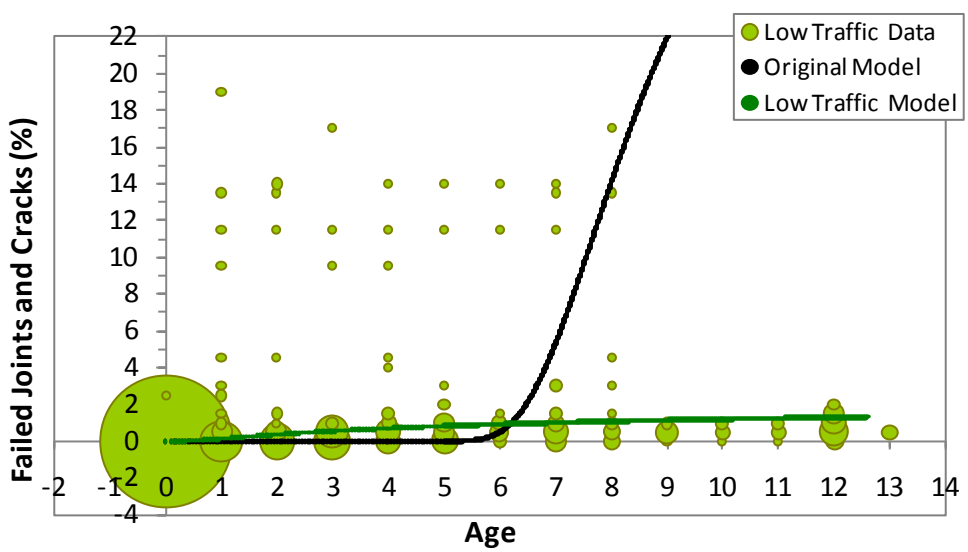
APPENDIX L
PLOTS OF JCP RECALIBRATED MODELS, ORIGINAL MODELS, AND DATA POINTS

Notes

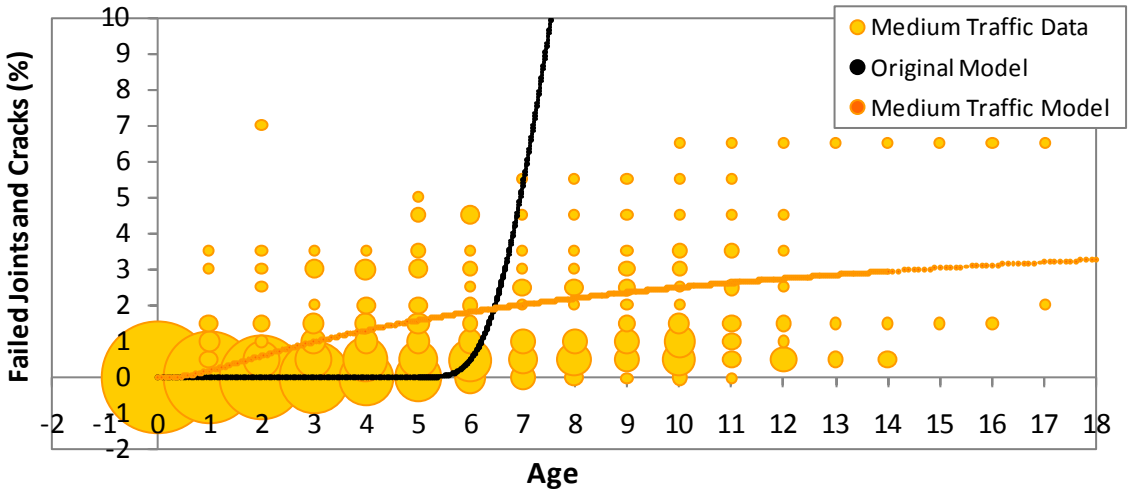
1. Legends do not obscure data points in any graph.
2. Color coding by traffic level for each distress and treatment plot is as follows:
   a. Low traffic
   b. Medium traffic
   c. Heavy traffic: Grey bubble with red border, red line for comparison plots, and dark red line for updated model.
   d. Low&Medium traffic, used when there was no significant difference between these two traffic levels for a certain distress and treatment type.
   e. Medium&Heavy (analogous meaning).
   f. Other colors, when used, indicate that more than one traffic level and/or treatment types were combined due to non-significance in statistical tests.
3. There is no medium traffic data for light rehabilitation in Zone 3.

Failed Joints and Cracks

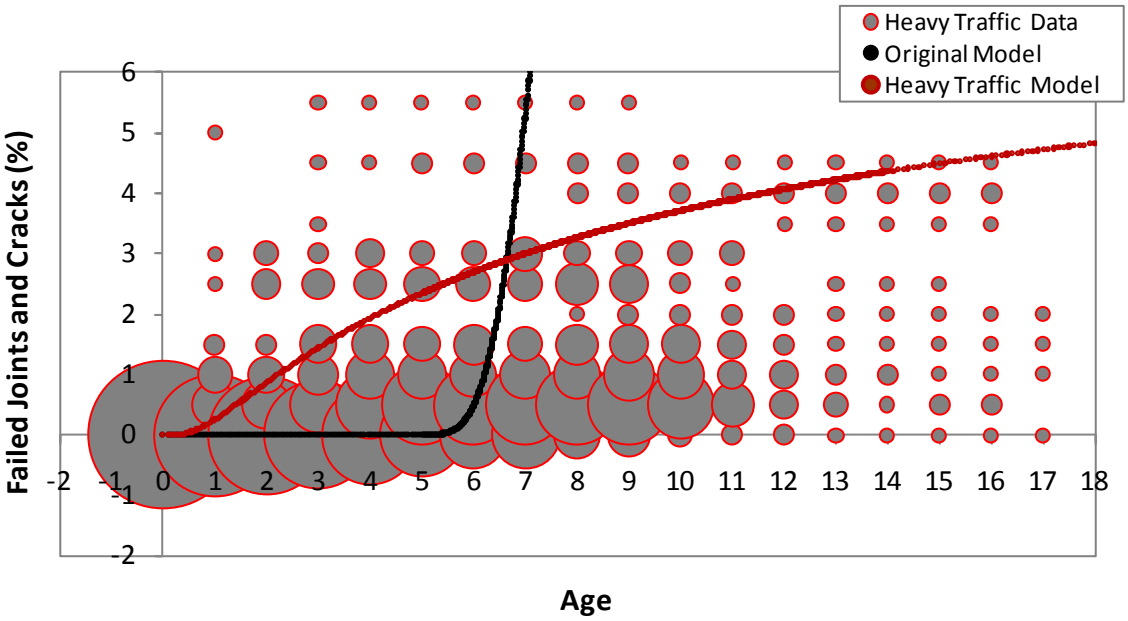
Heavy Rehabilitation, Low Traffic, All Zones

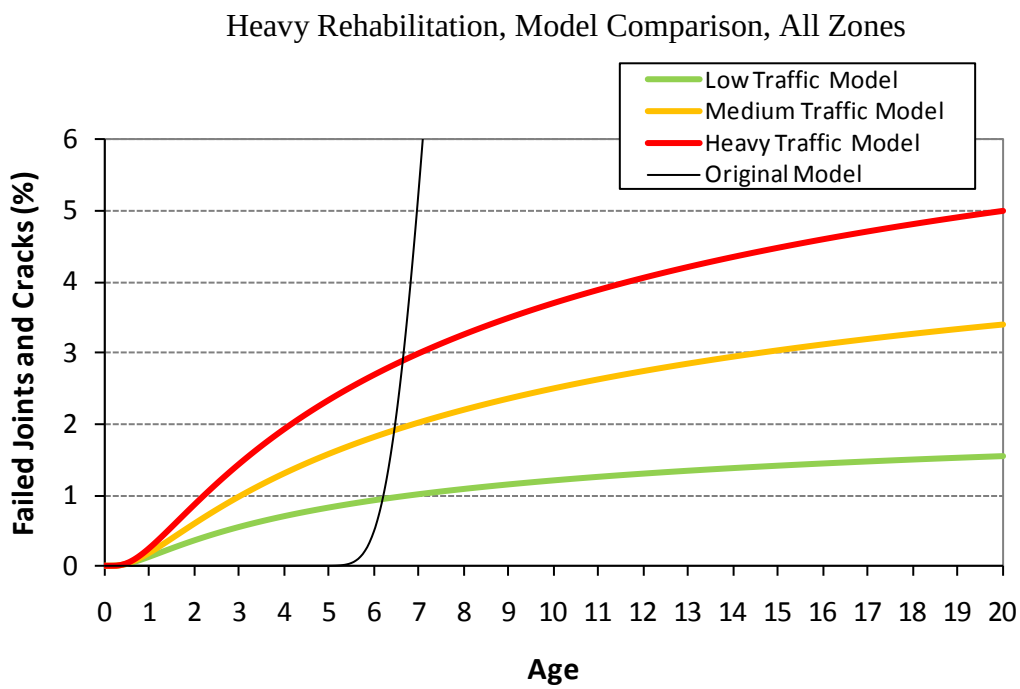


Heavy Rehabilitation, Medium Traffic, All Zones

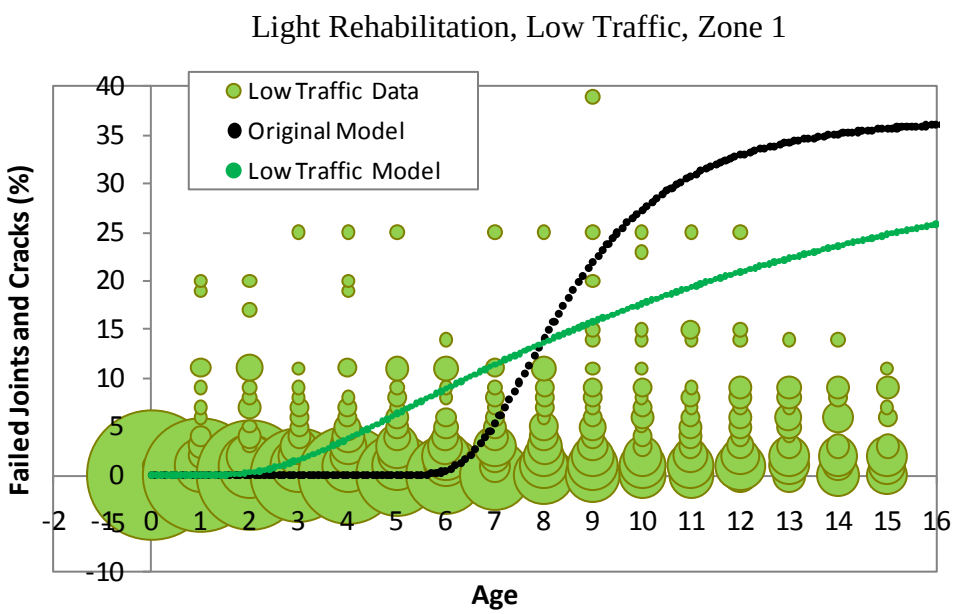


Heavy Rehabilitation, Heavy Traffic, All Zones

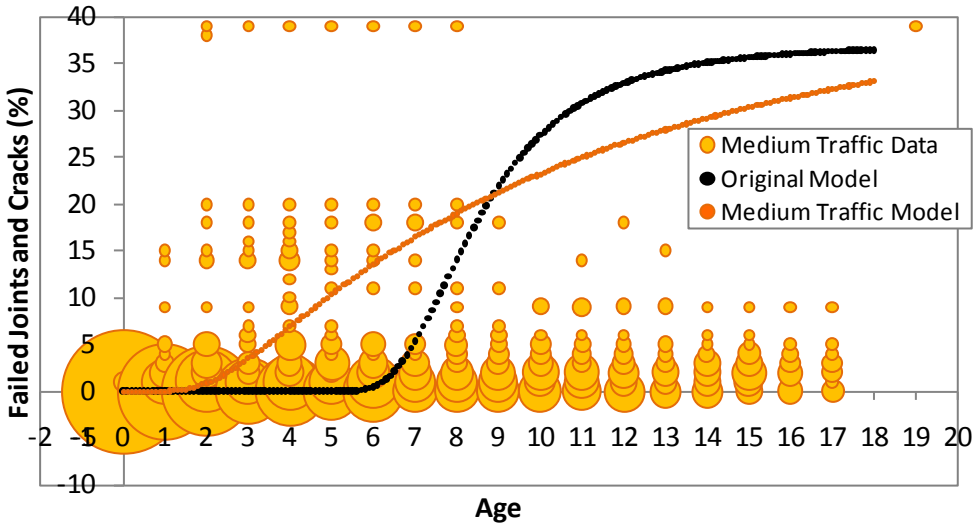



Heavy Rehabilitation, Model Comparison, All Zones
Low Traffic Model
Medium Traffic Model
Heavy Traffic Model
Original Model
Failed Joints and Cracks (%)
Age

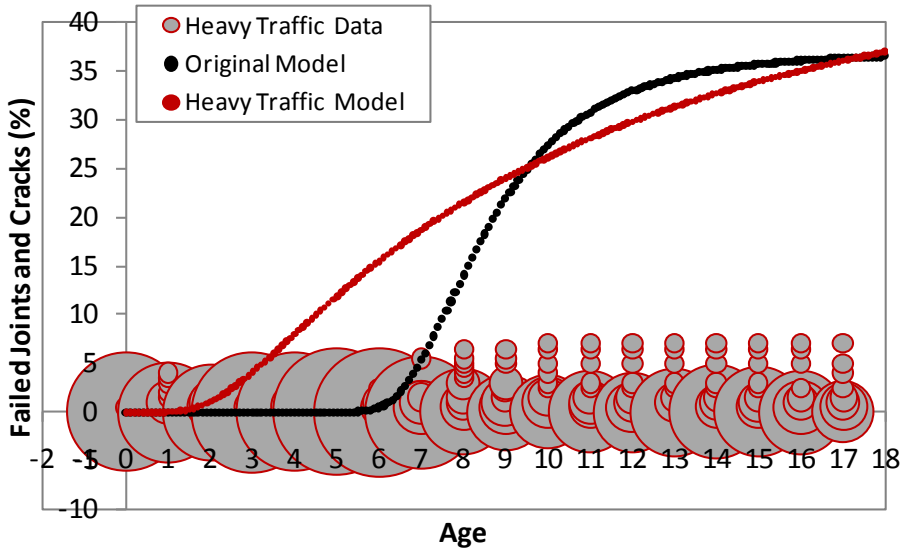
Zone 1


Light Rehabilitation, Low Traffic, Zone 1
Low Traffic Data
Original Model
Low Traffic Model
Failed Joints and Cracks (%)
Age

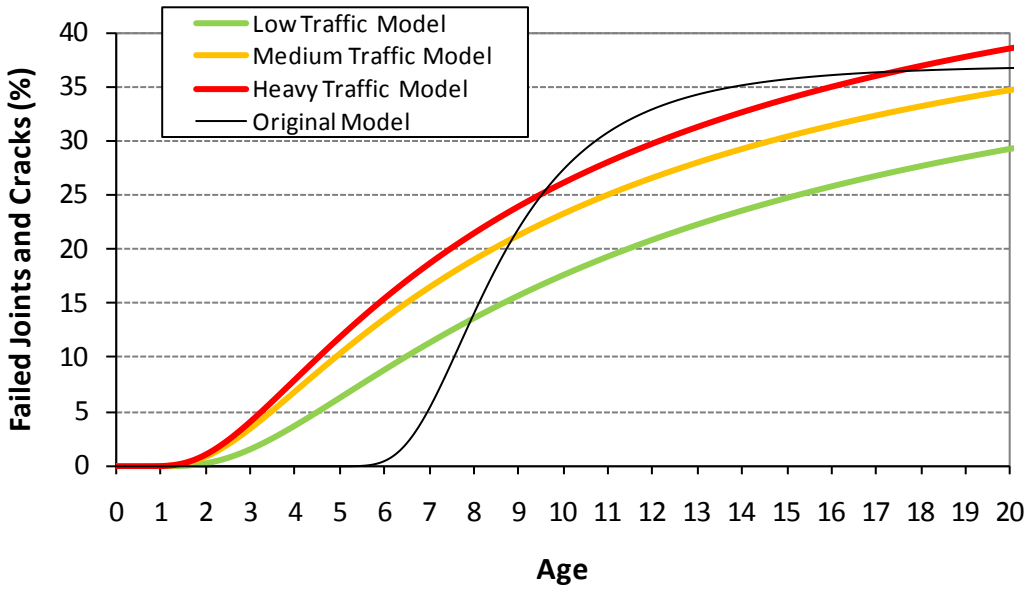
Light Rehabilitation, Medium Traffic, Zone 1



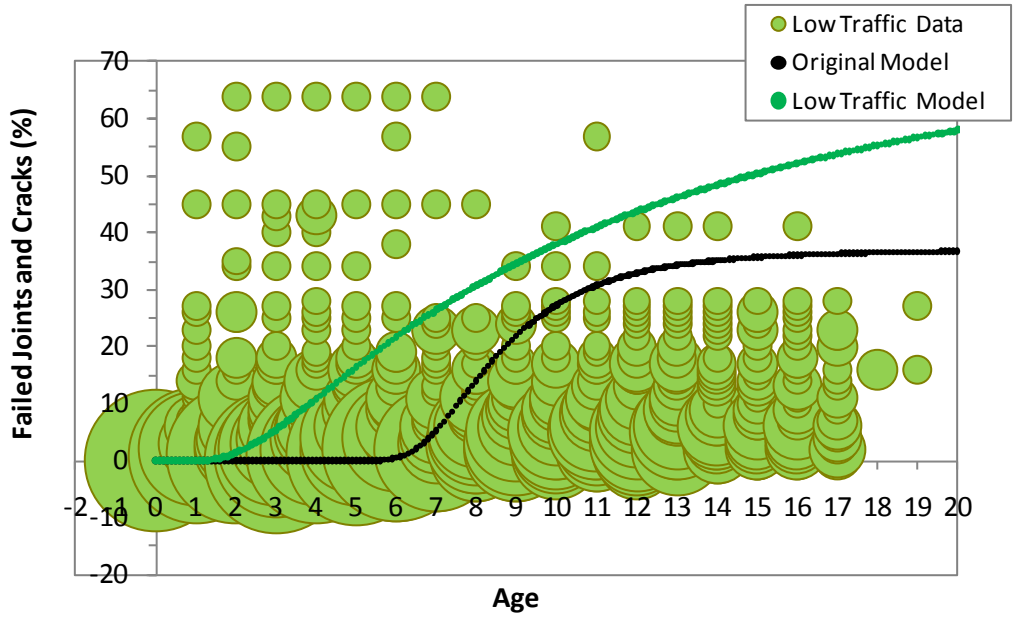
Light Rehabilitation, Heavy Traffic, Zone 1



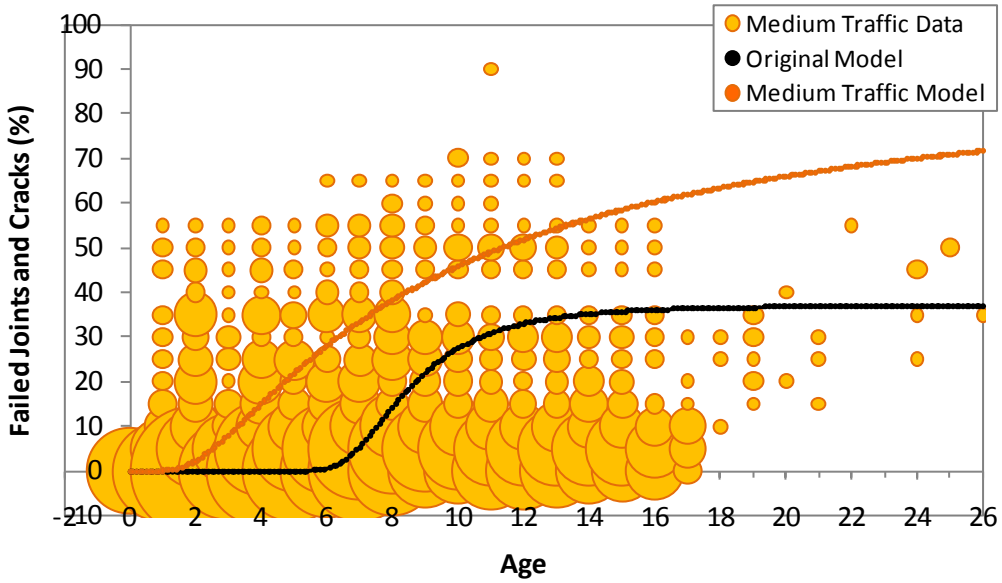
Light Rehabilitation, Model Comparison, Zone 1



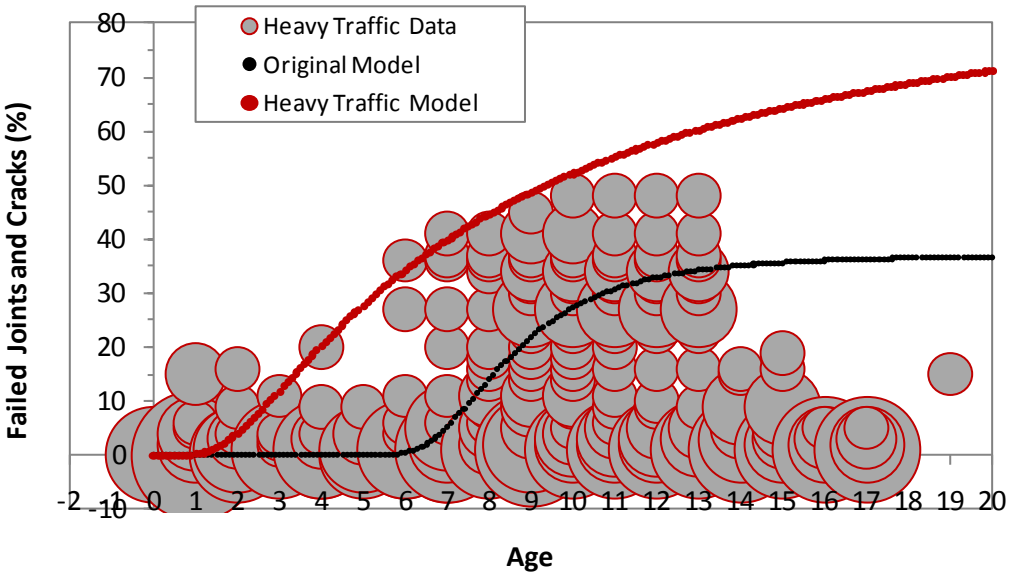
Preventive Maintenance, Low Traffic, Zone 1



