

SCDOT RIDEABILITY OVERVIEW



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SPECS

- SC-M-403 (Asphalt)

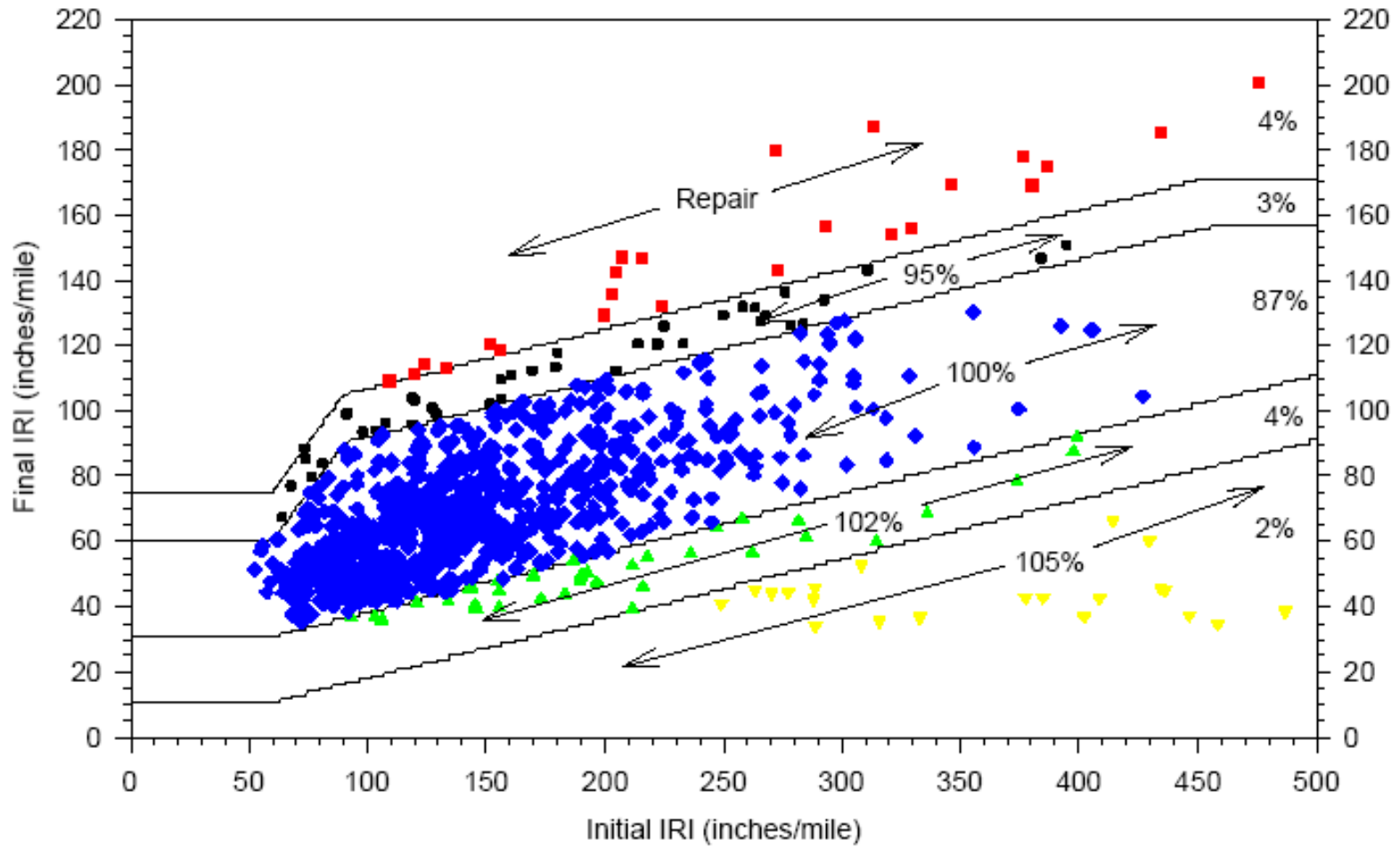
http://www.scdot.org/doing/pdfs/sup_tech_specs/SC-M-403_0908.pdf

- SC-M-502 (PCC)

