

**MOBILE6 Model Development
Stakeholder Review Document**

- Draft -

**Development of Speed Correction Cycles
Prepared by Sierra Research, Inc.**

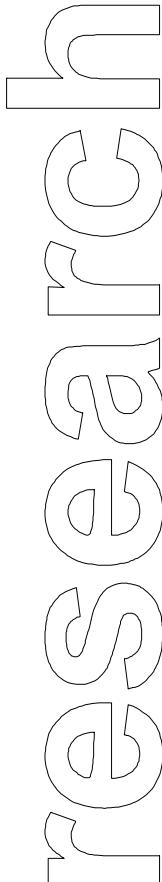
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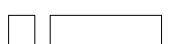
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Development of Speed Correction Cycles

prepared for:

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April 30, 1997



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Development of Speed Correction Cycles

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April 30, 1997

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1. SUMMARY

In response to a Work Assignment from EPA, Sierra Research (Sierra) has developed a new set of driving cycles that represent passenger car and light truck operation on a variety of roadway types under a variety of congestion levels and average speeds. Testing a representative sample of new vehicles on these cycles will provide EPA with the emissions data needed to improve the existing speed correction factors contained in its vehicle emission factor model, MOBILE5.

Eleven facility-specific cycles were developed to represent operation under the following conditions:

- high-speed freeway;
- freeway under congestion levels (i.e., LOS^{*}) A-C;
- freeway under LOS D;
- freeway under LOS E;
- freeway under LOS F;
- freeway under LOS “G”;^{**}
- freeway ramp;
- arterial under LOS A-B;
- arterial under LOS C-D;
- arterial under LOS E-F; and
- local roadways.

These cycles, which range from 4–12 minutes in length, were constructed to optimally match the observed speed-acceleration and specific power frequency distributions of chase car driving data collected over a range of facilities and congestion levels in Baltimore, Los Angeles and Spokane. As shown in Table 1, the average speeds of the cycles range from 13.1 to 63.2 mph.

^{*}Level-of-Service (LOS) is a measure of traffic congestion developed by the Transportation Research Board and used by the Federal Highway Administration.

^{**}Based on the definitions of LOS, travel under the most congested conditions is categorized as LOS F. In this study, Sierra also created a freeway cycle called LOS “G” to distinguish a subset of LOS F driving under the worst conditions routinely observed.

Table 1
New Facility-Specific Speed Correction Cycles

Cycle	Average Speed (mph)	Maximum Speed (mph)	Maximum Accel Rate (mph/s)	Length (seconds)	Length (miles)
Freeway, High Speed	63.2	74.7	2.7	610	10.72
Freeway, LOS A-C	59.7	73.1	3.4	516	8.55
Freeway, LOS D	52.9	70.6	2.3	406	5.96
Freeway, LOS E	30.5	63.0	5.3	456	3.86
Freeway, LOS F	18.6	49.9	6.9	442	2.29
Freeway, LOS "G"	13.1	35.7	3.8	390	1.42
Freeway Ramps	34.6	60.2	5.7	266	2.56
Arterials/Collectors LOS A-B	24.8	58.9	5.0	737	5.07
Arterials/Collectors LOS C-D	19.2	49.5	5.7	629	3.36
Arterials/Collectors LOS E-F	11.6	39.9	5.8	504	1.62
Local Roadways	12.9	38.3	3.7	525	1.87

Some of the facility-specific cycles are used in conjunction with a new “non-freeway” cycle to create a new “area-wide” urban driving cycle. The area-wide cycle is a multi-segment driving trace that can be applied to represent travel in any city based on generally available weighting factors for that city. The individual segments are the new freeway cycles for LOS A-C, LOS D, LOS E, LOS F, and ramps added to a 22-minute non-freeway segment, which represents operation on arterials, collectors, and local roadways. Each of these cycles represents a segment that is weighted appropriately for each city of interest. Table 2 summarizes the basic characteristics of the new non-freeway portion of the composite area-wide urban cycle.

Table 2
Non-Freeway Segment of New Area-Wide Speed Correction Cycle

Cycle	Average Speed (mph)	Maximum Speed (mph)	Maximum Accel Rate (mph/s)	Length (seconds)	Length (miles)
Non-Freeway Urban Travel	19.4	52.3	6.4	1,348	7.25

A detailed statistical evaluation of the representativeness of facility-specific cycles and the area-wide cycle has been performed. A comparison of the primary statistics used to evaluate cycles indicated that the facility-specific cycles closely matched their intended joint speed and acceleration driving distributions. Using appropriate segment weighting factors, it was also determined that the new area-wide cycle better matches the chase car data collected in Los Angeles than the “LA92” cycle now being used by the California Air Resources Board (CARB) to represent area-wide operation in LA. The improved representation of urban driving provided by the new area-wide cycle is due to two factors. First, the current cycle development methodology contains refinements that increase the representativeness of the new cycles. Second, the total length of the new area-wide cycle is three times longer than the LA92, which made it easier to match the characteristics of the data set from which the cycle was developed.

Testing a representative sample of vehicles on both cycles is required to determine whether the difference in emissions is significant. Depending on the results of such tests, the LA92 cycle may still prove to be a cost-effective alternative to the development of area-wide emission estimates for large urban areas. However, data collected using the speed- and facility-specific segments like those contained in the new area-wide cycle will be needed to account for changes in traffic congestion between urban areas and over time.

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2. INTRODUCTION

Except in California, overall air quality planning and project-specific air quality analyses are conducted using one particular motor vehicle emissions simulation model, called “MOBILE5,” which was developed by the U.S. Environmental Protection Agency.* Currently within the MOBILE5 model, speed correction factors are used to adjust the emissions measured using the Federal Test Procedure (FTP) for light-duty vehicles to account for speeds that are different from the average speed of the “LA4” driving cycle used in the FTP, which is 19.6 mph. It is assumed that emissions measured using the FTP properly represent travel occurring at an average speed of 19.6 mph, regardless of the roadway type, or combination of roadway types, over which that speed occurs. The speed correction factors are based on the relationship between emissions measured on the FTP and emissions measured on several other cycles, called “speed correction cycles,” which have speeds that are higher and lower than the LA4 cycle.

