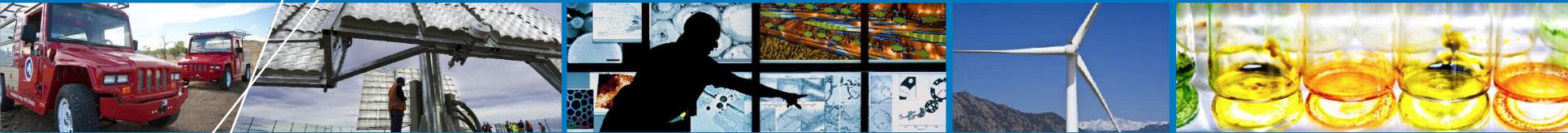


Fleet DNA Project Data Summary Report



Kevin Walkowicz

Adam Duran

Evan Burton

8/1/2014

PR 5400 57992

The Fleet DNA Project:

The Fleet DNA Project aims to accelerate the development of advanced vehicle technologies while supporting the strategic deployment of market-ready technologies that reduce costs, fuel consumption, and emissions.

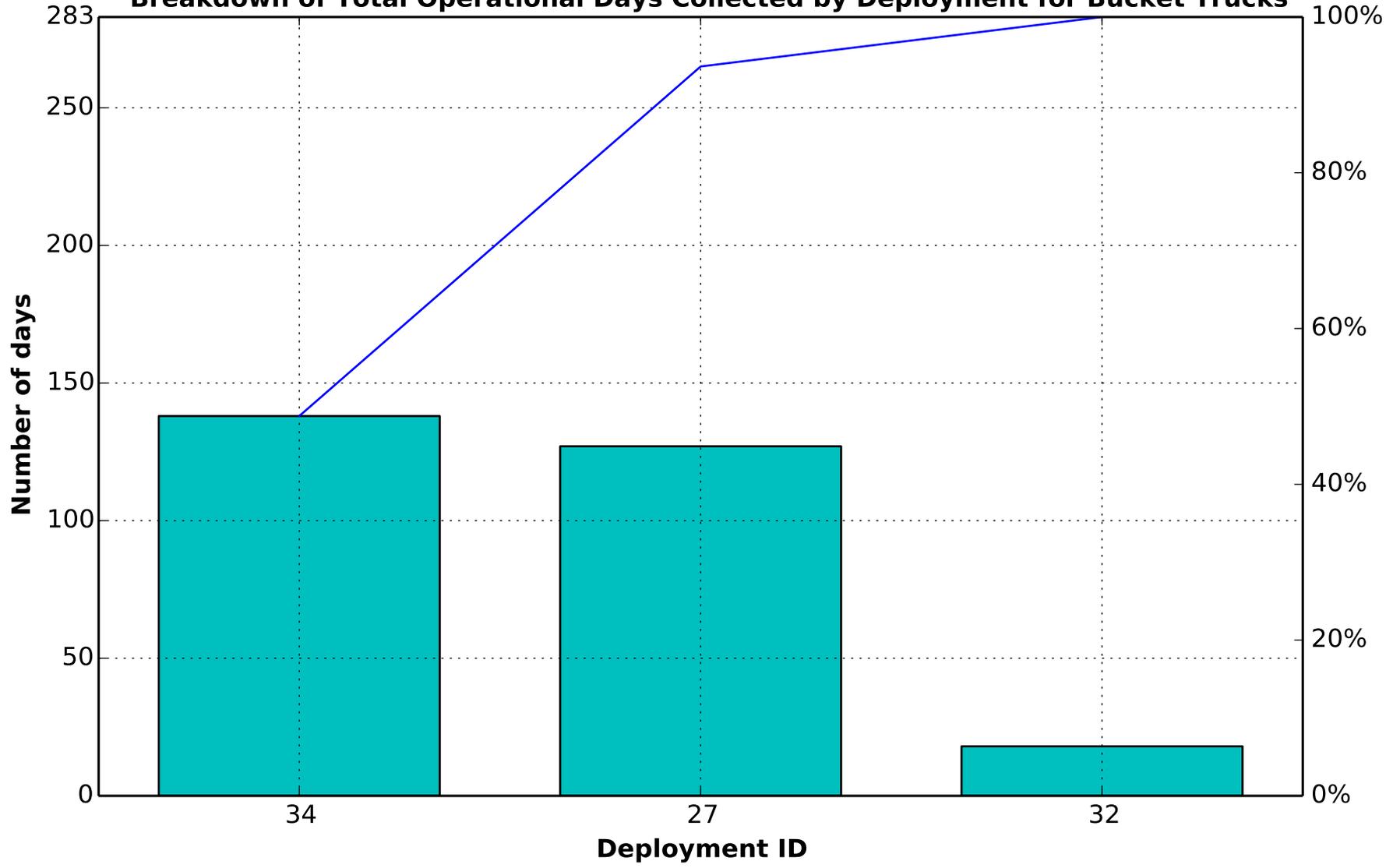
Designed by the U.S. Department of Energy's National Renewable Energy Laboratory in partnership with Oak Ridge National Laboratory, the data summaries contained within this report are designed to illustrate the broad operation range of many of today's vehicle vocations and to provide insight into key observable statistical trends.

Within This Report:

Contained within this report are graphical data summaries based on real-world “genetics” of medium- and heavy-duty commercial fleet vehicles operating within a chosen vocation.

These graphical data summaries have been selected to highlight key statistical trends observed in past U.S. DOE fleet studies, and to provide insight into potential areas of interest for the continued development of technology to reduce costs, fuel consumption, and emissions.

Breakdown of Total Operational Days Collected by Deployment for Bucket Trucks

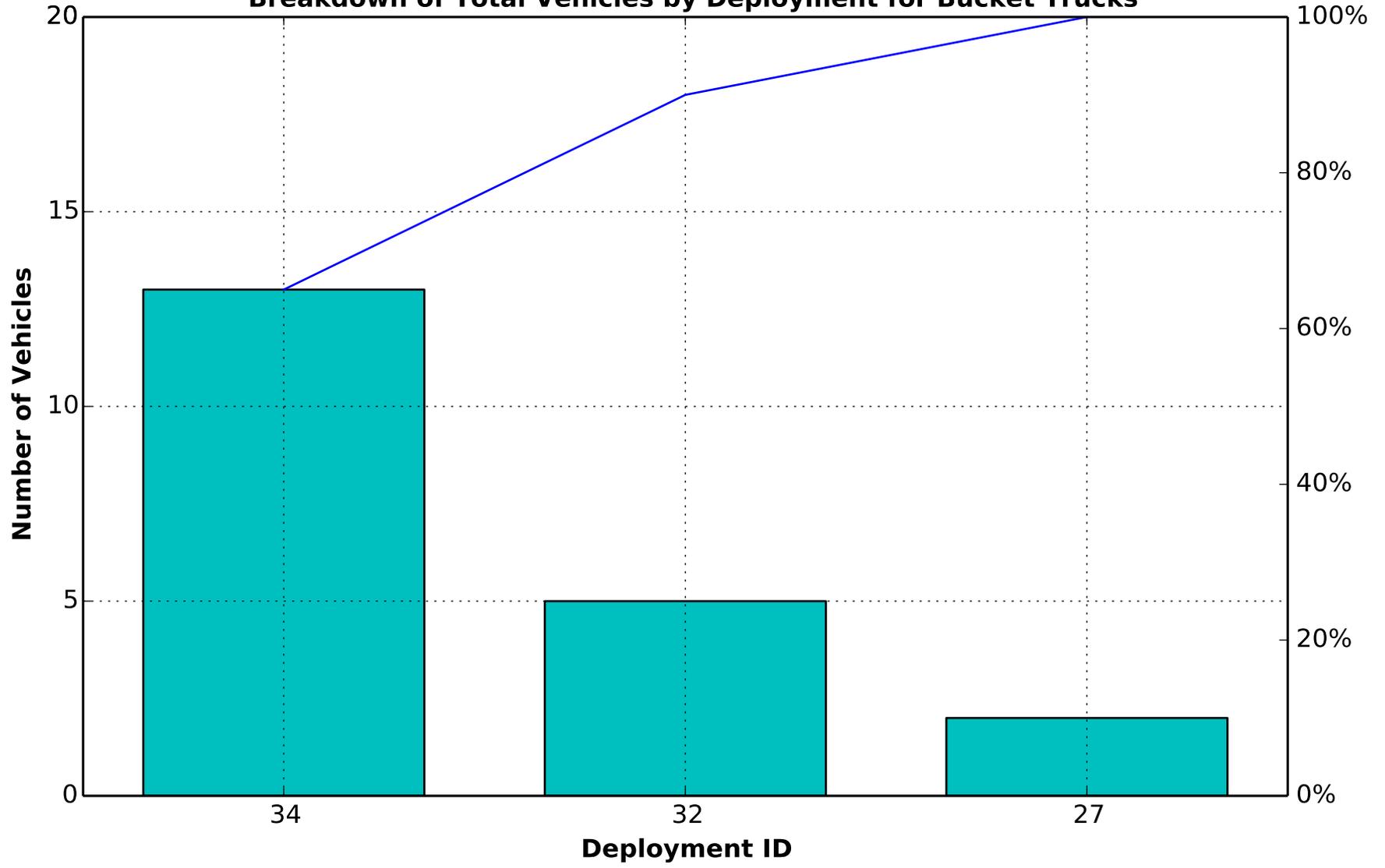


of Vehicles Reporting: 20

Generated: Thu Aug 07, 2014

of Days Included: 283

Breakdown of Total Vehicles by Deployment for Bucket Trucks

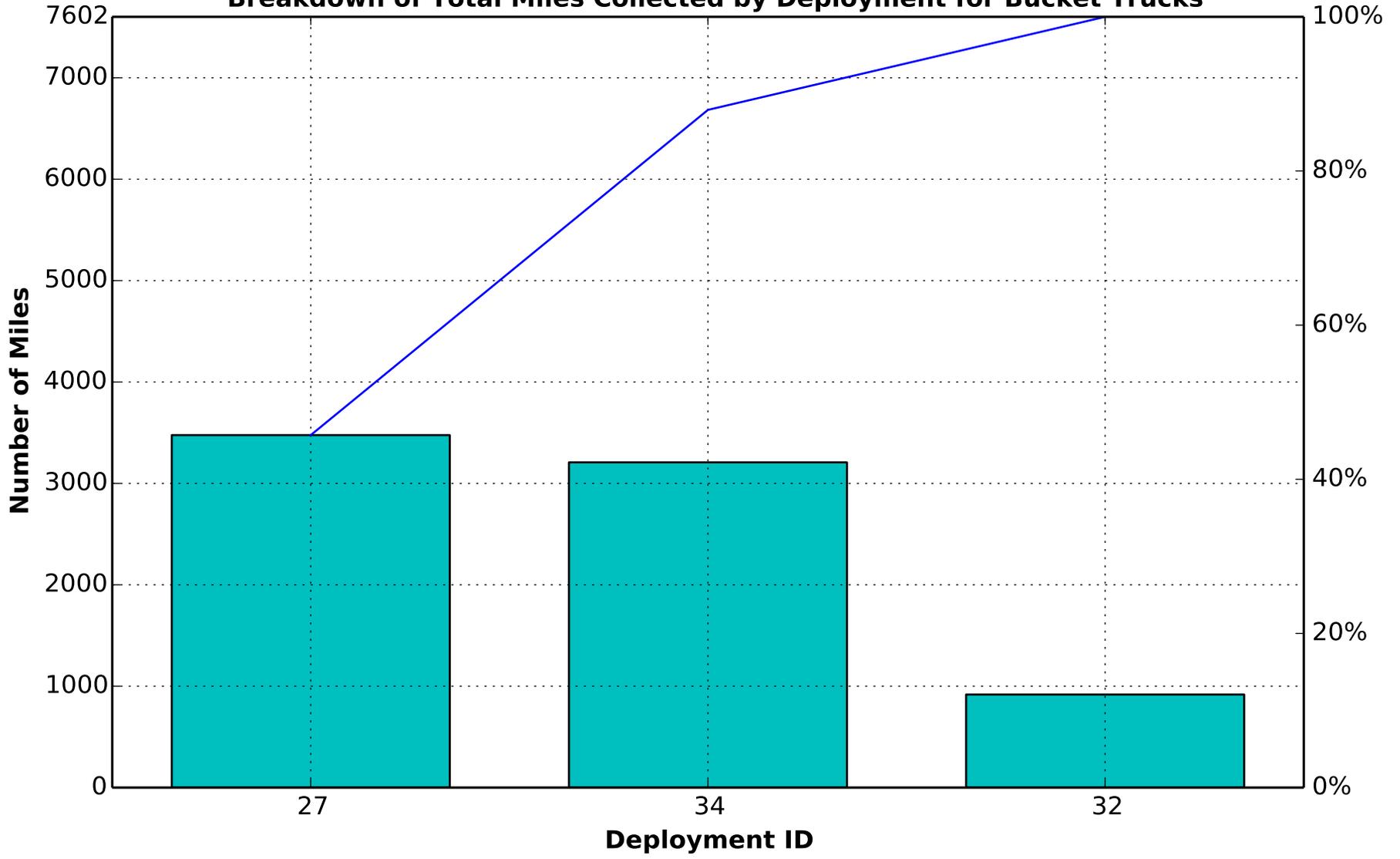


of Vehicles Reporting: 20

Generated: Thu Aug 07, 2014

of Days Included: 283

Breakdown of Total Miles Collected by Deployment for Bucket Trucks

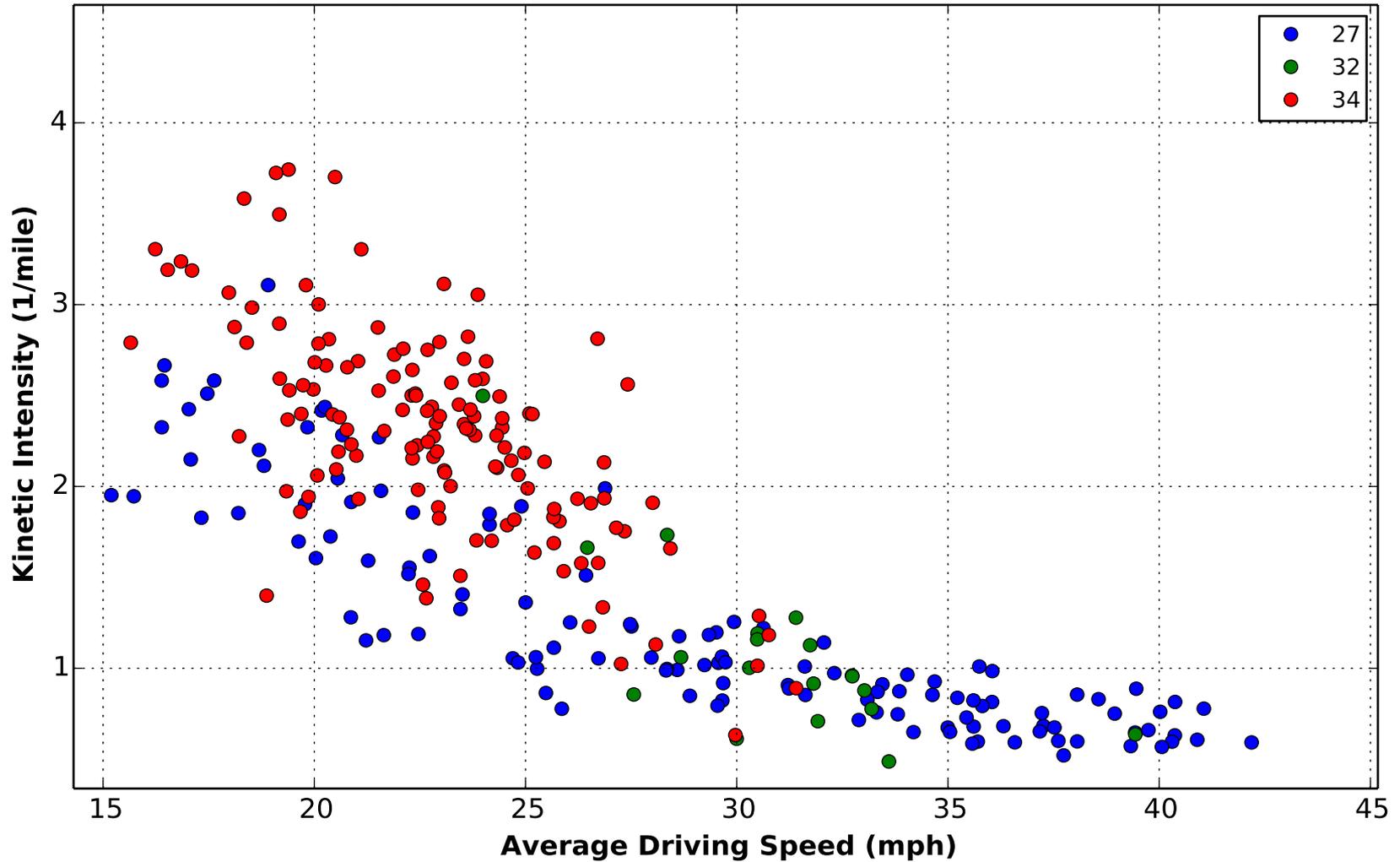


of Vehicles Reporting: 20

Generated: Thu Aug 07, 2014

of Days Included: 283

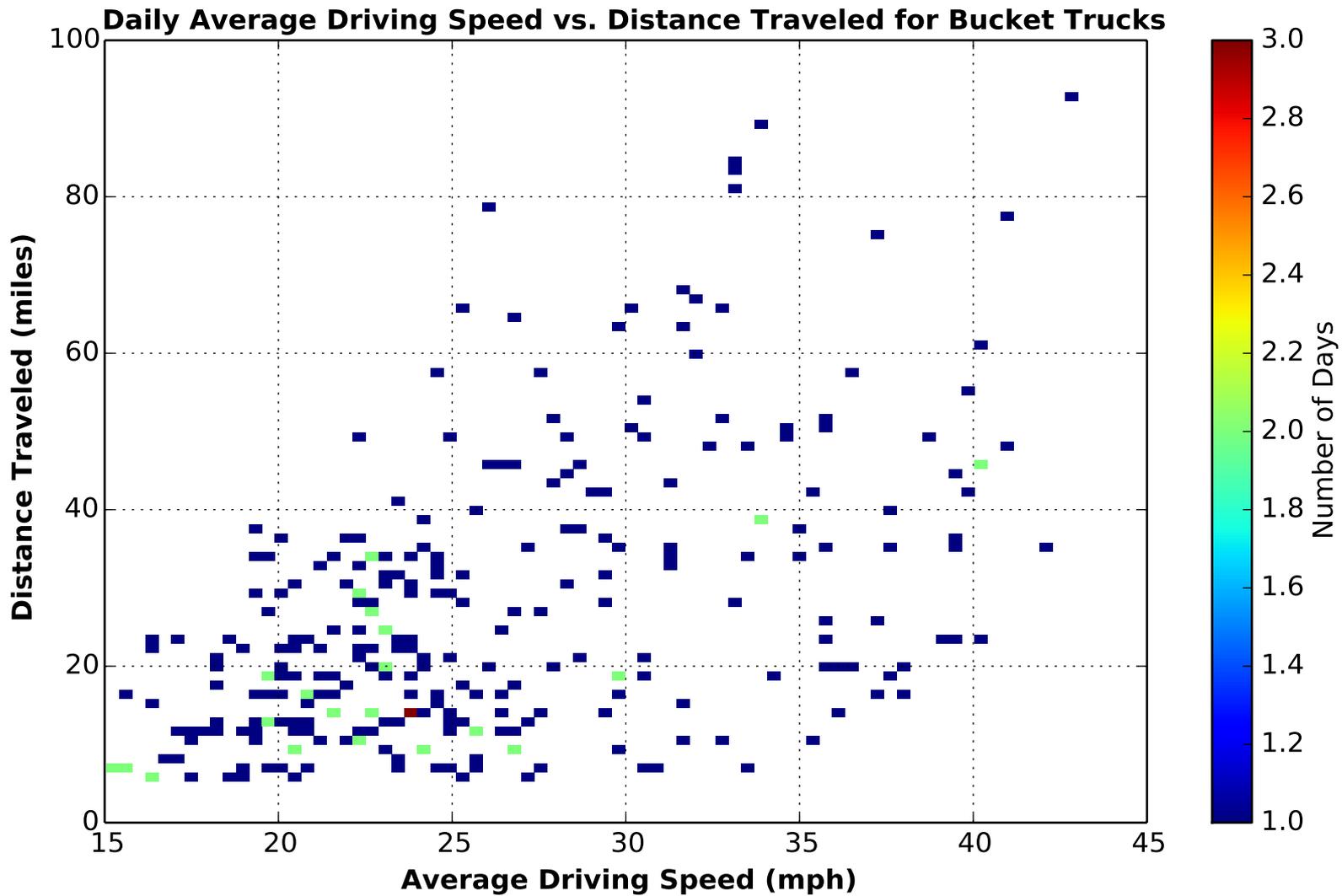
Daily Average Driving Speed vs. Kinetic Intensity for Bucket Trucks



