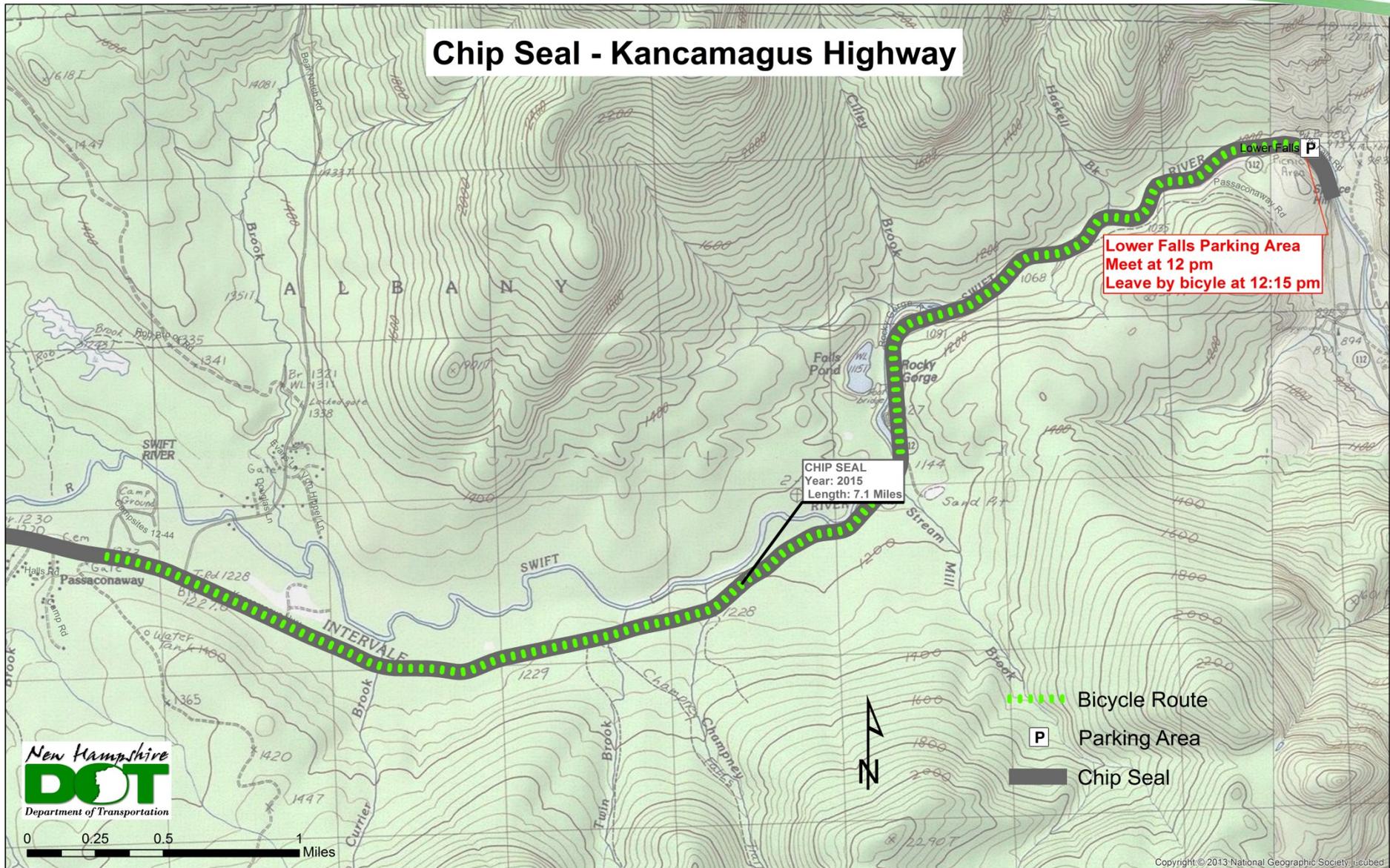


## Conventional Pavement

- Route 302
  - Shoulder – 2006
  - Travel lane - 2009



# Chip Seal - Kancamagus Highway



# Additional Shoulder Treatments

- Tried to address bicyclists concerns
- Additional treatments to shoulders were tested
  - Fog Seal
  - Fog Seal with aggregate (fine sand)
- Expected to help smooth out the surface

