

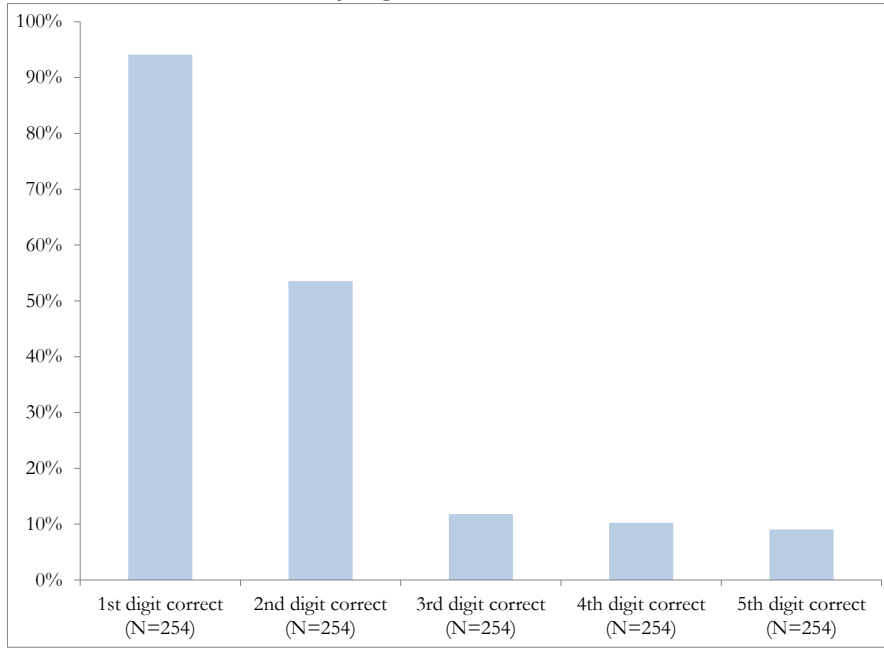
Heuristic Thinking and Limited Attention in the Car Market

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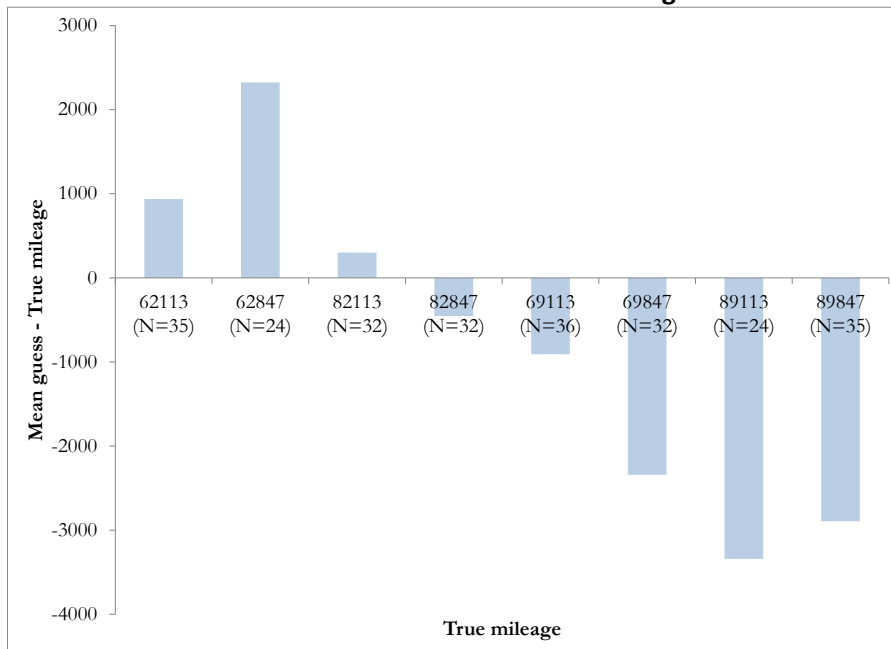
Web Appendix

Appendix Figure 1 - Recall Results. Panel A shows the percent of people who correctly remembered the 1st-5th digits of a car's mileage. Panel B indicates the difference between the average recall value and the true mileage of a car by each of the 8 different true mileage amounts.