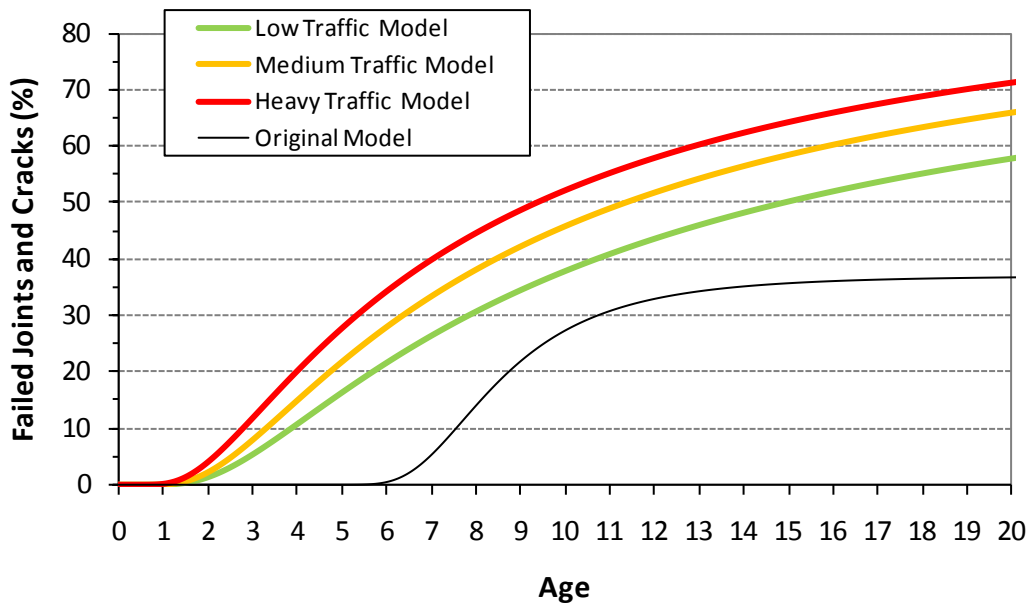
Preventive Maintenance, Medium Traffic, Zone 1



Preventive Maintenance, Heavy Traffic, Zone 1

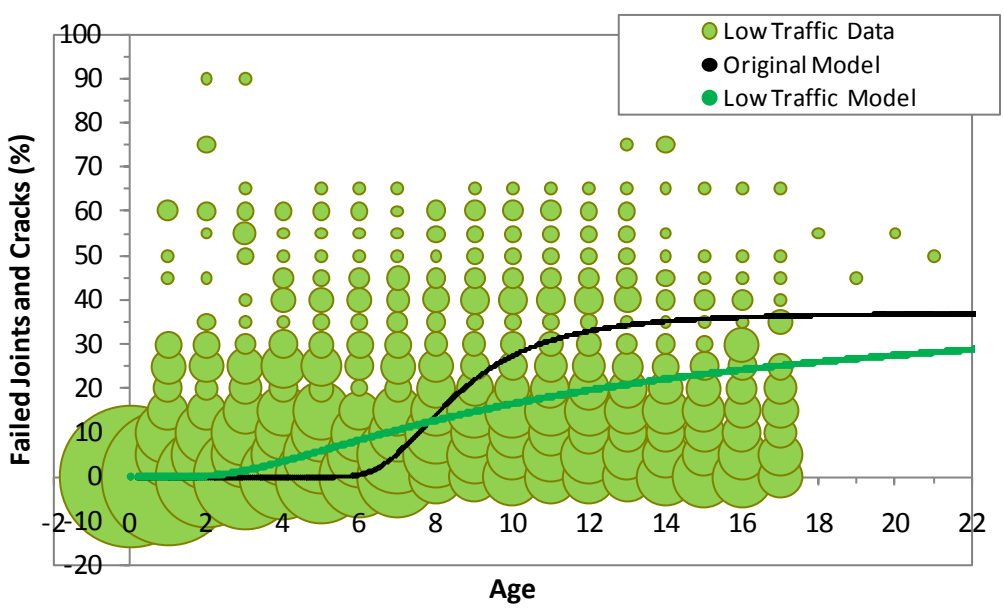


Preventive Maintenance, Model Comparison, Zone 1

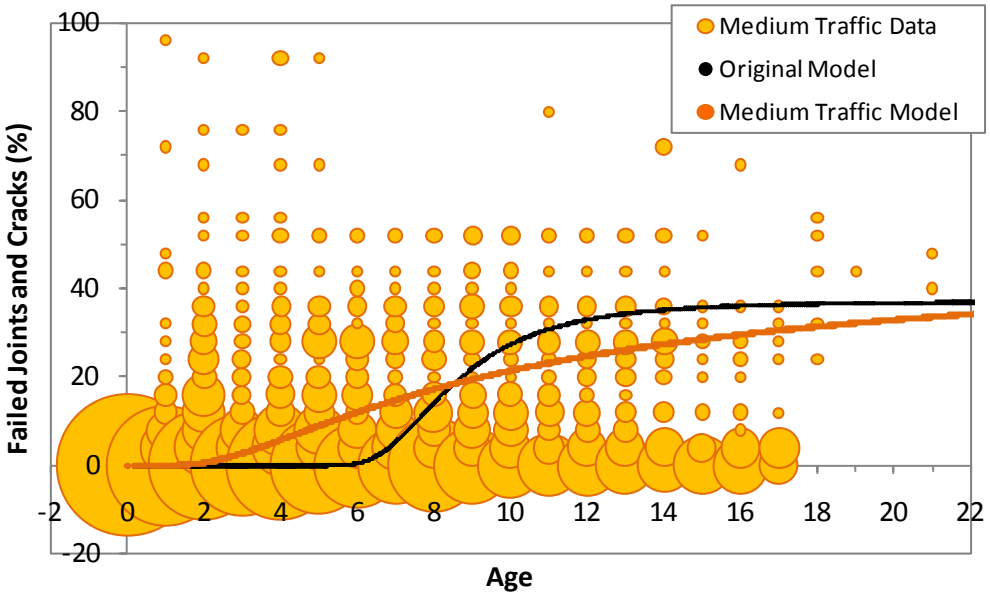


Zones 2 and 3

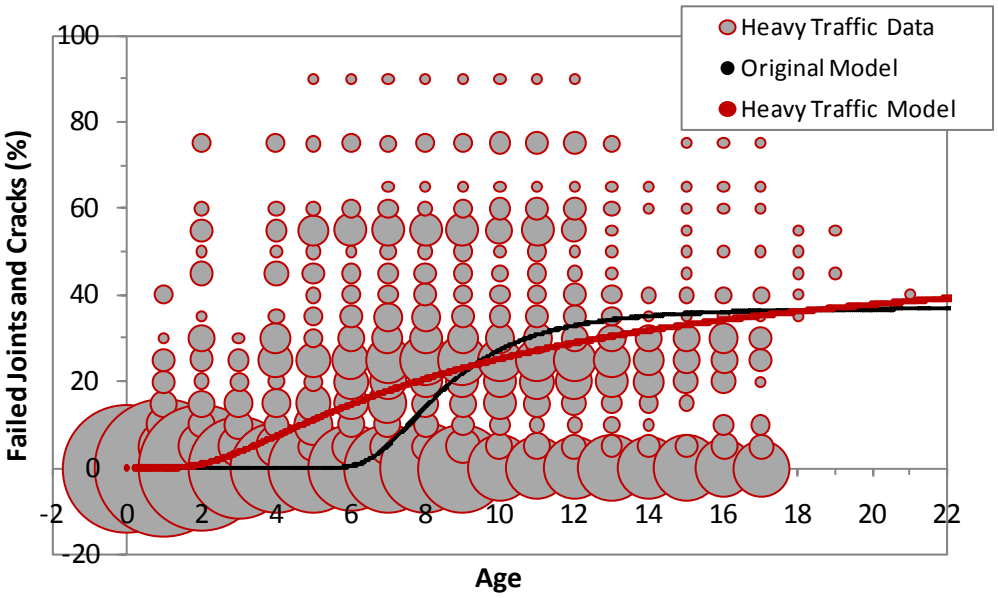
Light Rehabilitation, Low Traffic, Zones 2 and 3



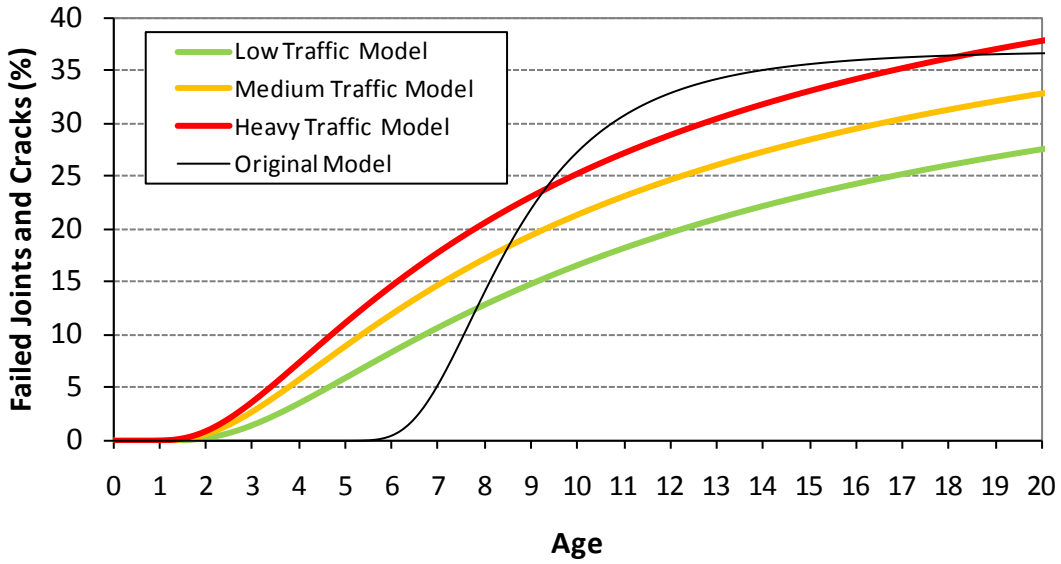
Light Rehabilitation, Medium Traffic, Zones 2 and 3



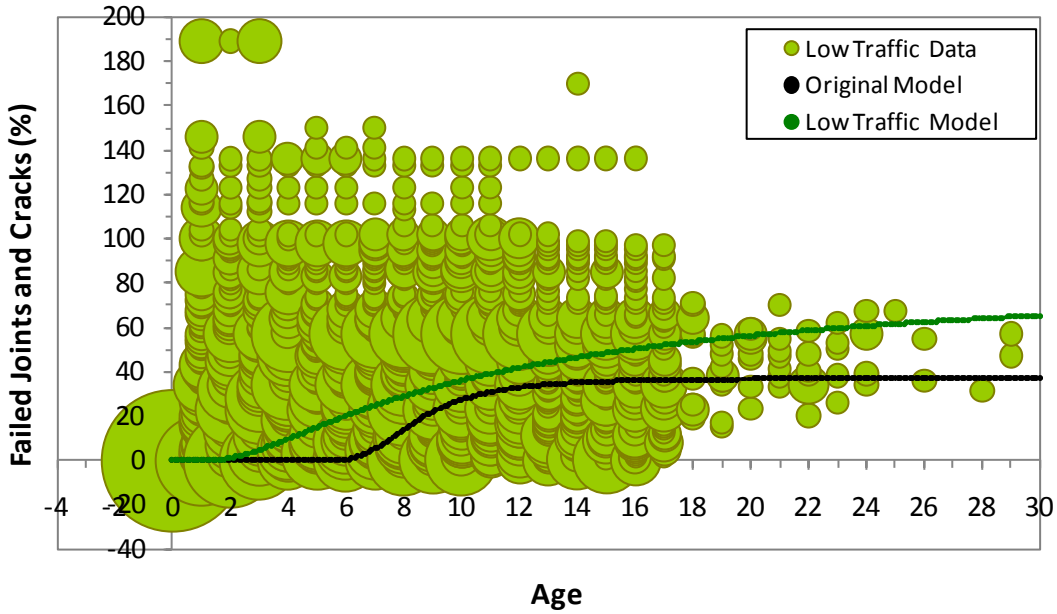
Light Rehabilitation, Heavy Traffic, Zones 2 and 3



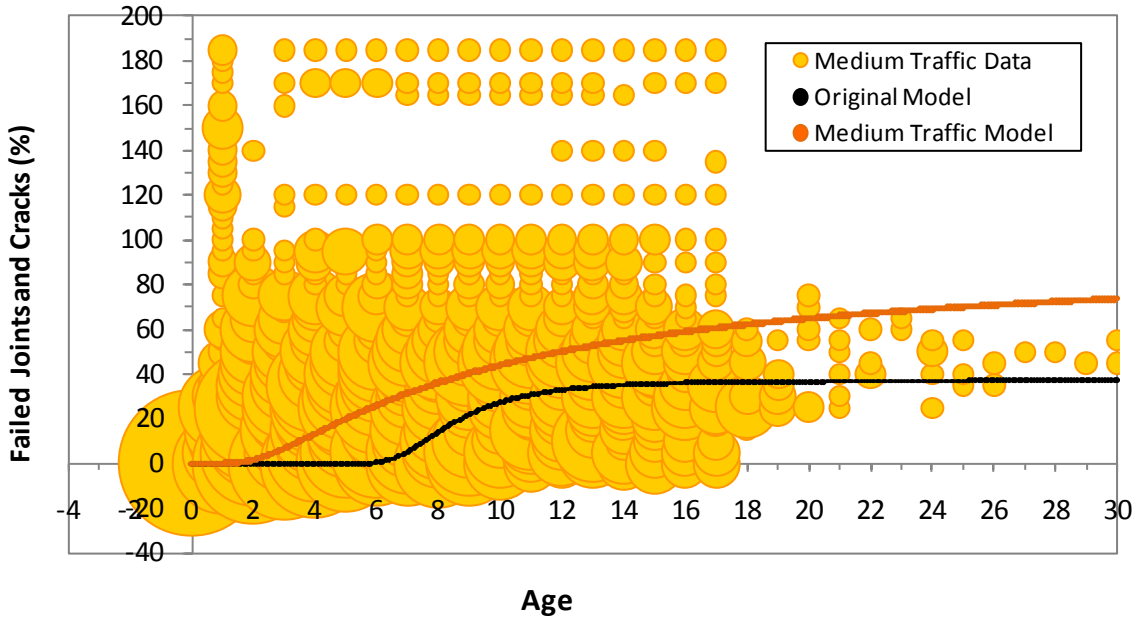
Light Rehabilitation, Model Comparison, Zones 2 and 3



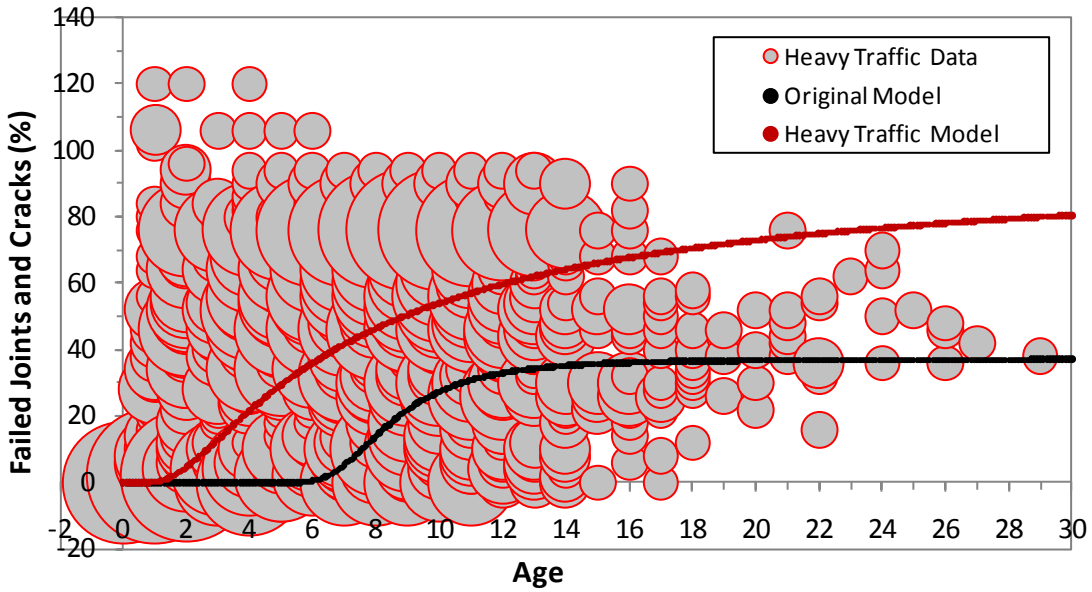
Preventive Maintenance, Low Traffic, Zones 2 and 3



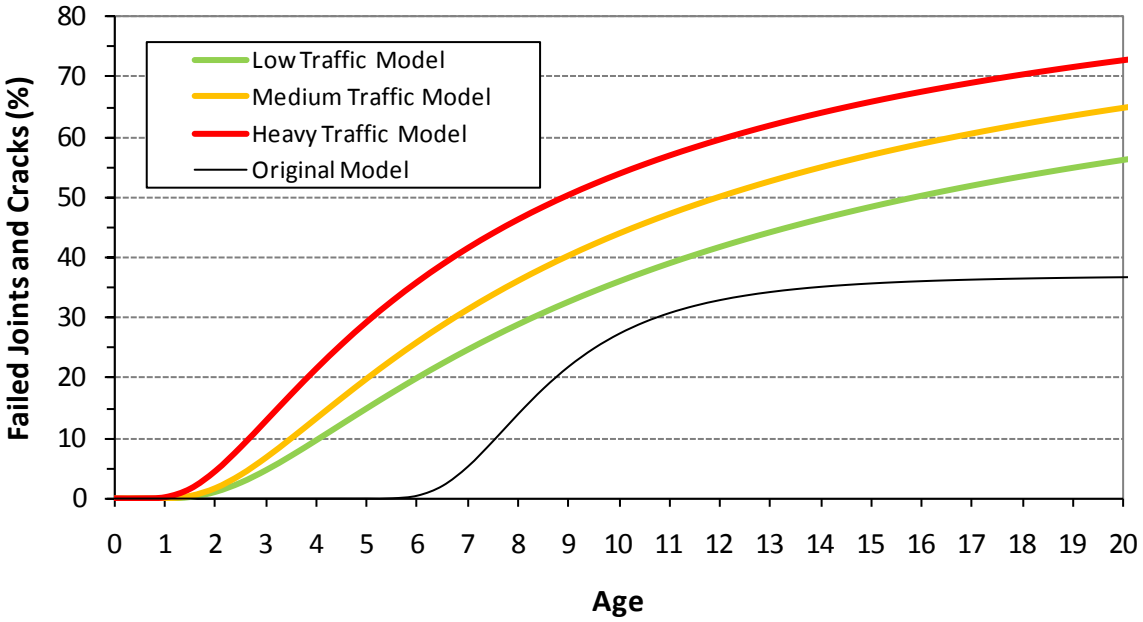
Preventive Maintenance, Medium Traffic, Zones 2 and 3



Preventive Maintenance, Heavy Traffic, Zones 2 and 3

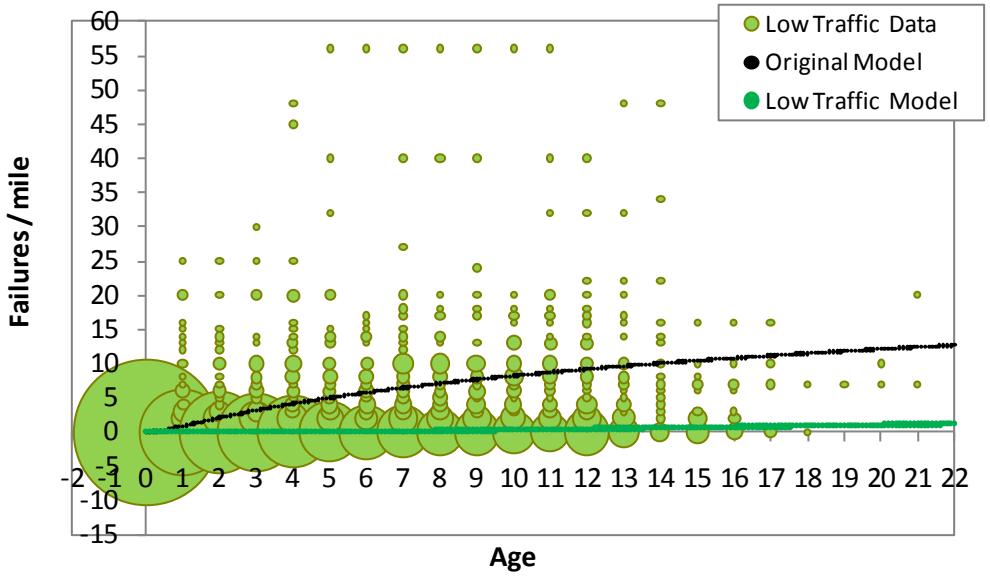


Preventive Maintenance, Model Comparison, Zones 2 and 3

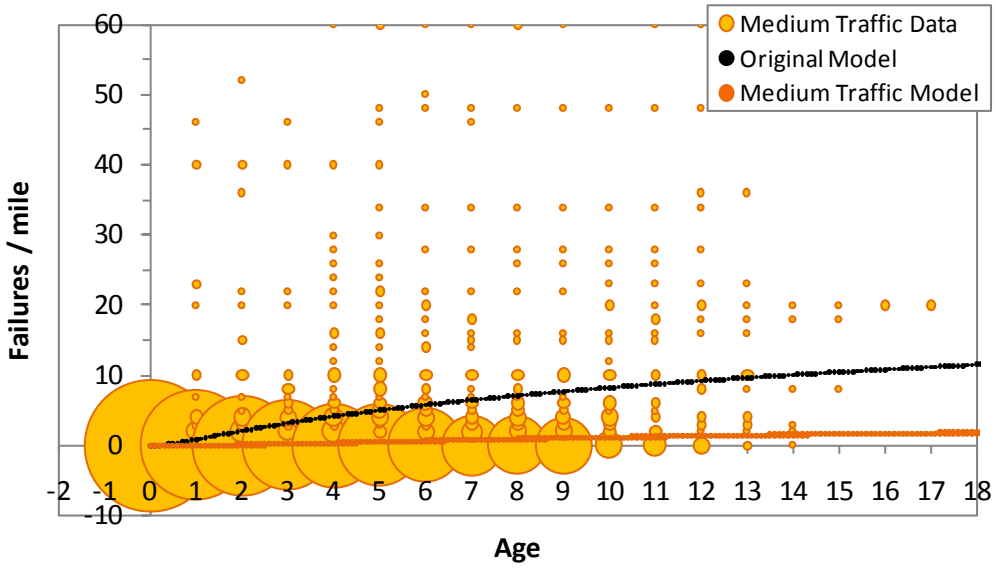


Failures

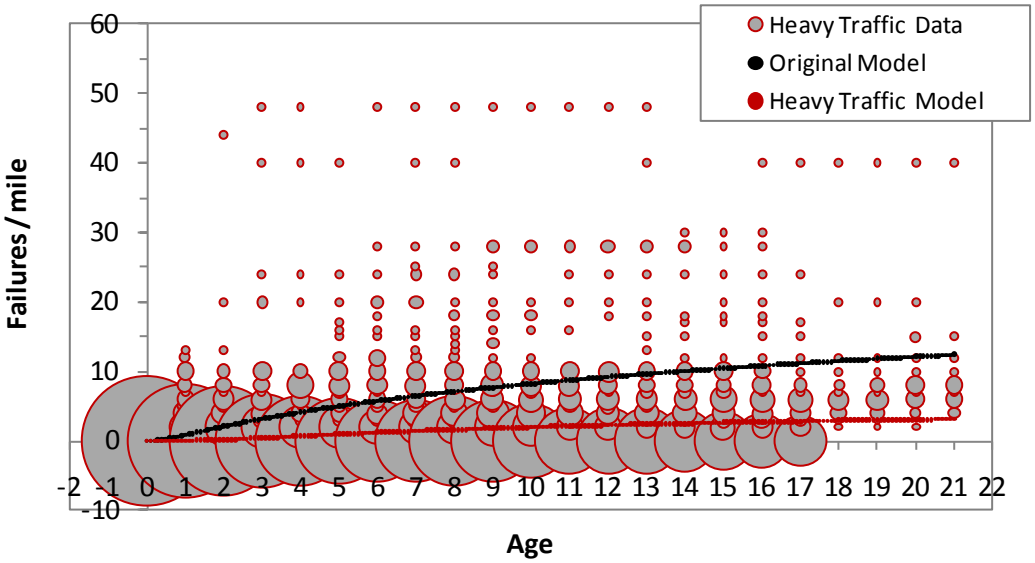
Heavy Rehabilitation, Low Traffic, All Zones