of Vehicles Reporting: 20

Generated: Thu Aug 07, 2014

of Days Included: 280

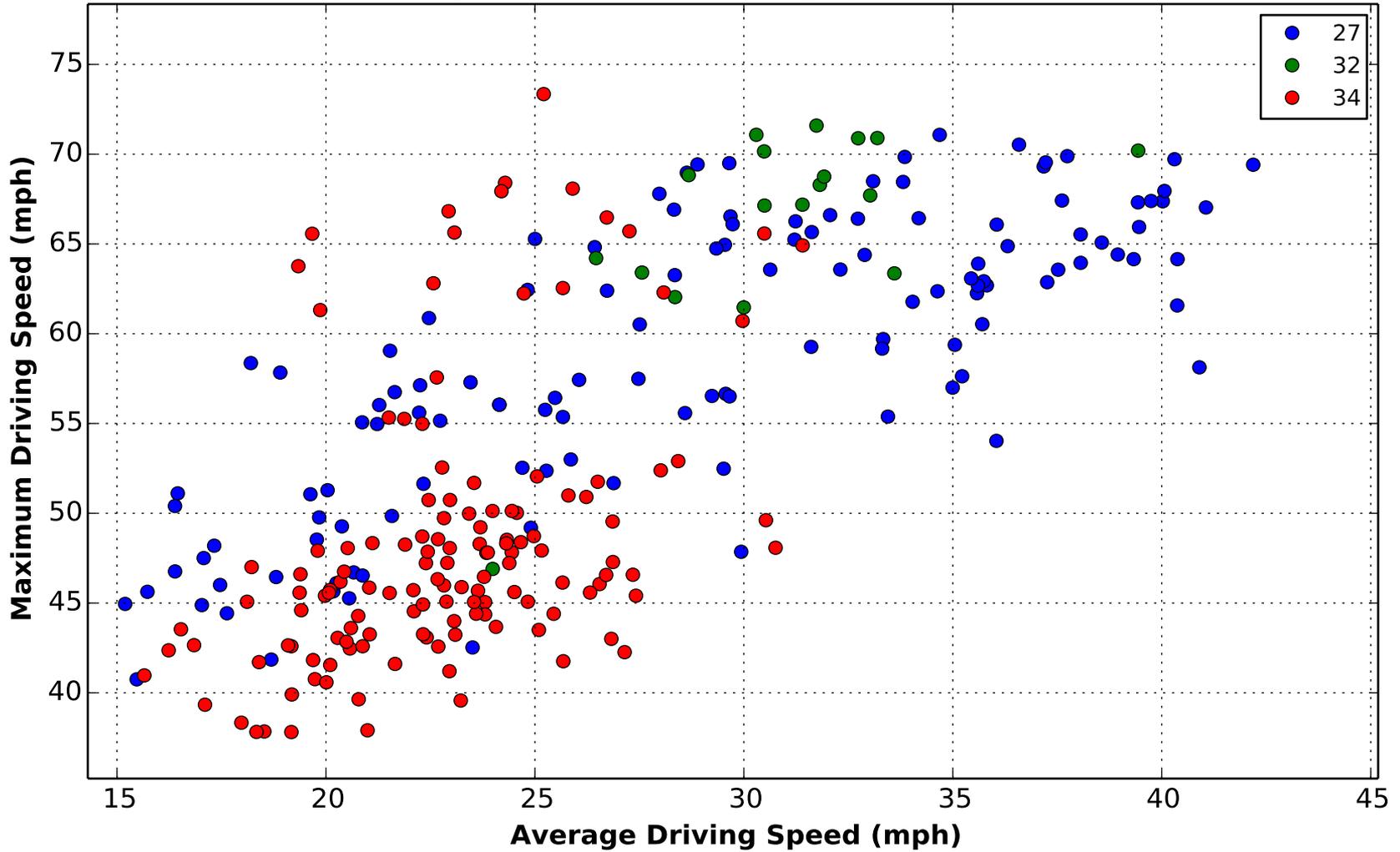


of Vehicles Reporting: 20

Generated: Thu Aug 07, 2014

of Days Included: 283

Daily Average vs. Maximum Driving Speed for Bucket Trucks

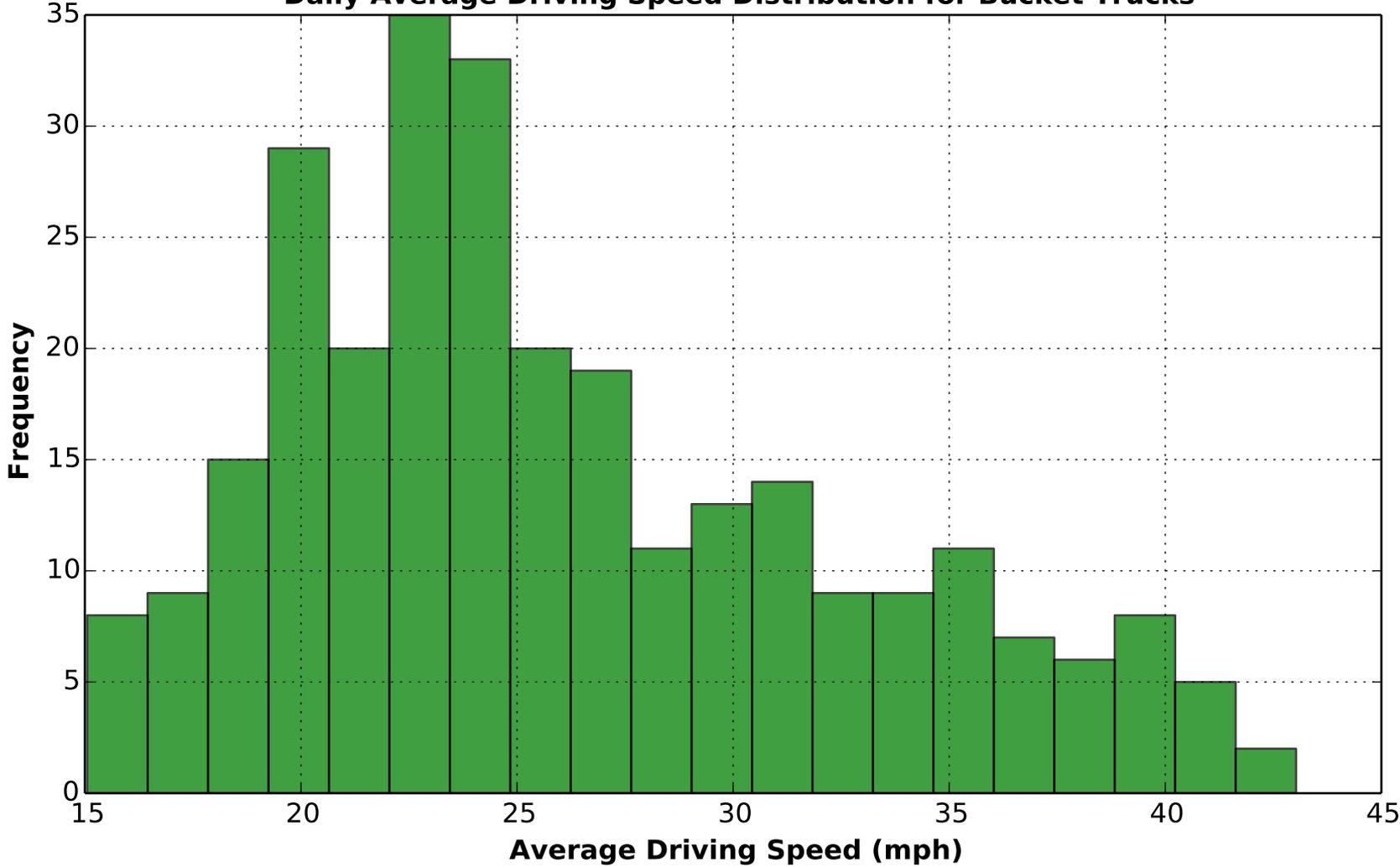


of Vehicles Reporting: 20

Generated: Thu Aug 07, 2014

of Days Included: 279

Daily Average Driving Speed Distribution for Bucket Trucks

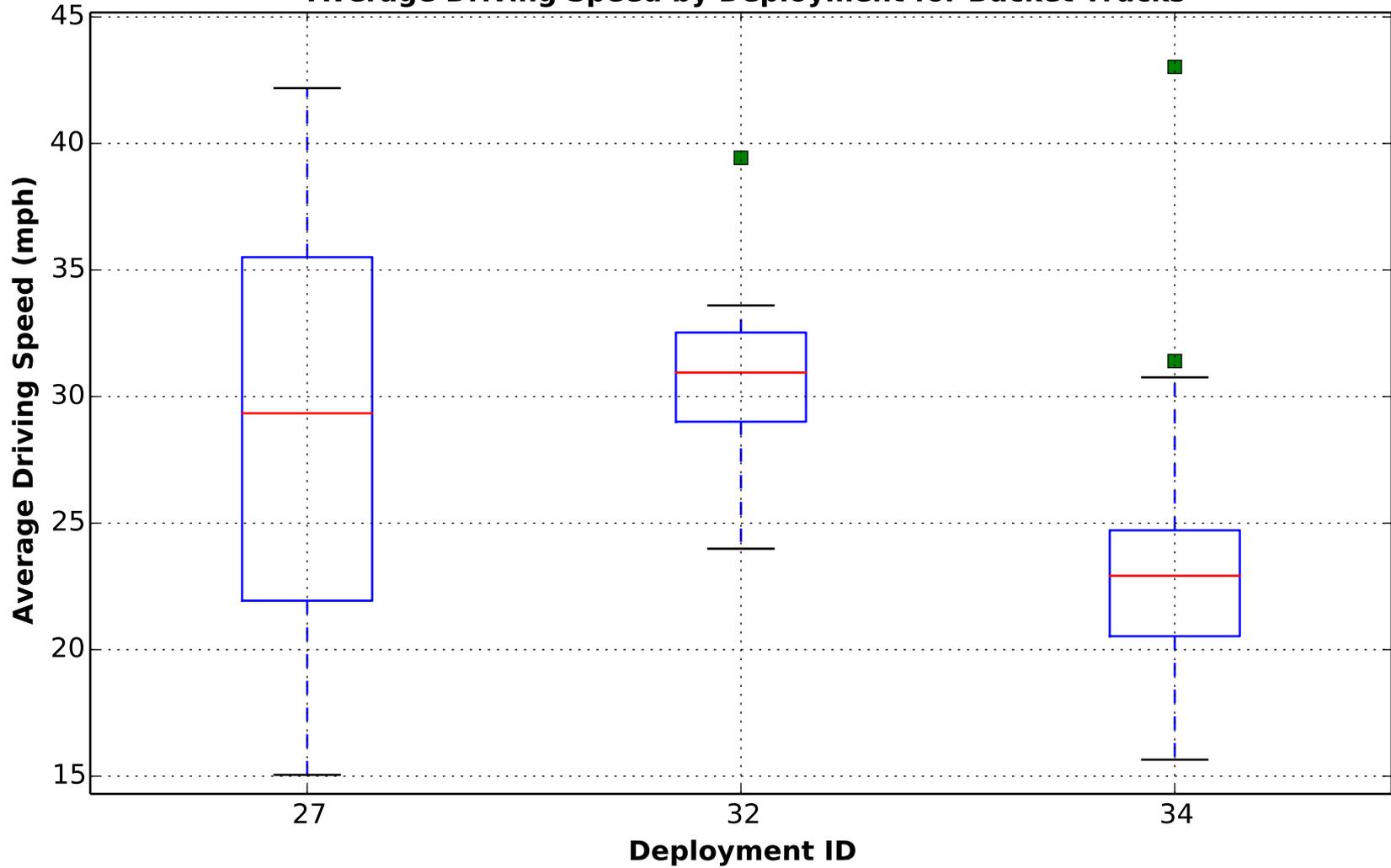


of Vehicles Reporting: 20

Generated: Thu Aug 07, 2014

of Days Included: : 283

Average Driving Speed by Deployment for Bucket Trucks

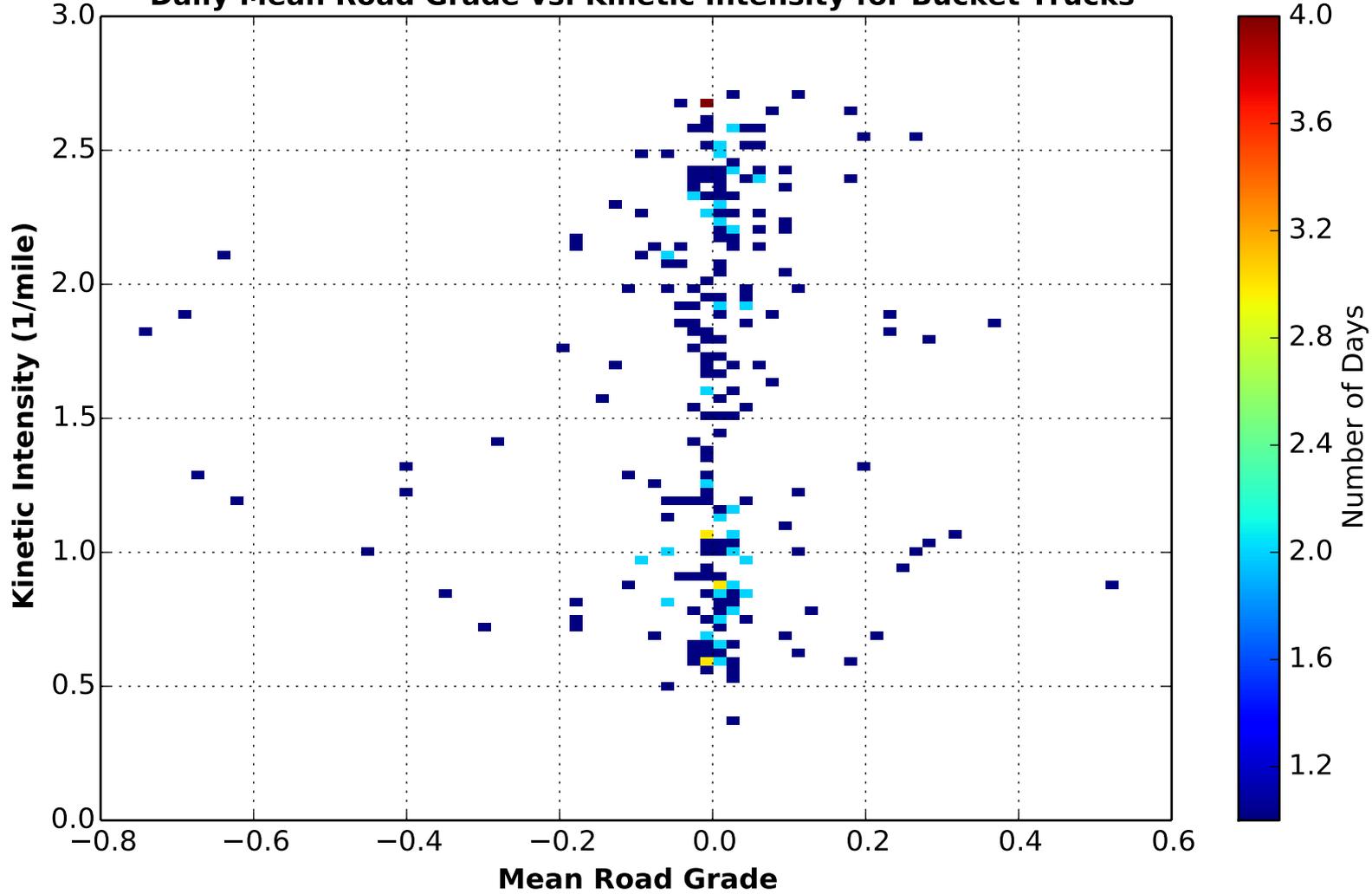


of Vehicles Reporting: 20

Generated: Thu Aug 07, 2014

of Days Included: : 283

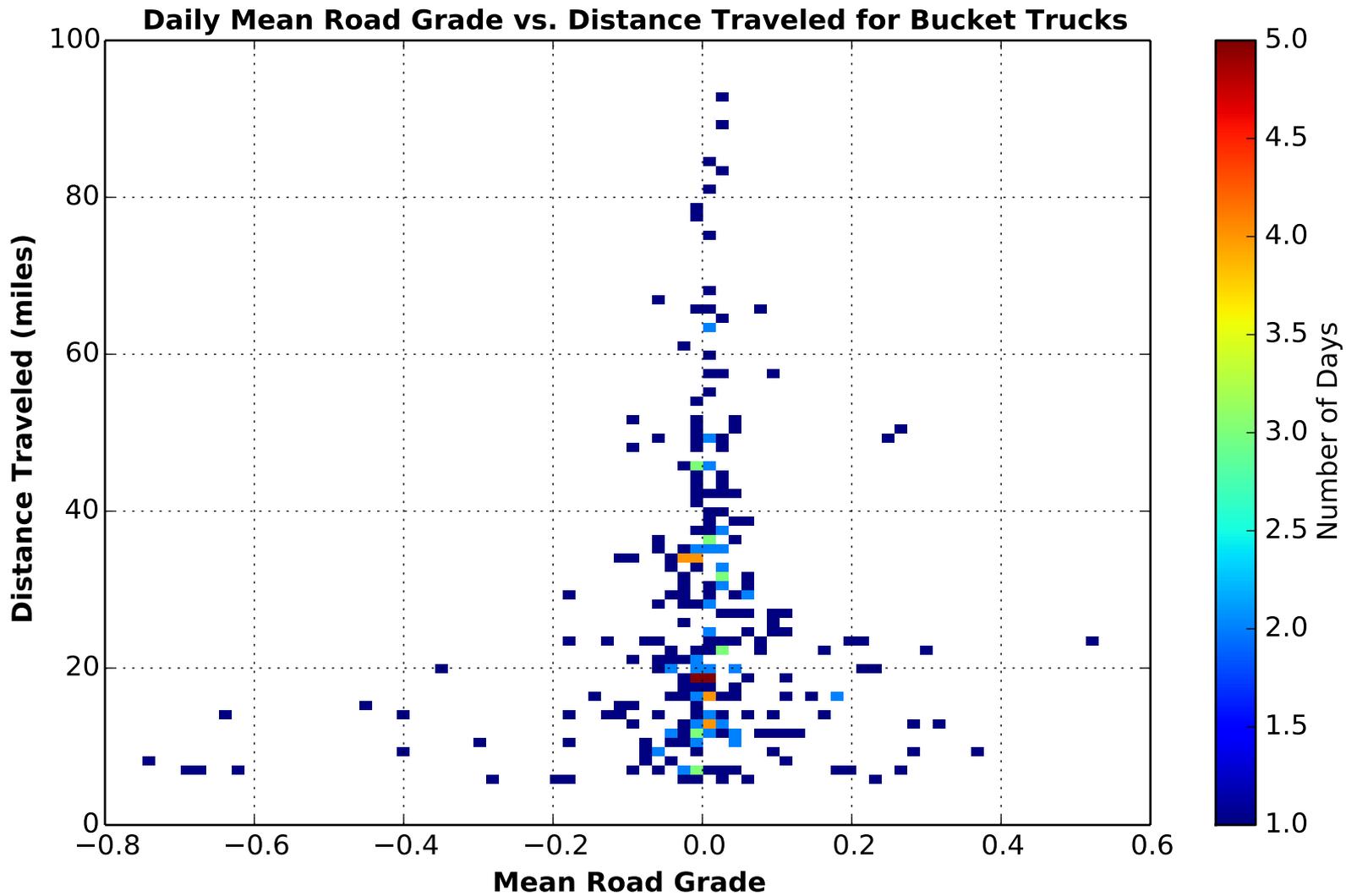
Daily Mean Road Grade vs. Kinetic Intensity for Bucket Trucks