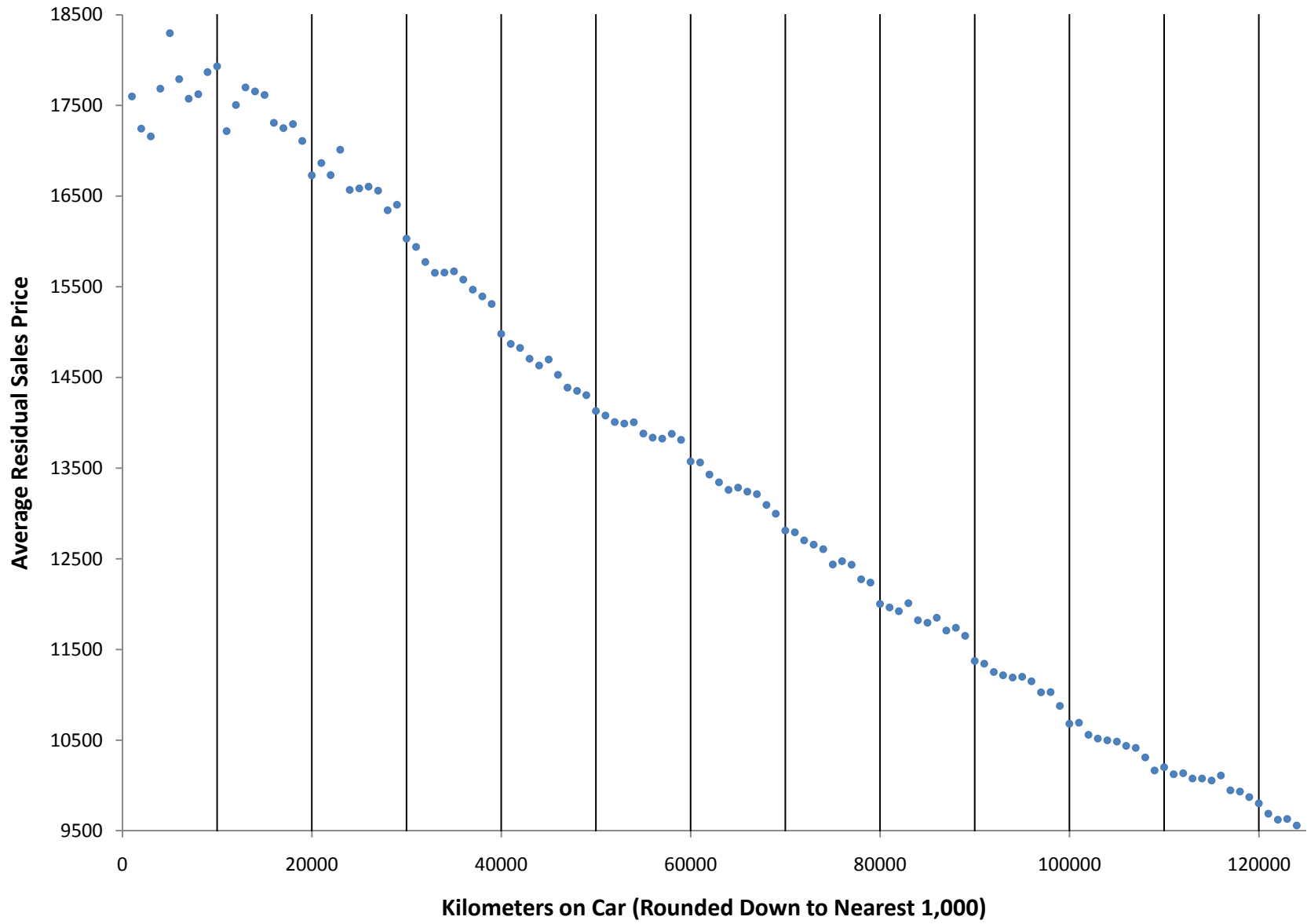
Panel A - Percent Correct by Digit



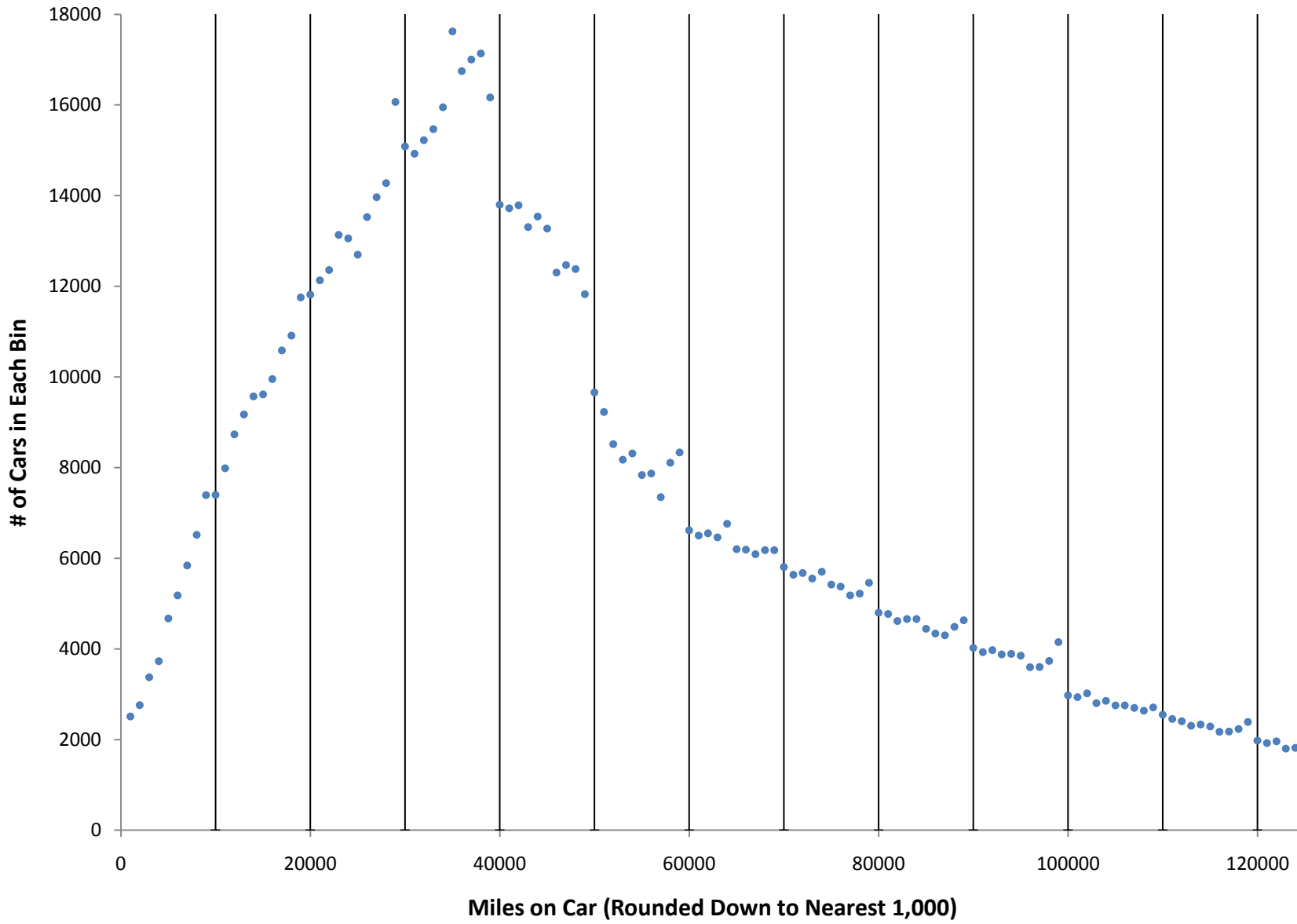
Panel B - Difference Between Recalled and True Mileage



Appendix Figure 2 - Canadian Price Residuals. This figure plots the average residual sales price within 1,000-kilometer bins for cars sold by auction in Canada. The residual is obtained by removing make-model-model year-body effects from the sales price.