# Chip Seal with Shoulder Treatment

- Kancamagus Highway
- Installed 2015
  - Fog Seal
  - Fog Seal with aggregate



# Chip Seal with Shoulder Treatment

- Kancamagus Highway
- Installed 2015
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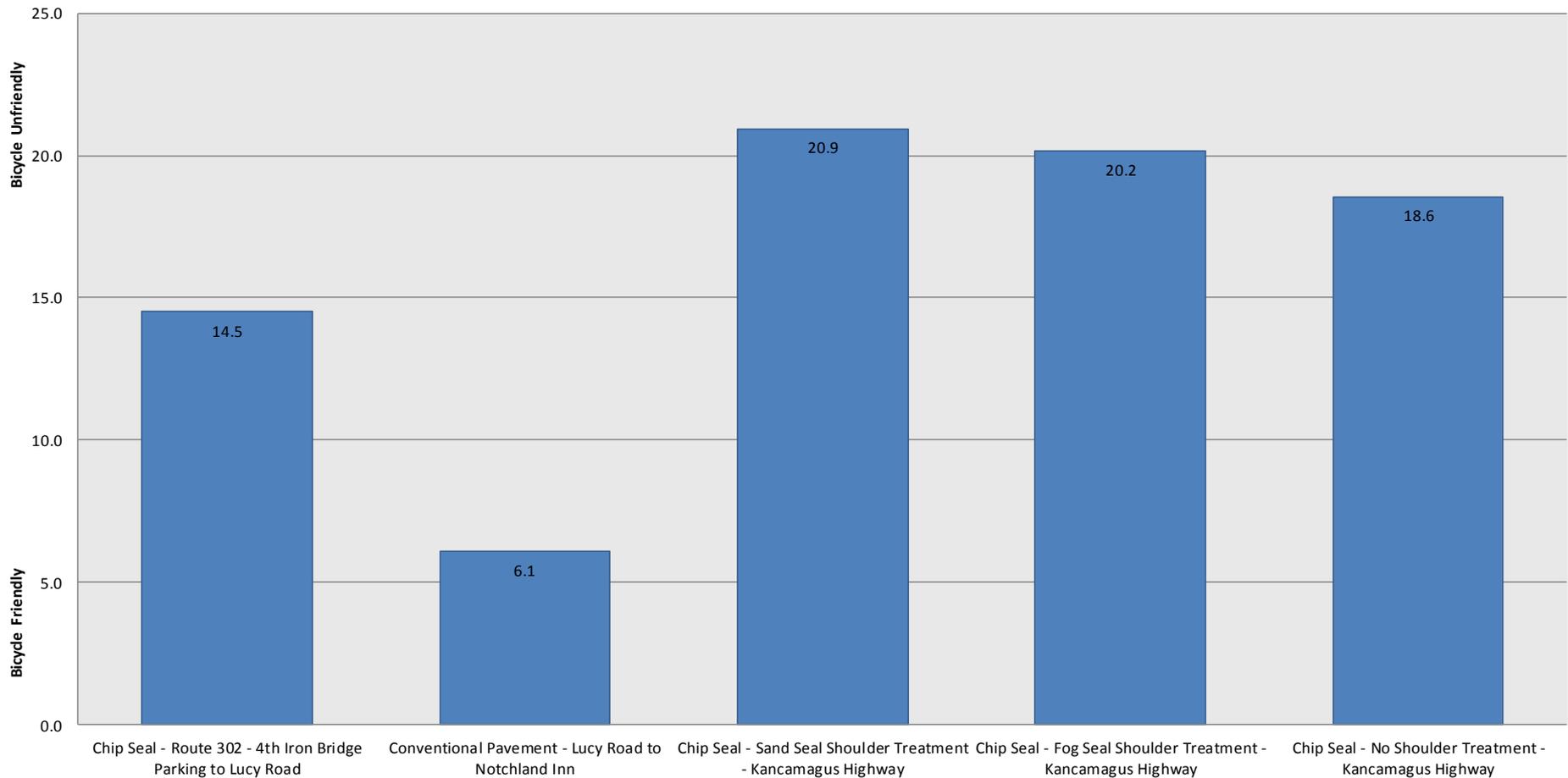


# Rating Forms

- Participants rated 5 pavement sections
  - Categories
    - Surface roughness
    - Vibration
    - Resistance/ speed reduction
    - Noise Level
    - Loose aggregate/ debris present

# Pavement Ratings

Average Rating



# General Comments – Kancamagus Highway

- Loose aggregate present in shoulder area.
- Shoulder rougher than travel lane.
- Bicyclists inclined to ride in the travel lane.
- Compromised safety.
- Increased fatigue due to vibration.
- Fog seals did not improve conditions.

# Recommendations

- Sweep shoulders again in the spring
- Additional compaction of shoulder area
  - Can only be done if shoulder is 8 feet or wider
- Use a smaller aggregate for shoulder
  - 1/4 " instead of 3/8"
- Higher application rate of fog seal
- Explore other means/ methods for broadcasting sand/ other aggregate
- Consider other pavement preservation techniques on popular bicycle routes
  - (Bonded wearing course, thin lift pavement, or slurry seal).

# More Photos



# More Photos



# More Photos



# More Photos



# More Photos



# More Photos



# More Photos



Report available at:

[http://www.nh.gov/dot/programs/bikeped/documents/Chip\\_Review\\_Report\\_Compressed\\_Draft\\_Final.pdf](http://www.nh.gov/dot/programs/bikeped/documents/Chip_Review_Report_Compressed_Draft_Final.pdf)