of Vehicles Reporting: 20

Generated: Thu Aug 07, 2014

of Days Included: 252

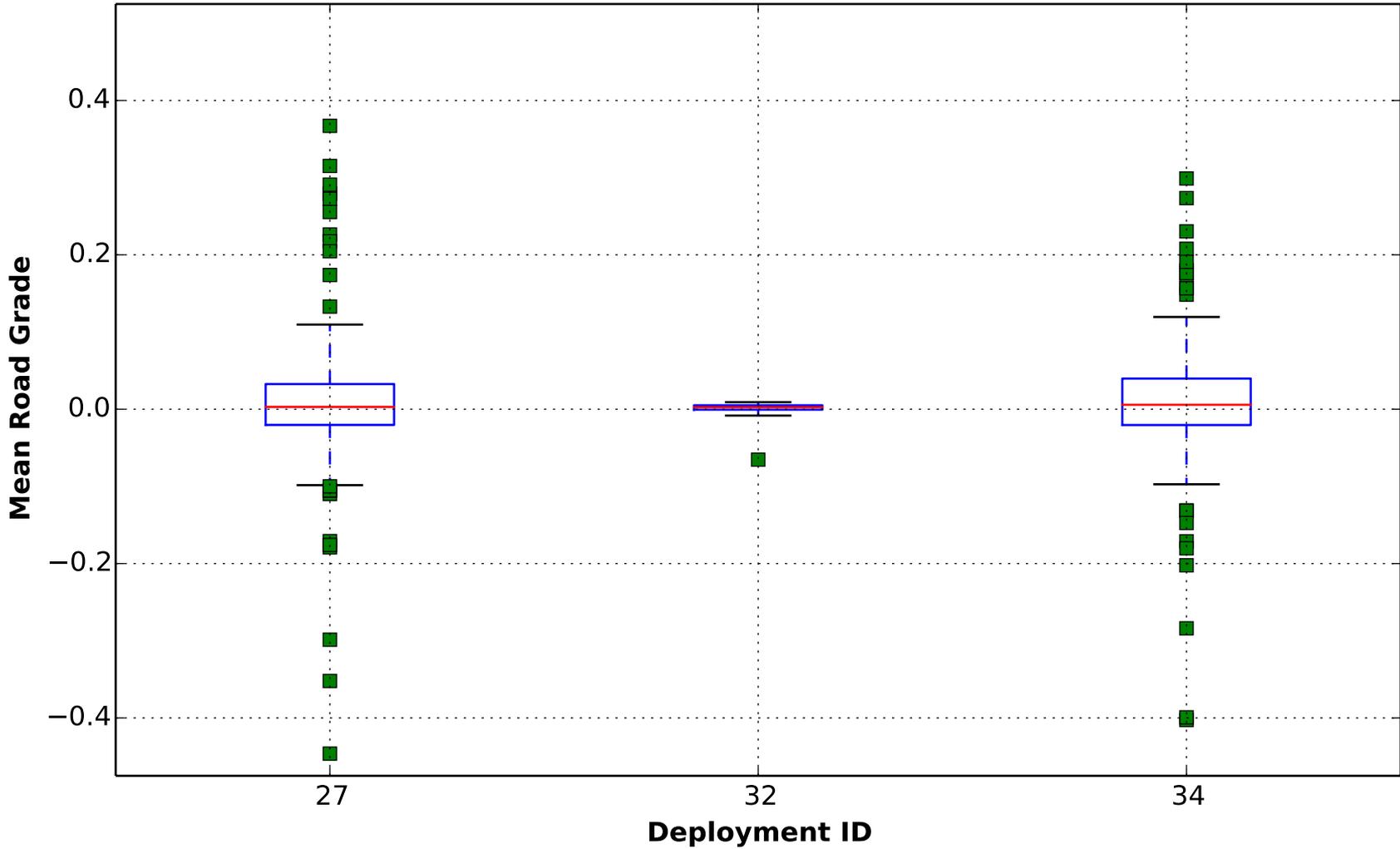


of Vehicles Reporting: 20

Generated: Thu Aug 07, 2014

of Days Included: 283

Daily Mean Road Grade by Deployment for Bucket Trucks

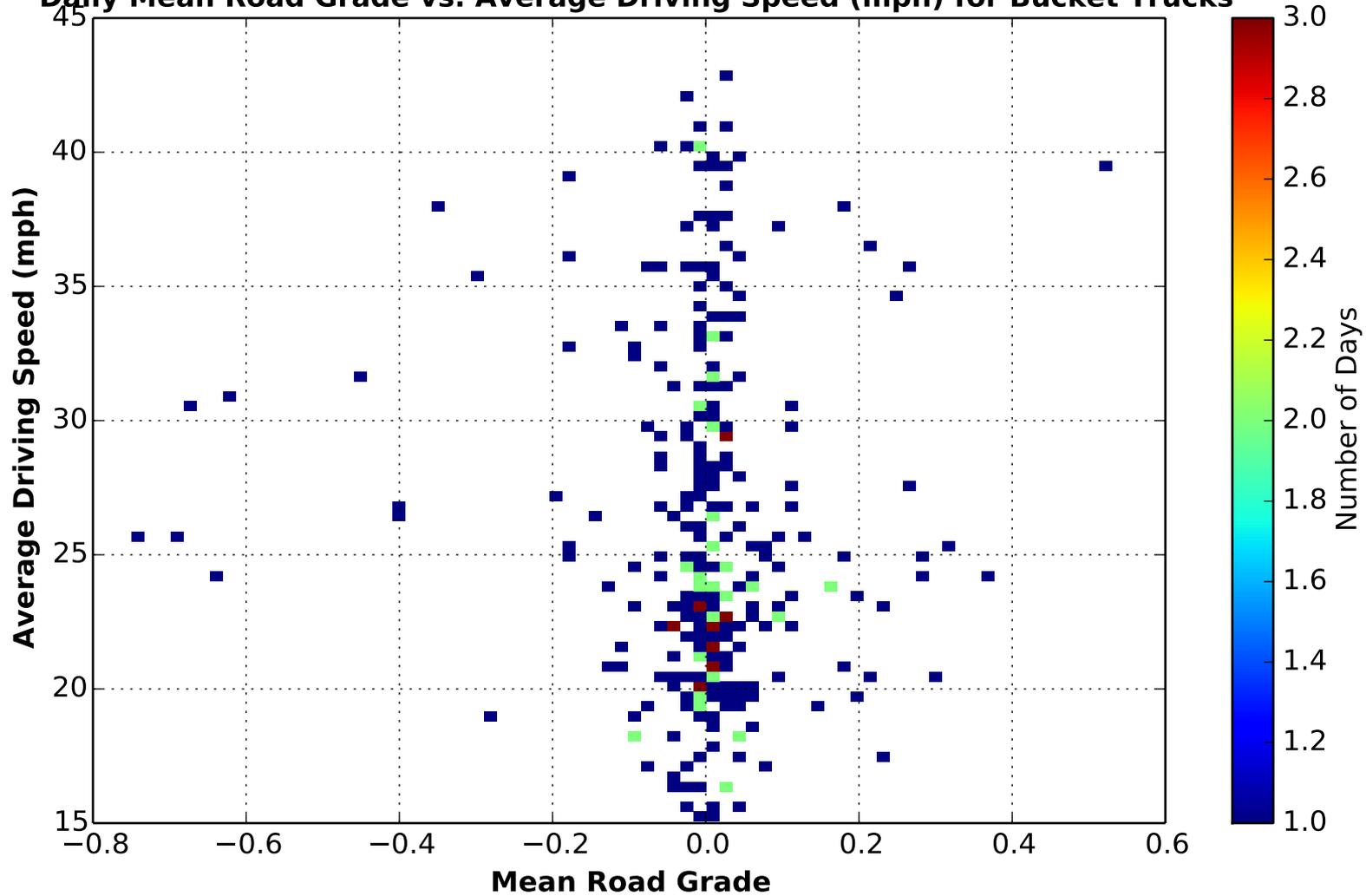


of Vehicles Reporting: 20

Generated: Thu Aug 07, 2014

of Days Included: 277

Daily Mean Road Grade vs. Average Driving Speed (mph) for Bucket Trucks

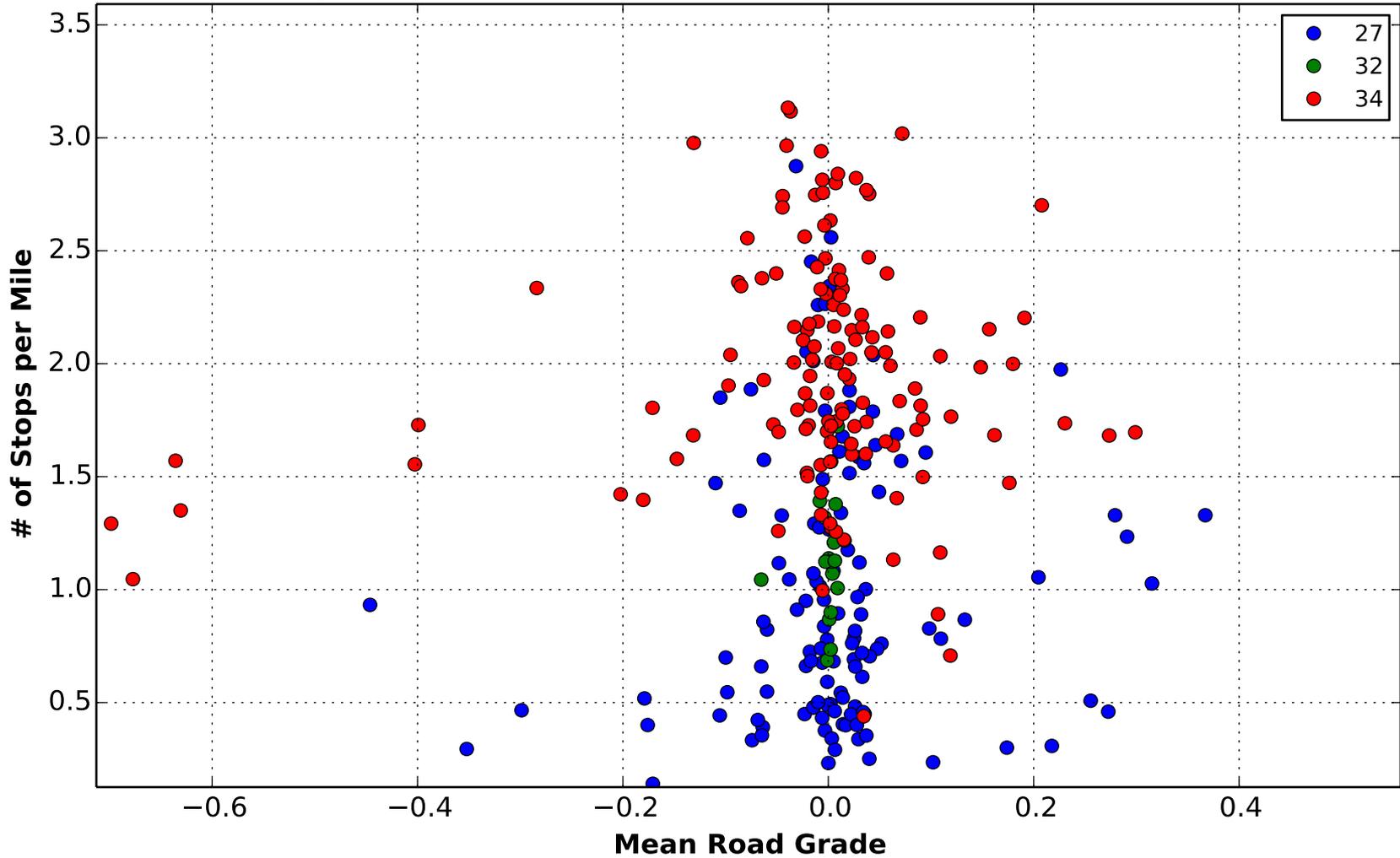


of Vehicles Reporting: 20

Generated: Thu Aug 07, 2014

of Days Included: 283

Daily Mean Road Grade vs. # of Stops per Mile for Bucket Trucks

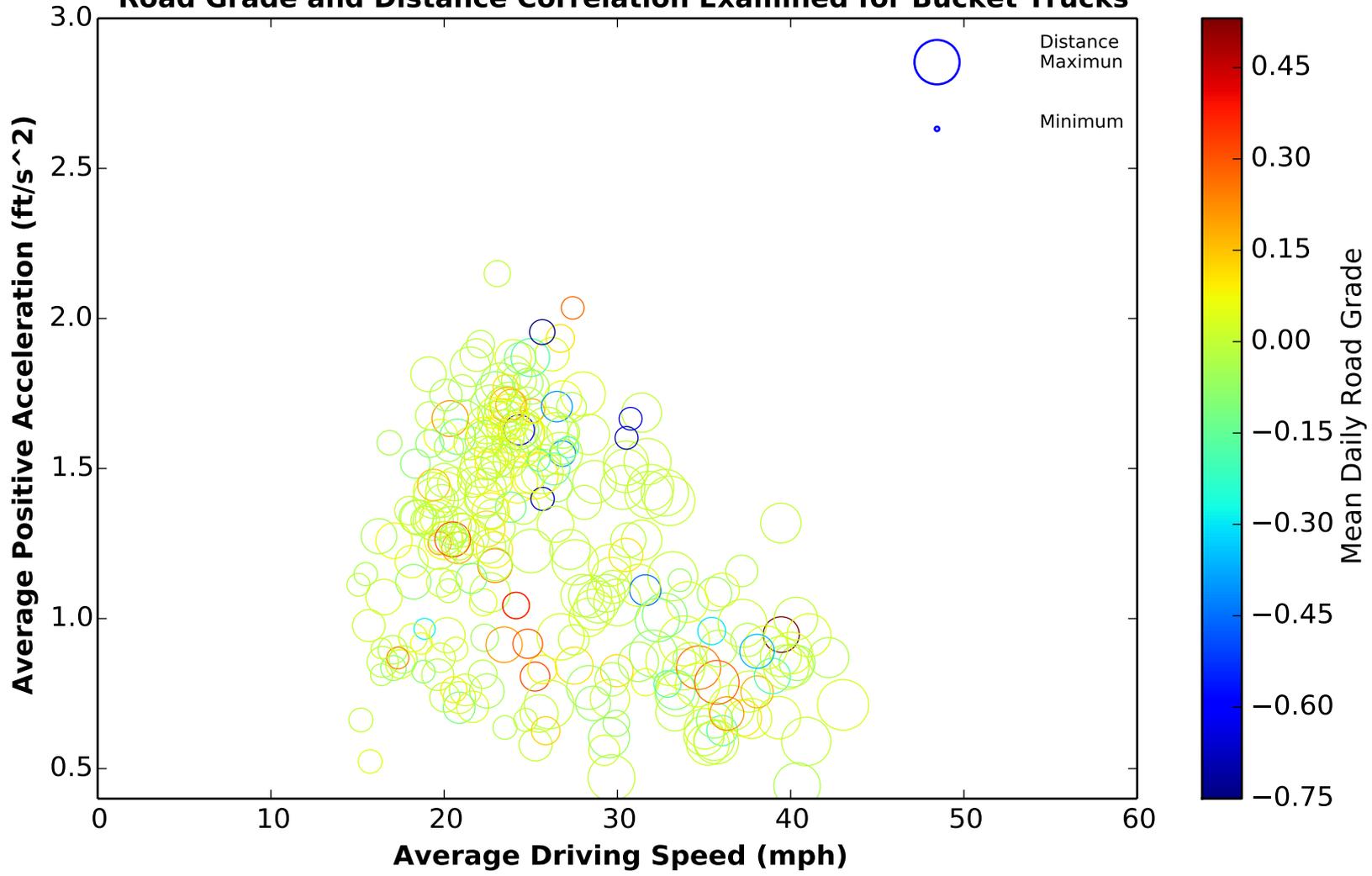


of Vehicles Reporting: 20

Generated: Thu Aug 07, 2014

of Days Included: 279

Road Grade and Distance Correlation Examined for Bucket Trucks

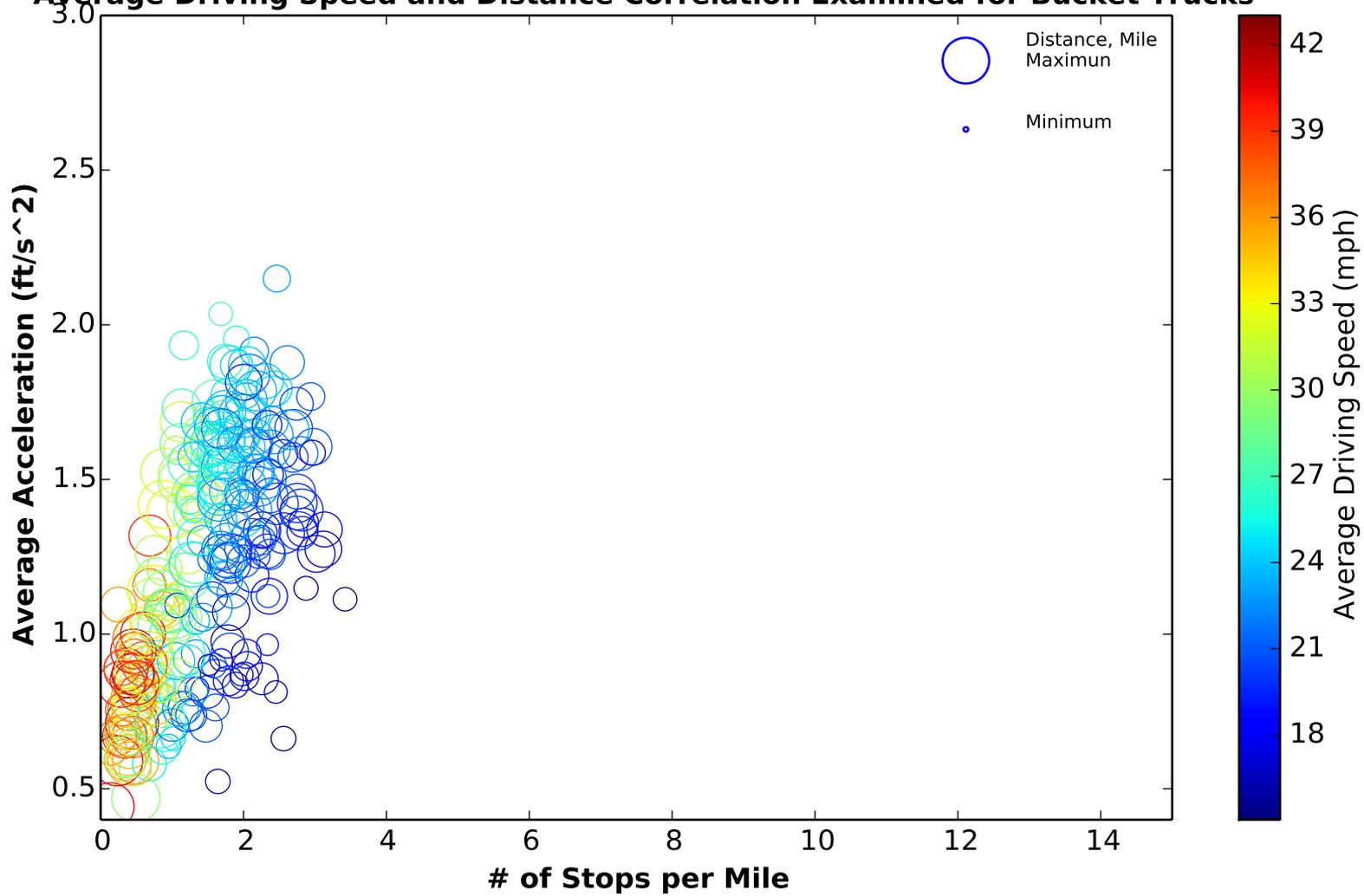


of Vehicles Reporting: 20

Generated: Thu Aug 07, 2014

of Days Included: 283

Average Driving Speed and Distance Correlation Examined for Bucket Trucks

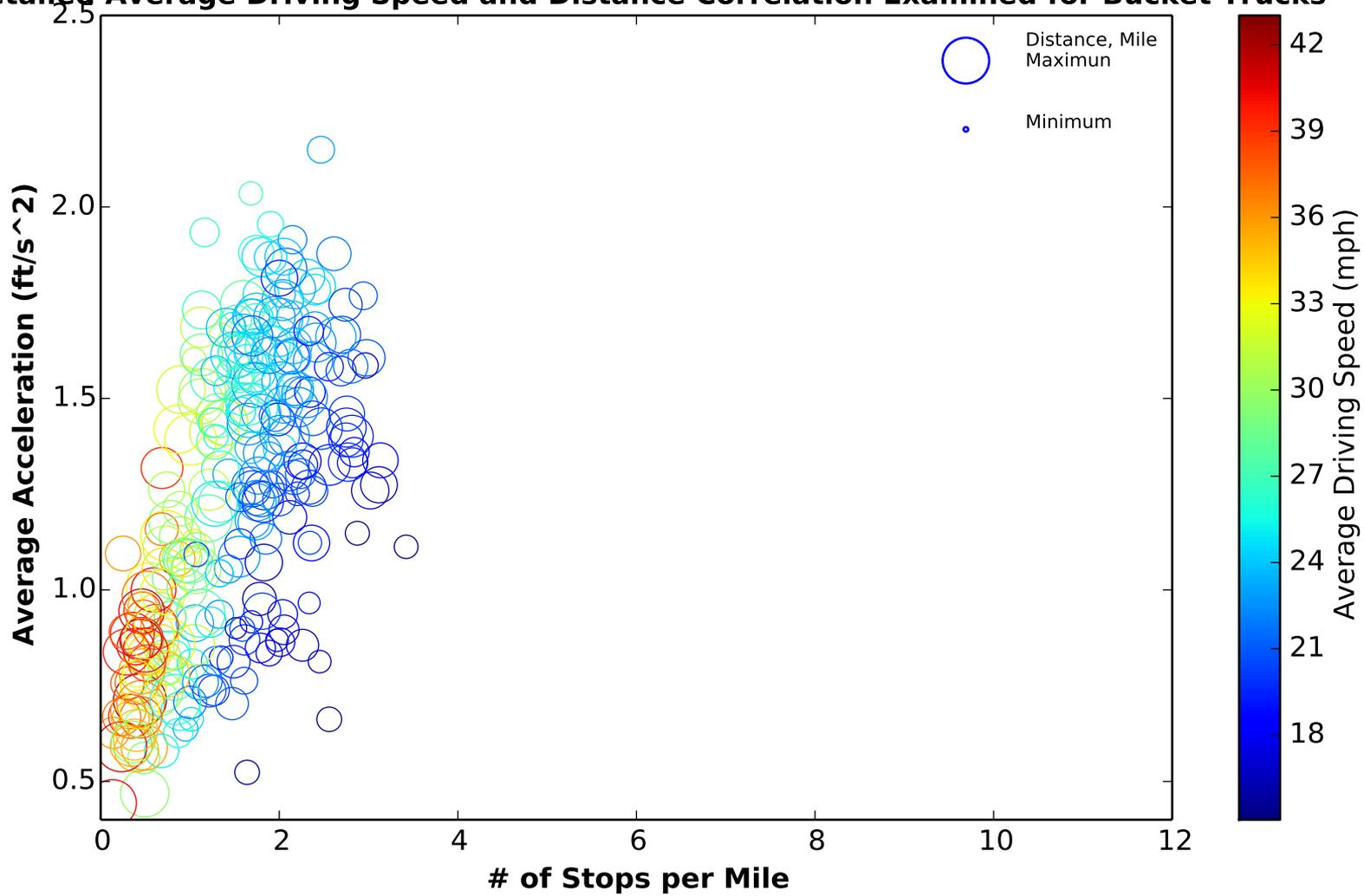


of Vehicles Reporting: 20

Generated: Thu Aug 07, 2014

of Days Included: 283

Detailed Average Driving Speed and Distance Correlation Examined for Bucket Trucks