Appendix Figure 3 - Cars.com Volume. This figure plots the raw counts within 1,000-mile bins for the number of cars being advertised on cars.com on 8/15/2009.



Appendix Table 1. The Impact of 10,000-Miles-Driven Discontinuities on Price by Year - Fleet/Lease Only

	Dependent Variable: Auction Price for Car Sale						
	2002	2003	2004	2005	2006	2007	2008
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Avg. Discontinuity Size	-160.4	-146.4	-160.4	-152.7	-170.0	-155.1	-134.6
Structural Theta Estimate	0.25	0.27	0.29	0.26	0.24	0.19	0.16
	[.01]	[.01]	[.01]	[.01]	[.01]	[.01]	[.01]
MT 10k miles	-91.5*** [25.5]	-100.9*** [24.7]	-109.8*** [25.8]	-91.7*** [25.2]	-84.4*** [23.2]	-102.9*** [23.0]	-83.6*** [24.4]
MT 20k miles	-128.8*** [13.0]	-142.6*** [11.8]	-211.8*** [13.6]	-153.4*** [14.2]	-179.4*** [11.9]	-133.9*** [10.6]	-129.6*** [12.5]
MT 30k miles	-102.3*** [7.5]	-90.5*** [7.5]	-101.0*** [9.0]	-87.9*** [9.6]	-99.6*** [9.0]	-93.4*** [7.6]	-23.2*** [8.0]
MT 40k miles	-192.5*** [7.9]	-175.7*** [7.6]	-208.1*** [9.2]	-191.8*** [10.3]	-189.4*** [10.2]	-157.3*** [9.9]	-179.5*** [10.6]
MT 50k miles	-283.0*** [9.2]	-276.6*** [8.4]	-279.0*** [9.8]	-300.8*** [10.8]	-304.9*** [10.6]	-280.8*** [10.8]	-235.4*** [12.2]
MT 60k miles	-223.7*** [11.6]	-212.8*** [10.2]	-201.2*** [11.2]	-193.2*** [12.4]	-172.0*** [12.0]	-176.5*** [12.3]	-151.0*** [13.9]
MT 70k miles	-206.4*** [13.4]	-218.5*** [11.7]	-237.8*** [12.3]	-191.2*** [13.3]	-224.9*** [12.5]	-216.2*** [12.7]	-179.1*** [13.9]
MT 80k miles	-211.7*** [15.6]	-148.8*** [13.5]	-178.5*** [13.6]	-184.3*** [14.5]	-214.4*** [13.5]	-196.2*** [13.5]	-176.0*** [14.6]
MT 90k miles	-161.0*** [17.9]	-130.0*** [15.6]	-140.3*** [15.3]	-167.7*** [16.1]	-215.9*** [14.8]	-222.0*** [14.9]	-195.9*** [16.1]
MT 100k miles	-219.5*** [20.6]	-164.1*** [17.4]	-118.8*** [16.9]	-144.2*** [17.6]	-186.0*** [15.7]	-150.7*** [15.9]	-154.4*** [16.4]
MT 110k miles	-42.3* [24.0]	-20.7 [20.3]	-10.1 [19.5]	18.5 [20.4]	-16.9 [18.9]	-17.3 [18.8]	-24.2 [20.0]
MT 120k miles	-61.7* [34.3]	-75.4*** [28.9]	-128.8*** [26.8]	-144.7*** [28.4]	-151.7*** [26.0]	-114.0*** [25.6]	-82.9*** [26.6]
7th-Order Miles Poly	X	X	X	X	X	X	X
Fixed Effects	Age*Make* Model*Body	Age*Make* Model*Body	Age*Make* Model*Body	Age*Make* Model*Body	Age*Make* Model*Body	Age*Make* Model*Body	Age*Make* Model*Body
R-Squared	0.917	0.933	0.939	0.938	0.948	0.950	0.942
Observations	2,150,821	1,912,499	1,676,461	1,491,405	1,429,164	1,590,089	1,427,728

