

# Lemberg Lemon Index: 2014 Model Year

September 2015

# Lemberg Lemon Index

In 2014, there were 16.5 million new vehicles sold in the U.S. While manufacturers strive for quality assurance, a typical vehicle can have more than 15,000 components. It stands to reason that some vehicle components and systems will have defects. However, it is difficult to detect patterns and to determine the point at which the number and severity of defects are such that a certain make and model earns the title of “lemon.”

The Lemberg Lemon Index is based on information extracted from the National Highway Traffic Safety Administration (NHTSA) database. The NHTSA database includes:

- Consumer complaints, which are filed by car owners regarding problems that relate to a vehicle’s safety;
- Defect investigations, which are undertaken by the NHTSA when a pattern of complaints emerges;
- Manufacturer technical service bulletins (TSBs) issued in response to a known safety issue or defect; and
- Recall campaigns initiated by a manufacturer or the NHTSA when a vehicle component creates a safety risk.

As of June 30, 2015, the NHTSA database logged the following data for passenger cars, SUVs, and pickups for model years 2013, 2014, and 2015.

Model Year	Recalls	Investigations	Complaints	TSBs
2013	517	61	10244	4162
2014	517	37	6059	2278
2015	293	4	1538	599

It is likely that the number of NHTSA consumer complaints significantly underrepresents consumer dissatisfaction, in part because the NHTSA consumer complaint submission process is not widely utilized. Underrepresentation of consumer dissatisfaction can also be extrapolated from the number of TSBs released for each model year. Issued to dealerships by manufacturers, TSBs outline recommended repairs for known problems. It seems unlikely that, for 2014 passenger cars, SUVs, and pickups, there were 2,278 TSBs issued but only 6,059 dissatisfied vehicle owners.

Although the consumer complaints are underrepresented and the TSBs listed relate only to safety issues, when cross-referenced with the number of vehicles sold, the information extracted from the NHTSA database can be indexed to determine which makes and models are most likely to be lemons.

## Complaints to Number of Units Sold

To determine the makes and models most likely to be lemons, one method is to determine the ratio of NHTSA complaints to the number of units sold. For model year 2014, the passenger cars, pickup trucks, and SUVs that were among the 280 top-selling vehicles in the U.S., that sold more than 10,000 units, and that received the highest ratio of NHTSA complaints to units sold were:

## Complaint Index: 2014 Model Year

Ranking	Make & Model	Score	Ranking	Make & Model	Score
1	Jeep Grand Cherokee	28947	11	Chrysler 300	9741
2	Mercedes Benz CLA Class	24118	12	Mazda CX-5	9685
3	Jeep Cherokee	22072	13	Land Rover Range Rover	8574
4	Fiat 500L	20140	14	Acura MDX	8384
5	Infiniti Q50	19242	15	Chevrolet Spark	8172
6	Ford Focus	12475	16	Mini Cooper	7203
7	Fiat 500	12163	17	Dodge Durango	7143
8	Ford Fiesta	10603	18	GMC Sierra	6562
9	Nissan Pathfinder	10492	19	Chevrolet Impala	6202
10	Mitsubishi Outlander	9948	20	Mazda Mazda6	6200

### Number of Technical Service Bulletins

Theoretically, technical service bulletins (TSBs) issued by the manufacturer can serve to alert service dealerships to defects, enabling them to engage in repair attempts prior to the consumer lodging a complaint. In other words, a higher number of TSBs may mitigate consumer complaints. At the same time, TSBs bear no relation to the number of units sold. Therefore, another method of determining the makes and models most likely to be lemons is to track the vehicles that reported the highest number of safety-related TSBs to the NHTSA. For model year 2014, the passenger cars, pickup trucks, and SUVs that sold more than 10,000 units and that received the highest absolute number of NHTSA-reported technical service bulletins were:

## Technical Service Bulletin Index: 2014 Model Year

Ranking	Make & Model	Score	Ranking	Make & Model	Score
1	Ford F-Series	409	11	Cadillac ATS	28
2	Ford Fusion	58	12	Infiniti Q50	25
3	GMC Sierra	55	13	Mercedes Benz E-Class	24
4	Chevrolet Silverado	50	14	Chevrolet Malibu	24
5	Ford Escape	36	15	Ford Fiesta	23
6	Ford Focus	33	16	Chevrolet Cruze	23
7	Lincoln MKZ	33	17	Ford Explorer	22
8	Chevrolet Impala	32	18	Cadillac CTS	22
9	BMW 3-Series & 4-Series	32	19	Chevrolet Express	21
10	Land Rover Range Rover	29	20	GMC Savana	20

### Lemberg Lemon Index

Another way of determining the makes and models of the vehicles most likely to be lemons is to construct a Lemberg Lemon Index (LLI). To determine relative lemon index scores, 2014 models that did not have records of complaints, TSBs, or recalls in the NHTSA database were excluded. Also excluded were models that sold fewer than 10,000 units.

Because TSBs are issued in response to known defects, and because they are unrelated to the number of cars sold, the Lemberg Lemon Index weights TSBs more heavily than consumer complaints. Initially, the calculations are the quotient of the number of complaints and the number of cars sold plus five percent of the quotient for each technical service bulletin. The resulting LLI is the previous sum multiplied by  $10^7$  to make the models more easily comparable.

For model year 2014, the passenger cars, pickup trucks, and SUVs that received the highest score on the Lemberg Lemon Index were:

Lemberg Lemon Index (LLI): 2014 Model Year

Ranking	Make & Model	Score	Ranking	Make & Model	Score
1	Jeep Grand Cherokee	47762	11	Chevrolet Impala	16125
2	Infiniti Q50	43294	12	Nissan Pathfinder	15213
3	Ford Focus	33060	13	Mazda CX-5	15012
4	Mercedes Benz CLA-Class	31354	14	Mitsubishi Outlander	14922
5	Jeep Cherokee	29797	15	Fiat 500	14596
6	GMC Sierra	24607	16	Chevrolet Spark	13892
7	Ford Fiesta	22796	17	Cadillac ATS	13650
8	Land Rover Range Rover	21005	18	Mini Cooper	11164
9	Ford F-Series	20487	19	Chevrolet Silverado	11033
10	Fiat 500L	20140	20	Chrysler 300	10715

**Likely Lemons**

To validate the LLI method and to determine overall which 2014 models are most likely to be lemons, the three lists were compared. The vehicles that appear on all three lists, and are thus most likely to be lemons are:

Most Likely Lemons: 2014 Model Year

Make & Model (Alphabetical Order)
Chevrolet Impala
Ford Fiesta
Ford Focus
GMC Sierra
Infiniti Q50
Land Rover Range Rover

# About Lemberg Law

Lemberg Law is a leading consumer law firm that represents clients in actions involving lemon law, the Fair Debt Collection Practices Act, the Telephone Consumer Protection Act, and other consumer laws. Based in Stamford, Connecticut, and with of-counsel attorneys in states across the U.S., Lemberg Law has helped more than 12,000 clients recover more than \$35 million. Sergei Lemberg, Esq., has been named “most active consumer attorney” each year for the past three years.