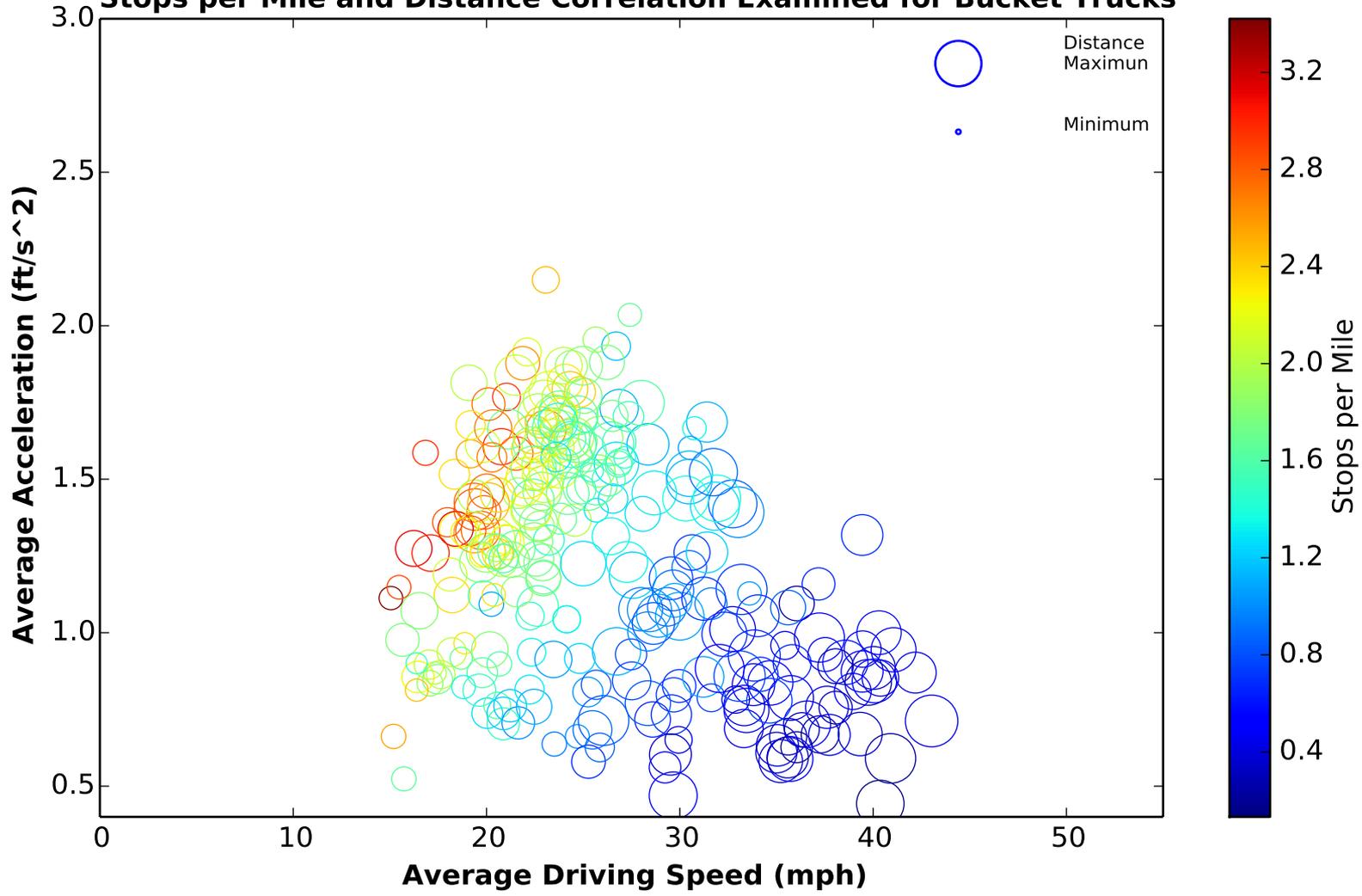


of Vehicles Reporting: 20

Generated: Thu Aug 07, 2014

of Days Included: 283

Stops per Mile and Distance Correlation Examined for Bucket Trucks

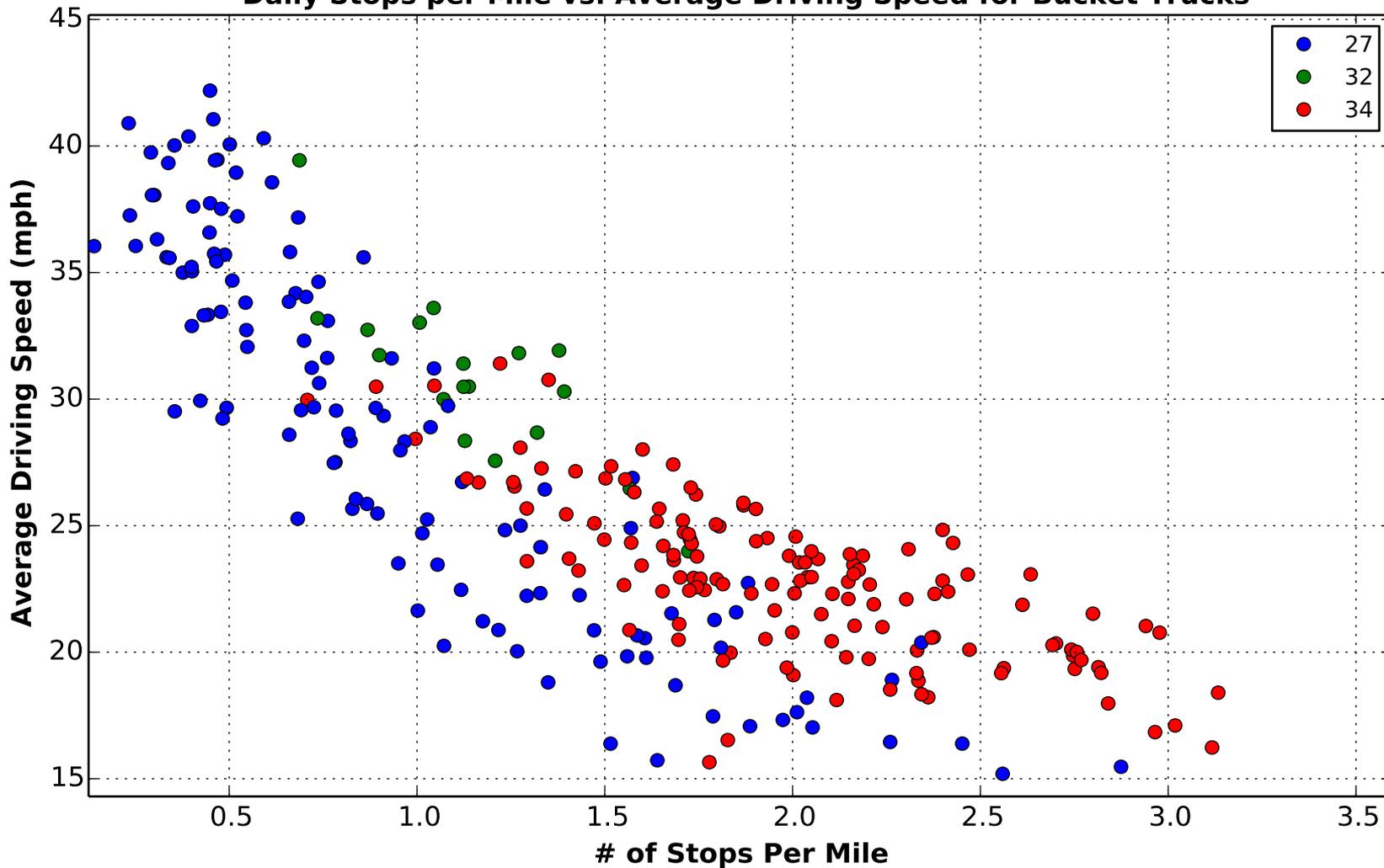


of Vehicles Reporting: 20

Generated: Thu Aug 07, 2014

of Days Included: 283

Daily Stops per Mile vs. Average Driving Speed for Bucket Trucks

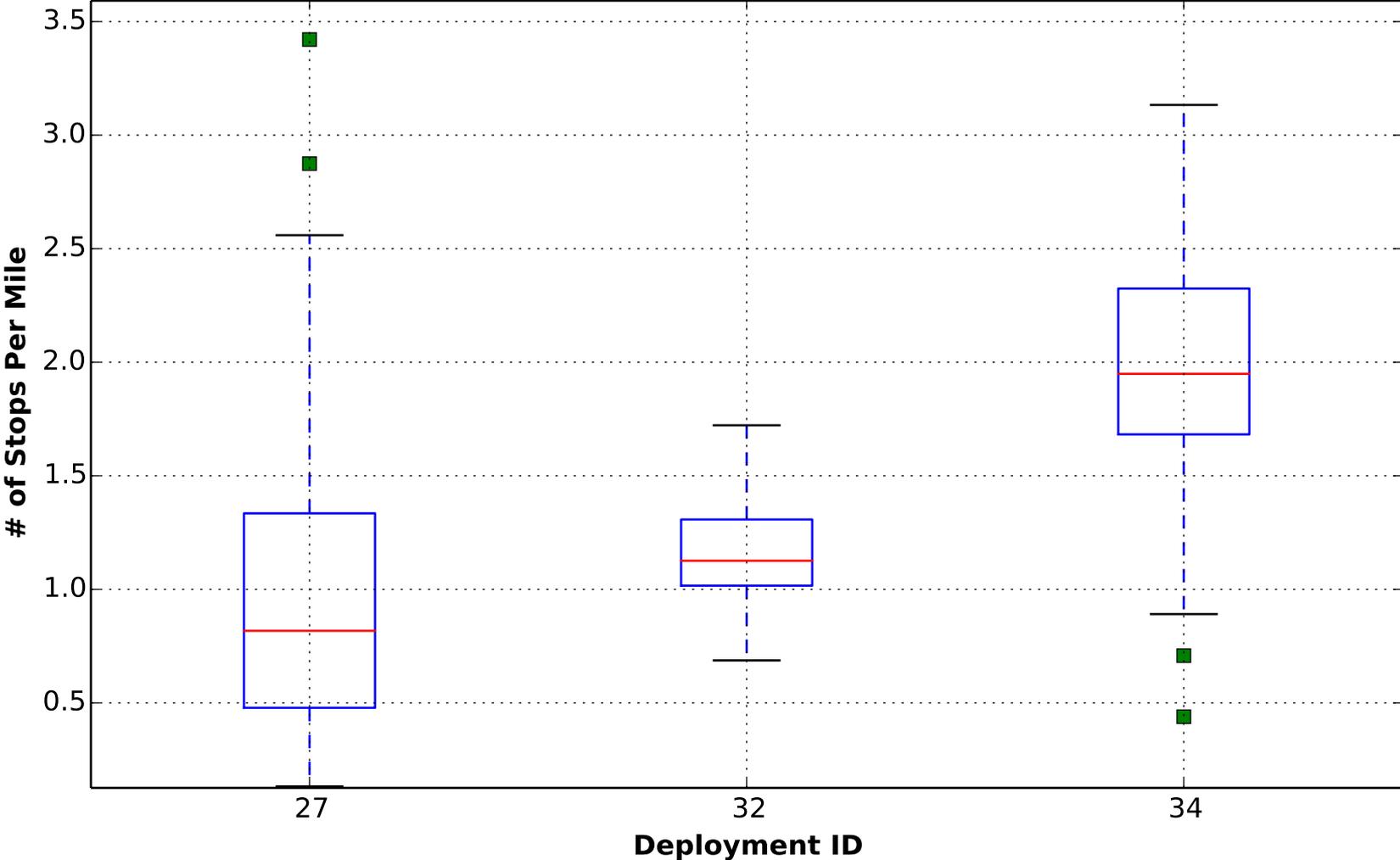


of Vehicles Reporting: 20

Generated: Thu Aug 07, 2014

of Days Included: 280

Stops Per Mile by Deployment for Bucket Trucks

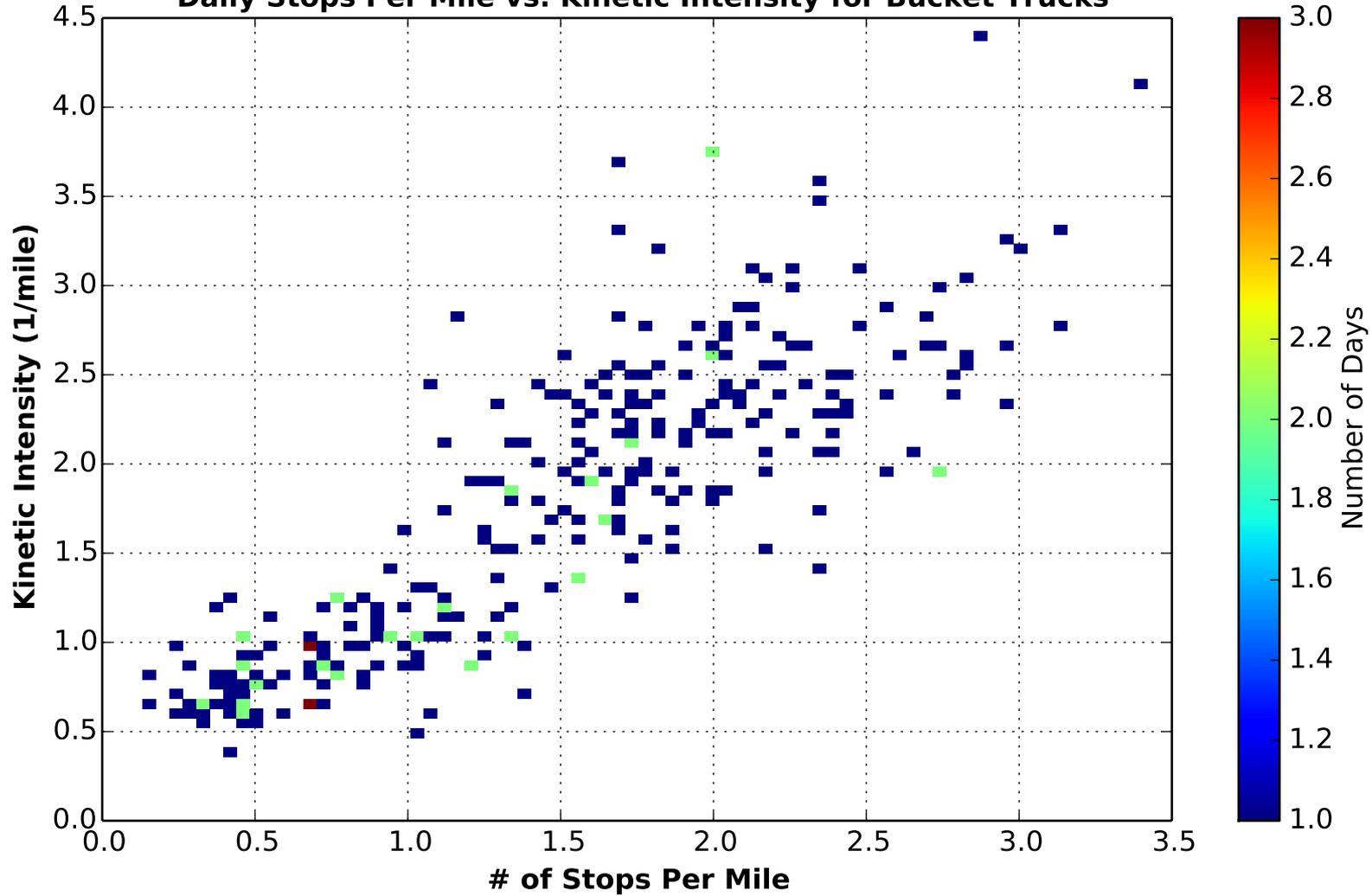


of Vehicles Reporting: 20

Generated: Thu Aug 07, 2014

of Days Included: 283

Daily Stops Per Mile vs. Kinetic Intensity for Bucket Trucks

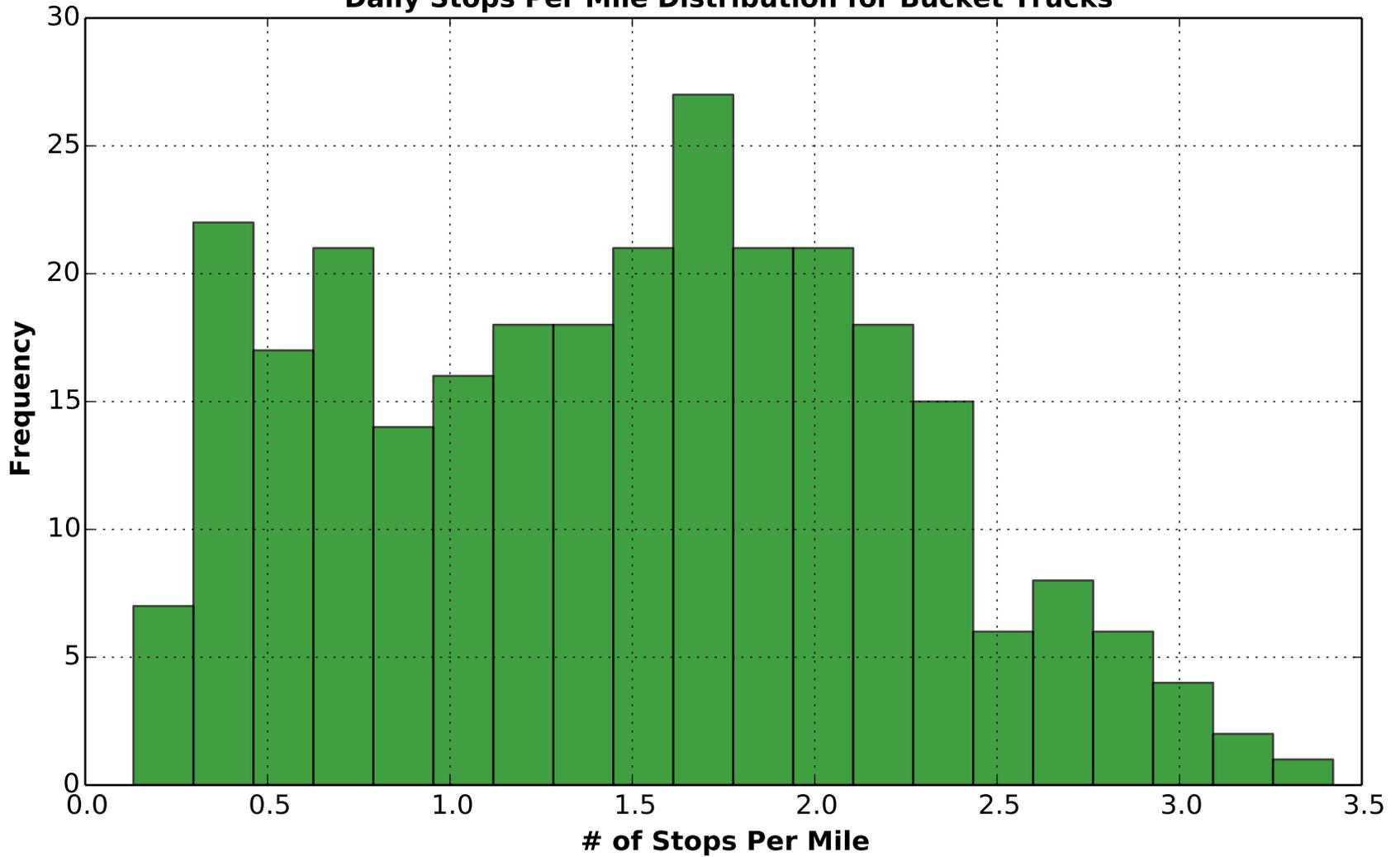


of Vehicles Reporting: 20

Generated: Thu Aug 07, 2014

of Days Included: 283

Daily Stops Per Mile Distribution for Bucket Trucks

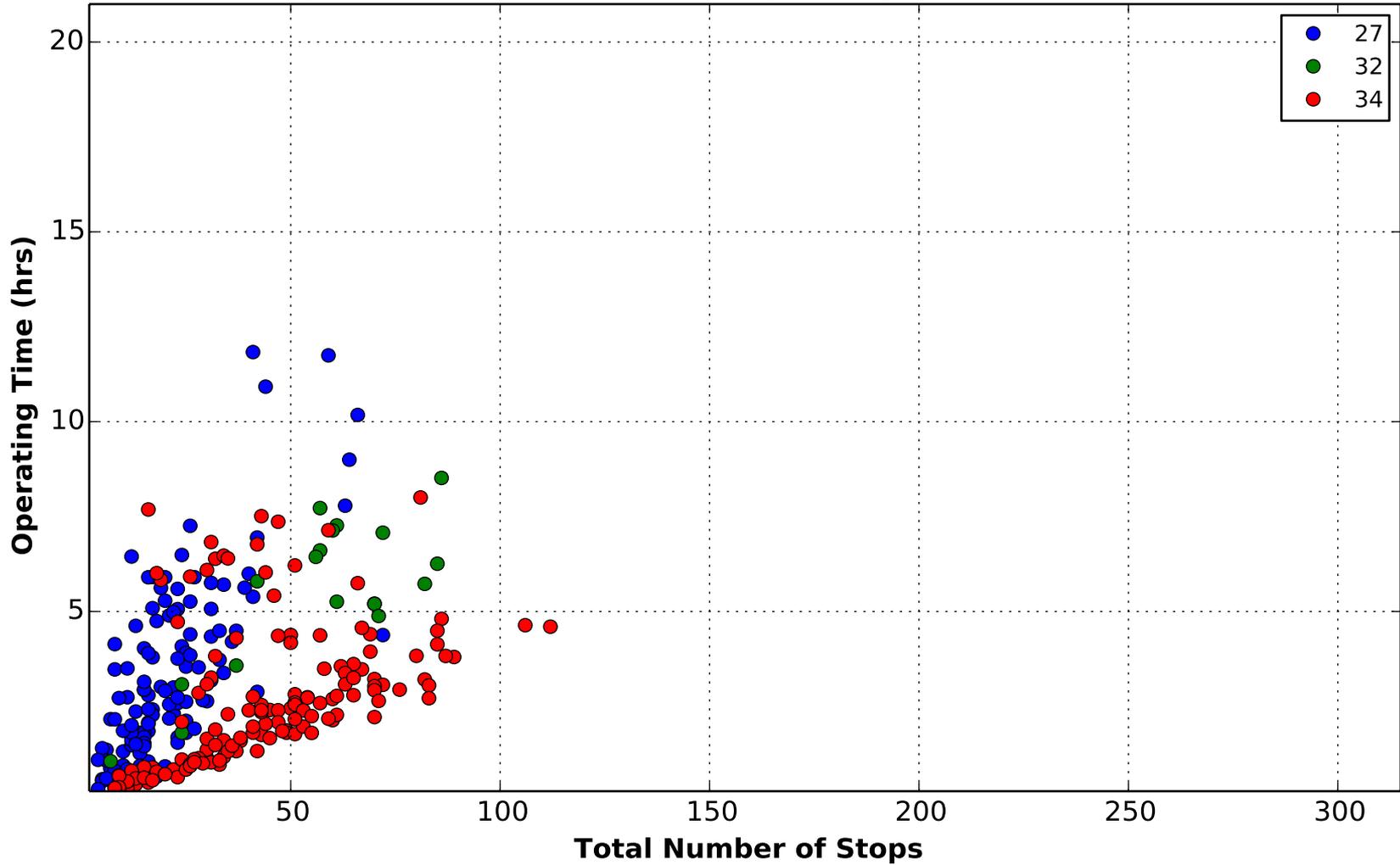


of Vehicles Reporting: 20

Generated: Thu Aug 07, 2014

of Days Included: 283

Daily Total Number of Stops vs. Operating Time for Bucket Trucks