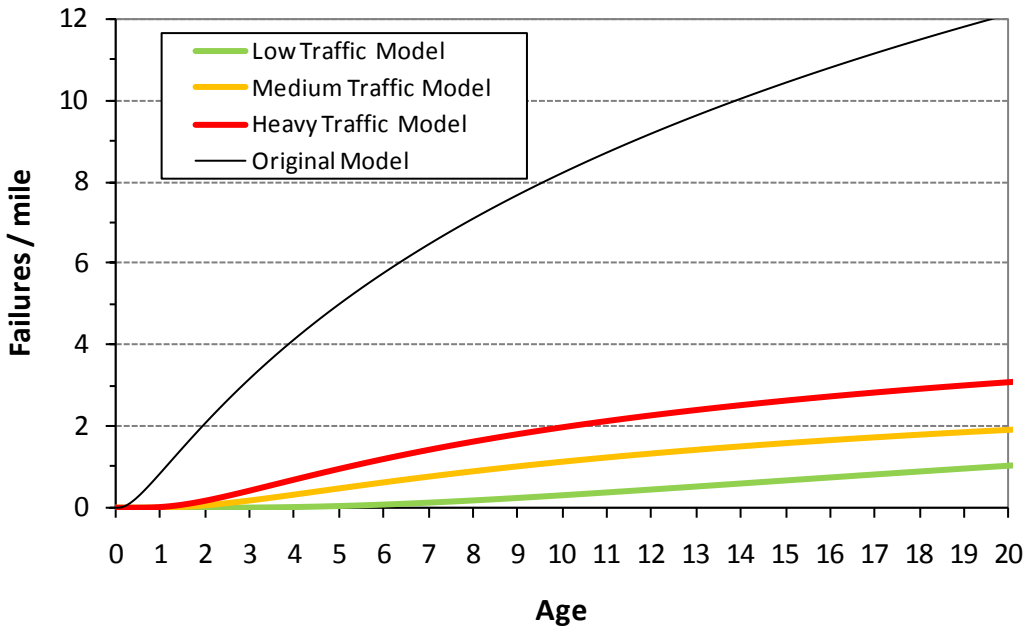
Heavy Rehabilitation, Medium Traffic, All Zones



Heavy Rehabilitation, High Traffic, All Zones

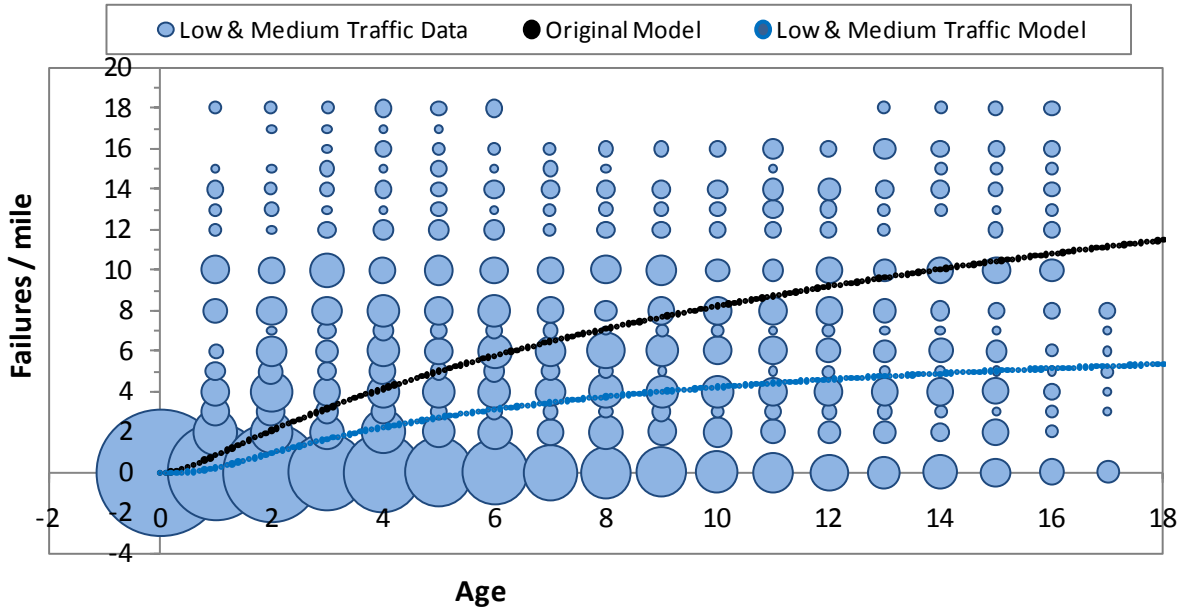


Heavy Rehabilitation, Model Comparison, All Zones

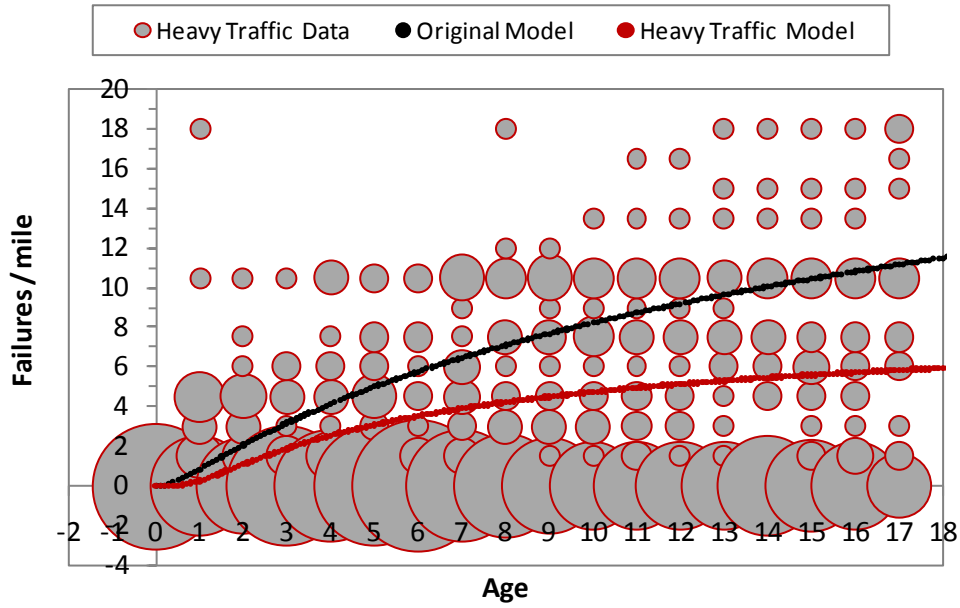


Zone 1

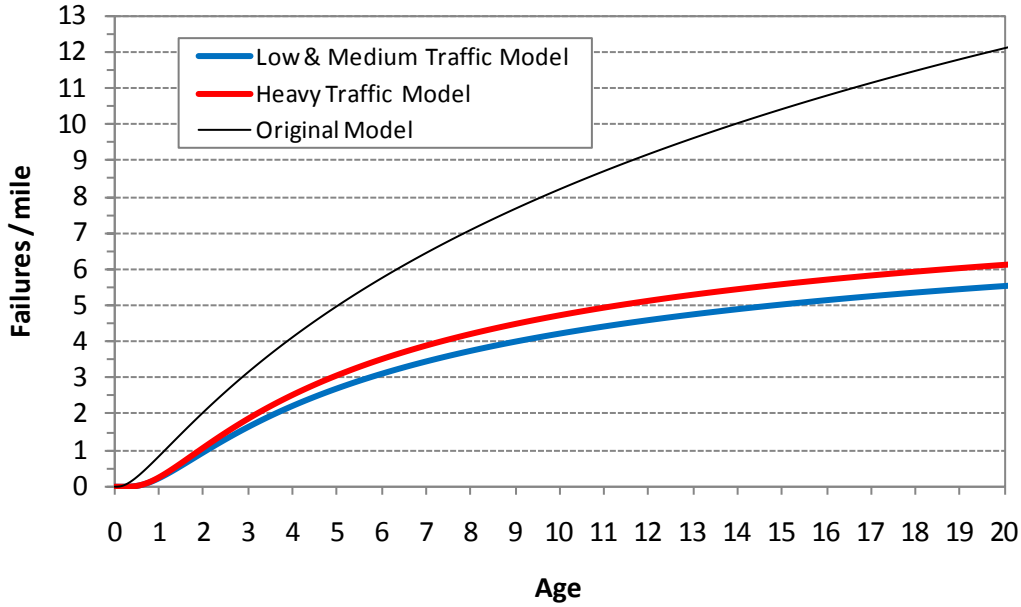
Light Rehabilitation, Low and Medium Traffic, Zone 1



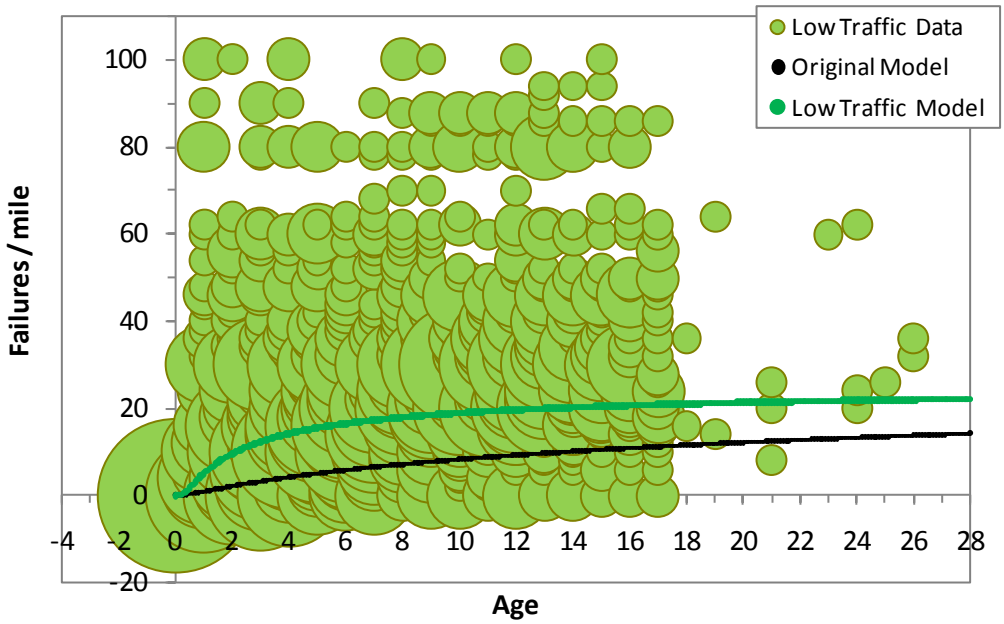
Light Rehabilitation, Heavy Traffic, Zone 1



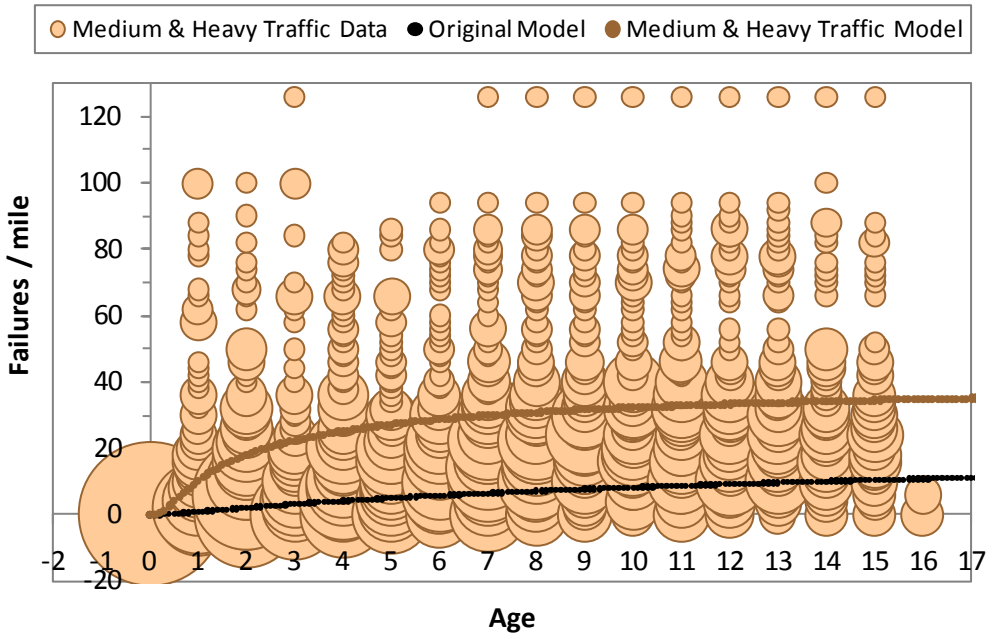
Light Rehabilitation, Model Comparison, Zone 1



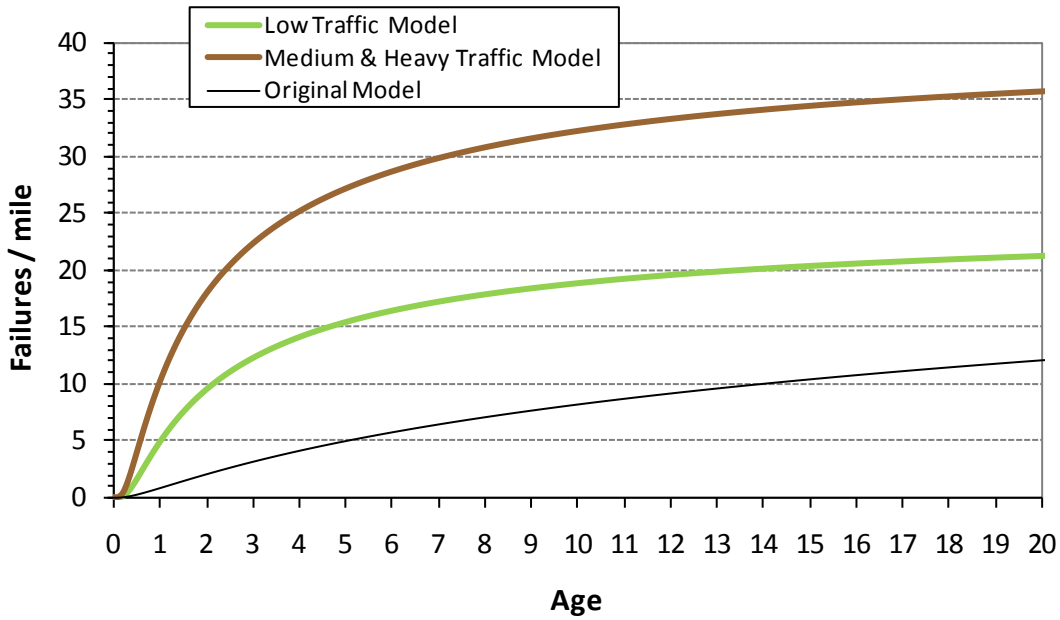
Preventive Maintenance, Low Traffic, Zone 1



Preventive Maintenance, Medium and Heavy Traffic, Zone 1

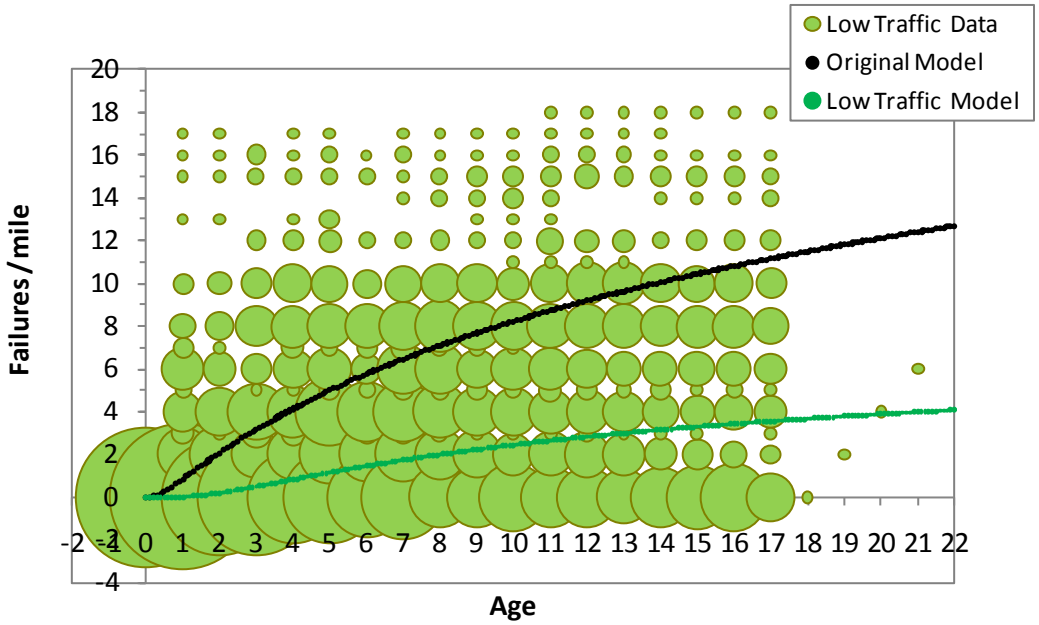


Preventive Maintenance, Model Comparison, Zone 1

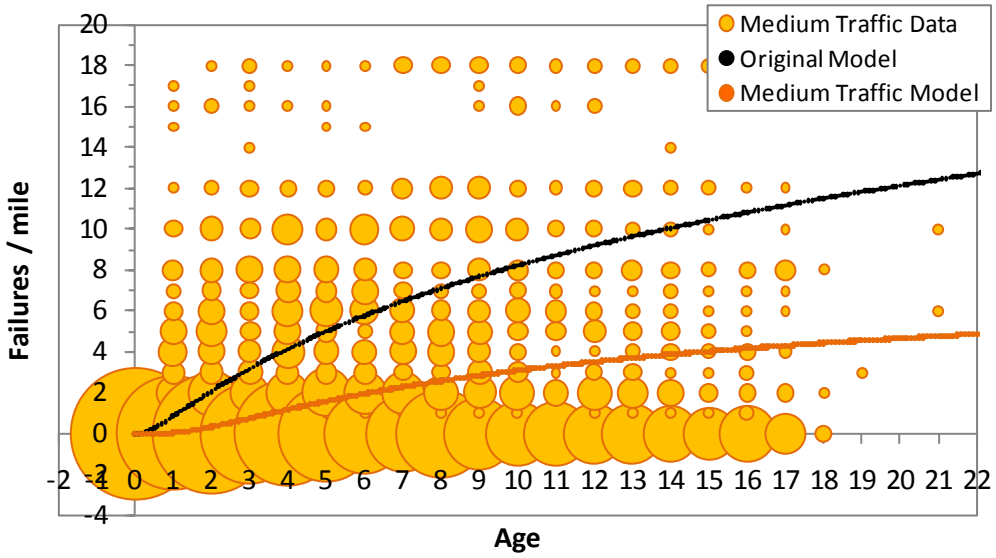


Zone 2

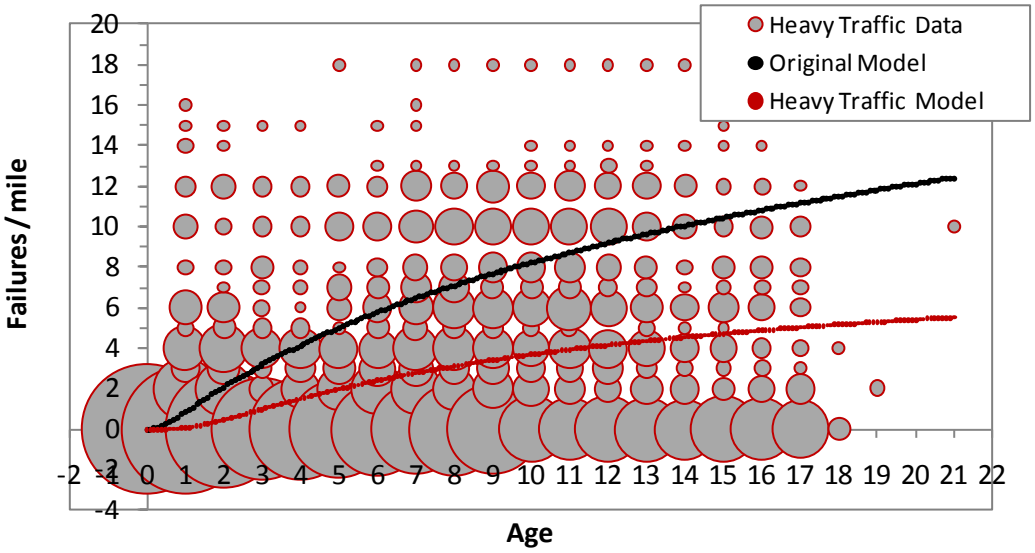
Light Rehabilitation, Low Traffic, Zone 2