There are three fundamental problems with the manner in which MOBILE5 is used to estimate emissions at various average speeds. First, recent research has shown that the base driving cycle (the LA4) does not adequately represent the range of speeds and acceleration rates occurring in customer service. As a result, the basic emission rates used in the MOBILE model are not accurate even when the average speed of vehicle operation is equal to the 19.6 mph speed of the LA4 driving cycle. Second, the speed correction cycles used to develop the current speed correction factors do not represent either facility-specific or area-wide travel in urban areas. Two of the speed correction cycles share the deficiencies of the LA4 cycle because they are subsets of the LA4. Other speed correction cycles are suspect because they were not developed from data representative of vehicle operation in urban areas. This is true for the so-called “Highway Cycle” and several variants of that cycle that have been used as speed correction cycles.** Third, there is no mechanism built into MOBILE for distinguishing between area-wide and facility-specific operation. It is assumed that the speed correction factors apply universally, regardless of the type of roadway, or combination of roadway types, over which the speed occurs. However, observations of travel on various types of roadways indicate that this assumption is invalid. For example, at an average speed of 35 mph, travel over surface streets is likely to be dominated by cruising in the vicinity of the speed limit at a low level

*The state of California uses its own model, called “EMFAC,” which, as far as speed correction factors are concerned, shares most of the deficiencies of MOBILE5 described herein.

**The so-called “Highway” cycle actually represents travel (highway plus non-highway) in non-urban areas where the 55 mph speed limit is strictly enforced.

of traffic congestion, while travel on a freeway at the same average speed results from a high congestion level and there is much less cruise operation.

To address the concerns summarized above, EPA issued a Work Assignment to Sierra Research during 1995 calling for the development of a methodology for generating new driving cycles for inventory development. The methodology recommended by Sierra^{1*} called for developing both facility-specific and area-wide driving cycles that match the speed-acceleration frequency distributions (SAFDs) of vehicles operating in customer service.

For facility-specific cycles, the proposed approach involved constructing cycles to match the SAFDs for a wide range of roadway types and congestion levels. These cycles were to be developed from “chase car” data, a data set containing second-by-second information regarding roadway type and congestion level.

For area-wide cycles, Sierra recommended a method involving the development of a “primary” cycle, representing overall average driving conditions, and at least two additional cycles, intended to represent areas with higher and lower average speeds. One option suggested for a higher speed composite cycle was to use data collected in an urban area with relatively low traffic congestion, like Spokane, Washington. It was also suggested that data collected in Baltimore, Los Angeles, and Atlanta during certain periods of the day could be used to construct cycles with different average speeds. For example, it was suggested that data collected only during the morning and afternoon commute periods could represent relatively high congestion levels and lower average speeds, while data collected during off-peak periods could represent lower congestion levels and higher speeds. It was noted, however, that further analysis would be required of differences in the fraction of area-wide VMT by facility-type between different urban areas and between peak and off-peak periods. Depending on the degree of variation observed, it was suggested that alternative cycle construction processes might be required. As discussed in Section 4, an alternative cycle construction technique was necessary.

Scope of Work

This report combines the results of two related Work Assignments (1-04 and 2-01), the second of which was a follow-on to the first. Under the initial scope, a Work Plan was developed to provide EPA with actual driving cycles intended to represent both facility-specific and area-wide vehicle operation. The Initial (1-04) Work Plan consisted of the four tasks described below.

Task 1, Development of Facility-Specific Driving Cycles - Facility-specific data regarding driving patterns in customer service are required for the development of facility-specific

*Superscripts denote references provided in Section 7.

cycles. Data collected by the chase car* in Baltimore, Spokane, and Los Angeles were used to develop 11 facility-specific cycles, to represent travel on freeways, ramps, arterials/collectors and local roadways. Target length for each cycle was established as approximately 10 minutes.

Task 2. Development of Area-Wide Driving Cycles - The original concept under Task 2 involved the development of a family of “composite” driving cycles to represent overall travel within an urban area, with each cycle representing different levels of average speed and congestion. However, during the initial phase of this task, in which driving data comparisons were performed by city and data type (i.e., chase car vs. instrumented), analysis indicated that average speed would not adequately define travel in a particular area. In addition, the question remained as to how area-wide cycles developed from data for specific cities in which the data collection was performed (Atlanta, Baltimore, Los Angeles and Spokane) could be extrapolated to represent driving in other U.S. urban areas. In consultation with the Work Assignment Manager, an approach was developed for a city-weighted area-wide driving cycle based on facility-specific “bags” and city-specific bag weighting factors that can be obtained from transportation planning model outputs.

Task 3. Evaluation of the Driving Cycles - During the course of facility-specific and area-wide cycle development, a detailed series of statistical tests were performed on each cycle. The characteristics of each cycle developed under Tasks 1 and 2 were compared to the data from which the cycle was constructed to show how well the cycle correlates with the “target” driving behavior recorded by instrumented vehicles and chase cars. The evaluation included comparisons of speed, acceleration, power, and other measures acceptable to the Work Assignment Manager. In performing the evaluation, Sierra utilized the statistical evaluation criteria recommended by EPA.² The following statistics were compared for each cycle and target driving population:

- time in acceleration;
- time in deceleration;
- time at cruise;
- time at idle;
- maximum speed;
- average speed;
- average or predominant speed during cruise (“subjective” cycle speed);
- maximum acceleration rate;
- maximum deceleration rate;
- maximum power;
- length (time and miles);
- stops per mile;

*Instrumented vehicle data are not suitable for the development of facility-specific cycles because facility type cannot be determined from the available data, except for uncongested freeway operation. However, instrumented vehicle data were compared to chase car data on an overall basis to evaluate the representativeness of the chase car data.