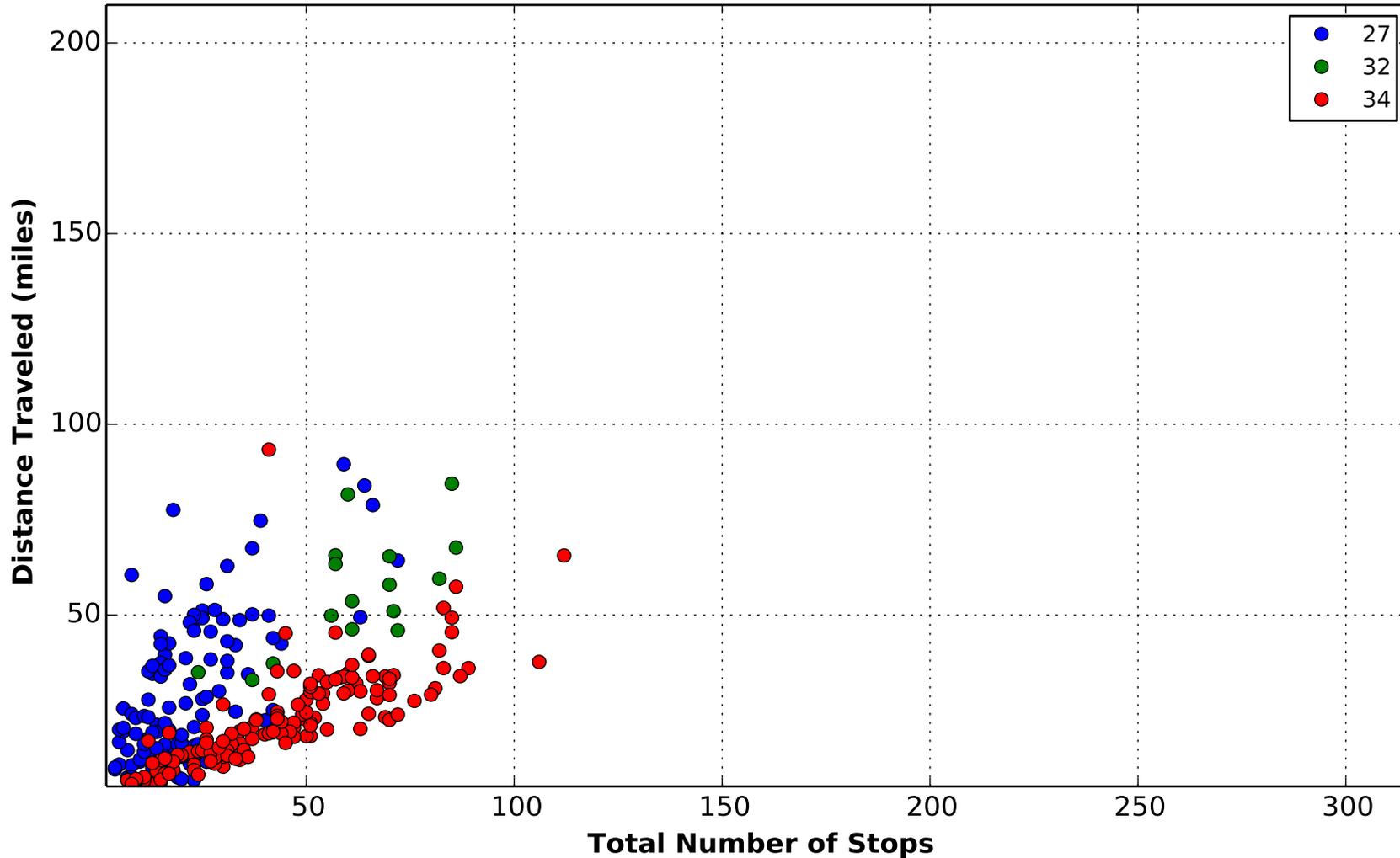


of Vehicles Reporting: 20

Generated: Thu Aug 07, 2014

of Days Included: 281

Daily Total Number of Stops vs. Distance Traveled for Bucket Trucks

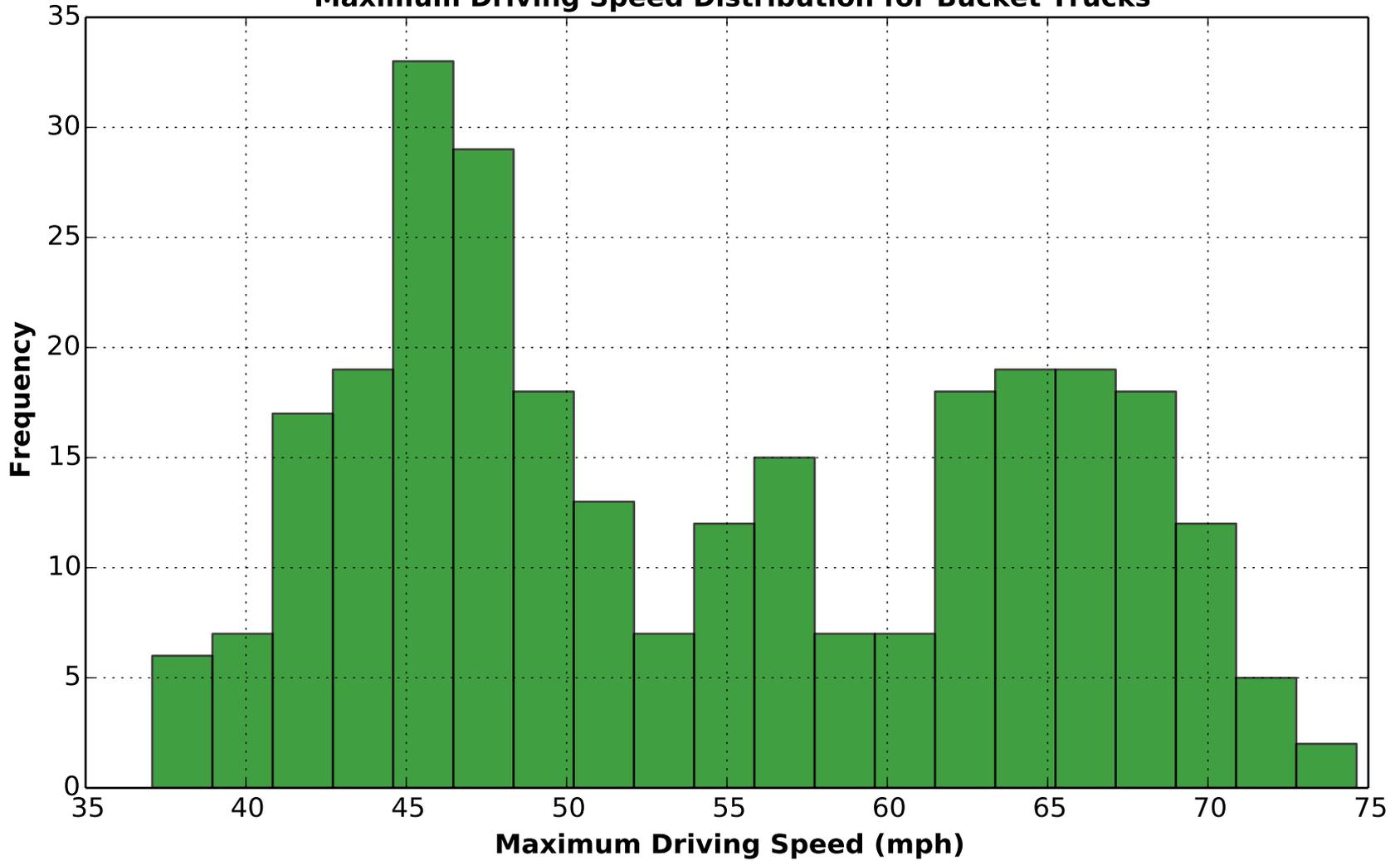


of Vehicles Reporting: 20

Generated: Thu Aug 07, 2014

of Days Included: 281

Maximum Driving Speed Distribution for Bucket Trucks

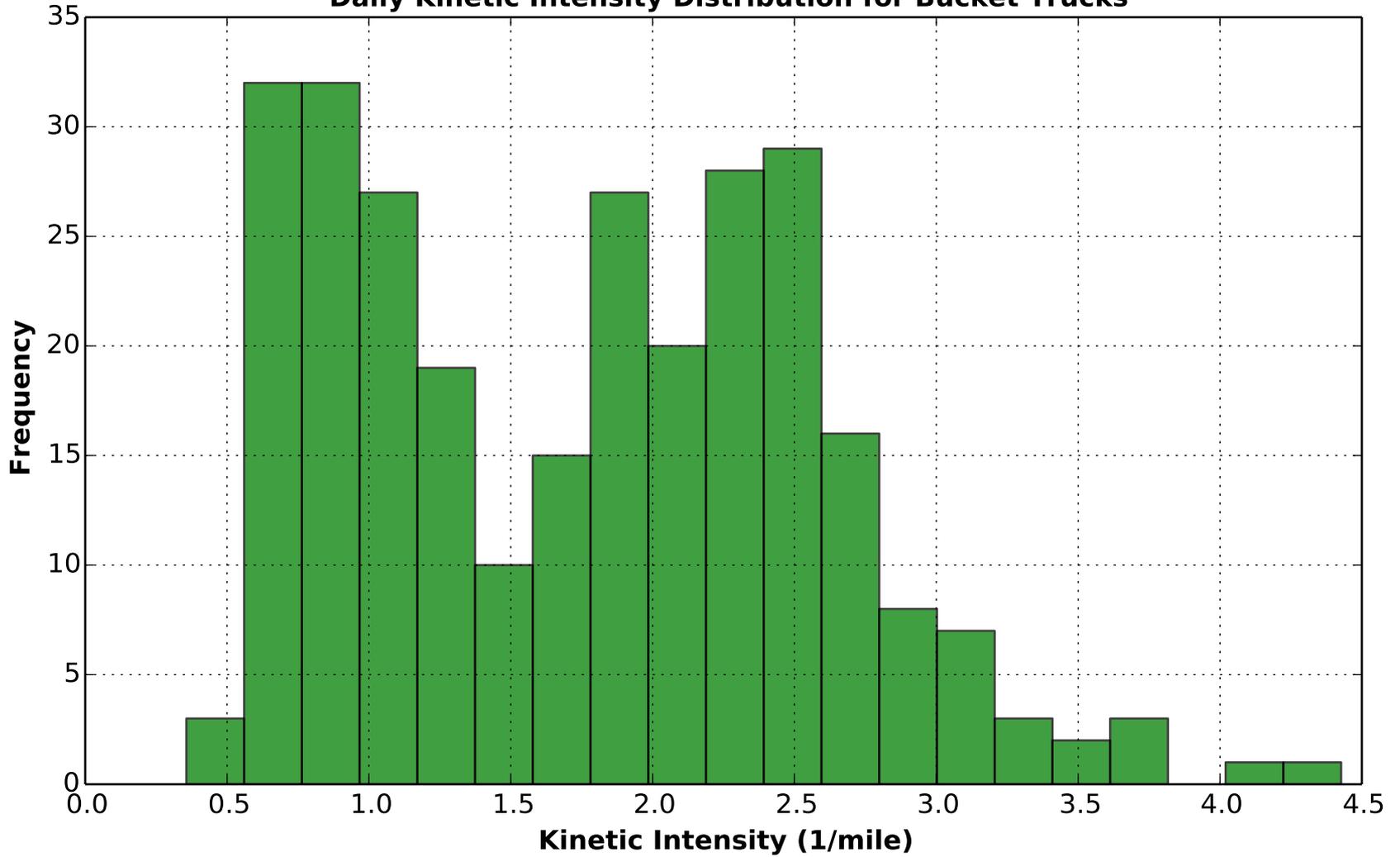


of Vehicles Reporting: 20

Generated: Thu Aug 07, 2014

of Days Included: 283

Daily Kinetic Intensity Distribution for Bucket Trucks

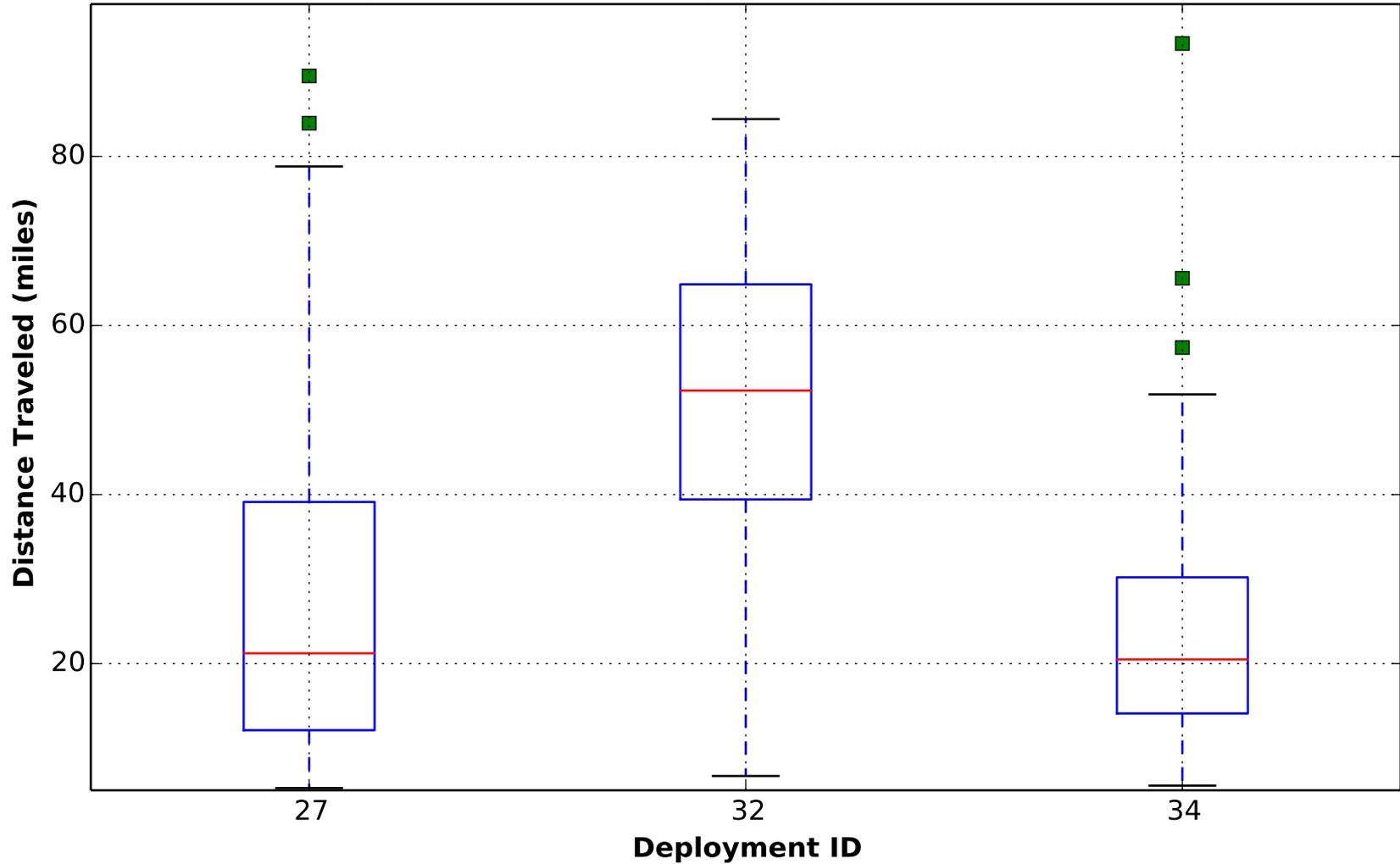


of Vehicles Reporting: 20

Generated: Thu Aug 07, 2014

of Days Included: 283

Daily Distance Traveled by Deployment for Bucket Trucks

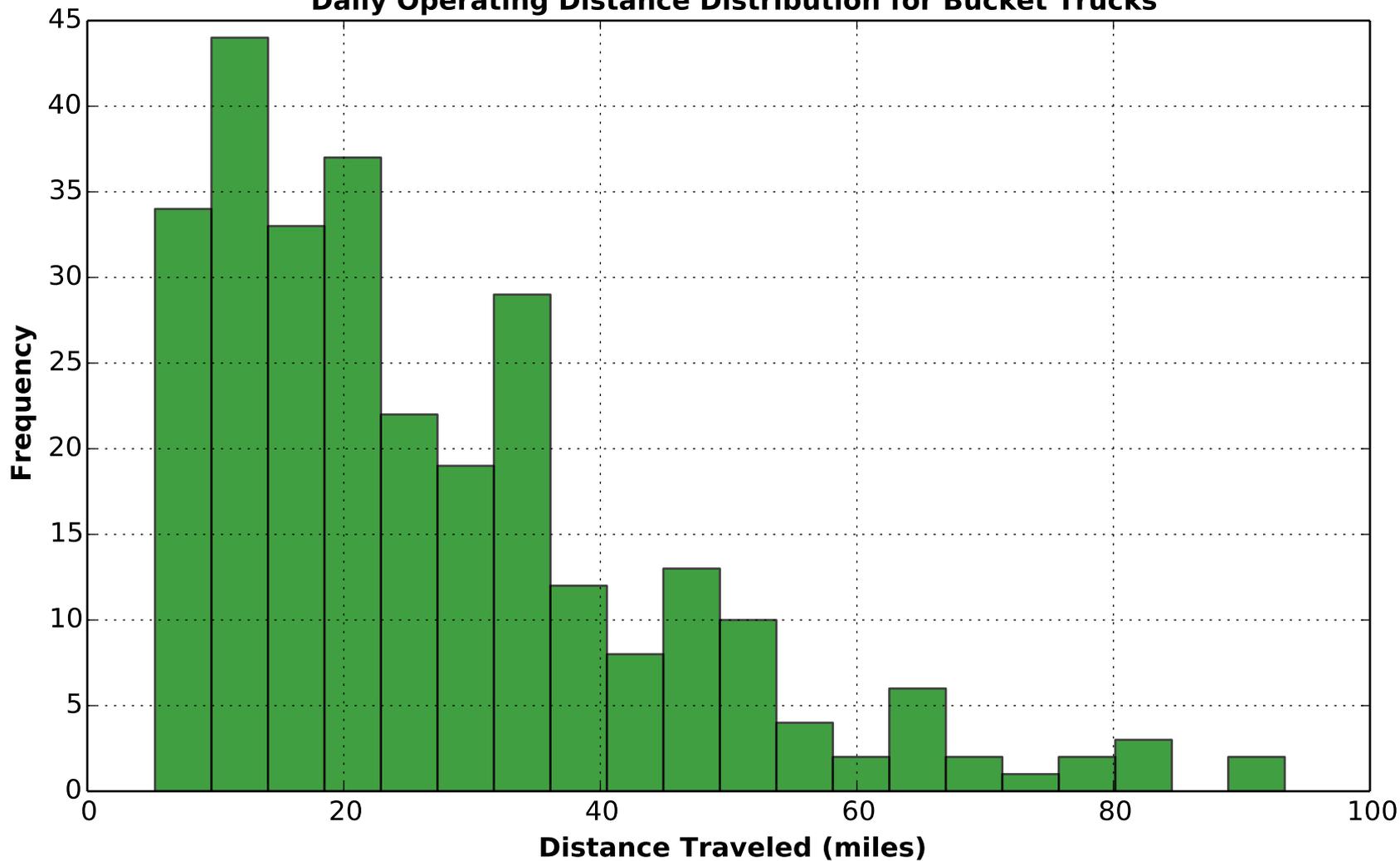


of Vehicles Reporting: 20

Generated: Thu Aug 07, 2014

of Days Included: 283

Daily Operating Distance Distribution for Bucket Trucks

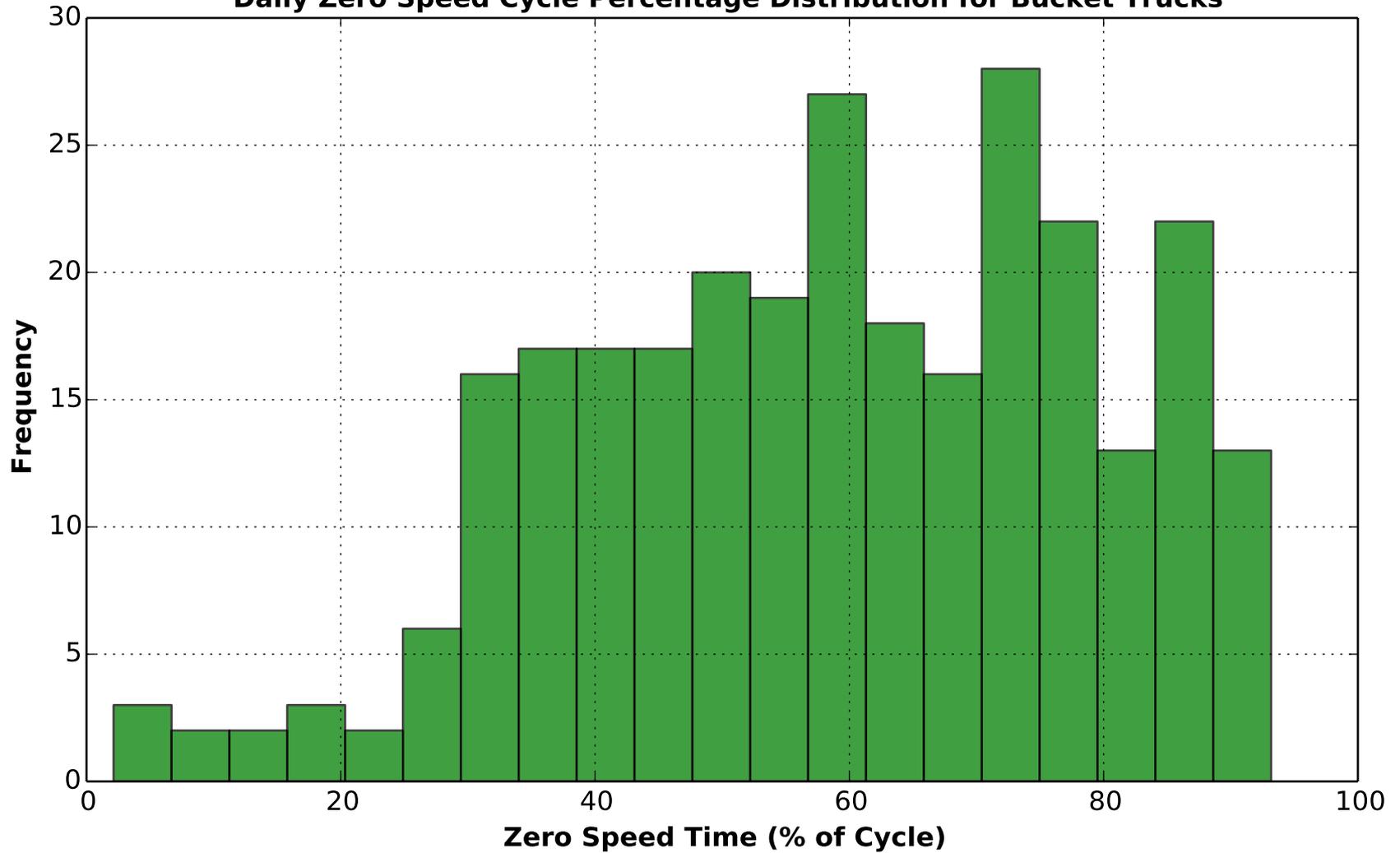


of Vehicles Reporting: 20

Generated: Thu Aug 07, 2014

of Days Included: 283

Daily Zero Speed Cycle Percentage Distribution for Bucket Trucks