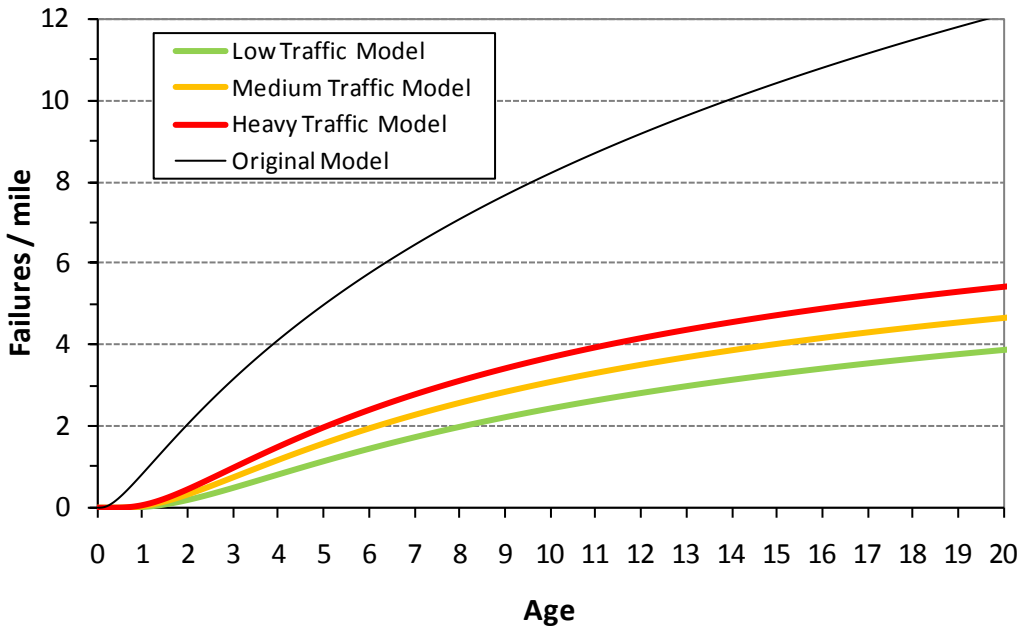
Light Rehabilitation, Medium Traffic, Zone 2



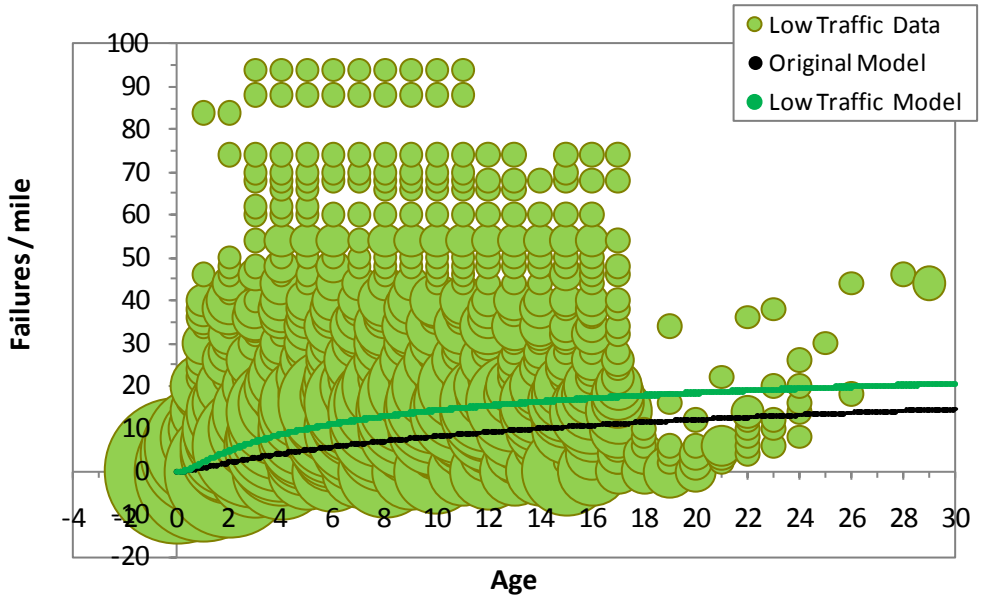
Light Rehabilitation, Heavy Traffic, Zone 2



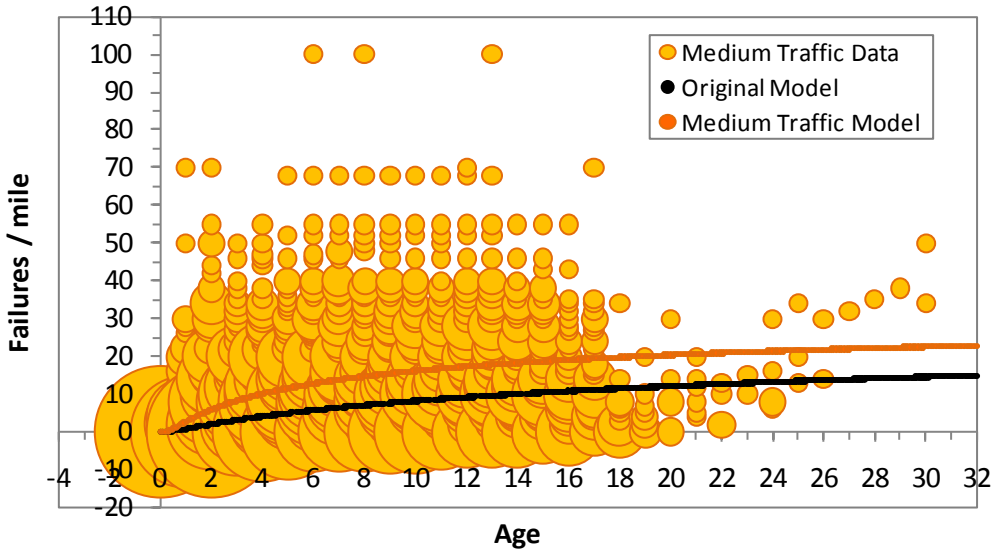
Light Rehabilitation, Model Comparison, Zone 2



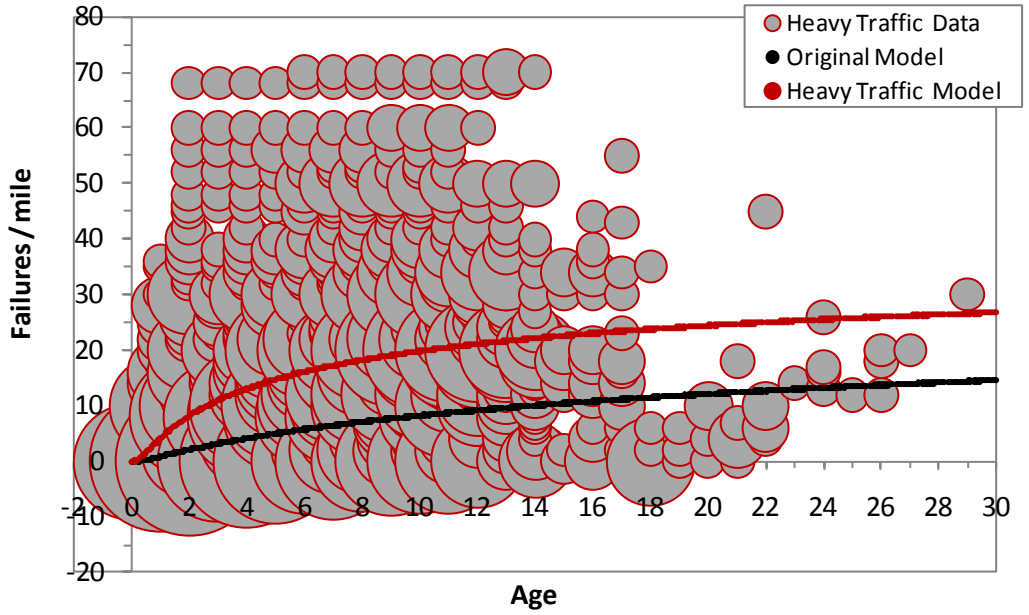
Preventive Maintenance, Low Traffic, Zone 2



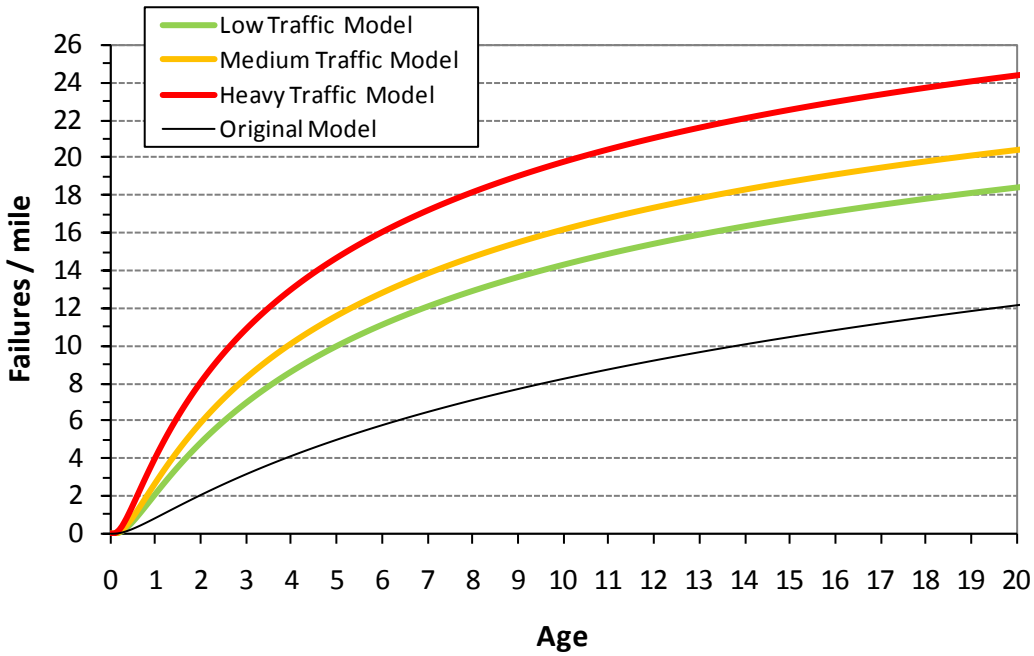
Preventive Maintenance, Medium Traffic, Zone 2



Preventive Maintenance, Heavy Traffic, Zone 2

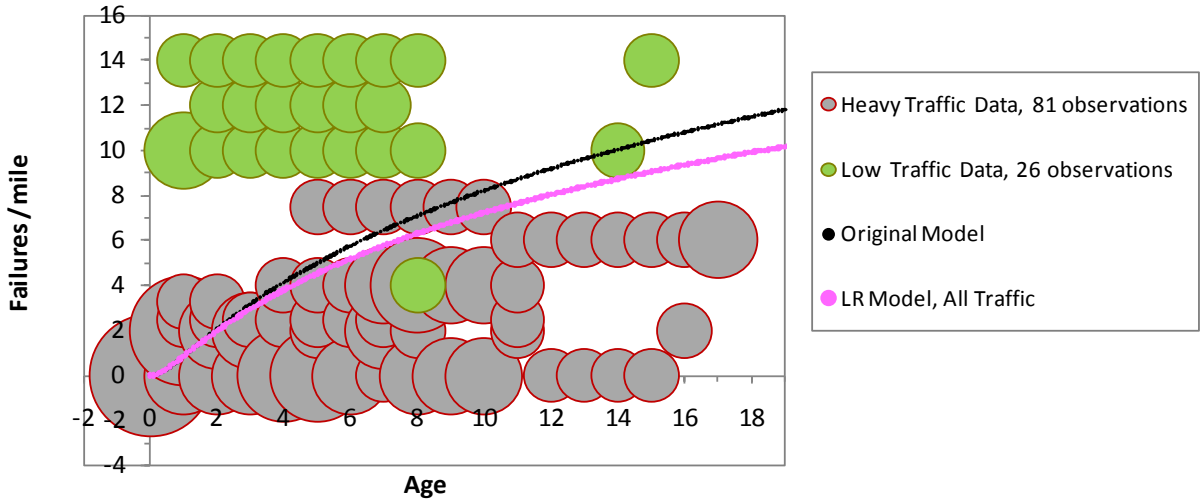


Preventive Maintenance, Model Comparison, Zone 2

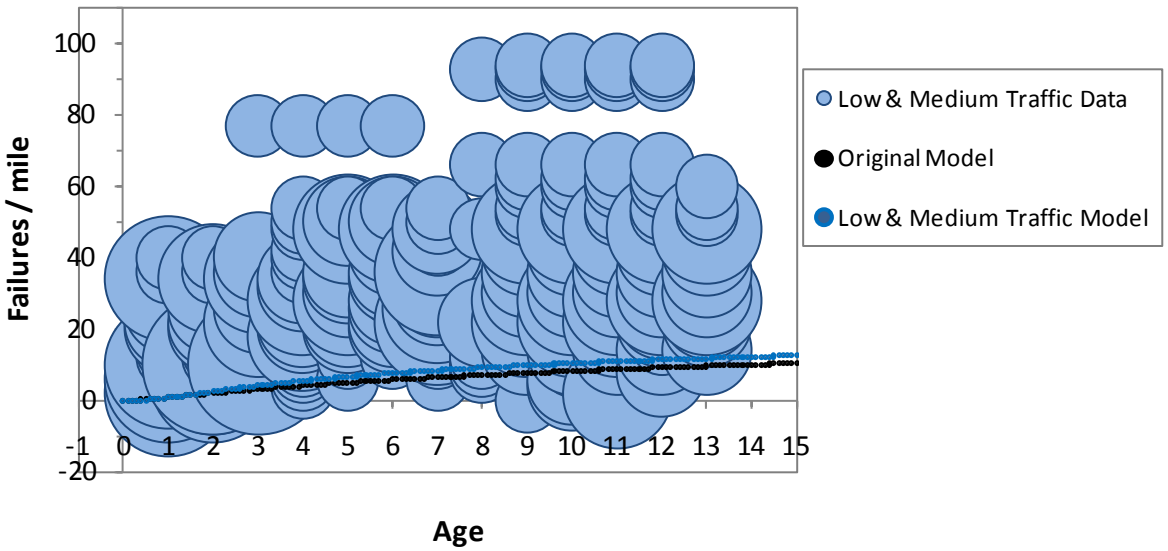


Zone 3

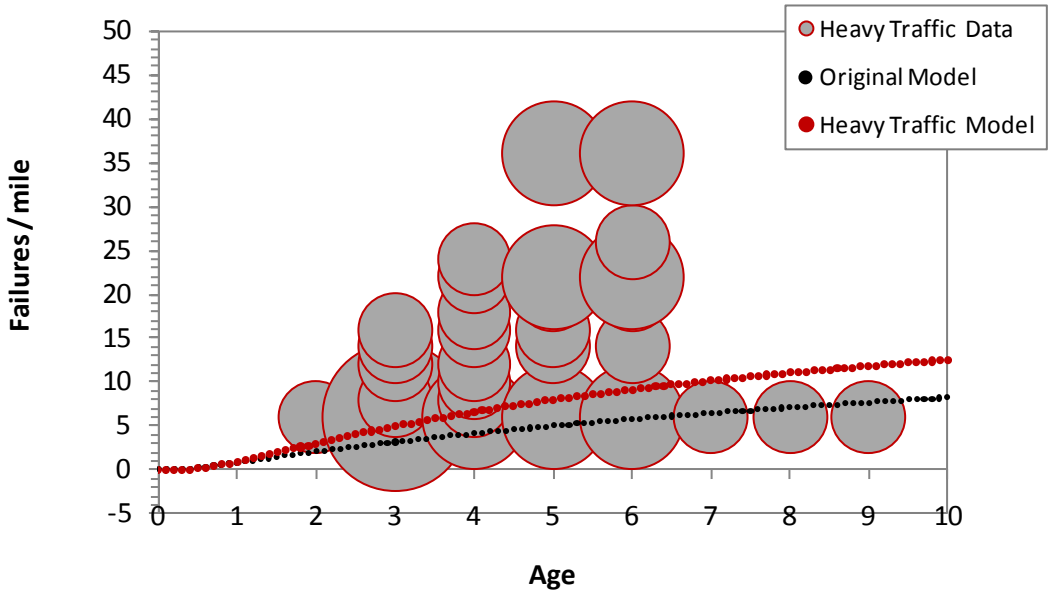
Light Rehabilitation, All Traffic, Zone 3



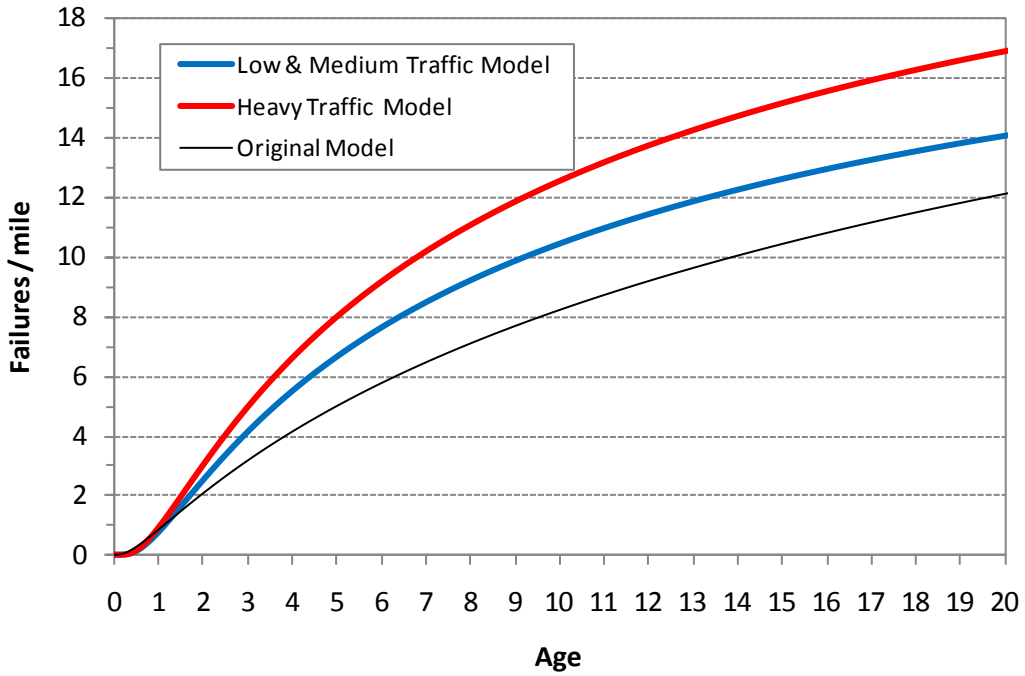
Preventive Maintenance, Low and Medium Traffic, Zone 3



Preventive Maintenance, Heavy Traffic, Zone 3

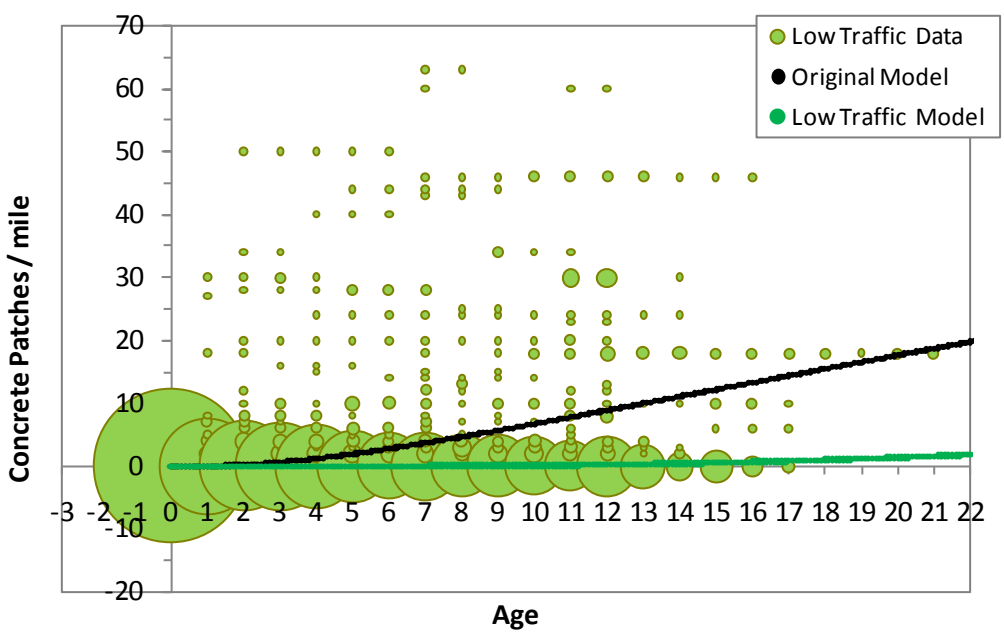


Preventive Maintenance Model Comparison, Zone 3

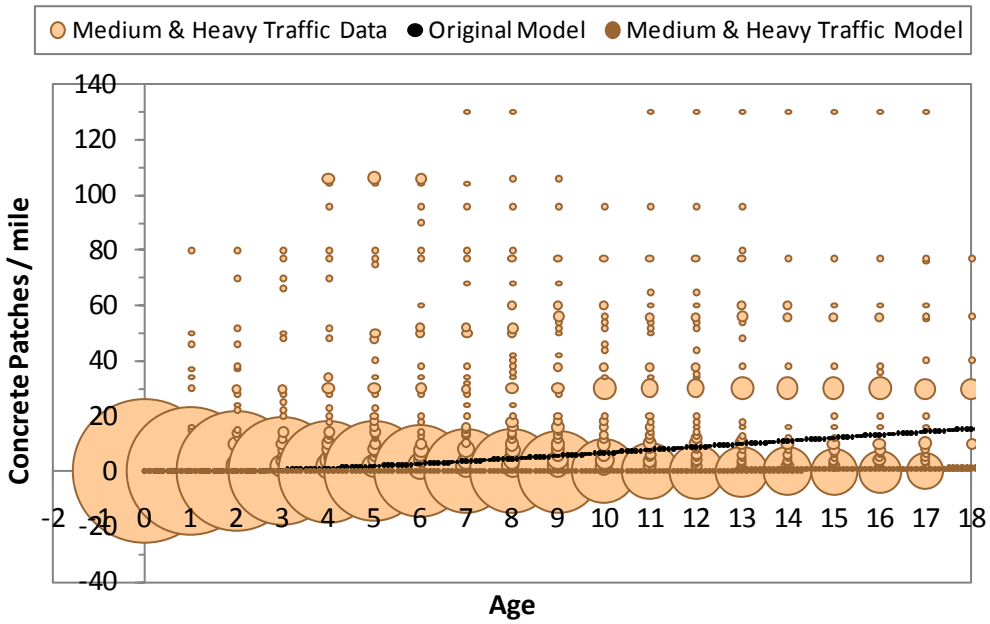


Concrete Patches

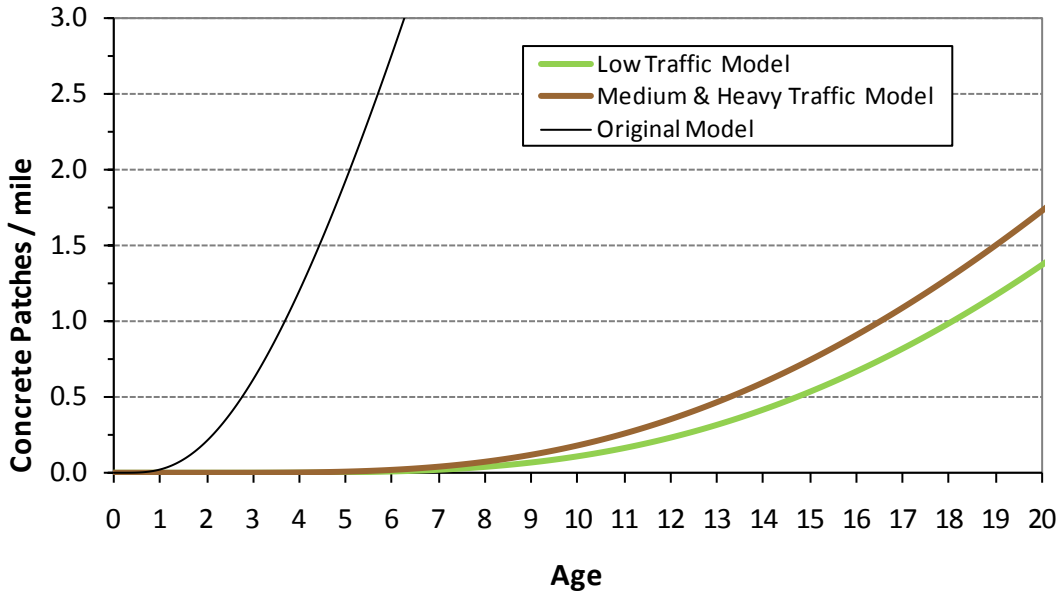
Heavy Rehabilitation, Low Traffic, All Zones