- average positive kinetic energy (PKE) change per mile and specific power; and
- detailed distributions of speed and acceleration.

Using the above-listed parameters, the characteristics of the composite cycle were compared to CARB's LA92 cycle (sometimes called the "Unified" cycle) to determine whether it is significantly different.

Task 4. Data Analysis and Reporting - Under this task, Sierra provided progress reports to EPA during the course of the project and prepared the draft final report and an electronic copy of the speed/time traces for each cycle developed under this effort.

Under the follow-on Work Plan developed under Work Assignment 2-01 (which was prepared after EPA's review of draft final results from the initial effort), several additional analytical tasks were added. These additional tasks are described below.

Task 1. Revisions to High-Speed Freeway Cycle - Under EPA's direction, a new high-speed freeway cycle was developed as a replacement for the high-speed cycle developed under the initial Work Plan to better represent the frequency of high power events found in the driving population for high-speed freeway operation.

Task 2. Evaluation of New High-Speed Freeway Cycle - In this task, statistical characteristics of the revised high-speed freeway cycle developed under Task 1 were compared to their "target" driving population to quantify how well the new cycle represented its intended driving patterns. The statistical measures compared were identical to those listed under Task 3 of the initial Work Plan, with key emphasis on ensuring a comparable "match" of high power events obtained for the other facility-specific driving cycles.

Task 3. Further Analysis of Surface Street Cycles - Under this task, the videotaped records of driving traces from arterial/collector and local roadway operation were reviewed to determine the extent to which portions of surface street driving are influenced by intersections. The actual traces from the arterial and local cycles as well as additional randomly selected traces from their driving populations were examined. Each second-by-second trace was marked (based on the video review) with flags that identified when the vehicle's operation was being influenced by approaching or departing intersections. Summaries of these data from the cycles and target populations were compared to determine the extent to which the new surface street speed correction cycles properly represent intersection activity and identify those sections of the cycle traces that represent intersection-influenced operation.

Task 4. Data Analysis and Reporting - Under this task, Sierra provided progress reports to EPA during the course of the project and prepared the draft final report and electronic copies of the second-by-second speed trace for the new high-speed cycle developed under Task 1 and second-by-second identification of intersections and their influence for surface street driving traces analyzed in Task 3.

Organization of the Report

Following this introduction, Section 3 provides a description of how the facility-specific cycles were constructed. Speed traces and basic statistics for each of the facility-specific cycles are also contained in Section 3. The rationale and methodology for the development of the city-weighted area-wide cycle are described in Section 4. Statistical comparisons of instrumented vs. chase car and city-by-city driving variations that led to the modified area-wide cycle approach are also presented in Section 4. Detailed statistical tests of all of the cycles developed under this effort against the driving behavior they are intended to represent are presented and discussed in Section 5. Included in this series of tests is a similar comparison of CARB's LA92 driving cycle against its intended driving behavior to compare the "fit" of cycles developed under this effort to that of the LA92. A comparison of the area-wide cycle to the LA92 is also presented in Section 5 to determine if they are significantly different. The analysis of the influence of intersections on surface street driving is documented in Section 6. Section 7 contains a list of references cited throughout the report.

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3. FACILITY-SPECIFIC CYCLE DEVELOPMENT

Different driving patterns on two different roadway types may exhibit the same average vehicle speed, but result in different vehicle emissions. Facility-specific driving cycles intended to represent driving behavior on specific roadway types under various congestion levels were generated in order to develop emission factors specific to each type of facility. This section describes the methodology and driving data used to create facility- and congestion-specific driving cycles, and provides basic statistics for each cycle.

Facility-Specific Cycle Construction Methodology

Selection of Driving Data - The facility-specific cycles were developed exclusively from chase car data. In the chase car studies,³ second-by-second recording of both facility type and congestion level was performed (using Level-of-Service [LOS] measures developed by the Transportation Research Board [TRB]⁴ and employed by the Federal Highway Administration [FHWA]). Public roadways were classified as either freeway, freeway ramp, arterial/collector, or local. “Freeways” were defined as multi-lane roadways with no signalized intersections and access limited to ramps that merge with a lane of traffic. “Ramps” were those sections of roadway that provide access to, or exit from, a freeway. “Arterials/collectors” were defined as non-freeway roads that link population centers and business centers, or serve as major corridors through urban areas. “Local” roadways were defined as non-freeway, non-arterial/collector roads providing access to residential areas, business parks, and other private property. Driving data collected under instrumented vehicle studies do not contain second-by-second representation of the type of roadway being driven and the congestion level. Under an earlier study for EPA,⁵ Sierra investigated whether the facility type and congestion level could be inferred from the instrumented data by screening the data with a series of statistical algorithms. It was determined that the facility type and congestion level could not be reliably inferred. Thus, the facility-specific cycles are based solely on chase car driving data.

Creation of “Target” Driving Populations - Prior to the generation of facility-specific cycles, the chase car data collected in Baltimore, Los Angeles and Spokane were combined into a single data set. Second-by-second data in this merged file were then divided into separate “segment” files for those facility type and LOS groupings from which cycles were subsequently developed. (In this study, the term “segment” refers to a continuous driving trace over the same facility type and at the same LOS and is explained in greater detail later in this section). The implicit assumption in this approach was that

driving data recorded for a given facility and LOS were not dependent on the city in which the driving was performed.

These facility/LOS groupings established for each cycle are discussed below. They were chosen on the basis of earlier analysis performed for EPA and defined under the scope of work (with exceptions for high-speed freeways and arterials/collectors as noted).

LOS-Based Freeway Cycles - For freeway operation, previous analysis of available chase car data showed similar speed/acceleration frequency distributions (SAFDs) for LOS A-C, indicating that this range of LOS could be represented by one cycle. Additional cycles were developed to represent LOS D, LOS E, and LOS F. It was also decided to develop a fifth cycle to represent driving under conditions that are more congested than LOS F. This type of operation, based on operation observed on the most congested freeway links in Los Angeles, was referred to as LOS "G."