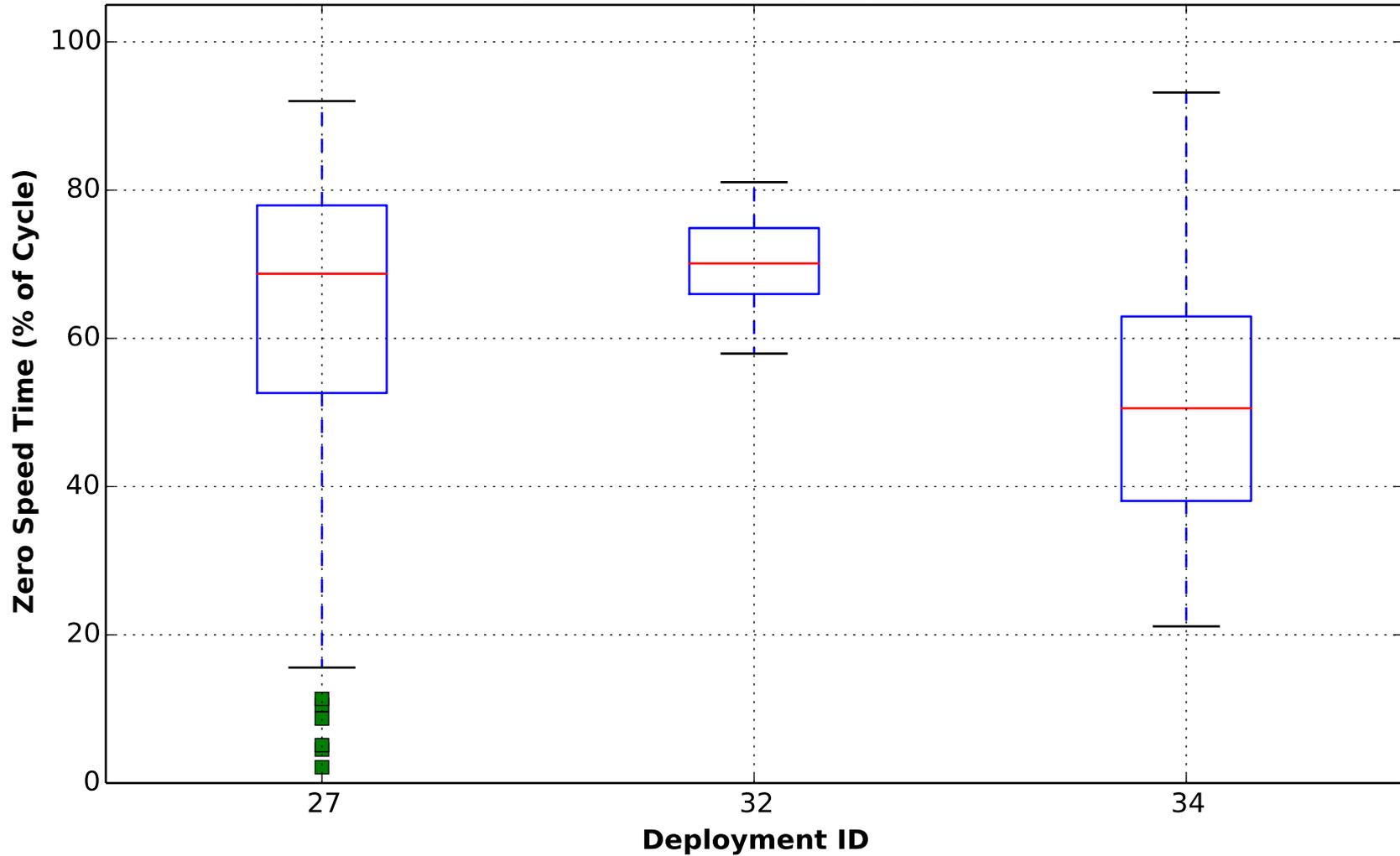


of Vehicles Reporting: 20

Generated: Thu Aug 07, 2014

of Days Included: 283

Daily Zero Speed Cycle Percentage by Deployment for Bucket Trucks

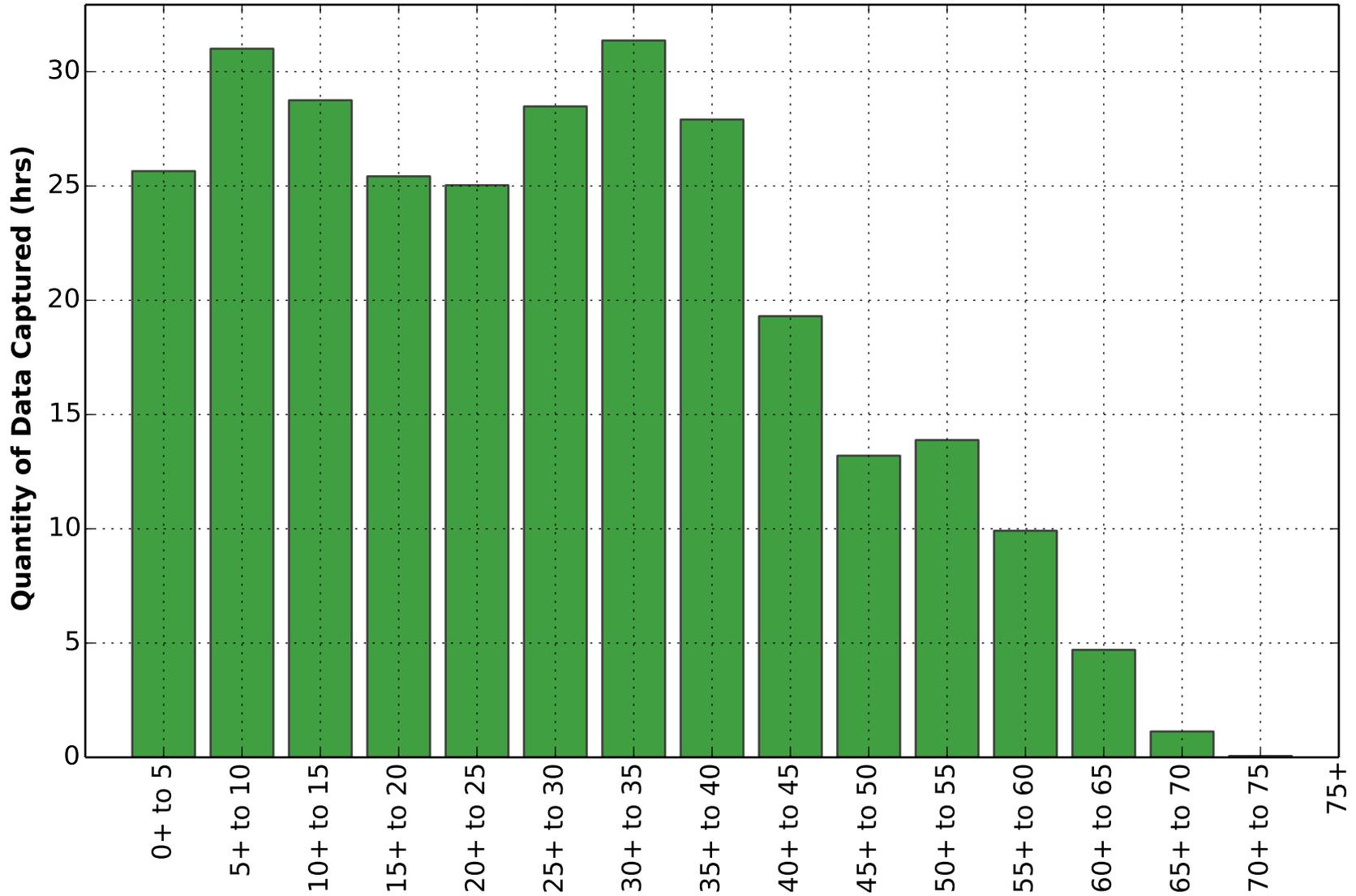


of Vehicles Reporting: 20

Generated: Thu Aug 07, 2014

of Days Included: 283

Captured Operating Time by Speed Bin (mph) for Bucket Trucks

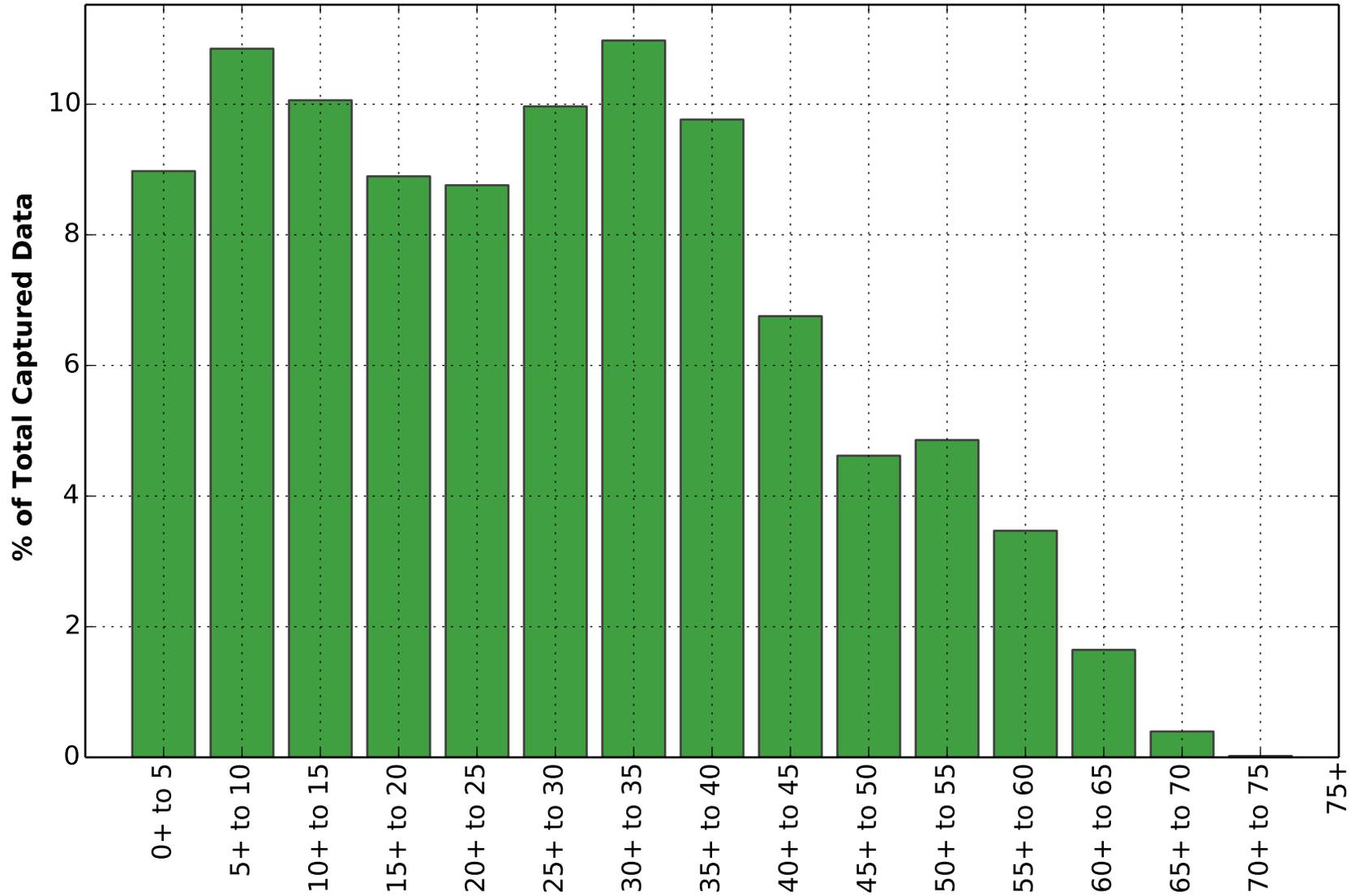


of Vehicles Reporting: 20

Generated: Thu Aug 07, 2014

of Days Included: 283

Captured Operating Time by Speed Bin (mph) for Bucket Trucks

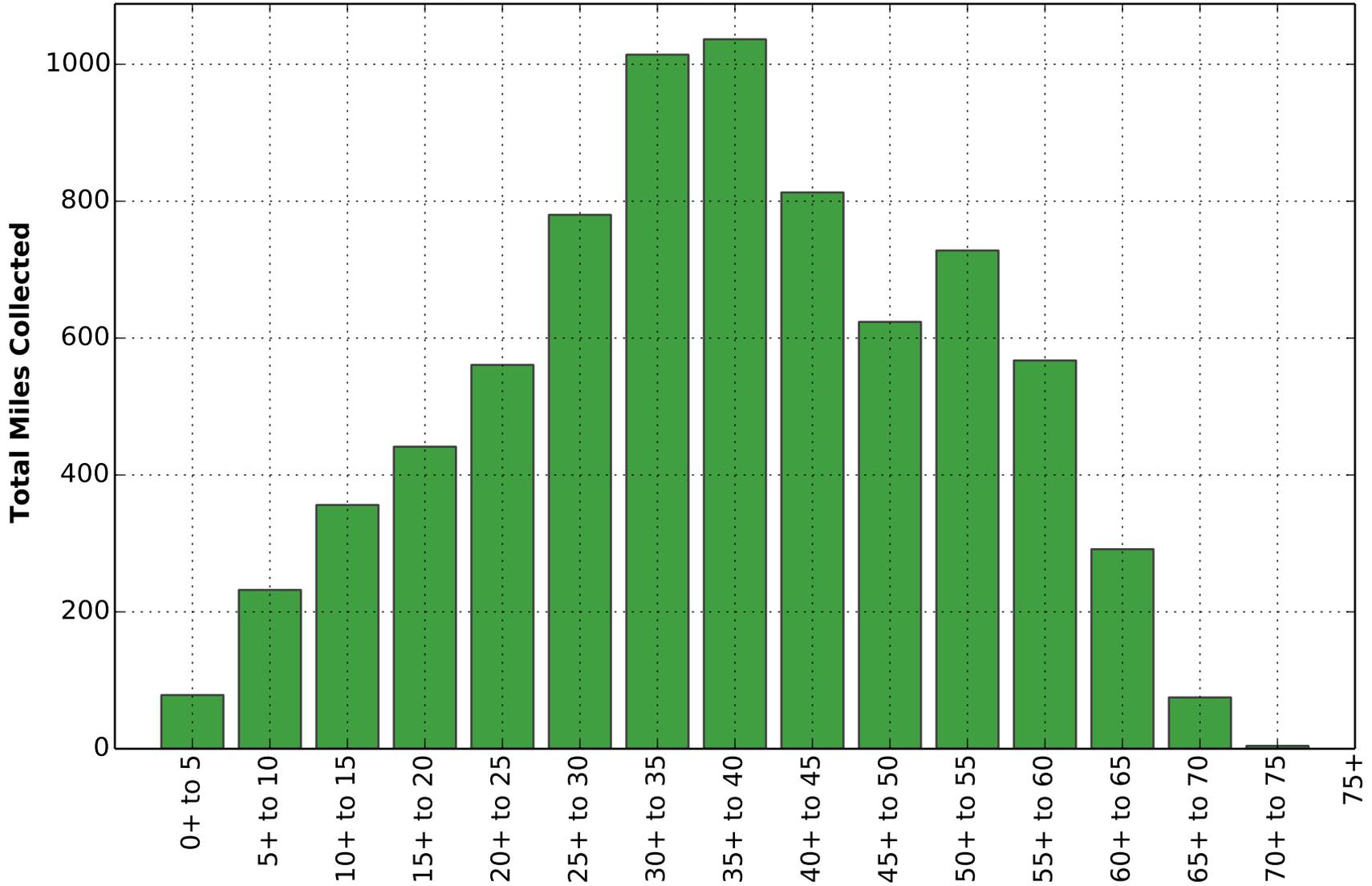


of Vehicles Reporting: 20

Generated: Thu Aug 07, 2014

of Days Included: 283

Total Mileage Collected by Speed Bin (mph) for Bucket Trucks

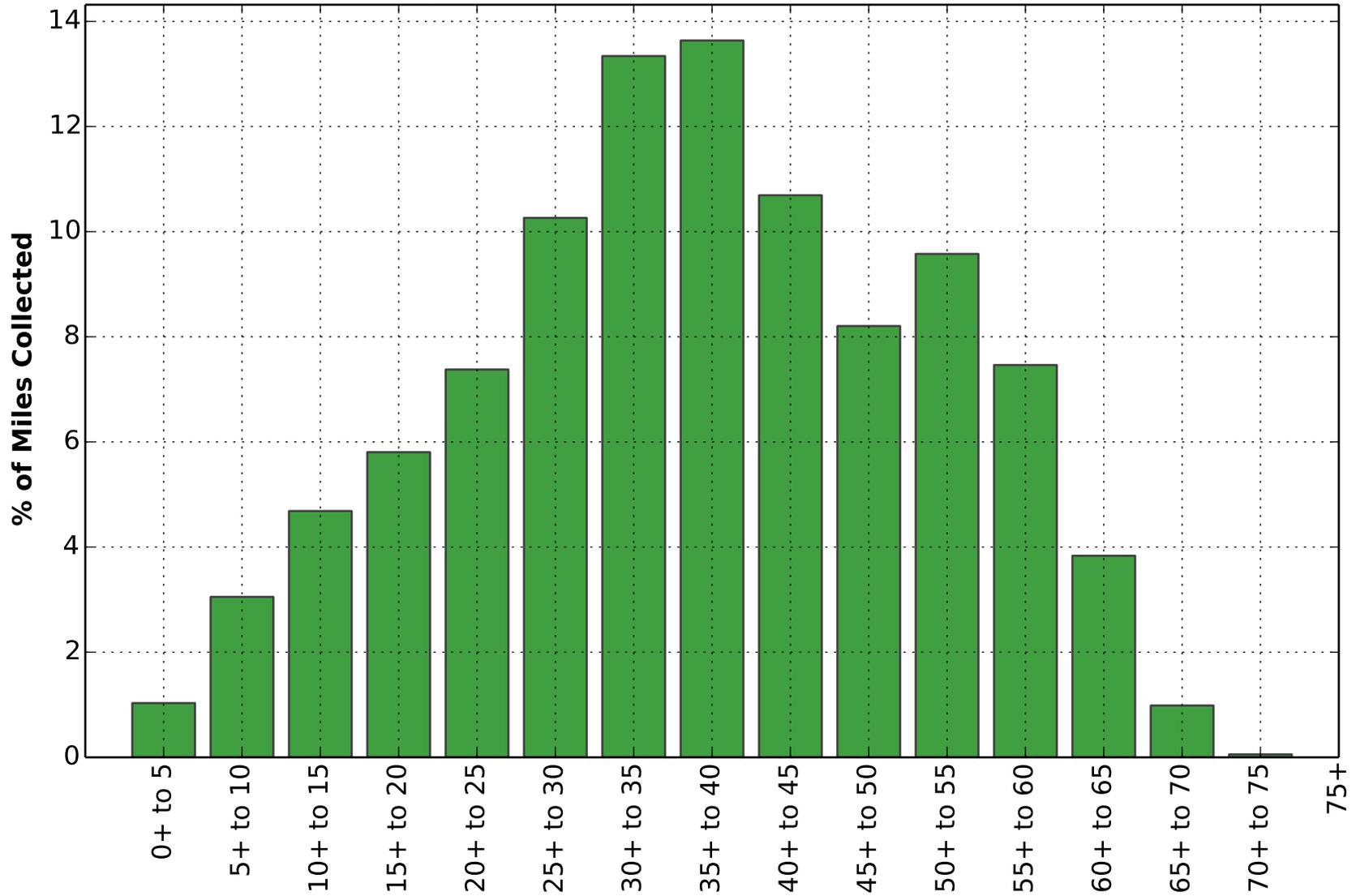


of Vehicles Reporting: 20

Generated: Thu Aug 07, 2014

of Days Included: 283

Total Mileage Collected by Speed Bin (mph) for Bucket Trucks

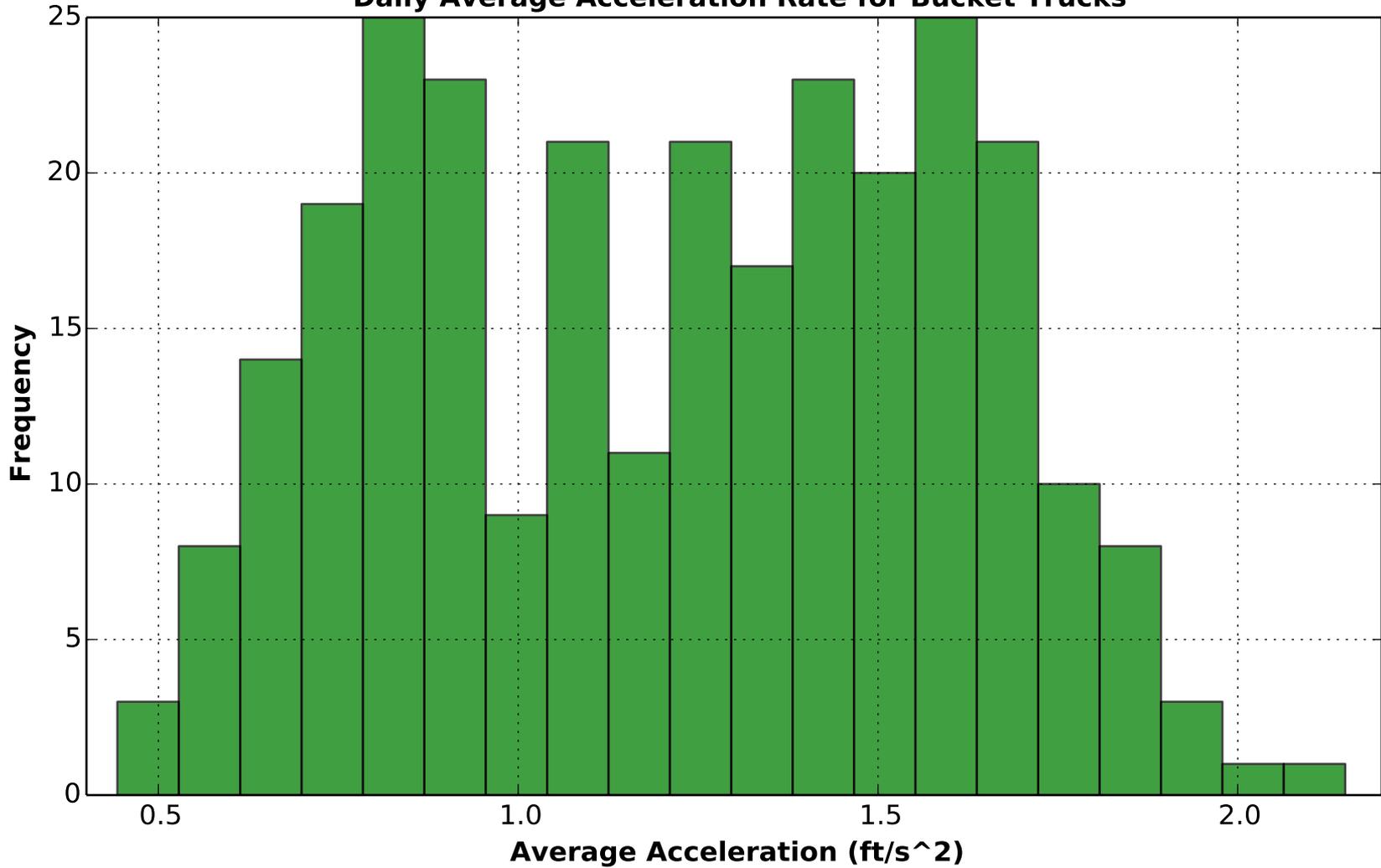


of Vehicles Reporting: 20

Generated: Thu Aug 07, 2014

of Days Included: 283