Heavy Rehabilitation, Medium and Heavy Traffic, All Zones

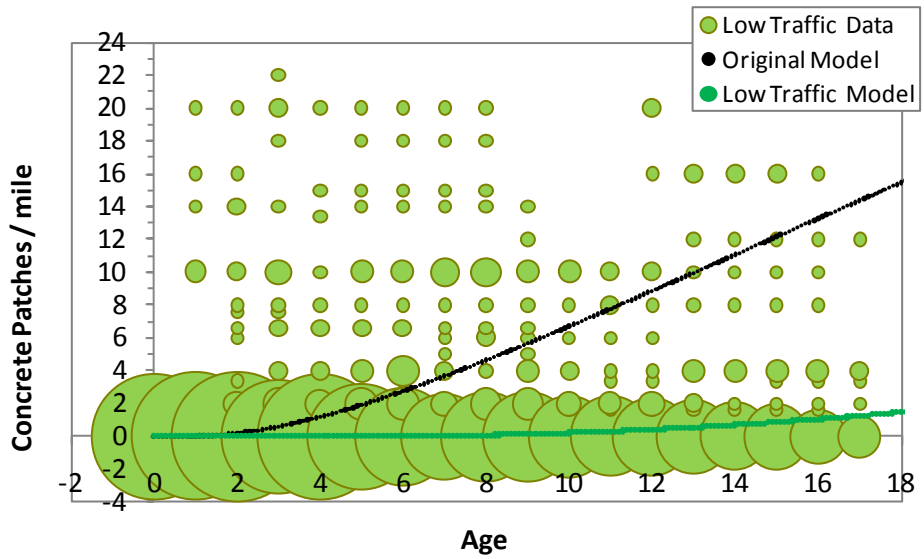


Heavy Rehabilitation, Model Comparison, All Zones

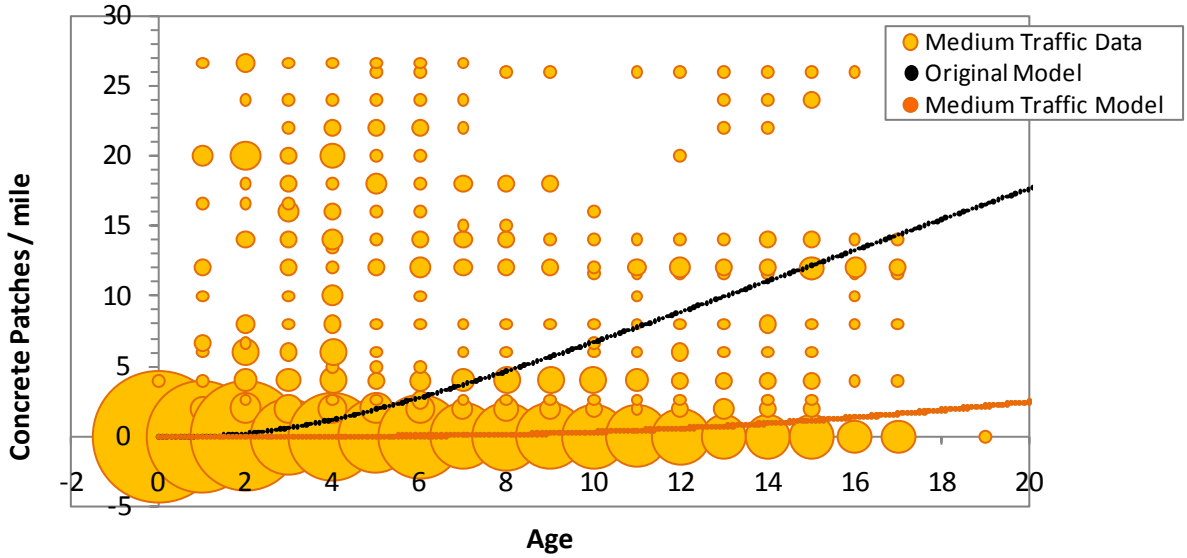


Zone 1

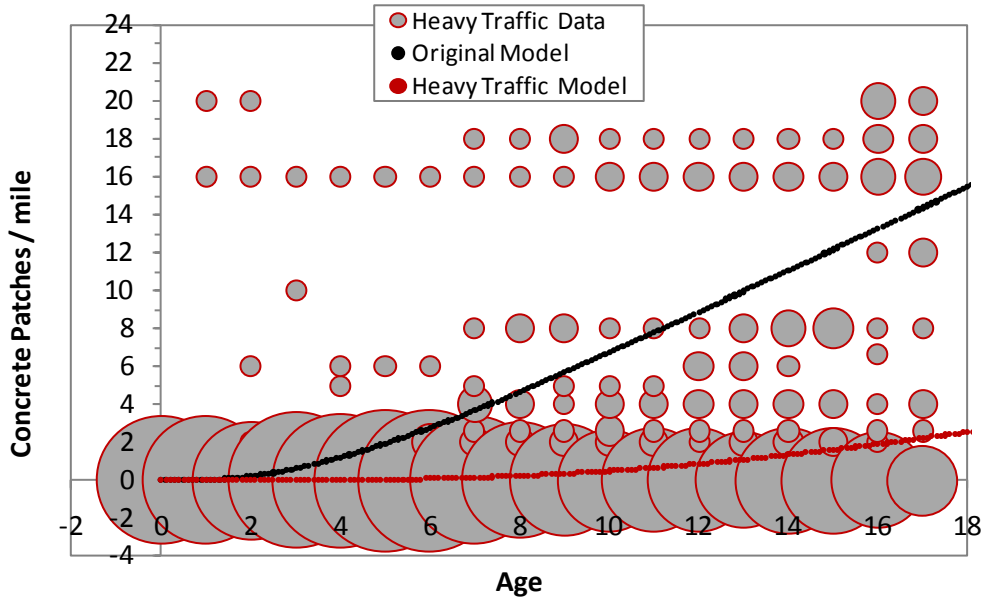
Light Rehabilitation, Low Traffic, Zone 1



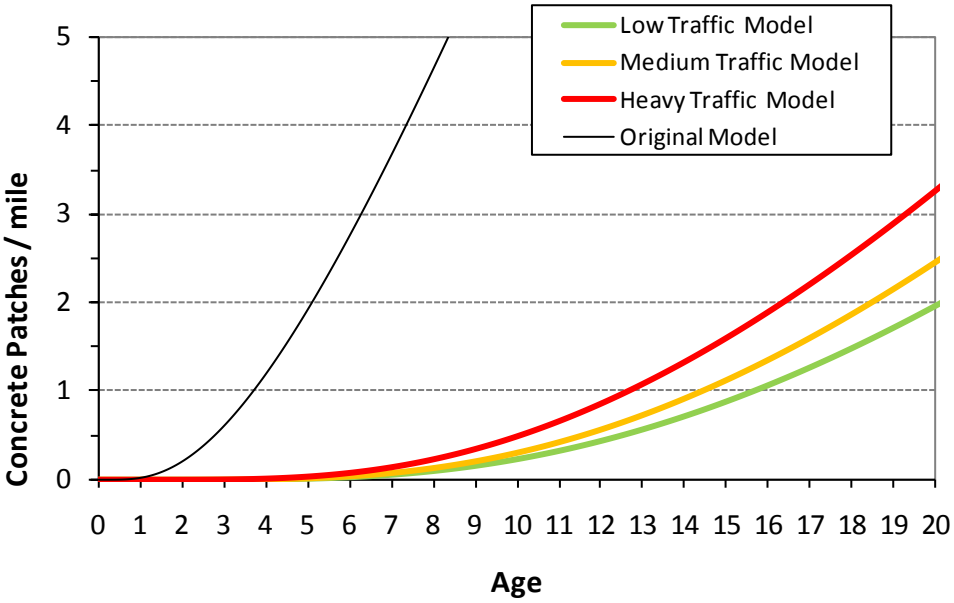
Light Rehabilitation, Medium Traffic, Zone 1



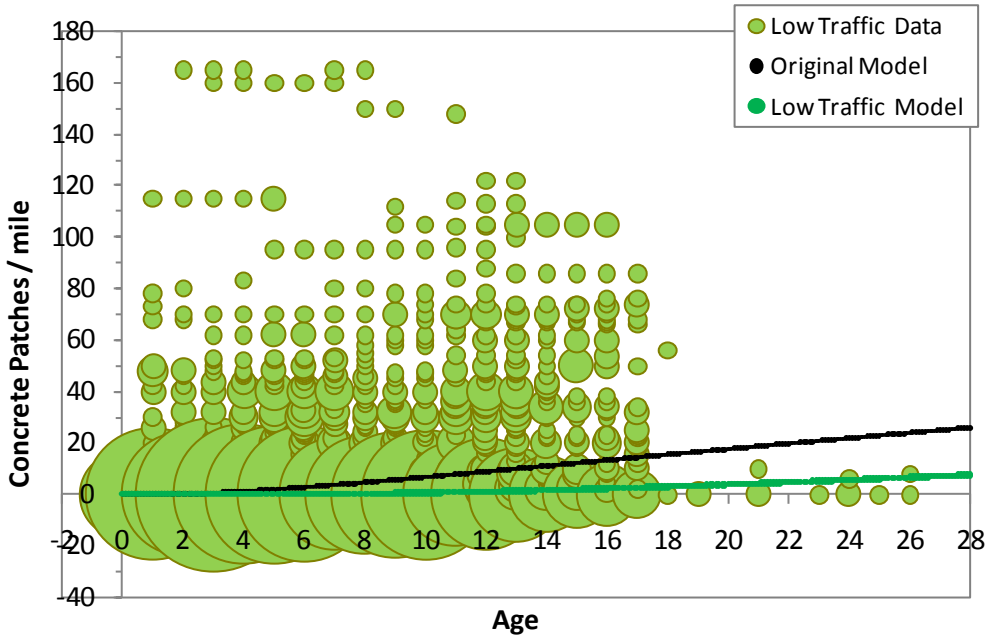
Light Rehabilitation, Heavy Traffic, Zone 1



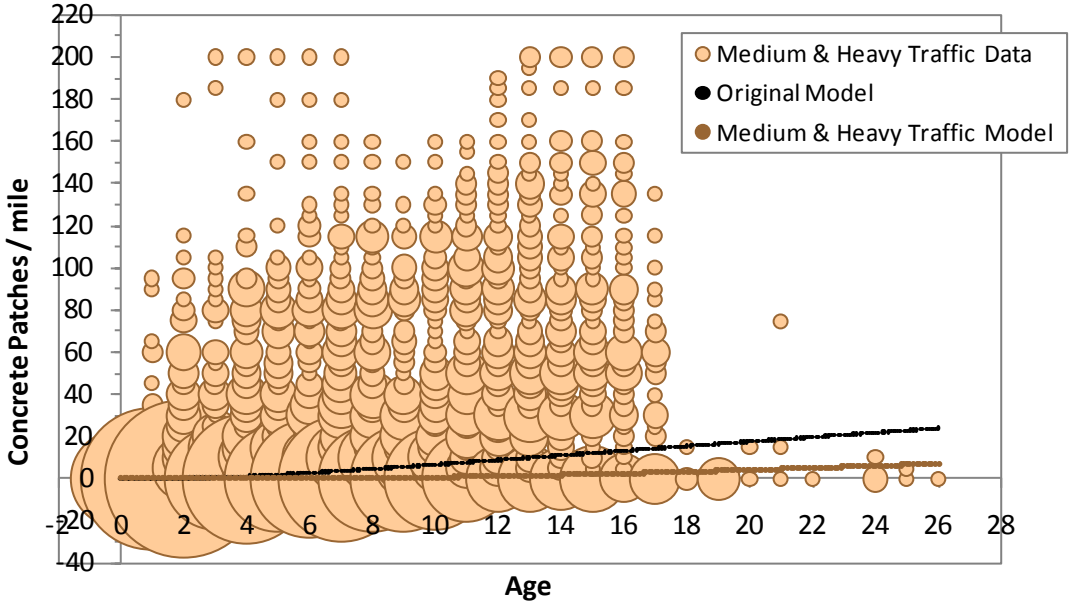
Light Rehabilitation, Model Comparison, Zone 1



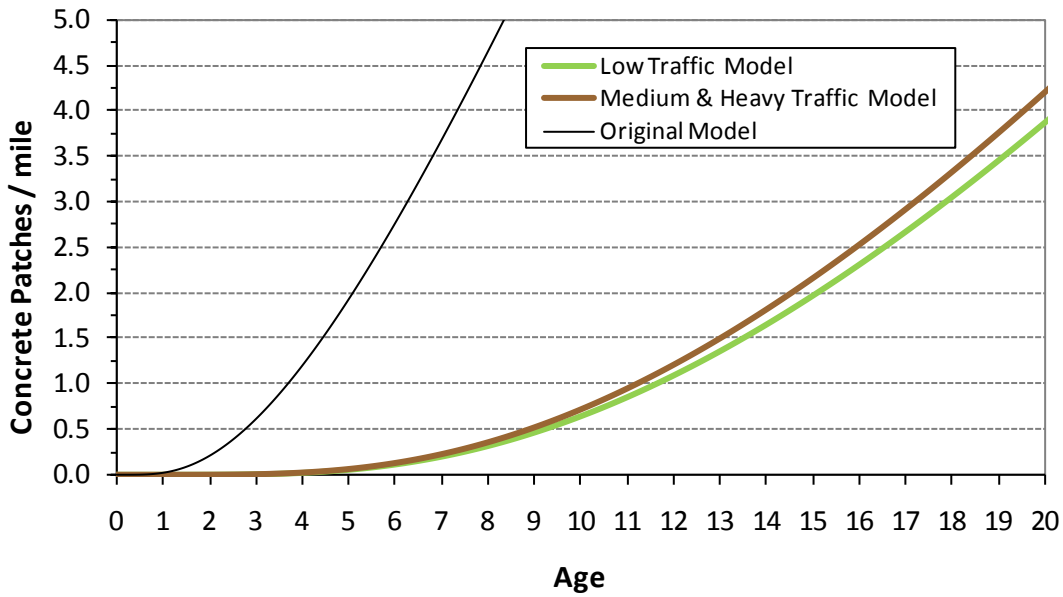
Preventive Maintenance, Low Traffic, Zone 1



Preventive Maintenance, Medium and Heavy Traffic, Zone 1

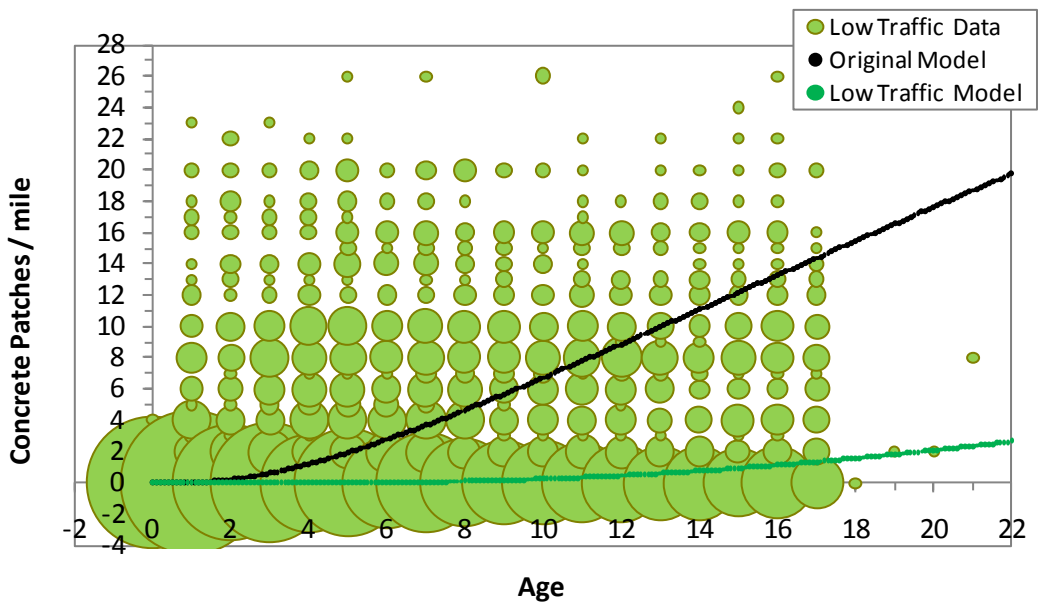


Preventive Maintenance, Model Comparison, Zone 1

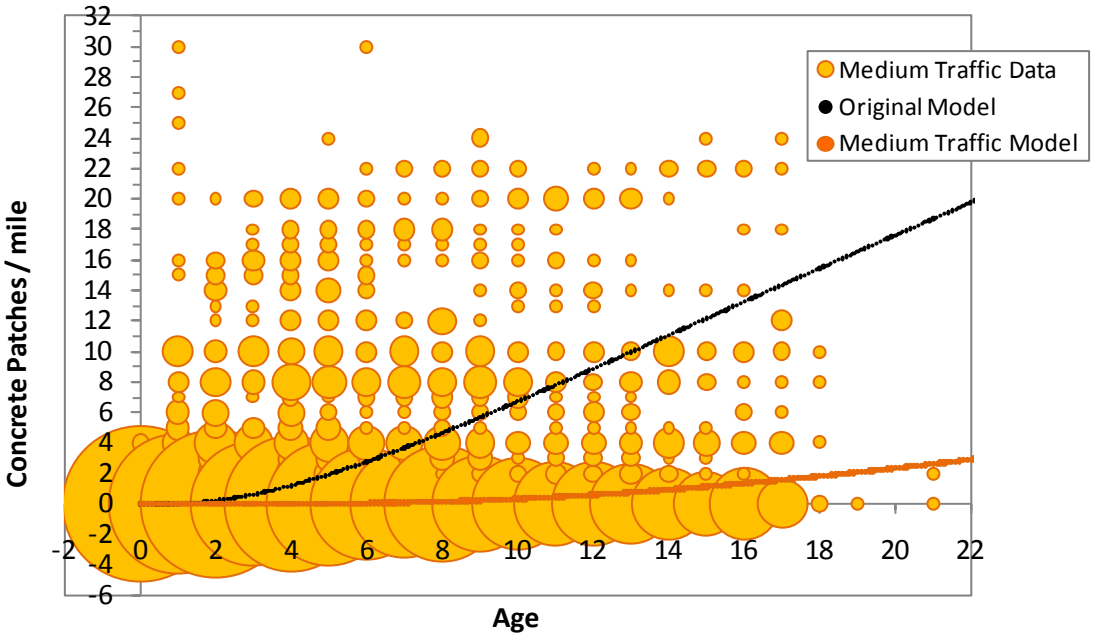


Zone 2

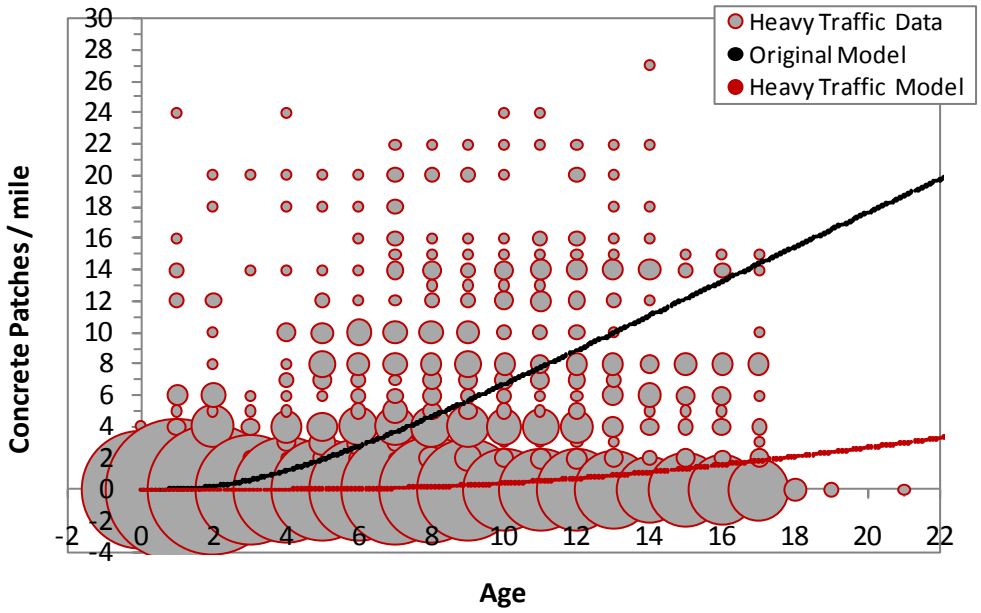
Light Rehabilitation, Low Traffic, Zone 2