High-Speed Freeway Cycle - In addition to the LOS-based freeway cycles, a "high speed" freeway cycle was developed to represent operation occurring under low congestion levels and speed limits higher than 55 mph (or lack of enforcement of a 55-mph speed limit). The driving "population" for this cycle was created from the combined driving segment files in the three-city chase car data set using the following criteria:

- freeway facility type;
- LOS A, B or C;
- segment length greater than 30 seconds; and
- minimum segment speed at or above 50 mph.*

Ramp Cycle - A separate cycle was developed to represent freeway ramp activity. The ramp activity includes driving on both on-ramps and off-ramps, as well as travel on "transitional" ramps (i.e., at freeway intersection interchanges where a vehicle must drive along a ramp to move from one freeway to the next).

Arterial/Collector Cycles - Under the initial scope of work, separate arterial/collector cycles were to be developed for each LOS from A through F. More detailed analysis of chase car data under this study indicated that travel on arterials and collectors should be represented by three ranges of observed congestion level: LOS A-B, C-D, and E-F. These groupings were based on the similarities in average speeds observed in the data set.

*These criteria reflect the definition of high-speed freeway operation for the revised high-speed cycle constructed under the 2-01 Work Plan. Under the initial (1-04) Work Plan, the minimum speed criterion of 55 mph was revised to 50 mph as listed above. The primary rationale for lowering the minimum speed cutoff was to increase the number of segments in the high-speed freeway driving population, thus enhancing the ability of a cycle to statistically match the "target" driving population. An evaluation of the additional segments added to driving population when lowering the minimum speed cutoff to 50 mph indicated that over 92% of these additional segments still had average speeds in excess of 55 mph.

Local Roadways Cycle - Because essentially all local roadway travel was observed to occur under a low level of congestion, only one cycle was required to represent travel over local roadways.

Segment-Based Candidate Cycle Construction Method - To construct a new family of facility-specific cycles, Sierra used a computerized “trial-and-error” approach to selecting combinations of trip “segments” that best matched the SAFD of the target data set (e.g., a particular facility type and congestion level). This approach ensured that the speed-time profiles of the cycles were constructed from real speed-time profiles that preserved the acceleration profiles and minor speed variations contained in customer service driving. The method used differed from previous cycle development efforts in that it did not attempt to use “microtrips” (speed traces that begin and end at rest). This change was necessary to develop cycles representative of roadway operation under which no stops occurred (e.g., uncongested freeway travel) and to accommodate the segment-based nature of driving data when grouped by facility and LOS. Under this revised approach, a trip “segment” was defined as a second-by-second speed trace whose endpoints were determined by either of the following conditions:

1. the vehicle came to rest (as at the end of a microtrip); or
2. the facility or LOS group changed (e.g., moving from a freeway onto an off-ramp or from LOS D to LOS E on a freeway).

After grouping the chase car data into separate files by facility type and LOS, the second condition was tested by searching for discontinuities greater than one second in the second-by-second time stamp field contained in the chase car data. For example, consider the following sample of second-by-second data in the “Freeway LOS D” file:

<u>Record Number</u>	<u>Time Stamp</u>	<u>Speed (mph)</u>
1	04/21/92 14:13:00	58.2
2	04/21/92 14:13:01	59.4
3	04/21/92 14:13:02	59.6
4	04/21/92 14:13:03	59.7
5	04/21/92 14:13:04	59.3
6	04/21/92 15:36:20	59.0
7	04/21/92 15:36:21	60.3
8	04/21/92 15:36:22	60.7
9	04/21/92 15:36:23	60.7
10	04/21/92 15:36:24	60.5

The discontinuity in the time stamp from Record 5 to Record 6 marks the end of one trip segment and the beginning of the next. As in this example, trip segments were identified within each of the facility/LOS group files.

The “Hybrid-Random/Incremental” cycle construction logic developed under previous work for EPA and CARB was then altered to generate candidate cycles from segments, rather than microtrips. Microtrips could easily be chained together since they began and ended at rest; after each microtrip was selected, the remaining microtrips were evaluated and another selected (either randomly or by “best incremental fit”). This microtrip selection process continued until the desired cycle time had been reached. To accommodate segments, instead of microtrips, the segment-selection process employed the following changes to the programming logic:

1. Once a segment was selected, its terminal speed and acceleration were identified.
2. The initial speed and acceleration of all the remaining segments were then tested against the terminal conditions of the current segment.
3. Those remaining segments whose initial speed and acceleration matched the terminal conditions of the current segment within allowed tolerances (± 0.5 mph for speed and ± 0.5 mph/sec for acceleration) were placed into a “Qualified Segment” subset from which the next segment was selected (again, either randomly or by best incremental fit).

Each time a new segment was selected, the Qualified Segment subset was re-determined and the above steps were repeated until the desired cycle time was reached.

Using varying constraints on the fraction of time that each candidate cycle used randomly selected segments, and using various methods of optimization (matching either the total, non-idle or non-cruise portions of each cycle against its target SAFD), the following number of candidate cycles were generated:

- 1,800 for each freeway/LOS group (A-C, D, E, F, G and High-Speed);
- 1,200 for ramps; and
- 1,000 for each arterial/collector/LOS group (A-B, C-D and E-F) and for local roadways.

In all, 16,000 candidate facility-specific cycles were generated using the segment-based Hybrid-Random/Incremental process described above.