Daily Average Acceleration Rate for Bucket Trucks

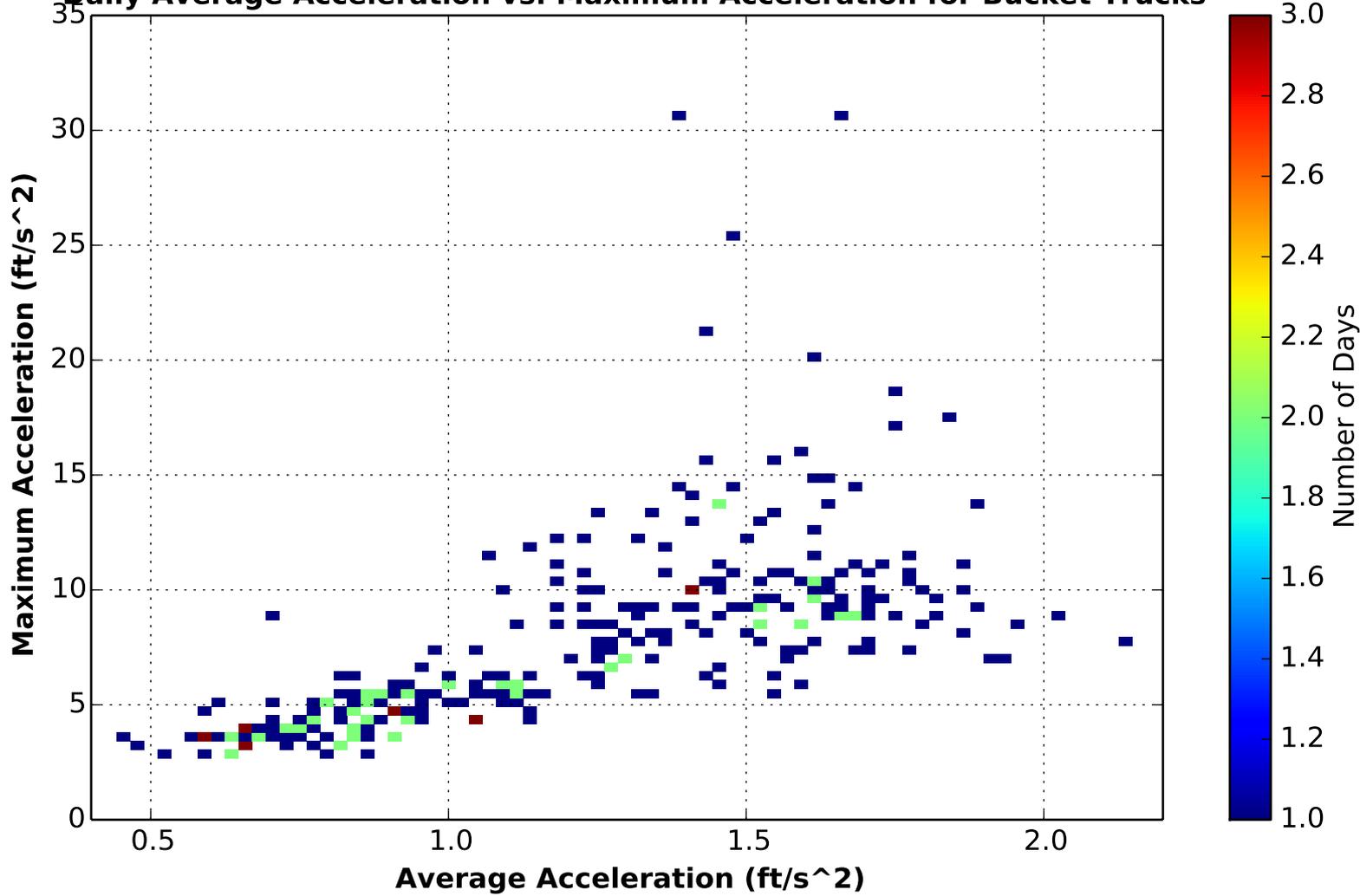


of Vehicles Reporting: 20

Generated: Thu Aug 07, 2014

of Days Included: 283

Daily Average Acceleration vs. Maximum Acceleration for Bucket Trucks

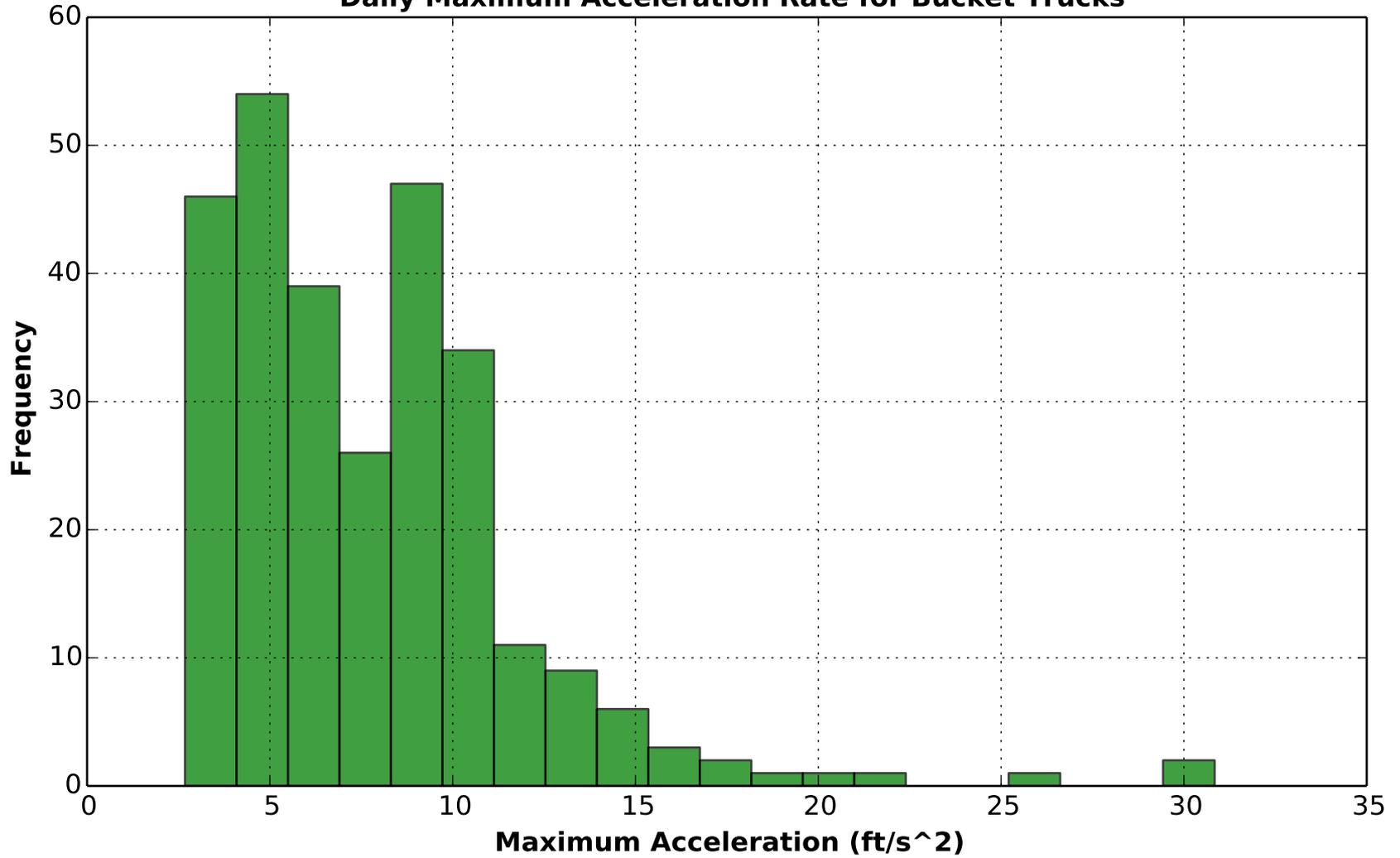


of Vehicles Reporting: 20

Generated: Thu Aug 07, 2014

of Days Included: 283

Daily Maximum Acceleration Rate for Bucket Trucks

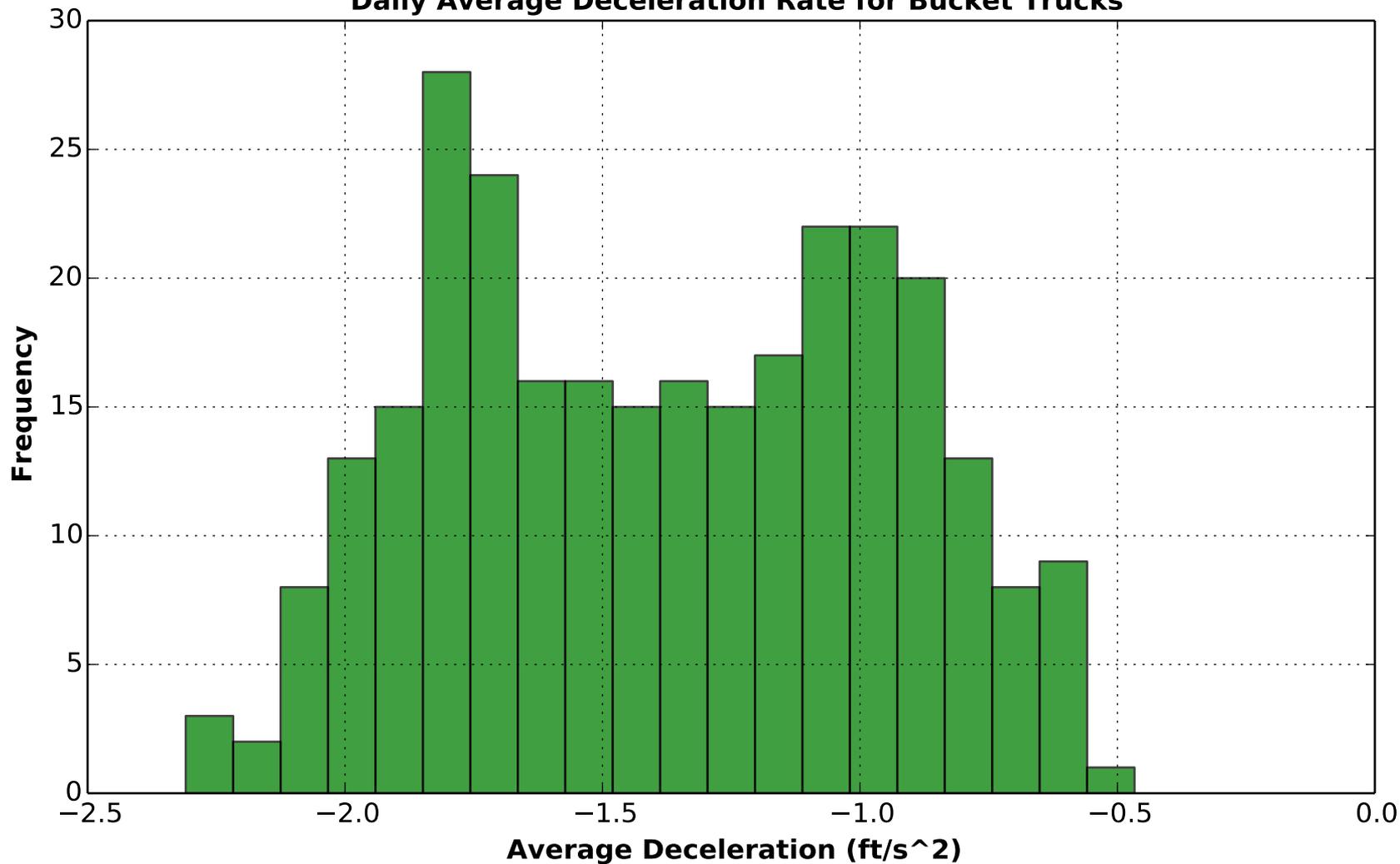


of Vehicles Reporting: 20

Generated: Thu Aug 07, 2014

of Days Included: 283

Daily Average Deceleration Rate for Bucket Trucks

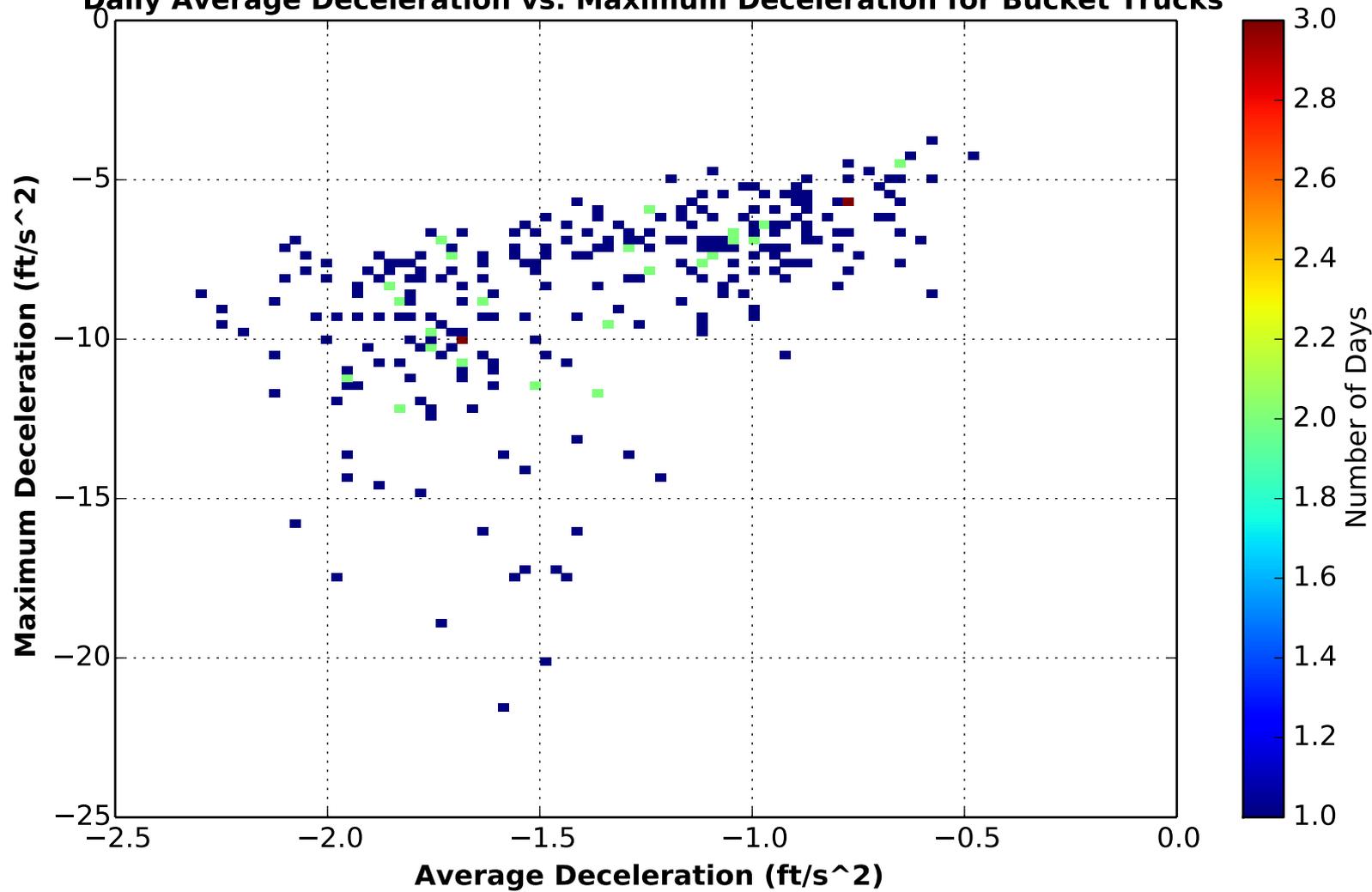


of Vehicles Reporting: 20

Generated: Thu Aug 07, 2014

of Days Included: 283

Daily Average Deceleration vs. Maximum Deceleration for Bucket Trucks

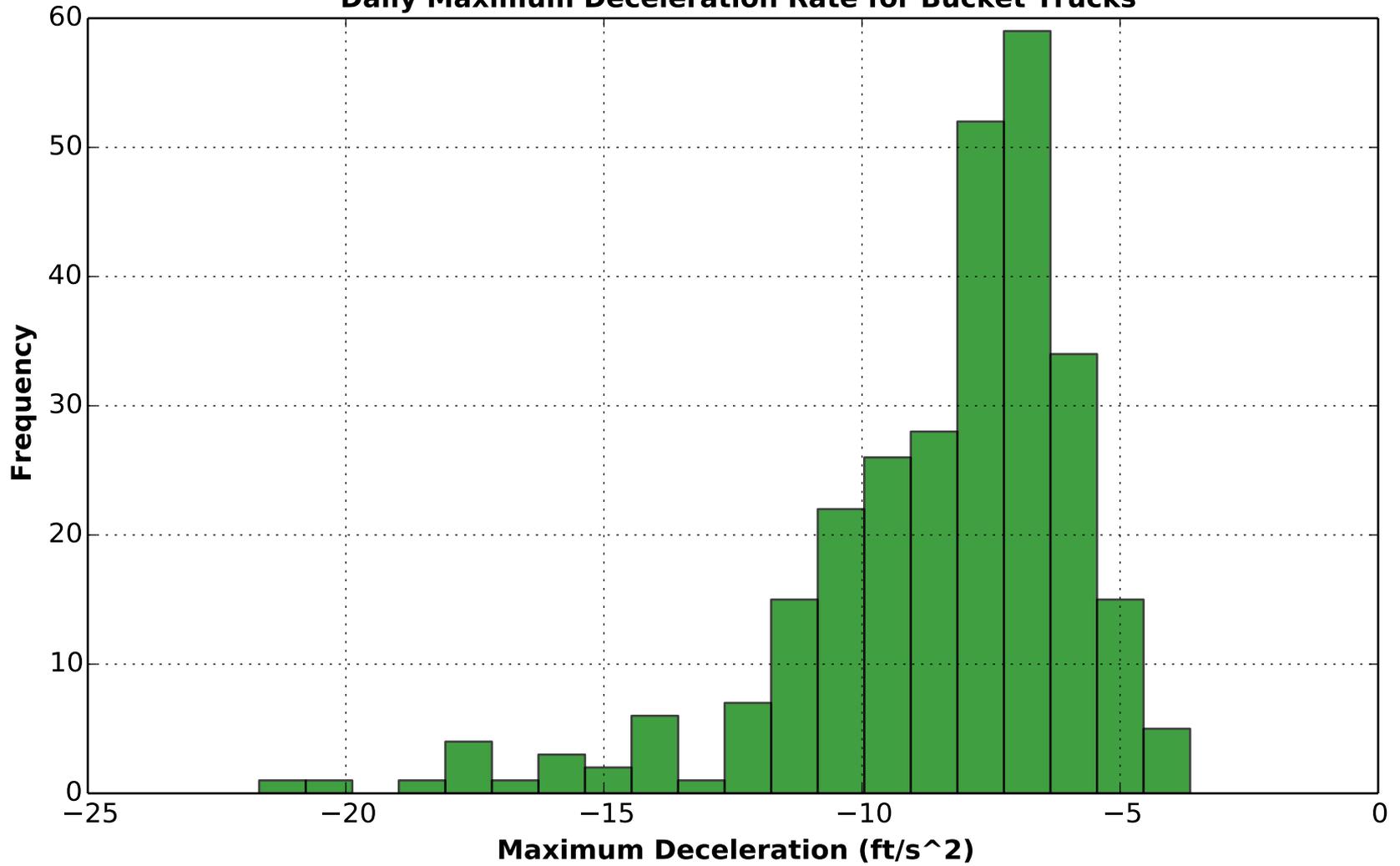


of Vehicles Reporting: 20

Generated: Thu Aug 07, 2014

of Days Included: 283

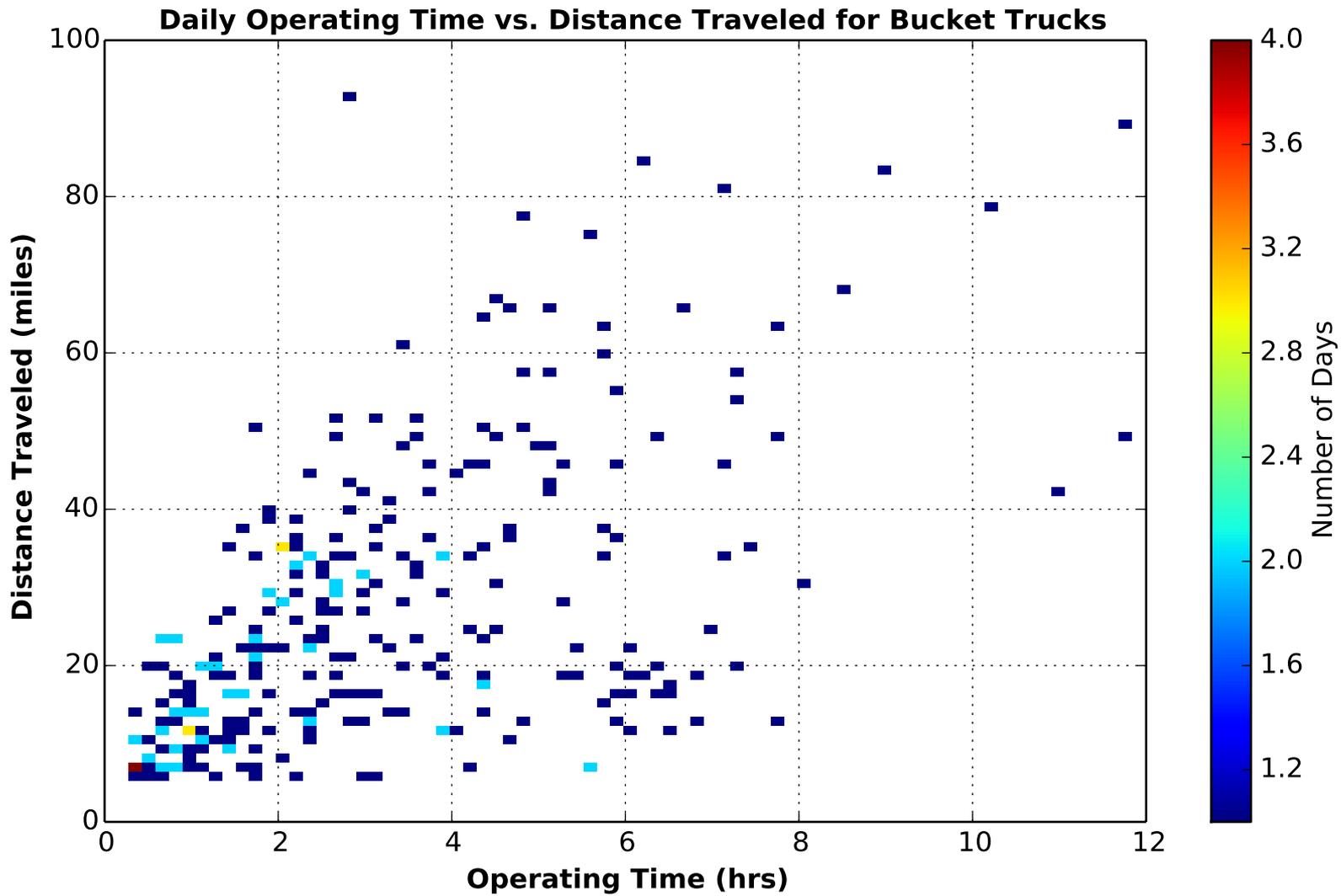
Daily Maximum Deceleration Rate for Bucket Trucks



of Vehicles Reporting: 20

Generated: Thu Aug 07, 2014

of Days Included: 283