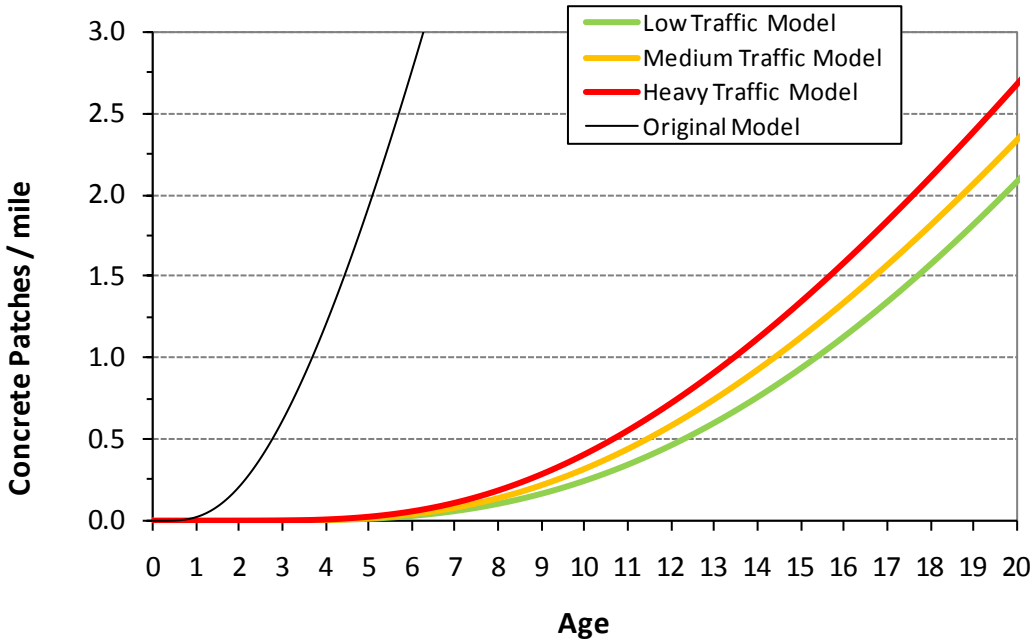
Light Rehabilitation, Medium Traffic, Zone 2



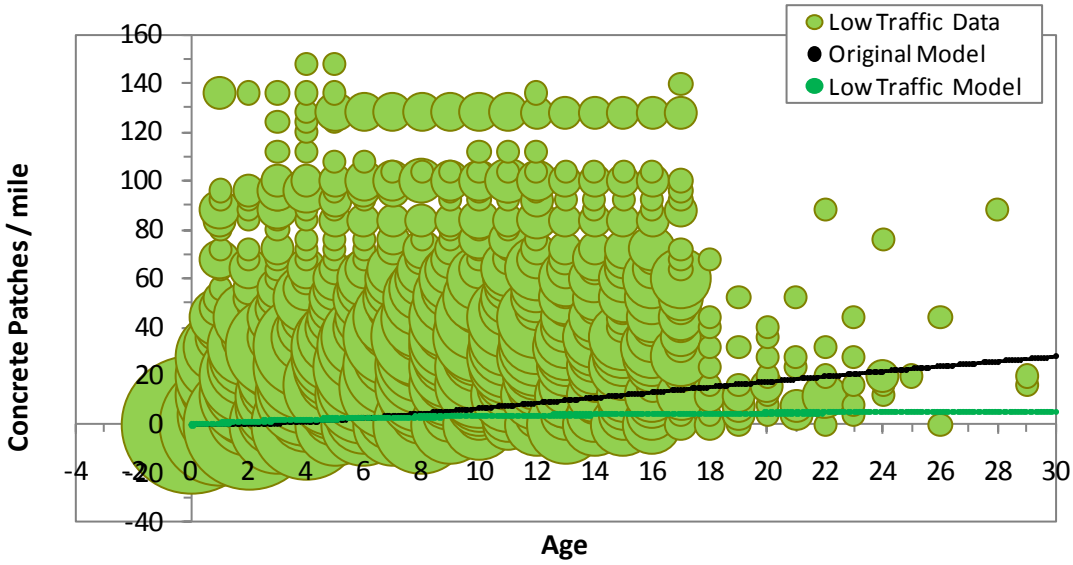
Light Rehabilitation, Heavy Traffic, Zone 2



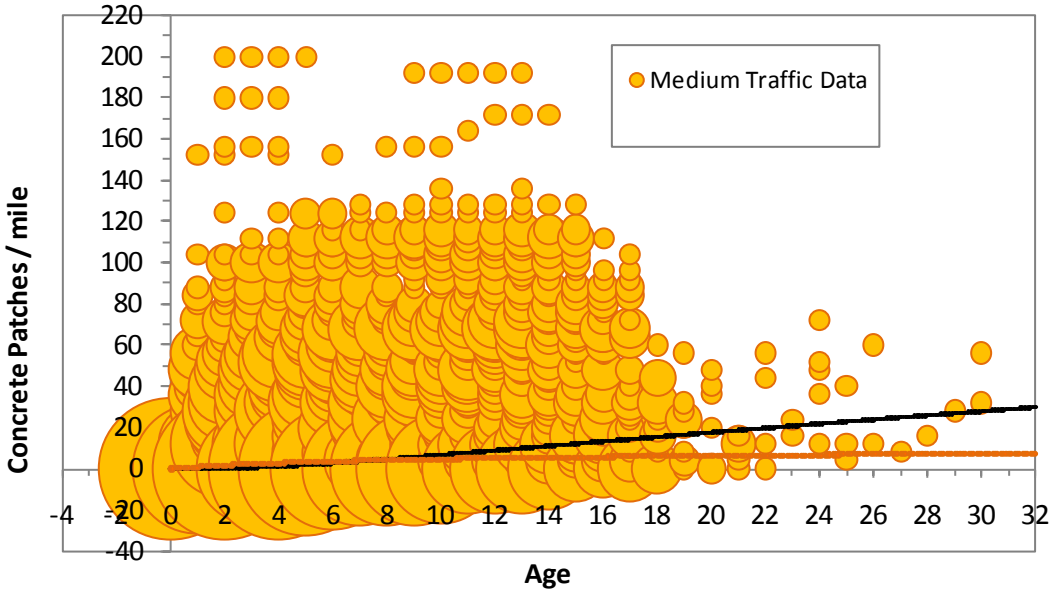
Light Rehabilitation Model Comparison, Zone 2



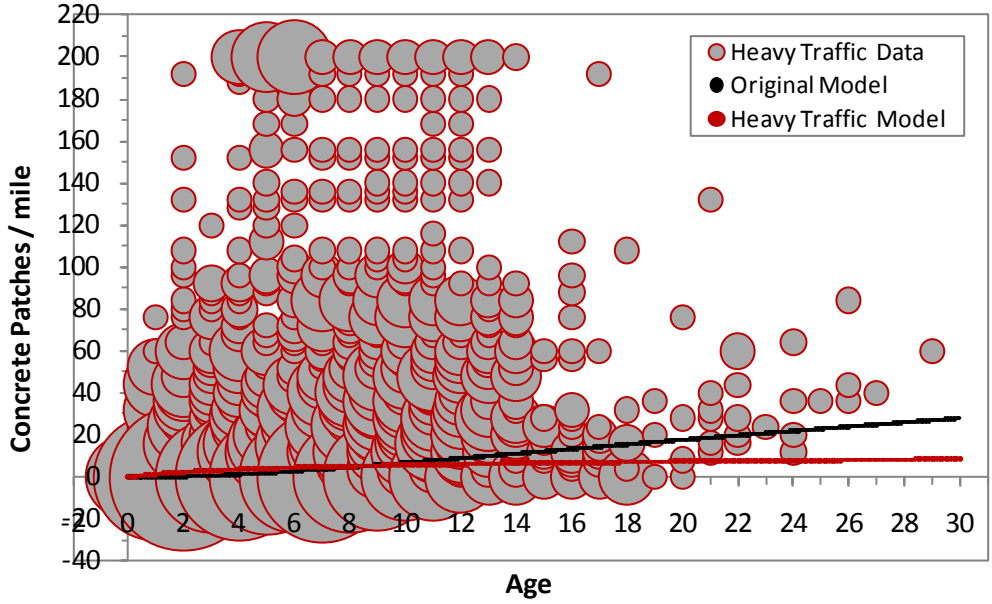
Preventive Maintenance, Low Traffic, Zone 2



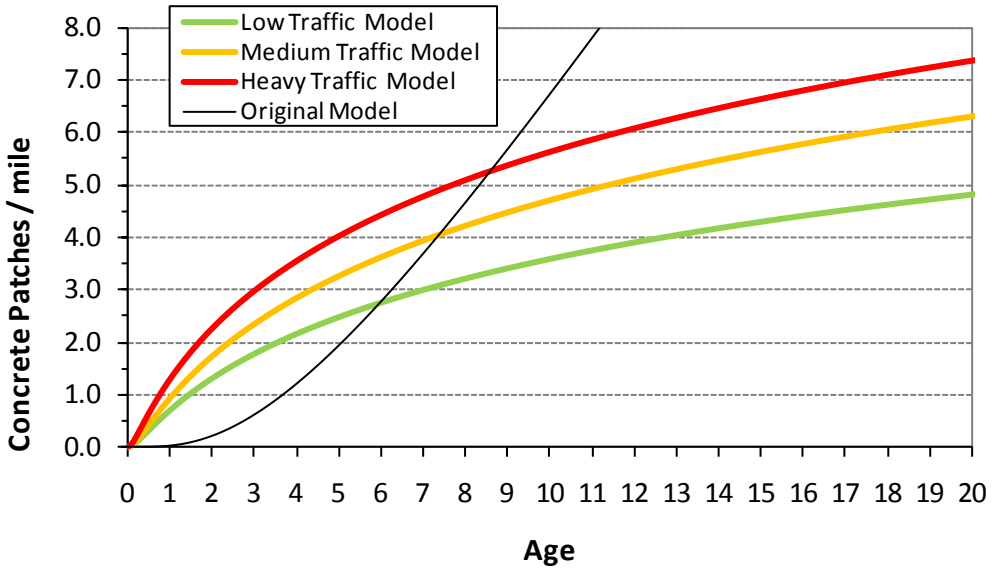
Preventive Maintenance, Medium Traffic, Zone 2



Preventive Maintenance, Heavy Traffic, Zone 2

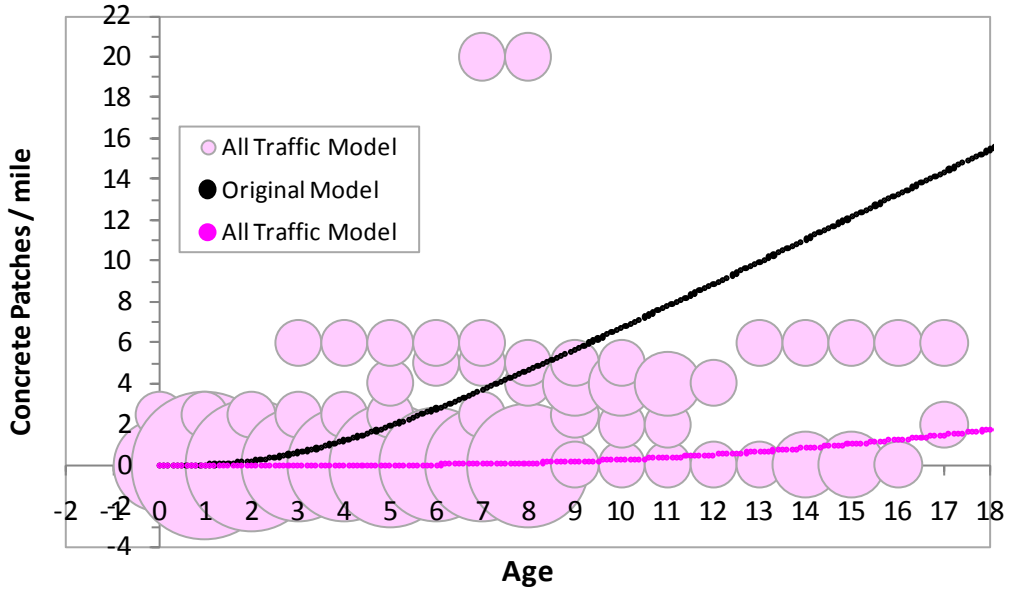


Preventive Maintenance Model Comparison, Zone 2

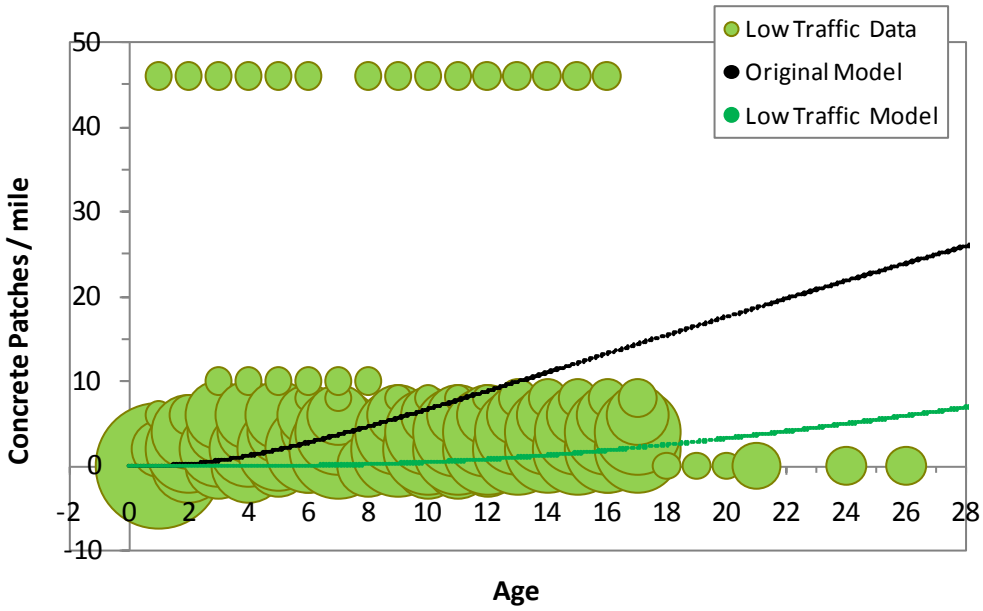


Zone 3

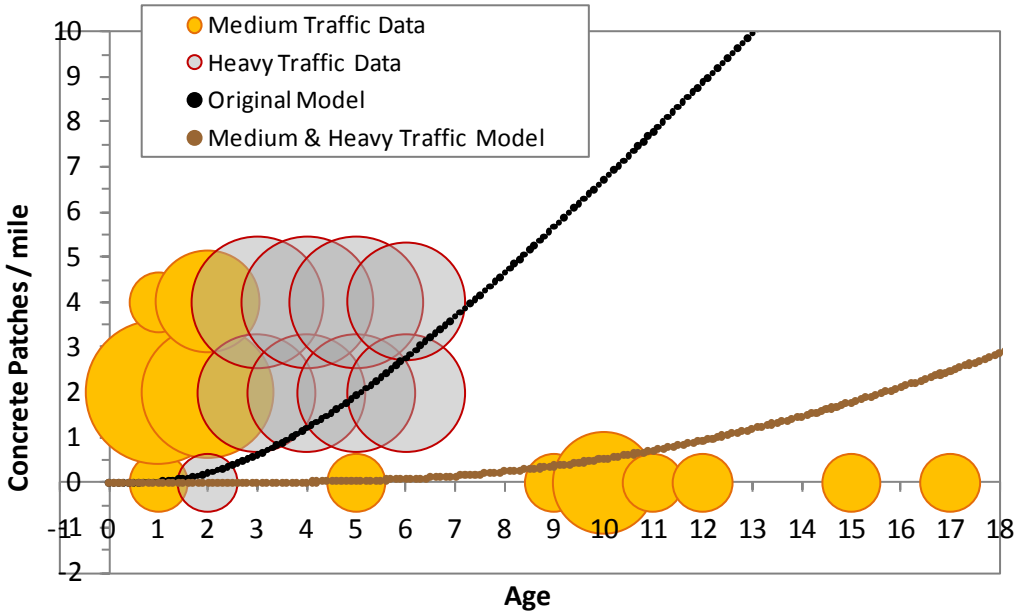
Light Rehabilitation, All Traffic, Zone 3



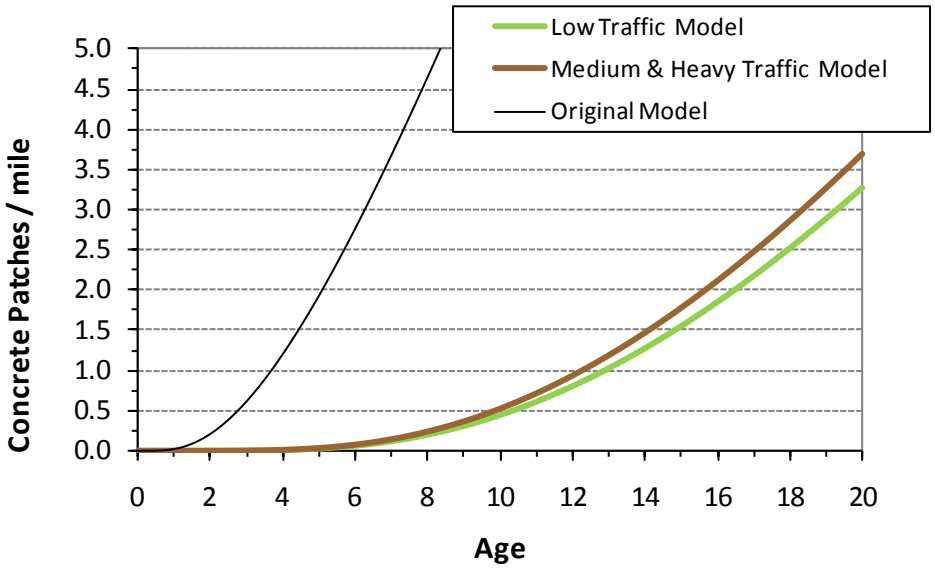
Preventive Maintenance, Low Traffic, Zone 3



Preventive Maintenance, Medium and Heavy Traffic, Zone 3

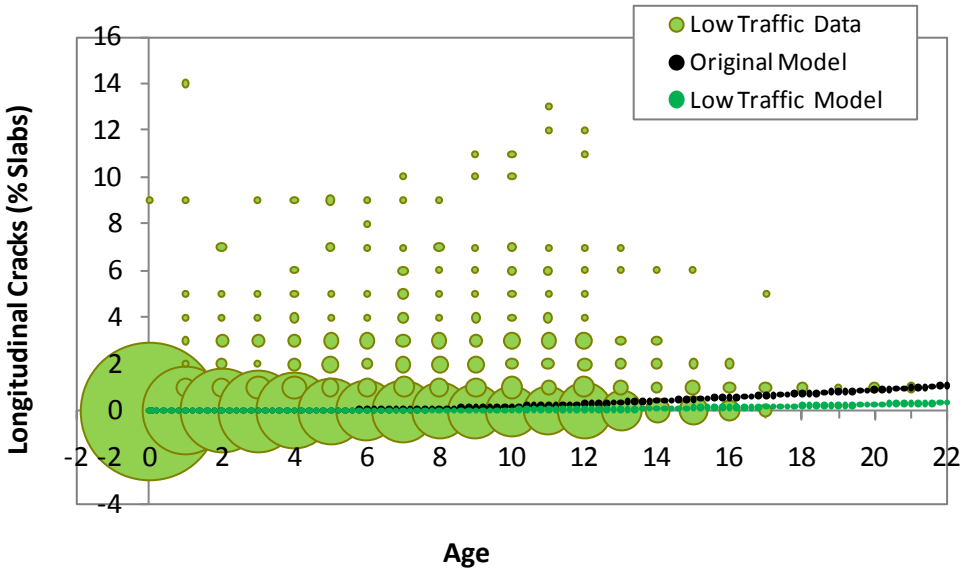


Preventive Maintenance Model Comparison, Zone 3

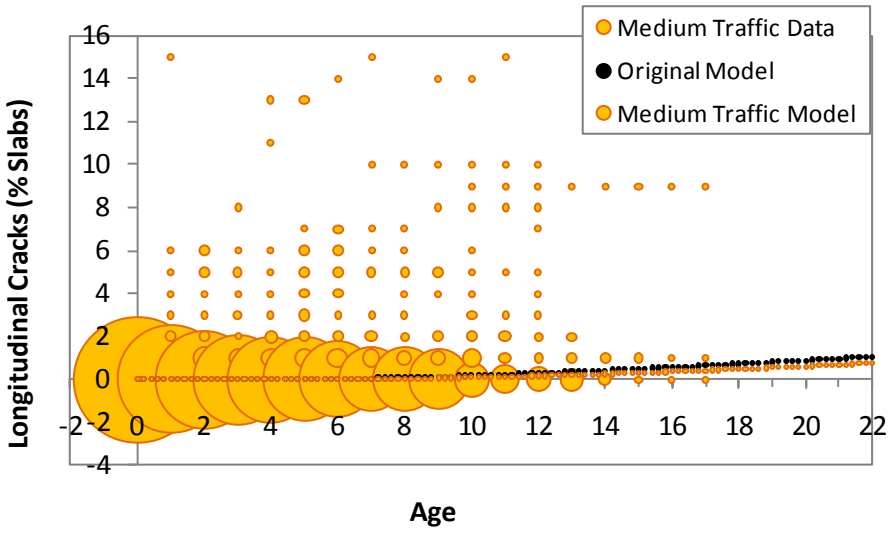


Longitudinal Cracks

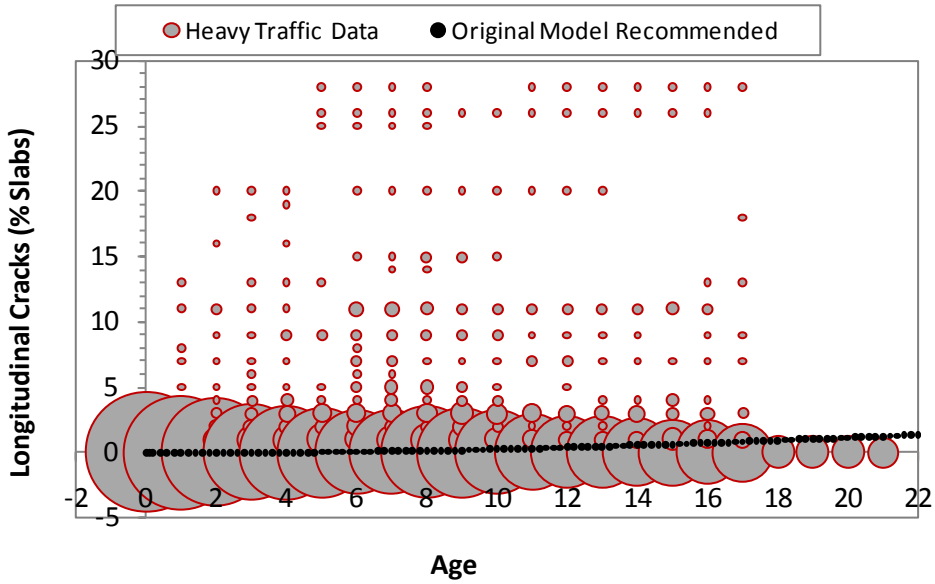
Heavy Rehabilitation, Low Traffic, All Zones