“Best” Cycle Selection Process - Once the candidate cycles had been generated for each facility type and LOS group, a series of statistical tests were applied to each cycle in order to identify and select the cycle in each group that “best” matched its target driving population. Sierra’s earlier “best” cycle selection process consisted of ranking each candidate cycle’s “DiffSum” statistic (i.e., sum of differences between cycle and target joint speed and acceleration frequencies) and selecting the single cycle with the lowest DiffSum or best “fit” to the target population. At the request of EPA, the cycle selection process was modified to include an evaluation of the amount of operation in relatively high specific power modes (e.g., between 200-299 mph²/sec and ≥ 300 mph²/sec). Among the

10 cycles with the best fits to the overall SAFD of each target population (e.g., freeway operation at LOS F), the cycle that best matched the amount of operation in these high power modes was then chosen as the single best cycle representing that driving population.* This collection of cycles is referred to as the final *unedited* cycles.

Cycle Editing - The last step in the cycle development process involved manually editing the computer-generated final unedited cycles to improve their fit to the target SAFD. Editing was limited to *segment addition* and *segment shortening* using a procedure developed under previous work for EPA. Segment addition consists of inserting segments of the speed-time trace that begin and end with a speed within 0.5 mph of the speed at the insertion point. Segment shortening involves removing portions of the speed-time trace between two cruise speeds that are within 0.5 mph. The procedure avoids changes to the speed-time profile that alter the characteristics of any accelerations. During the editing, Sierra lengthened or shortened cruise operation until an optimum match to the speed-acceleration distribution of the target data set was achieved within the target cycle length.

Basic Characteristics of the Facility-Specific Cycles

Table 3 summarizes several characteristics of the new facility-specific cycles that were developed. As shown in the table, the six non-ramp, freeway cycles have average speeds ranging from 13.1 mph to 63.2 mph. The ramp cycle has an average speed of 34.6 mph. The three arterial/collector cycles have average speeds ranging from 11.6 mph to 24.8 mph. The cycle representing travel on local roadways has an average speed of 12.9 mph.

Table 3 New Facility-Specific Speed Correction Cycles					
Cycle	Average Speed (mph)	Maximum Speed (mph)	Maximum Accel Rate (mph/s)	Length (seconds)	Length (miles)
Freeway, High Speed	63.2	74.7	2.7	610	10.72
Freeway, LOS A-C	59.7	73.1	3.4	516	8.55
Freeway, LOS D	52.9	70.6	2.3	406	5.96
Freeway, LOS E	30.5	63.0	5.3	456	3.86
Freeway, LOS F	18.6	49.9	6.9	442	2.29

* All of the “top-10” cycles in each target group generally exhibited nominally identical fits to their target SAFDs. DiffSums only varied in magnitude by 1-2% across each top-10 set of candidate cycles.

Table 3
New Facility-Specific Speed Correction Cycles

Cycle	Average Speed (mph)	Maximum Speed (mph)	Maximum Accel Rate (mph/s)	Length (seconds)	Length (miles)
Freeway, LOS "G"	13.1	35.7	3.8	390	1.42
Freeway Ramps	34.6	60.2	5.7	266	2.56
Arterials/Collectors LOS A-B	24.8	58.9	5.0	737	5.07
Arterials/Collectors LOS C-D	19.2	49.5	5.7	629	3.36
Arterials/Collectors LOS E-F	11.6	39.9	5.8	504	1.62
Local Roadways	12.9	38.3	3.7	525	1.87

Figures 1-11 show the speed-time traces for each of the facility-specific cycles. The scale of the axis is kept the same to facilitate comparisons between the cycles.

