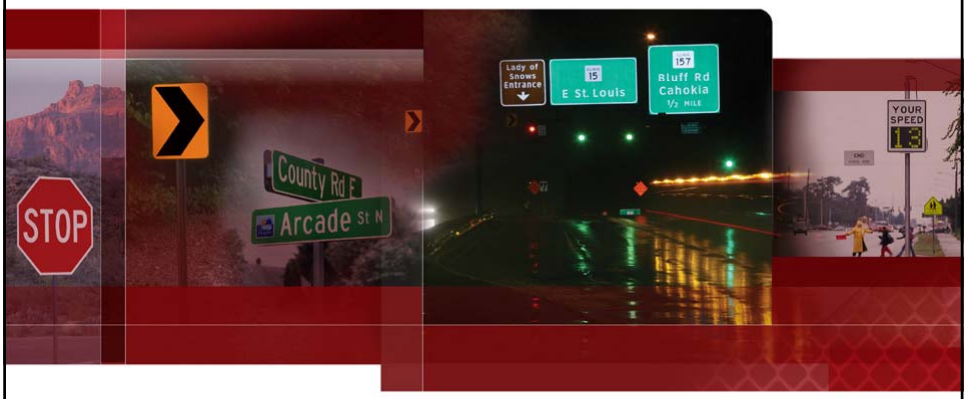
Improving Sign Performance

Michael Holderness



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Background

- Olexiy Kurlov
  - *Traffic Assets Manager - Auckland Motorway Alliance*
- Wanted a way of working out whether a sign on the network needed to be replaced
- Current practice was to replace a sign when it looked bad
  - *When does a sign "look bad"*
- Had no performance data for the existing signs
- Had little data of installed dates (asset management)
- Discussed terminal values

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Data Collection and Preliminary Results

- Decided to collect reflectivity data from a set of old signs existing on the network
  - *Measured White, Red, Green, Blue and Brown*
- Cleaned the signs and re-measured them

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Initial Results

	Before Cleaning		After Cleaning	
	Below Standard	Above Standard	Below Standard	Above Standard
White	44	11	11	44
Green	30	0	24	6
Red	19	6	2	23
Blue	4	3	0	7
Brown	4	0	0	4

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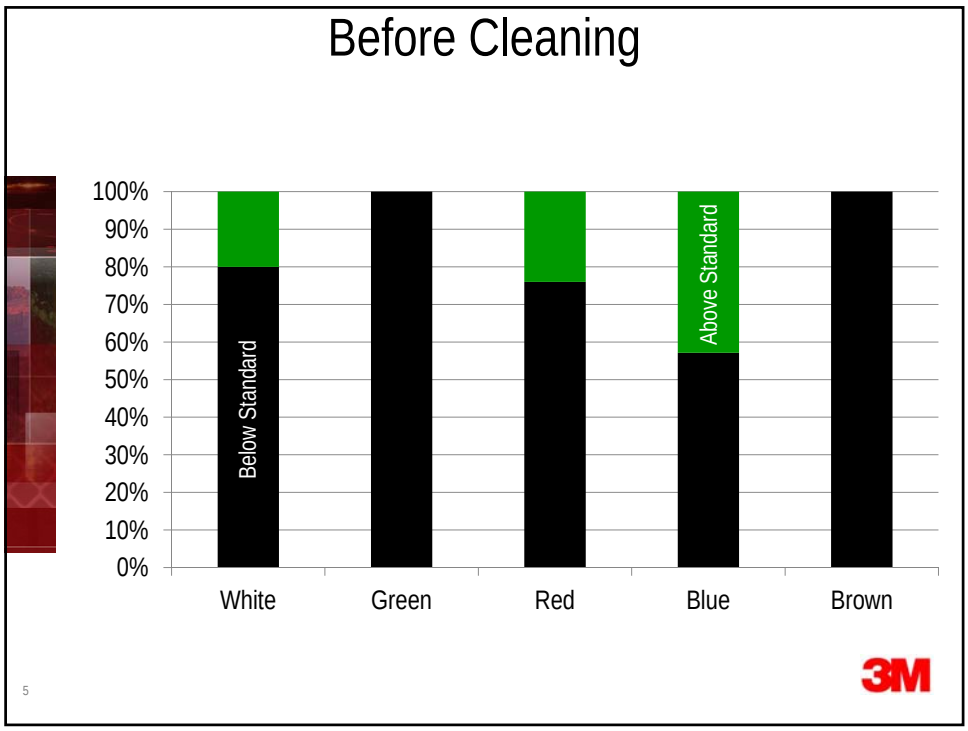
Before Cleaning
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Below Standard
Above Standard
White
Green
Red
Blue
Brown
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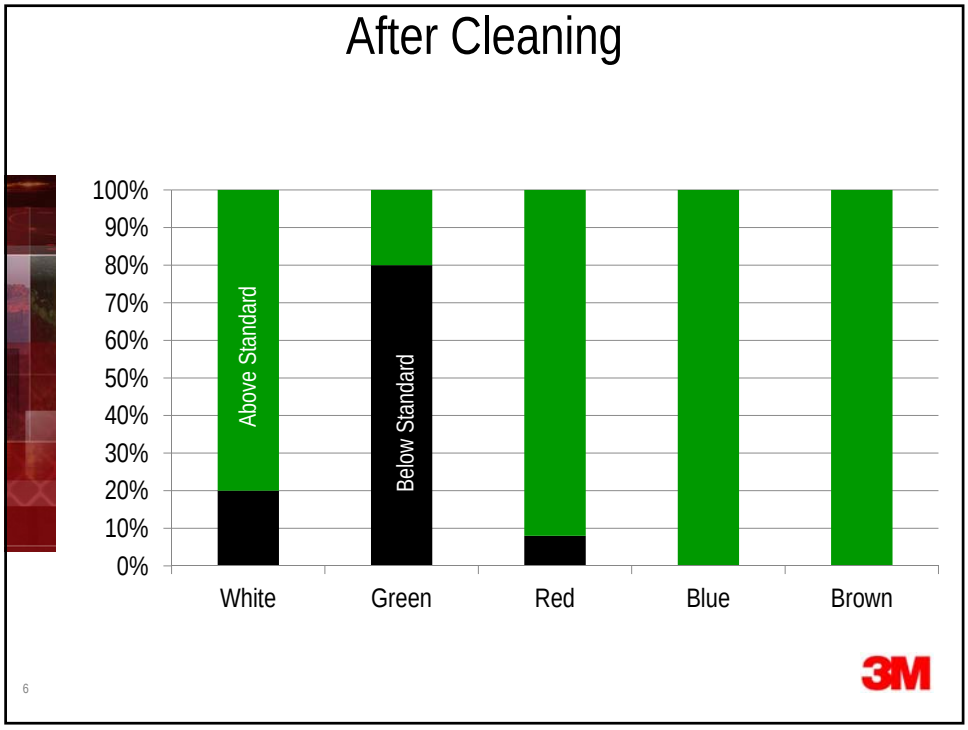
After Cleaning
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Above Standard
Below Standard
White
Green
Red
Blue
Brown
6
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Cleaning Results

	Average Improvement
White	396%
Green	173%
Red	220%
Blue	192%
Brown	966%

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Thoughts

- Major improvements can be made to the sign reflectivity by cleaning the signs
- The limited data collected poses many more questions
- More data is needed for a thorough analysis
  - *Olexiy is remeasuring the same signs again to get a historical data set*
- Olexiy still has not answered his initial question – how do you know when a sign needs replacing?
- It is hoped that this project will yield more data to create a full presentation for next years conference

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