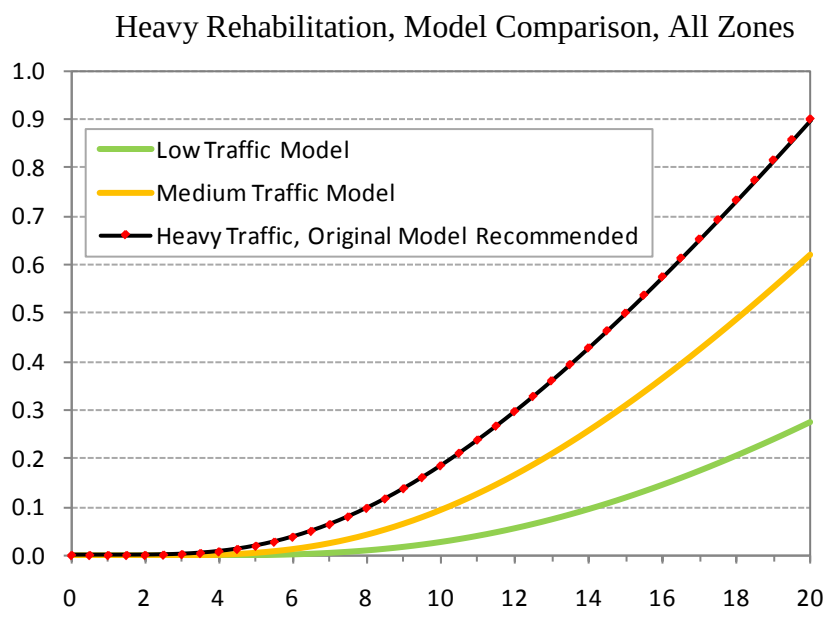


Heavy Rehabilitation, Medium Traffic, All Zones

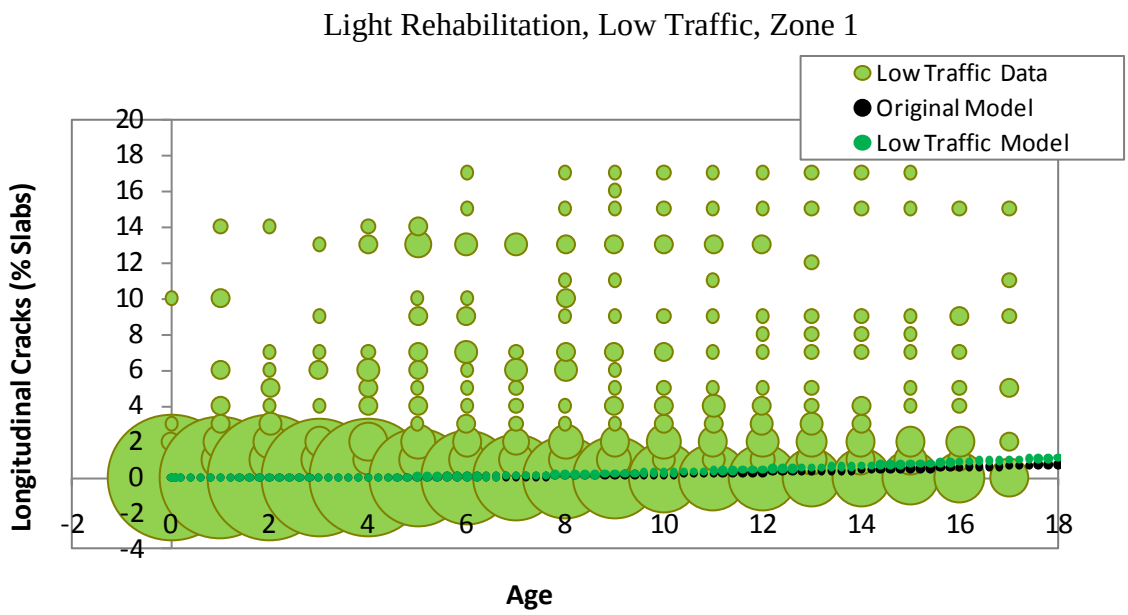


Heavy Rehabilitation, Heavy Traffic, All Zones

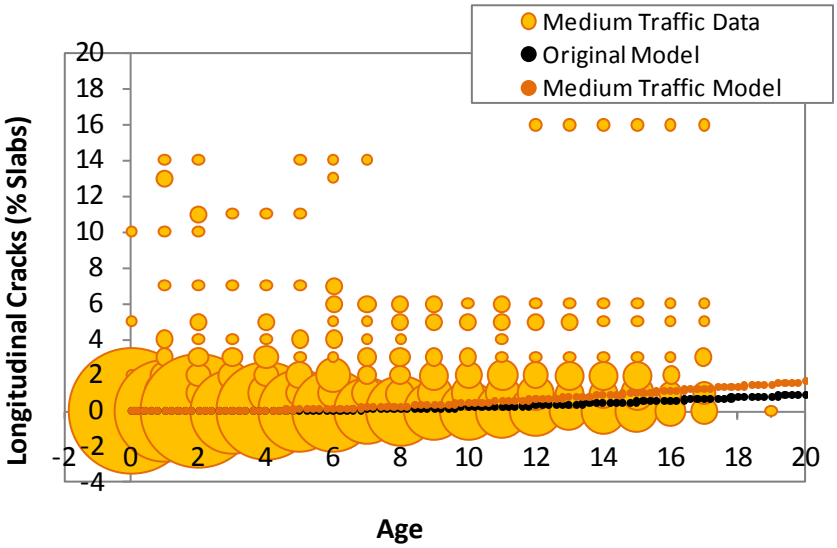



Heavy Rehabilitation, Model Comparison, All Zones
Low Traffic Model
Medium Traffic Model
Heavy Traffic, Original Model Recommended
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
0
2
4
6
8
10
12
14
16
18
20

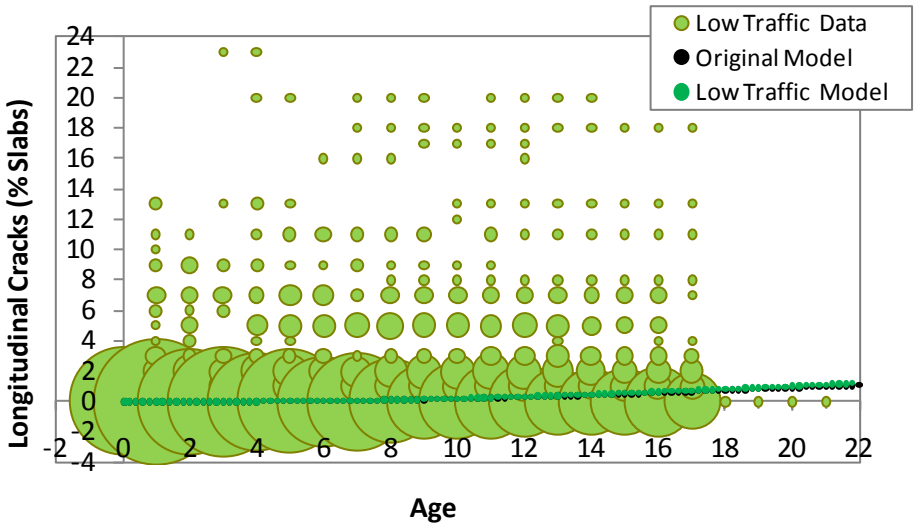
Zones 1 and 2


Light Rehabilitation, Low Traffic, Zone 1
Low Traffic Data
Original Model
Low Traffic Model
Longitudinal Cracks (% Slabs)
Age
20
18
16
14
12
10
8
6
4
2
0
-2
-4
-2
0
2
4
6
8
10
12
14
16
18

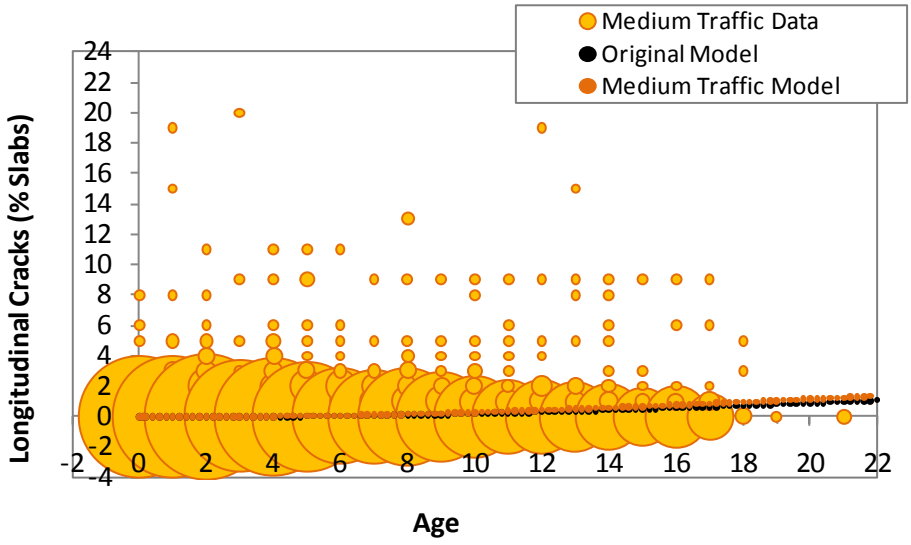
Light Rehabilitation, Medium Traffic, Zone 1



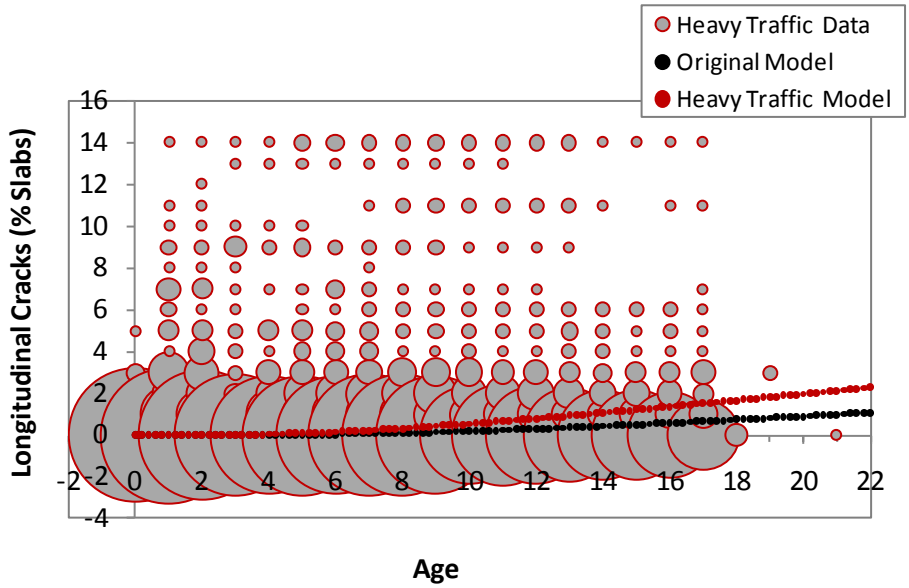
Light Rehabilitation, Low Traffic, Zone 2



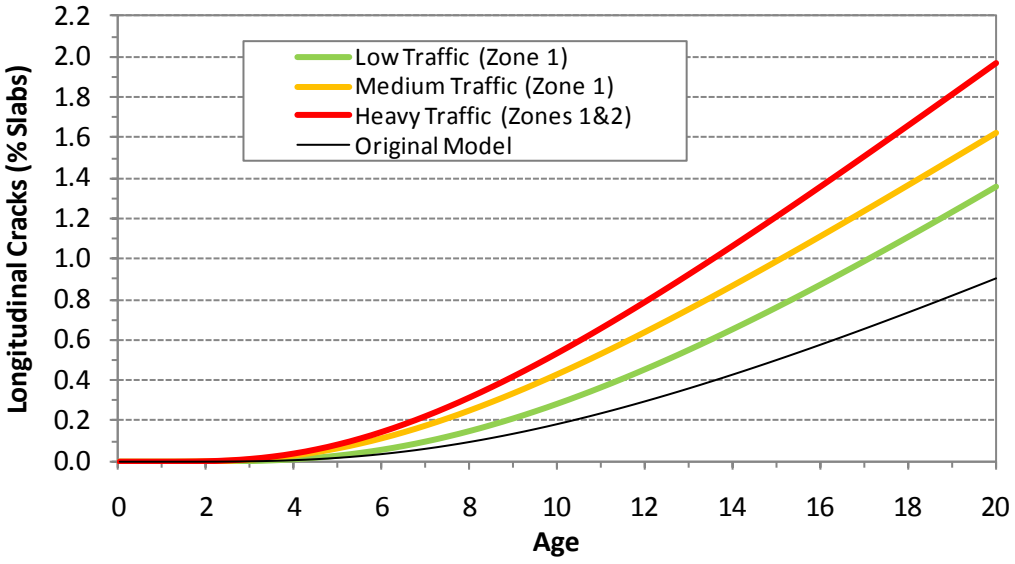
Light Rehabilitation, Medium Traffic, Zone 2



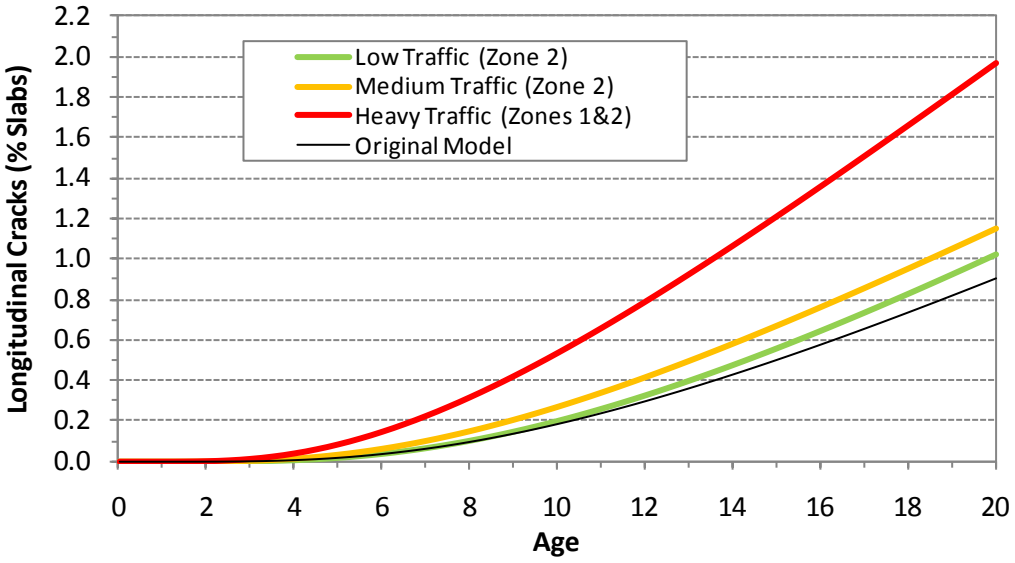
Light Rehabilitation, Heavy Traffic, Zones 1 and 2



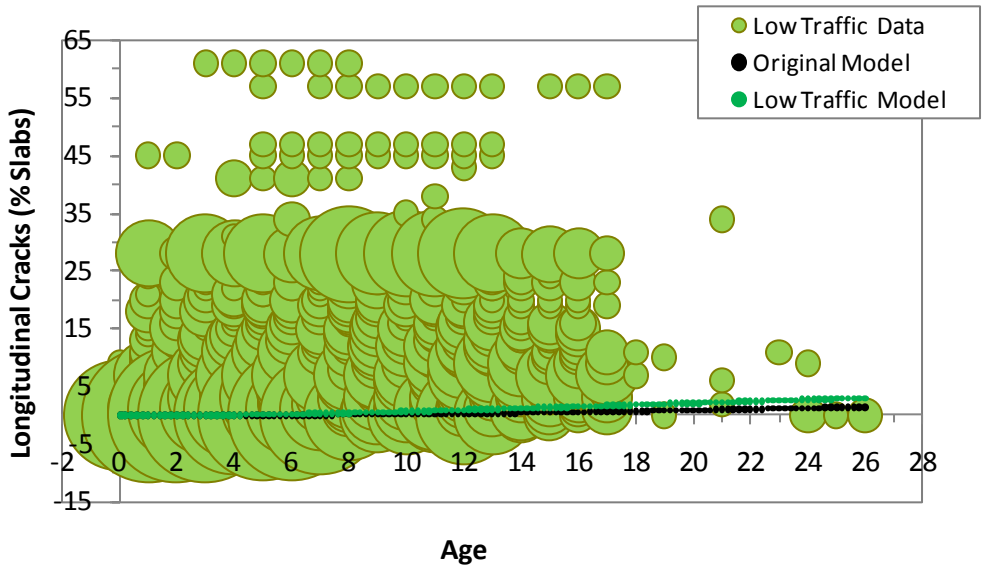
Light Rehabilitation Model Comparison, Zone 1



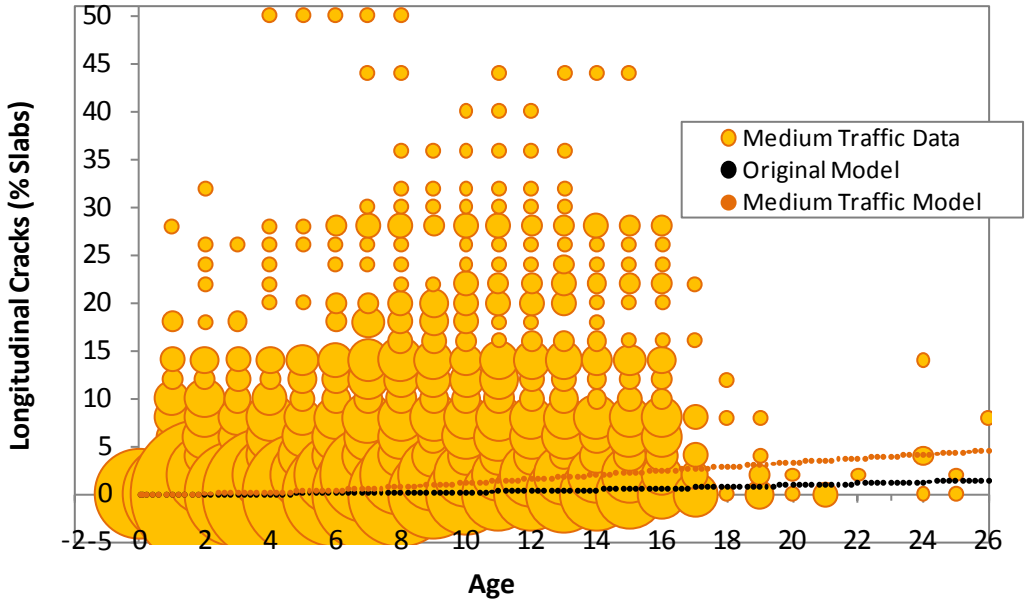
Light Rehabilitation Model Comparison, Zone 2



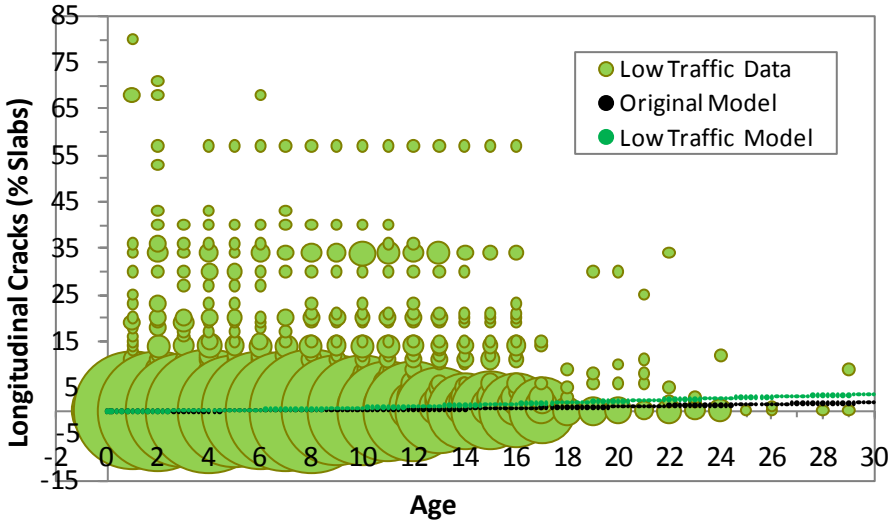
Preventive Maintenance, Low Traffic, Zone 1



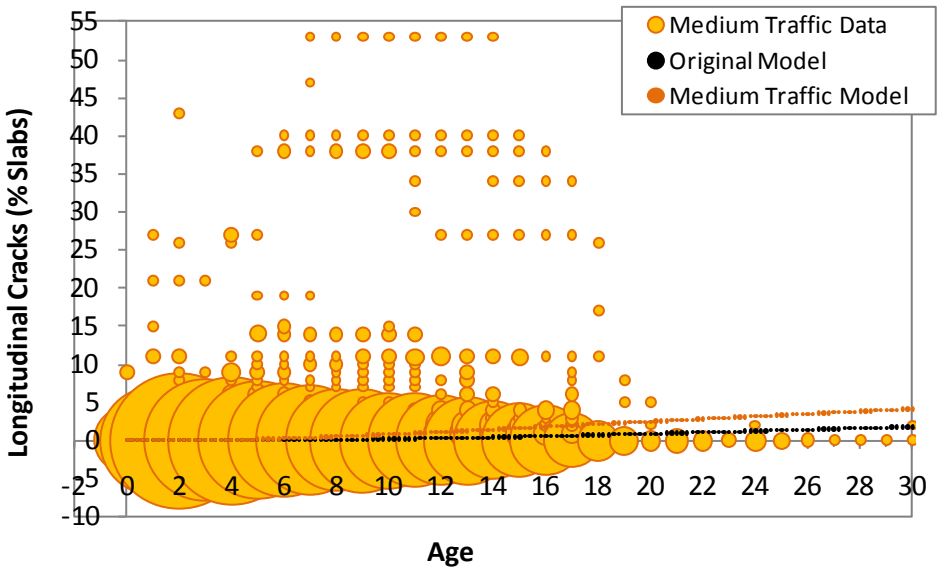
Preventive Maintenance, Medium Traffic, Zone 1