Figure 1

**Edited High-Speed Freeway Cycle
Driving Trace**

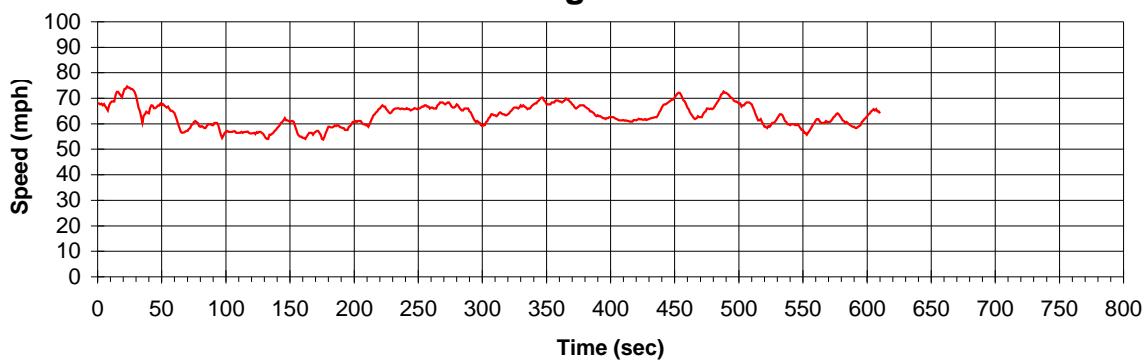


Figure 2

**Edited Freeway LOS A-C Cycle
Driving Trace**

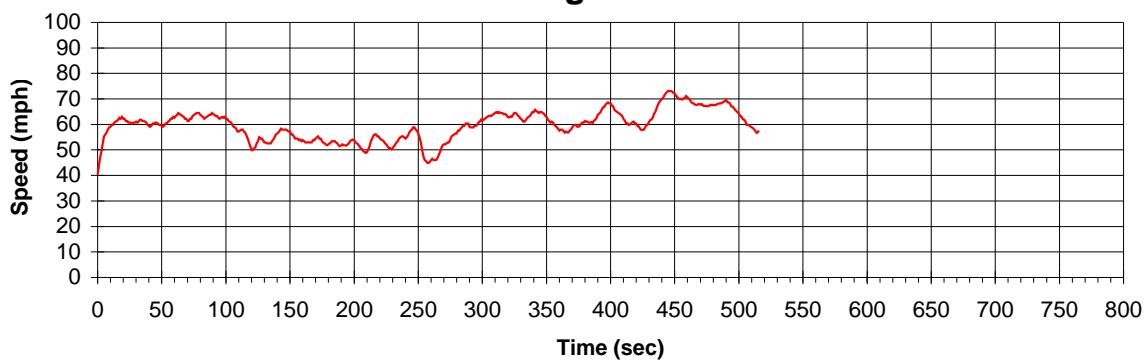


Figure 3

**Edited Freeway LOS D Cycle
Driving Trace**

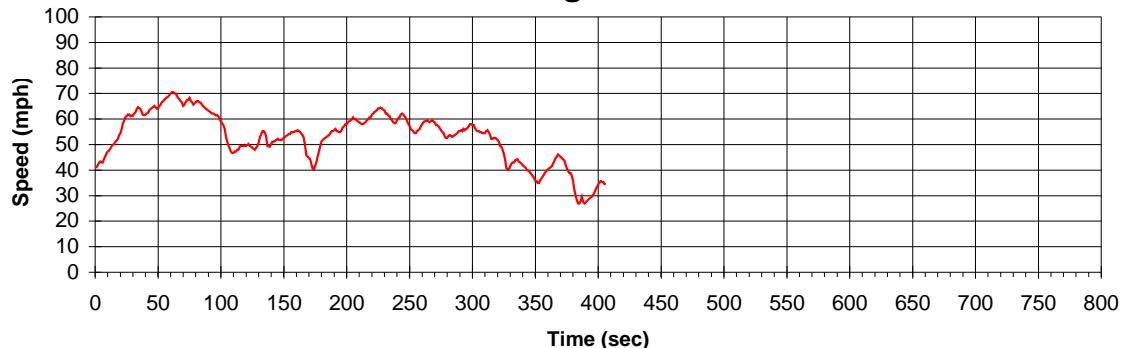


Figure 4

**Edited Freeway LOS E Cycle
Driving Trace**

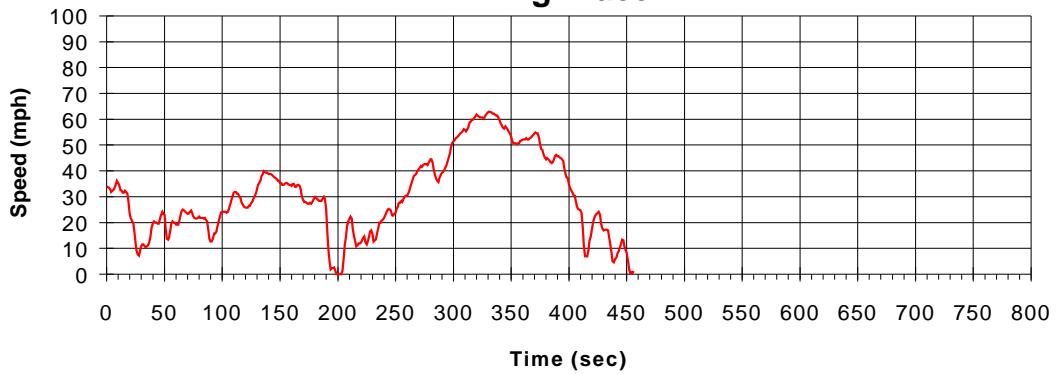


Figure 5

**Edited Freeway LOS F Cycle
Driving Trace**

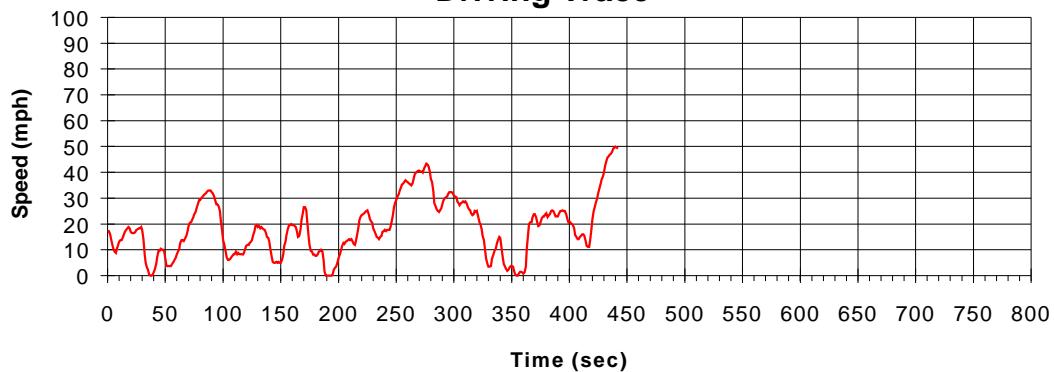


Figure 6