http://www.scdot.org/doing/pdfs/sup_tech_specs/PCC_Pavement_Rideability.pdf

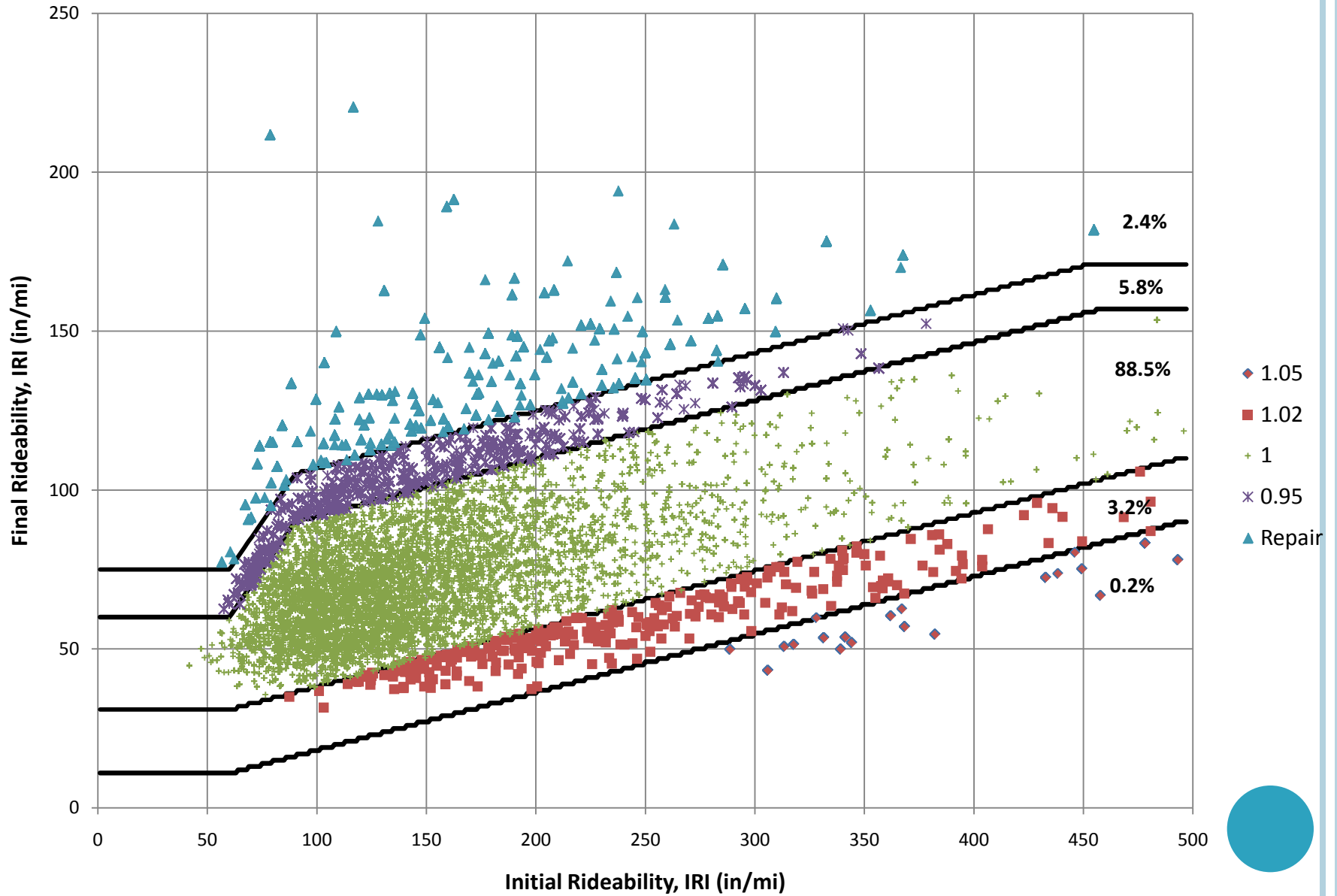


Initial IRI versus Final IRI



Pre-2008 data used to develop SC-M-403

2008-2010 Resurfacing Rideability, 5500 lane-miles



Pay Factors for Single-Lift Resurfacing Projects



District

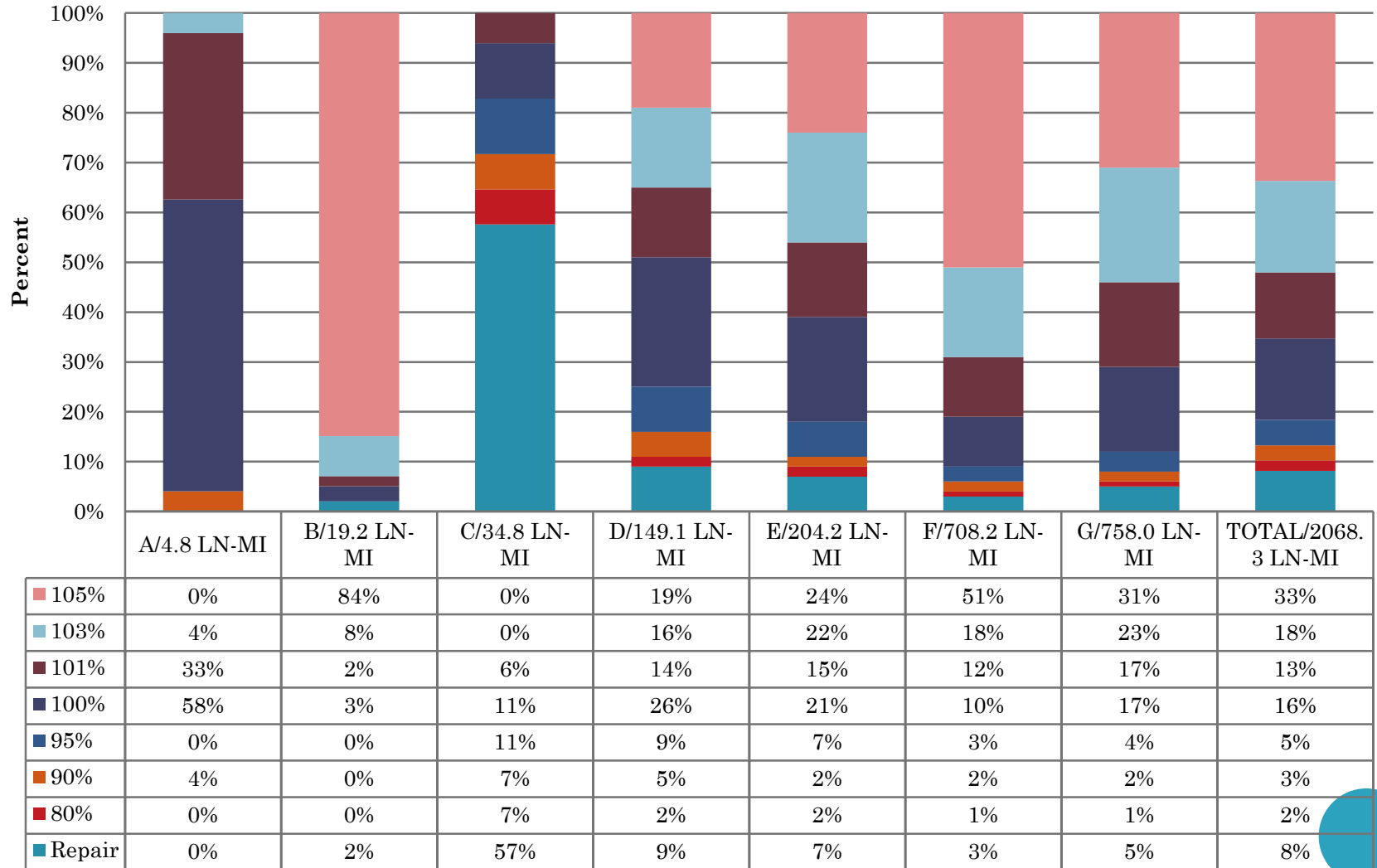
	1	2	3	4	5	6	7	All
Pay Factor	7117	4913	1214	3666	25721	2900	9469	55000
105%	0	51	9	24	0	0	0	84
102%	36	379	329	204	315	187	291	1741
100%	6377	4414	830	3099	22995	2412	8537	48664
95%	581	60	28	248	1607	144	508	3176
Repair	123	9	18	91	804	157	133	1335
Avg. *	99.5%	100.1%	100.4%	99.7%	99.6%	99.6%	99.7%	99.7%

* - Average Pay Factor assumes Repair sections paid at 50%

**Count of Resurfacing Pay Adjustments by District
for 0.1 mile segments**



Bonus/Reduction Distribution for New Construction, 2008-2010



New Construction Estimated Incentive/Disincentive Cost Mid-2008 to February 2011

(\$232,973)	80%
(\$174,730)	90%
(\$145,608)	95%
\$0	100%
\$75,716	101%
\$314,514	103%
\$961,015	105%
\$797,934	TOTAL
\$39	TOTAL/SEGMENT
\$0.55	TOTAL/TON



SC-M-403 MAJOR REVISIONS

- Increase in speed limit to 45 mph for rideability requirements to apply.
- Alternate formula for penalty in lieu of repair for overlays at SCDOT's discretion.
- "Do no harm" specification for overlays of 150 psy or less.
- New section covering rideability of HMA over reclamation.



STICKING POINTS

- What constitutes multiple lifts?
- How should leveling be considered in ride improvement?
- What is a reasonable ride requirement for reclamation projects?



SCAPA CONCERNS

- Adverse effect of curb and gutter not explicitly considered in specification.
- Token amounts of leveling can elevate ride requirements excessively.
- Leveling quantity and location not selected by contractor; may not improve ride.
- New construction ride requirements for overlays may be overly restrictive in many situations, even with multiple lifts.
- Reclamation ride requirements may still be overly tight.



PHILOSOPHICAL QUESTIONS

- 64% of “new” construction segments qualify for bonus/14% qualify for 100% pay/20% qualify for reduction. Is this a reasonable distribution?
- Are the current ride thresholds meaningful to the road users?
- Are the magnitudes of the bonuses and reductions sufficient to incentivize better rideability? Is the carrot/stick ratio optimal?
- Can SCDOT afford more carrots?