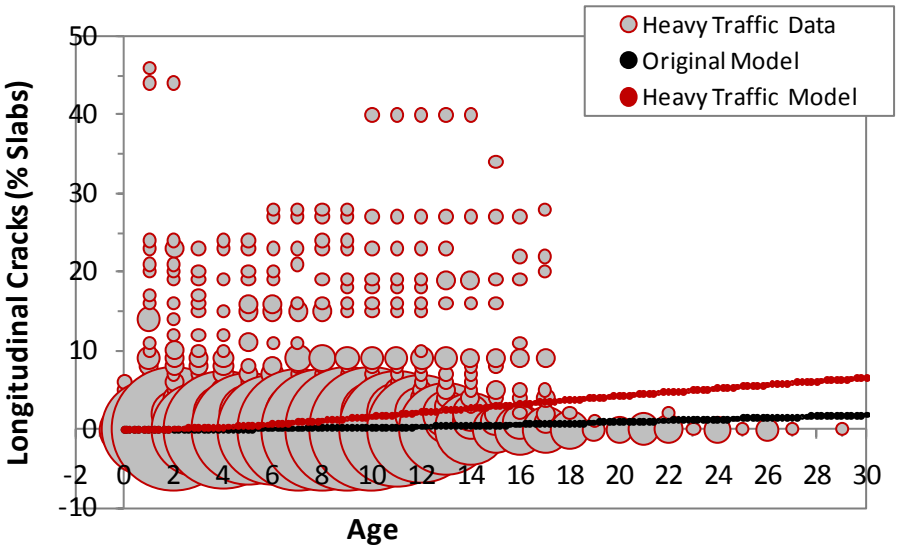
Preventive Maintenance, Low Traffic, Zone 2



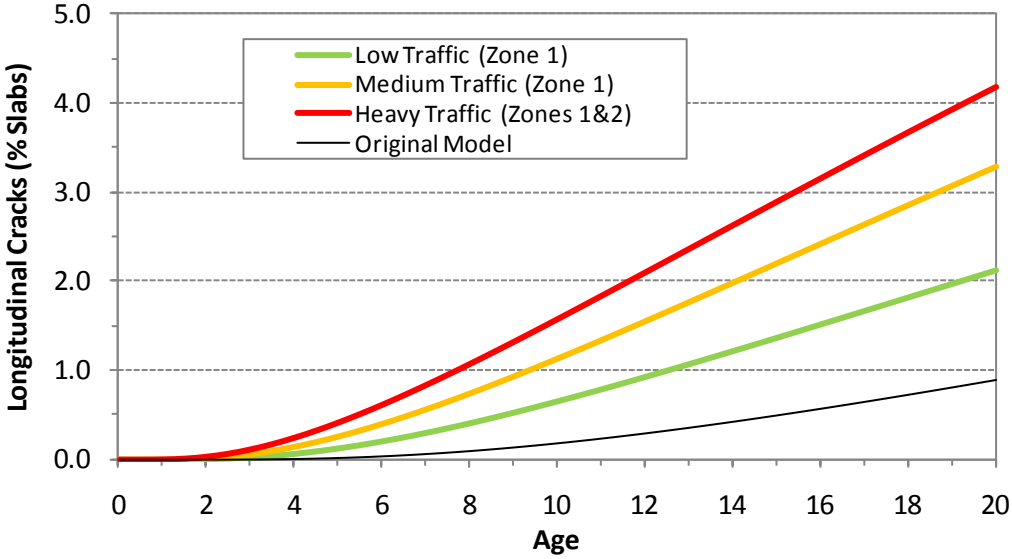
Preventive Maintenance, Medium Traffic, Zone 2



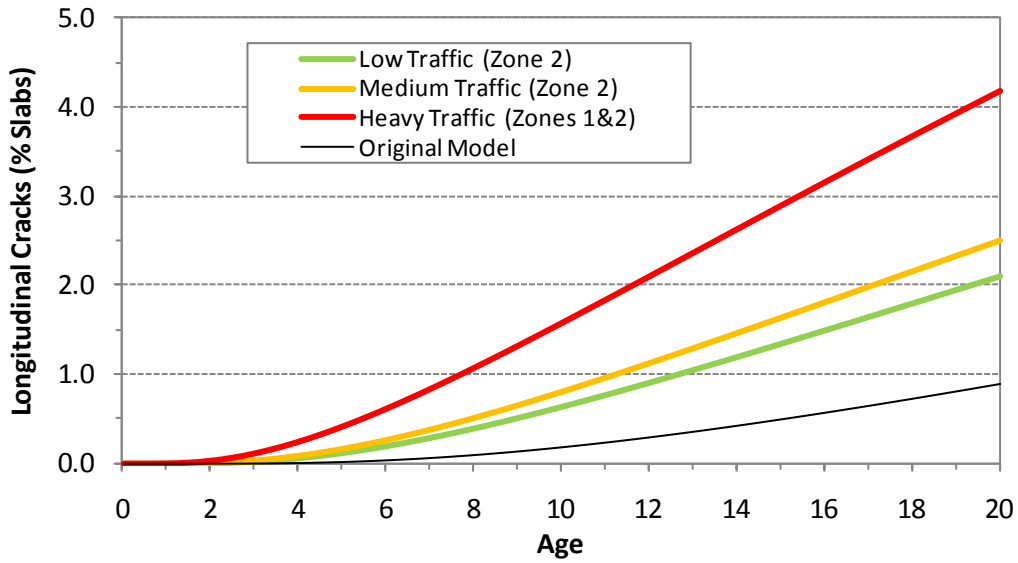
Preventive Maintenance, Heavy Traffic, Zones 1 and 2



Preventive Maintenance Model Comparison, Zone 1

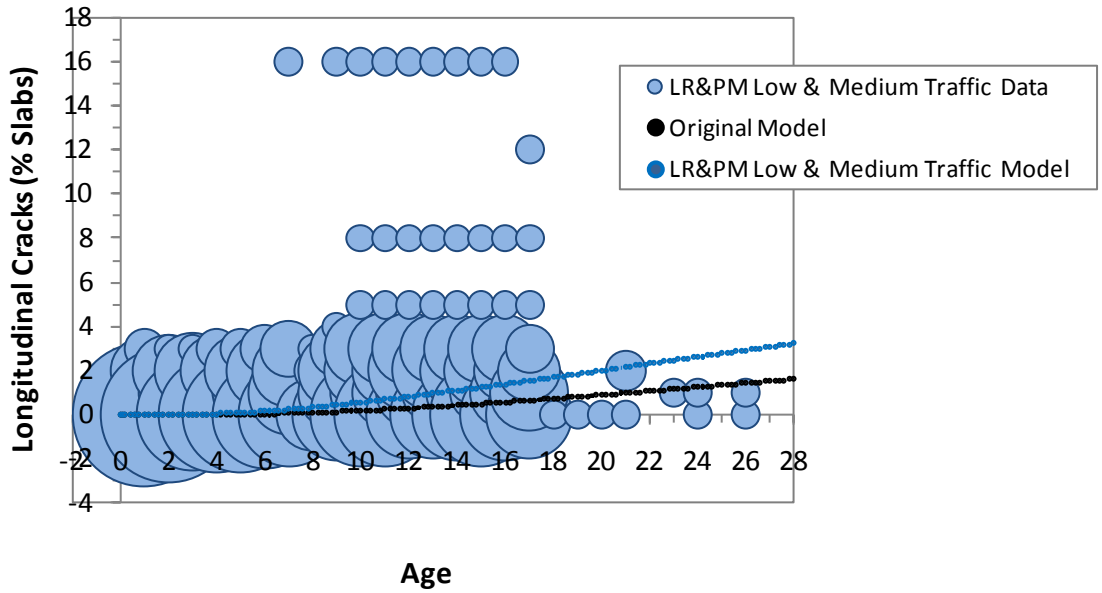


Preventive Maintenance Model Comparison, Zone 2

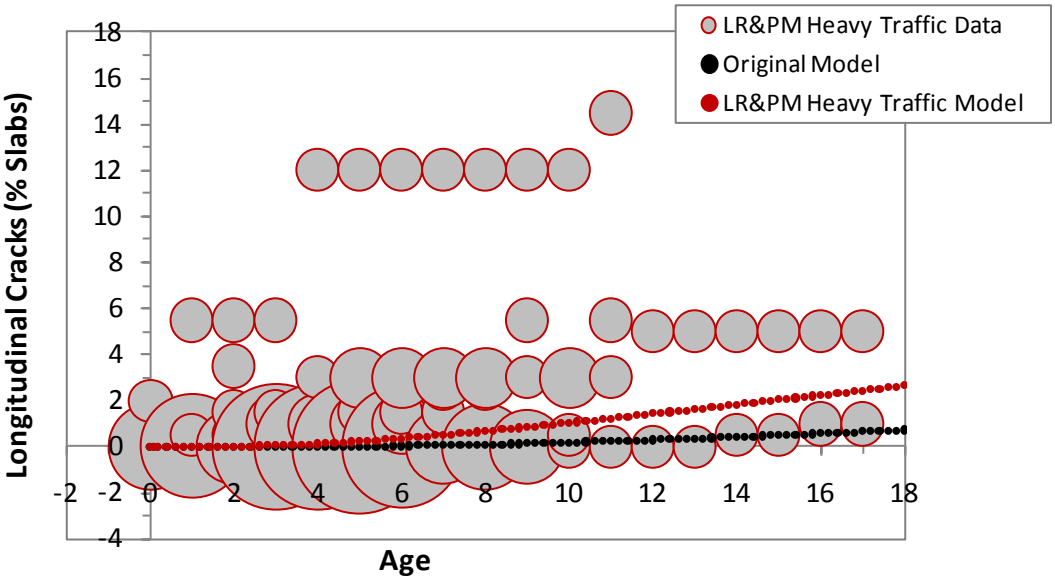


Zone 3

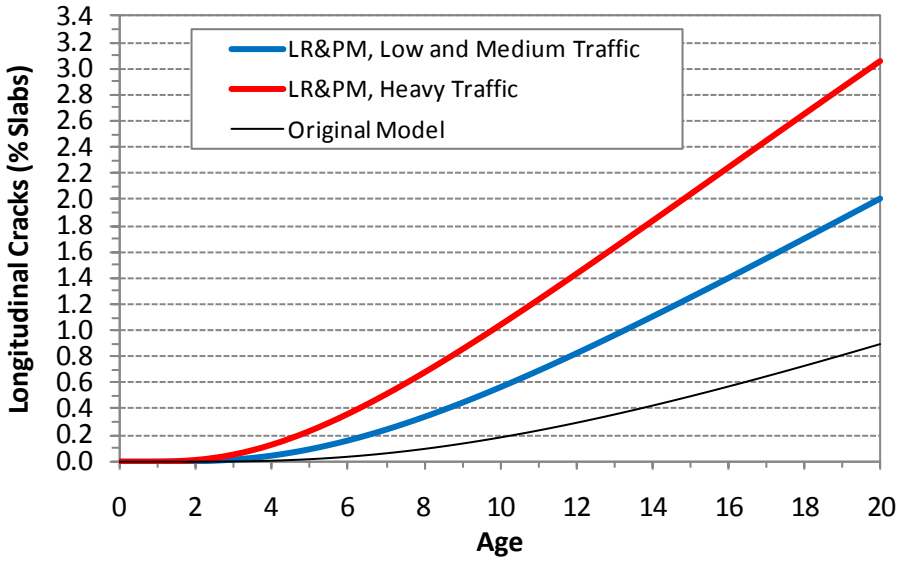
Light Rehabilitation and Preventive Maintenance, Low and Medium Traffic, Zone 3



Light Rehabilitation and Preventive Maintenance, Heavy Traffic, Zone 3

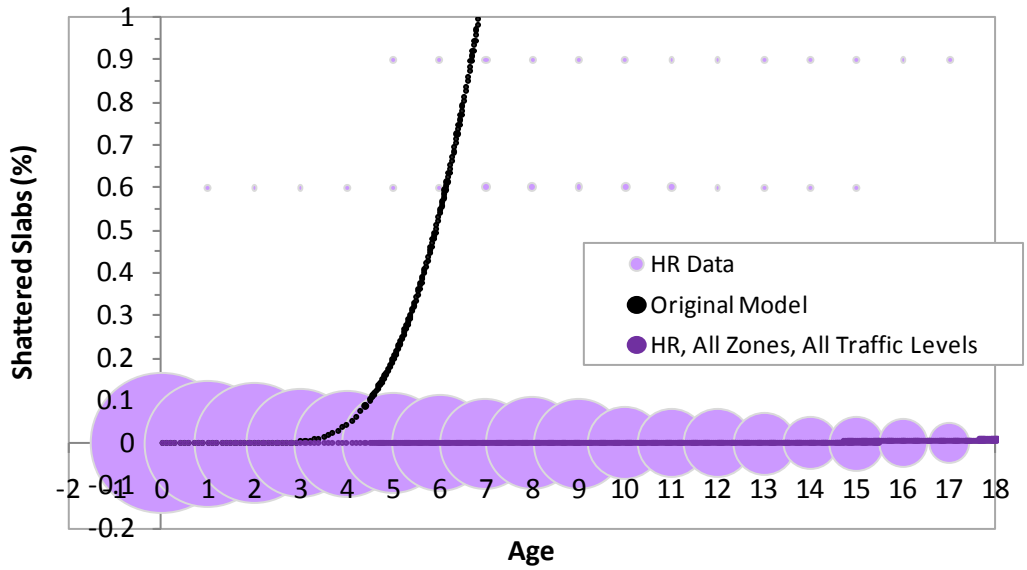


Zone 3, LR and PM Model Comparison

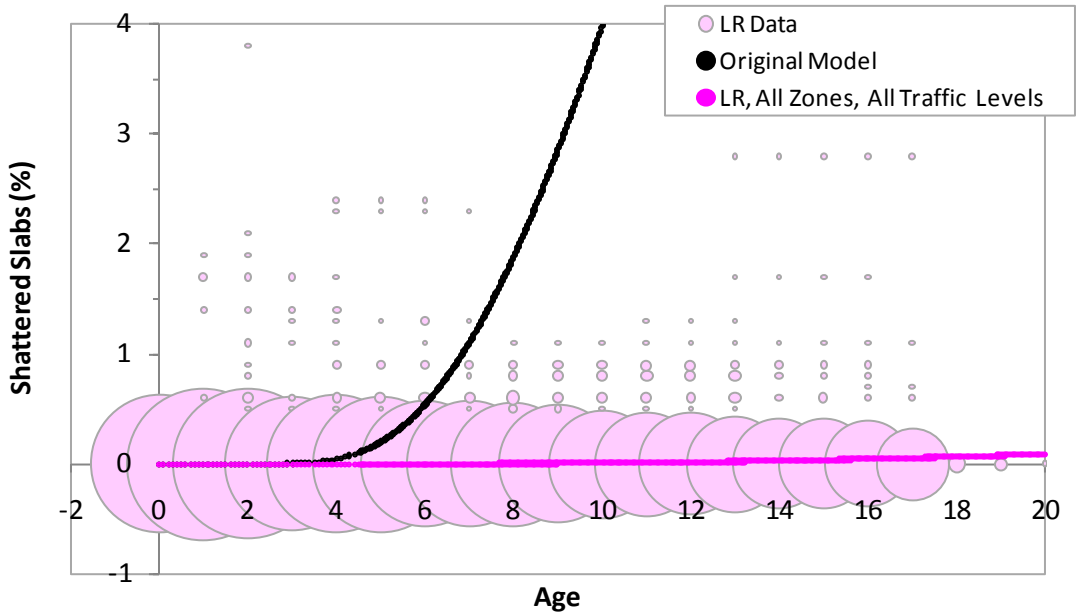


Shattered Slabs

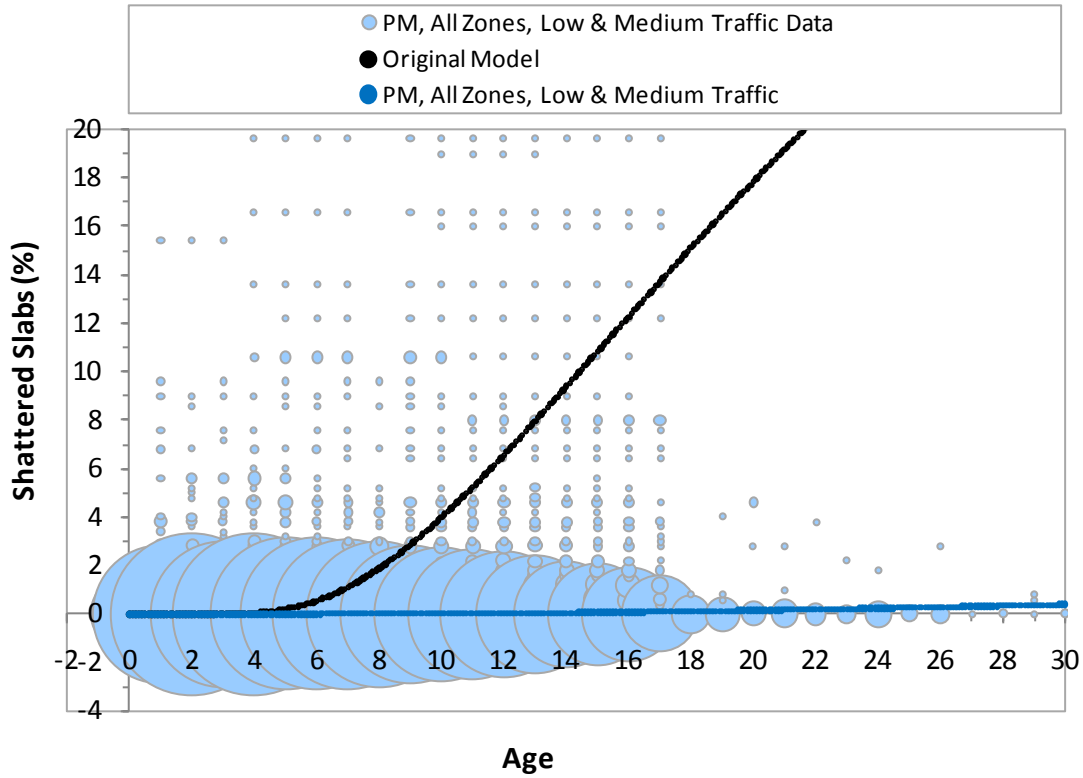
Heavy Rehabilitation, All Zones and Traffic Levels



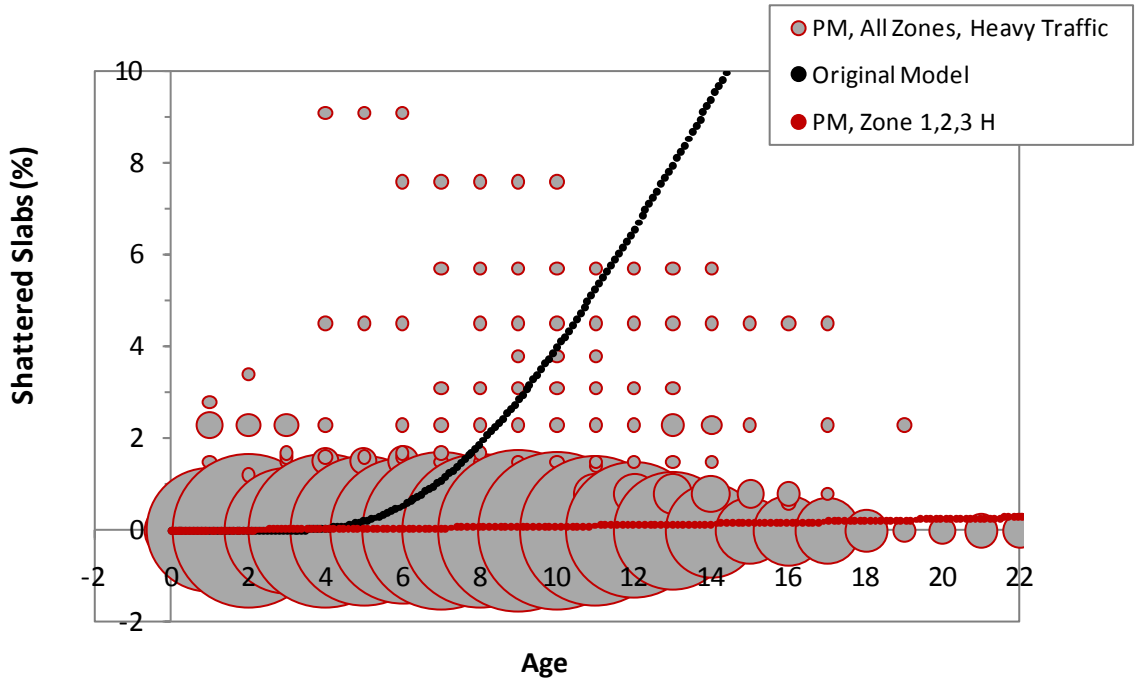
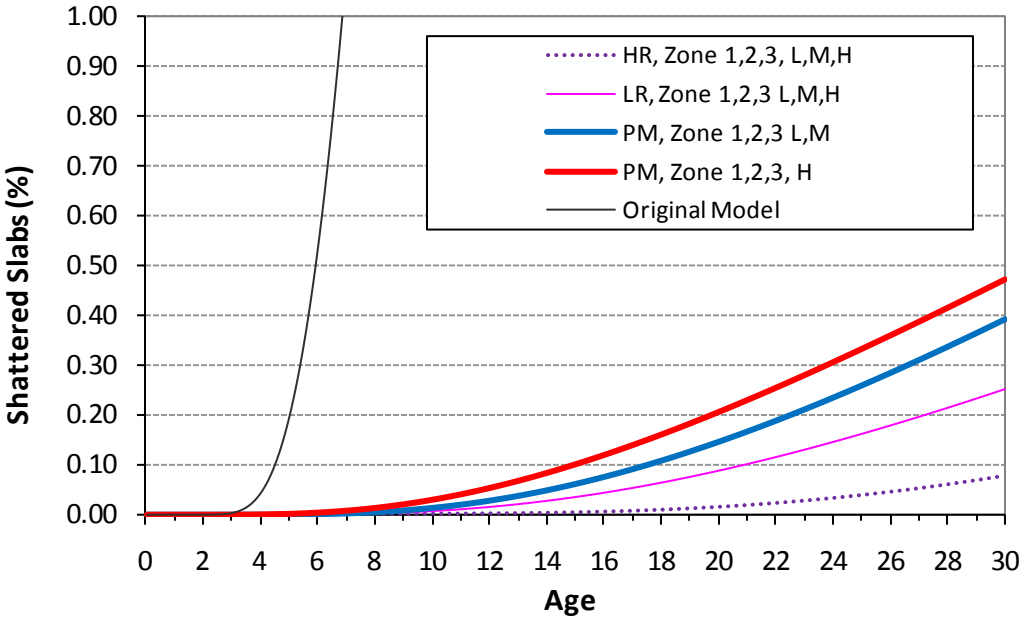
Light Rehabilitation, All Zones and Traffic Levels



Preventive Maintenance, All Zones, Low and Medium Traffic



Preventive Maintenance, All Zones, Heavy Traffic



Shattered Slabs Model Comparison, All Groups