**Edited Freeway LOS G Cycle
Driving Trace**

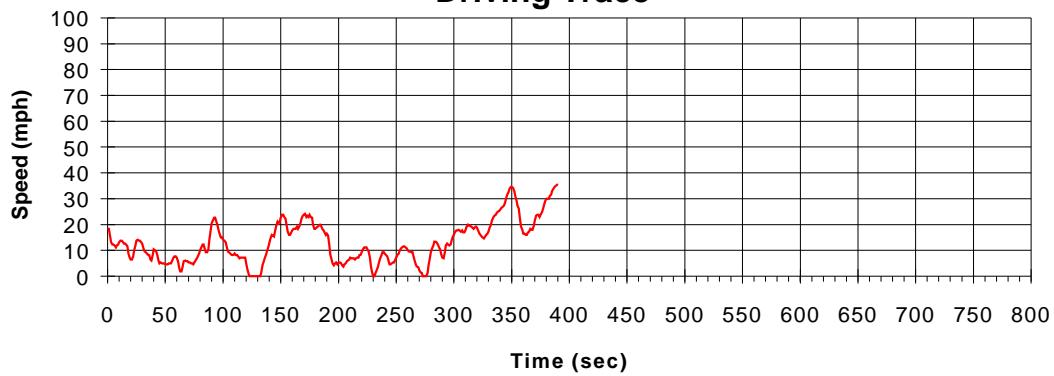


Figure 7

**Edited Freeway Ramp Cycle
Driving Trace**

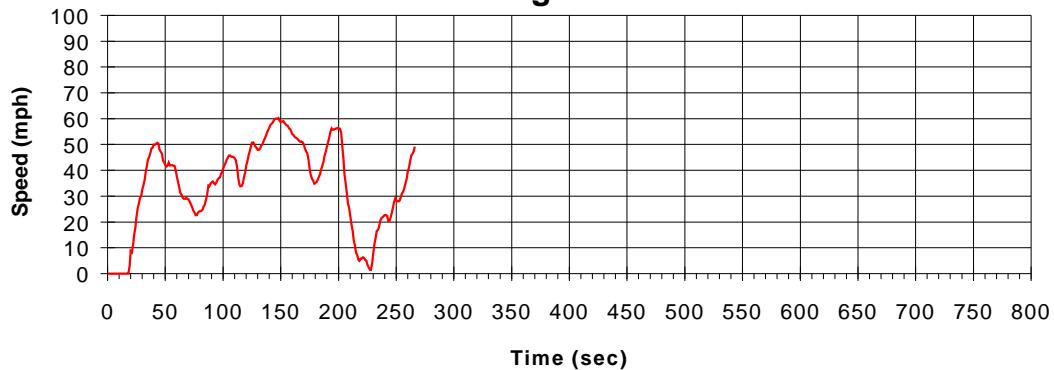


Figure 8

**Edited Arterial LOS A-B Cycle
Driving Trace**

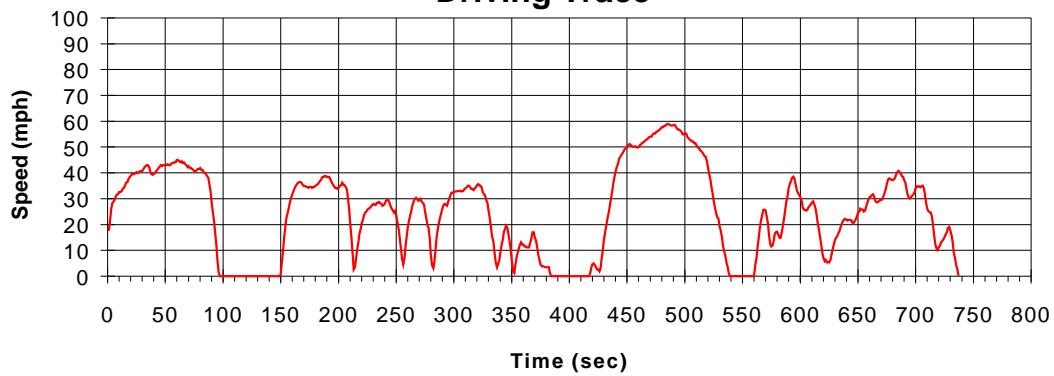


Figure 9

**Edited Arterial LOS C-D Cycle
Driving Trace**

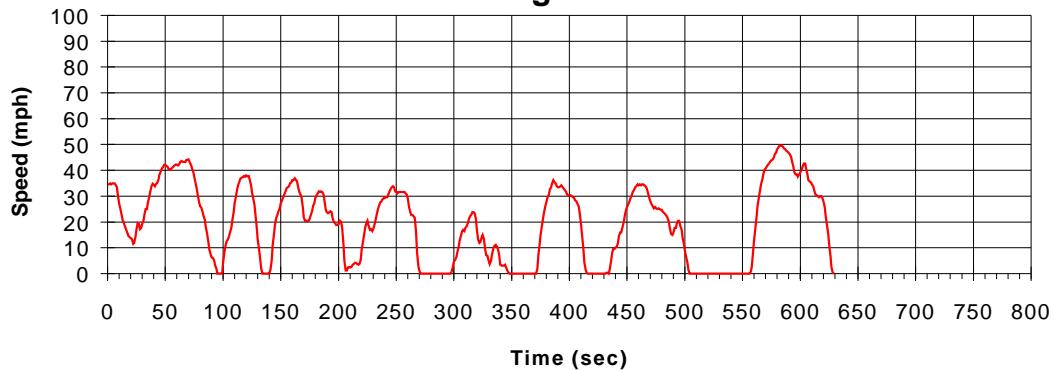


Figure 10

**Edited Arterial LOS E-F Cycle
Driving Trace**

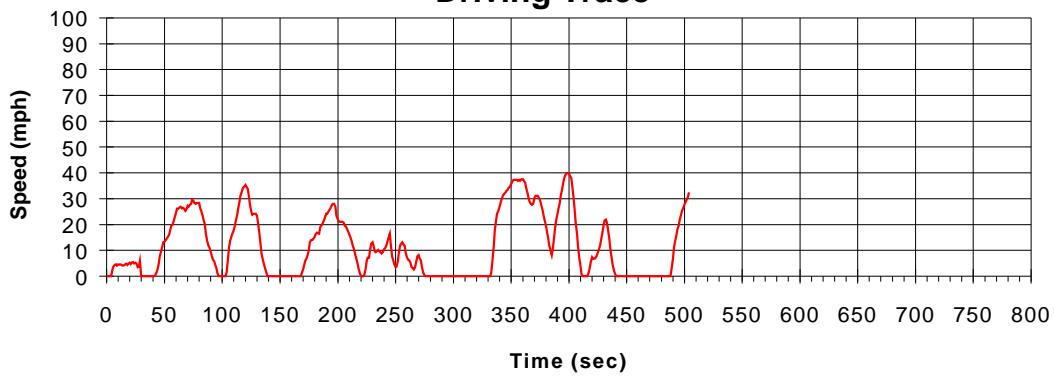
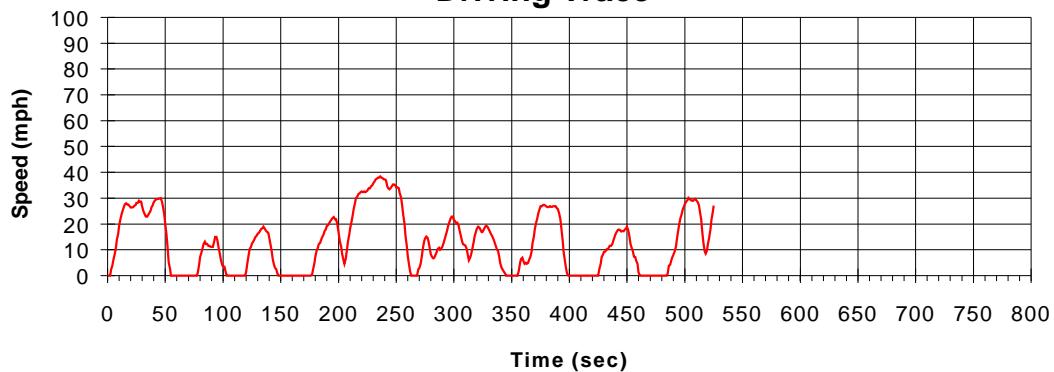