** p < .05; *** p < .01

Appendix Table 2. The Impact of 10,000-Miles-Driven Discontinuities on Price by Year - Dealer Only

	Dependent Variable: Auction Price for Car Sale						
	2002	2003	2004	2005	2006	2007	2008
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Avg. Discontinuity Size	-160.3	-166.2	-165.9	-165.1	-180.3	-180.4	-176.0
Structural Theta Estimate	0.42	0.4	0.37	0.35	0.31	0.33	0.34
	[.01]	[.01]	[.01]	[.01]	[.01]	[.01]	[.01]
MT 10k miles	-149.8*** [27.1]	-201.0*** [23.6]	-172.0*** [21.4]	-159.9*** [20.4]	-215.8*** [20.3]	-173.5*** [21.8]	-184.5*** [29.3]
MT 20k miles	-149.2*** [17.7]	-162.6*** [14.7]	-170.2*** [13.5]	-132.5*** [12.9]	-135.9*** [13.1]	-143.7*** [14.2]	-178.3*** [19.3]
MT 30k miles	-90.5*** [12.4]	-97.2*** [10.7]	-121.8*** [10.8]	-125.5*** [10.4]	-154.0*** [10.7]	-161.7*** [11.1]	-159.2*** [14.5]
MT 40k miles	-206.1*** [12.2]	-244.7*** [10.0]	-219.3*** [10.3]	-207.9*** [10.4]	-210.5*** [10.9]	-235.6*** [11.3]	-244.3*** [15.2]
MT 50k miles	-233.7*** [11.6]	-290.4*** [9.5]	-263.6*** [9.4]	-255.5*** [9.5]	-248.7*** [9.9]	-281.8*** [10.3]	-287.6*** [13.9]
MT 60k miles	-198.5*** [11.7]	-196.9*** [9.5]	-195.8*** [9.2]	-214.0*** [9.1]	-218.3*** [9.2]	-200.8*** [9.5]	-202.2*** [12.7]
MT 70k miles	-215.7*** [11.0]	-206.2*** [9.2]	-218.0*** [8.7]	-235.2*** [8.5]	-253.2*** [8.6]	-255.3*** [8.8]	-225.2*** [11.5]
MT 80k miles	-143.2*** [10.0]	-136.3*** [8.6]	-135.7*** [8.1]	-152.5*** [7.8]	-177.7*** [7.6]	-187.8*** [7.8]	-163.1*** [9.8]
MT 90k miles	-141.4*** [10.2]	-149.7*** [9.0]	-164.4*** [8.4]	-174.2*** [8.2]	-184.5*** [7.8]	-214.4*** [7.8]	-181.5*** [9.7]
MT 100k miles	-279.2*** [10.2]	-215.7*** [9.1]	-221.9*** [8.6]	-212.9*** [8.2]	-202.0*** [7.7]	-192.4*** [7.7]	-177.4*** [9.3]
MT 110k miles	-46.6*** [11.7]	-21.1** [10.6]	-32.9*** [10.0]	-33.6*** [9.3]	-56.7*** [8.9]	-25.3*** [8.7]	-32.9*** [10.4]
MT 120k miles	-69.6*** [15.6]	-72.1*** [13.8]	-75.5*** [13.0]	-77.3*** [12.2]	-106.3*** [11.3]	-92.4*** [11.2]	-75.6*** [13.0]
7th-Order Miles Poly	X	X	X	X	X	X	X
Fixed Effects	Age*Make* Model*Body	Age*Make* Model*Body	Age*Make* Model*Body	Age*Make* Model*Body	Age*Make* Model*Body	Age*Make* Model*Body	Age*Make* Model*Body
R-Squared	0.954	0.966	0.965	0.966	0.966	0.968	0.958
Observations	1,447,598	1,542,434	1,751,146	1,893,420	1,851,407	1,796,014	1,201,405

** p < .05; *** p < .01

Appendix Table 3. The Impact of 10,000-Mile Thresholds on Prices by Most Popular Make-Models

