




# TRANSPORTATION DATA MANAGEMENT AND SPATIAL ANALYSIS

DAMA Consultants, Inc., have a long history with conducting database analysis, GIS spatial analysis, identifying data integrity issues, and developing data quality solutions. DAMA projects involve combining data from multiple sources and creating methods to extract and transform data sets calculate performance measurements, identify important locations and times, and understand how mitigation approaches can improve traffic flow.

DAMA uses the HEAR National Performance Management Research Data Set (NPMRDS) to identify how traffic conditions are affected by road conditions, time of day, functional class, geometry, and other factors. This data set includes up to 29 million records per month and refers to a roadway network structure often does not match networks created for other agencies.

DAMA developed methods to transform this data set into more usable values and match segments between the NPMRDS and roadway segment inventories provided by the Illinois Department of Transportation and the Federal Highway Administration.



	NPMRDS	Average Speed Dataset	CMAP Regional Archive	IDOT Shapefiles	Getting Around Illinois	RTAMS	MS2 Data Portal	Weather	NTA	NTD
NPMRDS	Green	Green	Blue	Orange	Red	Red	Red	Blue	Blue	Orange
Average Speed Dataset	Orange	Green	Blue	Red	Red	Red	Red	Blue	Blue	Blue
CMAP Regional Archive	Blue	Orange	Green	Red	Red	Red	Green	Blue	Blue	Blue
IDOT Shapefiles	Orange	Orange	Red	Green	Red	Red	Blue	Green	Blue	Blue
Getting Around Illinois	Red	Red	Red	Orange	Green	Red	Green	Green	Red	Red
RTAMS	Red	Orange	Red	Red	Red	Green	Red	Blue	Blue	Orange
MS2 Data Portal	Red	Orange	Red	Red	Red	Red	Green	Red	Red	Red
Weather	Blue	Red	Green	Red	Green	Red	Green	Blue	Blue	Red
NTA	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Green	Green	Green
NTD	Orange	Orange	Red	Red	Red	Green	Red	Blue	Blue	Green