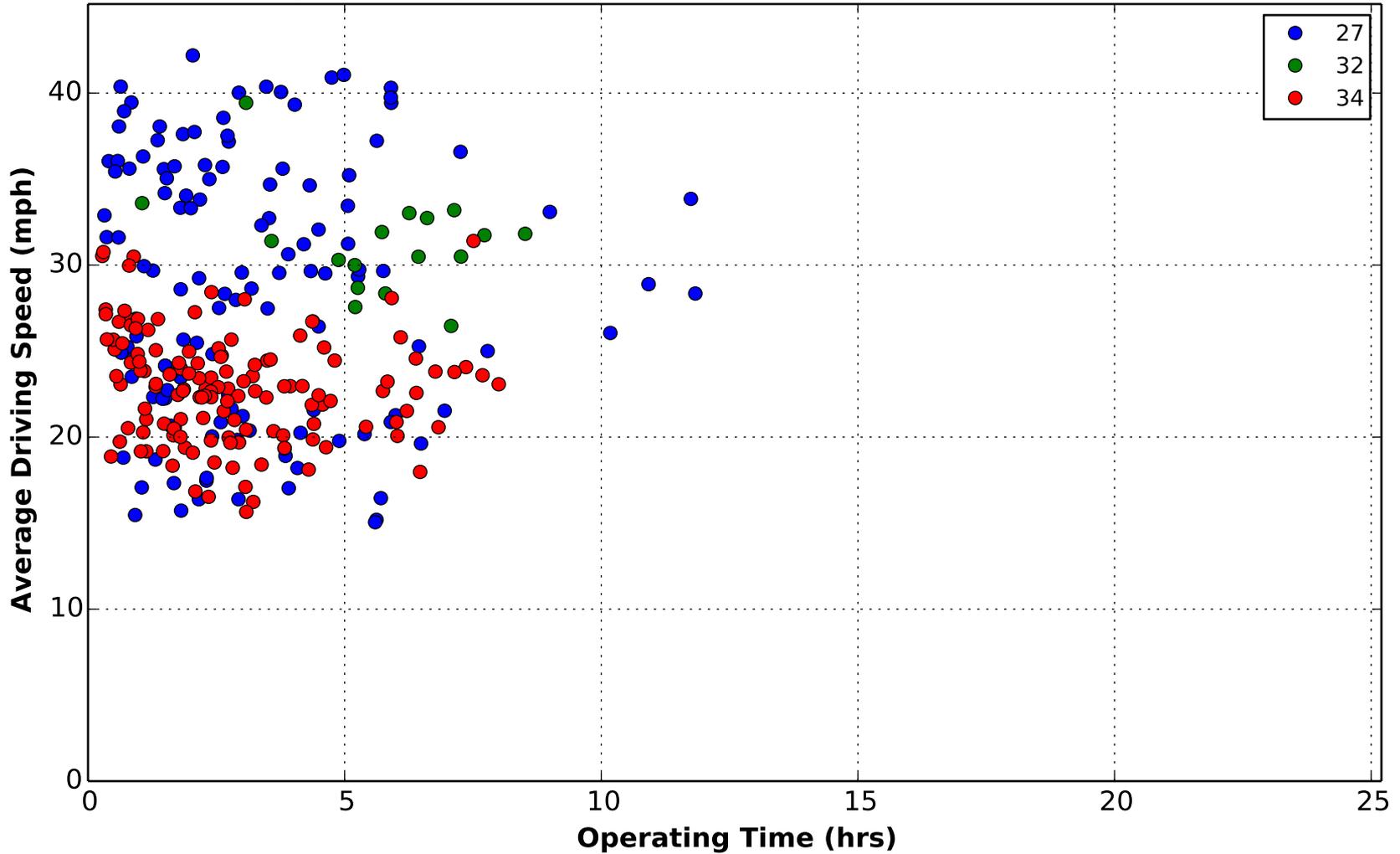


of Vehicles Reporting: 20

Generated: Thu Aug 07, 2014

of Days Included: 283

Daily Operating Time vs. Average Driving Speed for Bucket Trucks

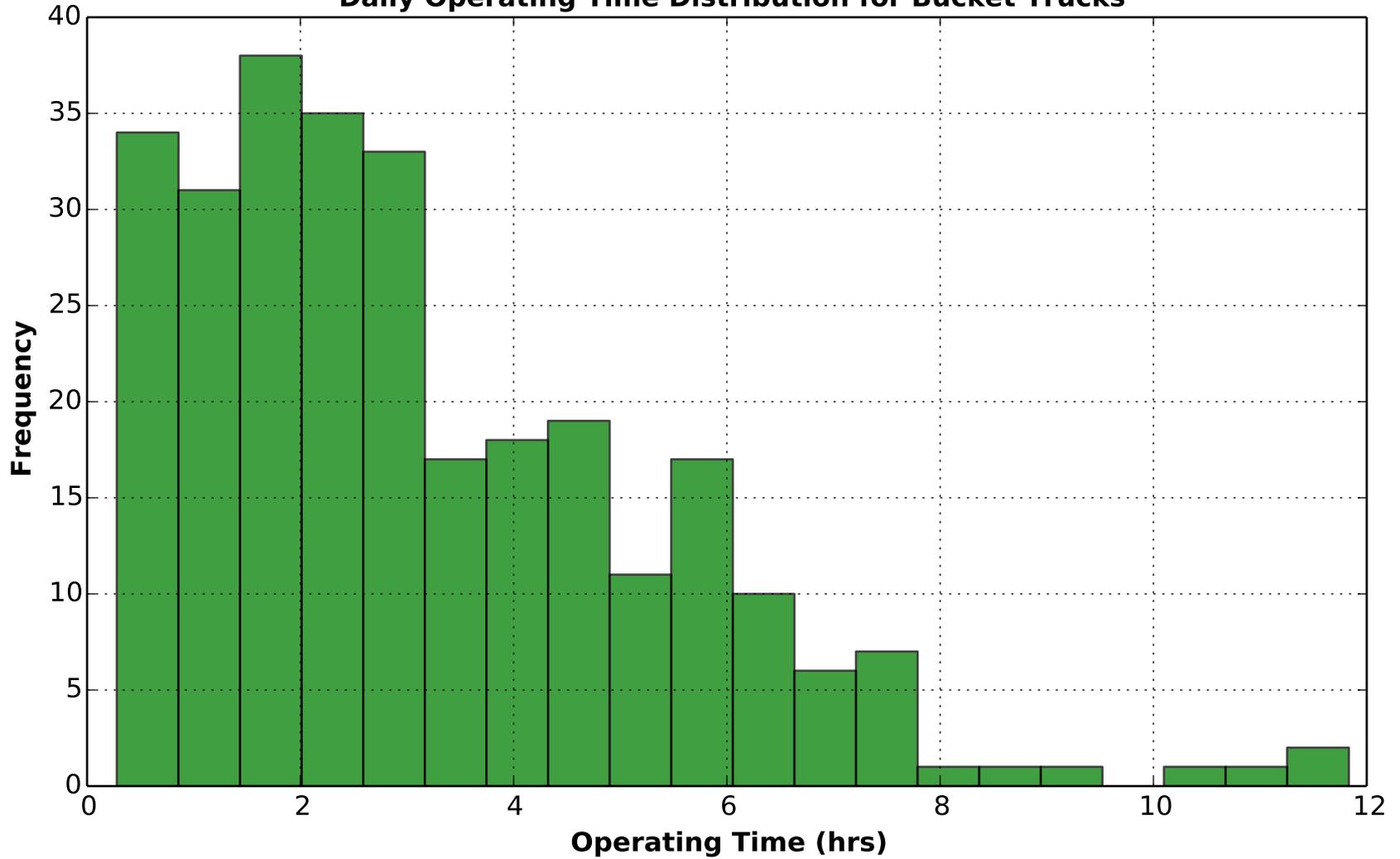


of Vehicles Reporting: 20

Generated: Thu Aug 07, 2014

of Days Included: 282

Daily Operating Time Distribution for Bucket Trucks

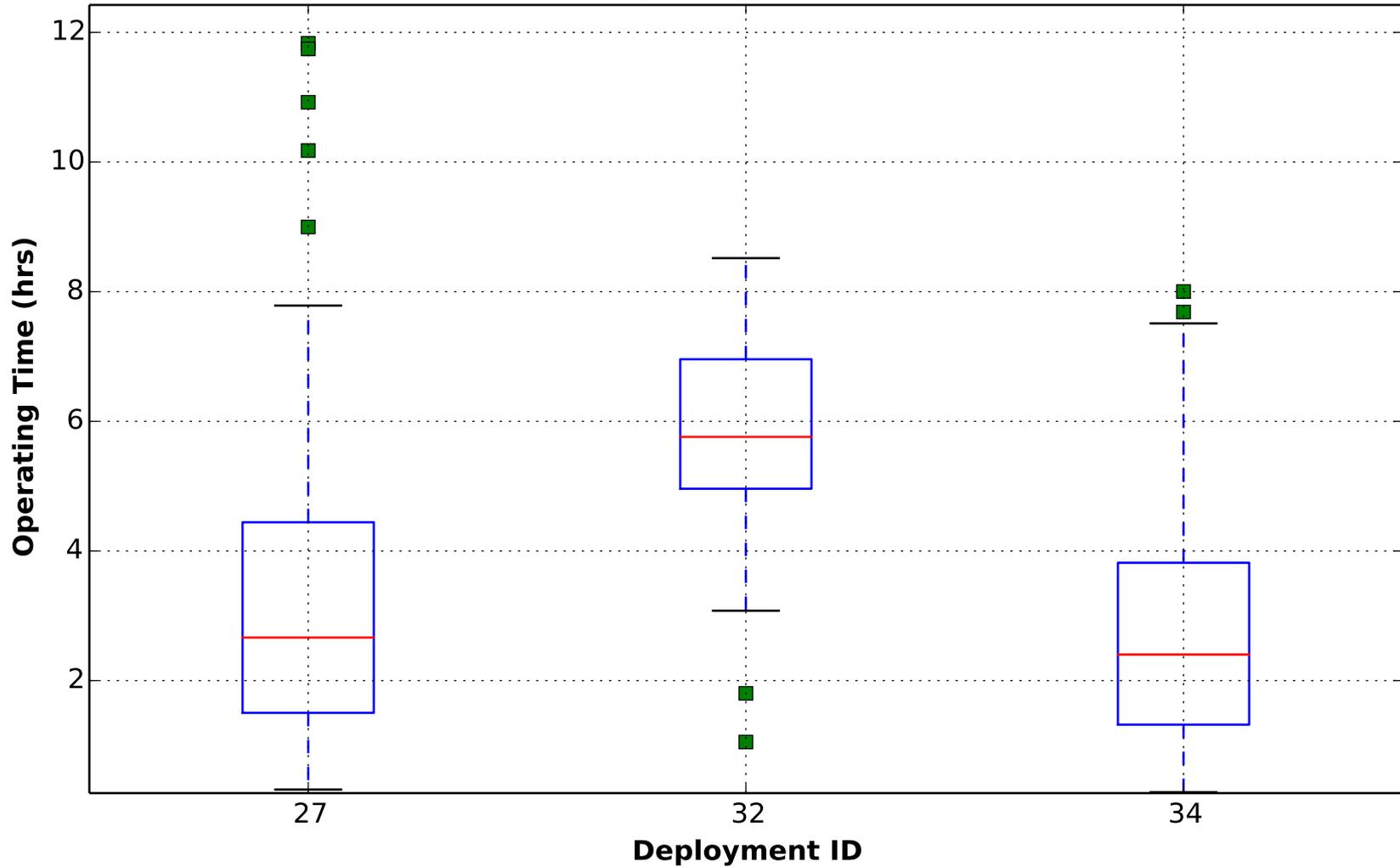


of Vehicles Reporting: 20

Generated: Thu Aug 07, 2014

of Days Included: 283

Operating Time by Deployment for Bucket Trucks



of Vehicles Reporting: 20

Generated: Thu Aug 07, 2014

of Days Included: 283

Interested in Participating?

The statistical summaries presented in this report were generated with the support of a variety of organizations. It is through the continued support of these partner organizations that Fleet DNA continues to grow.

For more information about the project or to discuss partnership opportunities including contribution of data to the database, please contact:

Adam Duran

303.275.4586

Adam.Duran@nrel.gov

www.nrel.gov/fleetdna