Dependent Variable: Auction Price for Car Sale

	Ford Taurus (1)	Ford Explorer (2)	Ford Focus (3)	Chevy Impala (4)	Ford F150 (5)	Toyota Camry (6)	Chevy Cavalier (7)	Nissan Altima (8)
Avg. Discontinuity Size	-147.5	-197.2	-105.3	-59.6	-277.4	-109.4	-69.0	-178.5
Structural Theta Estimate	0.18	0.28	0.16	0.19	0.34	0.21	0.33	0.33
	[.03]	[.04]	[.05]	[.05]	[.06]	[.06]	[.09]	[.06]
MT 10k miles	-9.6 [84.5]	-272.2* [161.3]	-56.4 [75.1]	254.2 [175.2]	-227 [160.3]	78.9 [136.5]	34.1 [93.8]	-102.5 [121.2]
MT 20k miles	-149.4*** [33.7]	-75.8 [64.5]	-92.0** [45.8]	-86.1 [77.4]	-151.6** [68.2]	-107.6* [61.2]	-68.8 [60.0]	-158.7*** [54.4]
MT 30k miles	-2.5 [21.0]	-75.5** [38.4]	-61.8* [31.8]	-51.8 [43.4]	-218.0*** [59.7]	179.4*** [37.4]	-77.9** [36.9]	-161.4*** [41.7]
MT 40k miles	-239.4*** [29.7]	-243.6*** [39.7]	-53 [36.2]	-96.1 [64.4]	-229.5*** [71.8]	-140.1*** [47.9]	-60.1 [44.7]	-141.7*** [49.2]
MT 50k miles	-257.3*** [28.9]	-278.7*** [43.3]	-90.8** [39.1]	-126.5** [56.7]	-328.3*** [74.8]	-331.1*** [51.4]	-57.2 [45.6]	-349.6*** [56.8]
MT 60k miles	-101.3*** [27.9]	-183.9*** [48.7]	-109.7** [43.2]	-186.3*** [52.5]	-351.7*** [86.7]	-296.4*** [53.7]	-75 [48.2]	-288.0*** [64.8]
MT 70k miles	-101.6*** [26.5]	-161.7*** [50.6]	-217.6*** [42.2]	-96.1* [49.7]	-498.9*** [89.2]	-182.7*** [56.6]	-168.8*** [45.4]	-353.9*** [65.7]
MT 80k miles	-127.4*** [26.7]	-162.3*** [50.0]	-160.7*** [44.7]	-84.2 [52.2]	-277.2*** [87.3]	-126.2** [54.5]	-150.3*** [42.1]	-186.6*** [62.4]
MT 90k miles	-229.3*** [30.2]	-245.0*** [53.4]	-161.4*** [50.4]	-169.2*** [65.6]	-332.9*** [90.2]	-125.9** [56.6]	-26.4 [43.1]	-226.2*** [63.1]
MT 100k miles	-361.3*** [31.9]	-423.3*** [55.2]	-143.3** [55.8]	-97.7 [71.7]	-378.8*** [90.9]	-147.4*** [55.9]	-111.3*** [41.2]	-194.8*** [60.7]
MT 110k miles	-33.3 [38.8]	42.3 [72.0]	0.7 [68.5]	69.8 [90.8]	20.4 [108.9]	-45.6 [56.9]	-46.1 [47.3]	4.8 [68.0]
MT 120k miles	-157.3*** [53.3]	-286.4*** [89.2]	-117.6 [102.9]	-44.7 [129.5]	-355.0*** [136.6]	-68.6 [69.3]	-19.8 [58.0]	16.3 [82.9]
7th-Order Miles Poly	X	X	X	X	X	X	X	X
Fixed Effects	Age*Make* Model*Body	Age*Make* Model*Body	Age*Make* Model*Body	Age*Make* Model*Body	Age*Make* Model*Body	Age*Make* Model*Body	Age*Make* Model*Body	Age*Make* Model*Body
R-Squared	0.882	0.899	0.732	0.796	0.870	0.889	0.722	0.865
Observations	115,624	82,508	60,705	43,045	49,720	58,361	57,520	56,175

** p < .05; *** p < .01