Figure 11

**Edited Local Roadway Cycle
Driving Trace**



4. AREA-WIDE CYCLE DEVELOPMENT

As introduced earlier in Section 2, the original area-wide cycle concept was to develop a family of composite driving cycles to represent overall travel within urban areas with different levels of congestion and average speed. However, analysis of both instrumented vehicle and chase car data collected from various cities indicated that average speed would not adequately define travel within a particular area. Furthermore, the question remained as to how separate area-wide cycles developed from data for specific cities in which driving studies were conducted (Atlanta, Baltimore, Los Angeles and Spokane) could be extrapolated to represent driving in other U.S. urban areas. In consultation with EPA, an alternative approach was developed that identifies and separates the type of driving that does not vary appreciably from city-to-city from that which does. By applying this alternative methodology, an area-wide driving cycle composed of a series of speed traces (segments) was generated that can be used to represent operation within any urban area, given city-specific segment weighting factors that can be developed from transportation planning model outputs.

This section presents driving data comparisons that led to the development of this alternative approach to area-wide cycle development, as well as a detailed description of the methodology and the rationale behind it. It also summarizes the basic characteristics of the resulting area-wide driving cycle, as weighted for Baltimore driving conditions.

Initial Driving Data Comparisons

Prior to the development of area-wide “composite” driving cycles, a detailed investigation of the available driving data was conducted. A series of statistical comparisons were performed in order to determine which specific data should be used in the development of composite cycles intended to represent operation in metropolitan nonattainment areas. Before proceeding to a discussion of these comparisons, summaries of the driving data and their inherent biases are presented below.

Available Driving Data - Detailed driving data representing vehicle operation under current urban driving conditions were collected in field studies^{6,2} conducted in Baltimore, Los Angeles, Atlanta and Spokane using two different methods:

1. Instrumented Vehicle - direct second-by-second vehicle speed measurement obtained from an on-board instrumentation package installed on randomly selected vehicles in customer service (for one to two weeks per vehicle); and
2. Chase Car - remote determination of the second-by-second speed of randomly followed vehicles by a laser range finder-equipped “chase” car following a predesignated route.

Both instrumented vehicle and chase car data were collected in Baltimore and Spokane. Only chase car driving was performed in Los Angeles, and only instrumented vehicle data were collected in Atlanta.

Data Limitations and Inherent Biases - In evaluating driving data collected under these two methods, there are several important factors to consider. These factors are listed below.

1. Chase car driving was conducted over point-to-point urban routes selected from zone-to-zone “trips” output from transportation planning models. These models are known to under-represent short “intrazonal” trips.
2. Facility-type and congestion (LOS) were not measured in instrumented driving.
3. Instrumented vehicle biases (which have been cited in previous studies) include the lack of representation of fleet vehicle operation and possible travel by instrumented vehicles outside the urban area.

Instrumented vehicle data, despite the biases cited and the lack of facility type and congestion level, are believed to be superior to chase car data in representing the entire range of urban vehicle operation because they include the short, intrazoned travel under-represented by the chase car surveys.

Driving Data Comparisons - A series of statistical comparisons were performed on both the instrumented and chase car driving data. These comparisons were then evaluated to guide the development of the area-wide cycle methodology. The following types of variations in the driving data were examined:

- instrumented vs. chase car differences;
- city-to-city differences;
- variation in facility and LOS distributions; and
- time of day variations.

The driving statistics generated included average speed, average specific power and specific power distributions, average trip length/time, detailed speed-acceleration frequency distributions (SAFDs) and DiffSums (sum of differences between cycle and target joint speed and acceleration frequencies). Detailed tabular summaries of these statistical comparisons are contained in Appendix A.

Not surprisingly, one of the primary differences observed in comparing data from city to city was the variation in the distribution of travel by facility type and LOS. Table 4 compares the travel distributions by facility type and LOS for each of the chase car cities (Baltimore, Los Angeles and Spokane). The distribution of freeway travel by LOS is also shown.

Table 4
Comparison of Chase Car Facility and LOS Travel Distributions by City

Facility/LOS	Travel Frequency (% time)		
	Baltimore	Los Angeles	Spokane
Freeway Total	16.91	25.77	9.79
Ramp Total	3.47	5.11	1.55
Arterial Total	60.53	66.52	76.53
Local Total	16.38	2.27	10.03
Other Facilities Total	2.71	0.32	2.10
LOS A Total	50.64	32.92	62.49
LOS B Total	23.62	19.64	22.21
LOS C Total	15.30	19.84	12.17
LOS D Total	6.79	11.02	1.67
LOS E Total	2.13	7.49	0.38
LOS F Total	1.52	9.08	0.04
Freeway LOS A	23.76	2.51	39.04
Freeway LOS B	31.96	7.96	31.58
Freeway LOS C	23.82	25.17	26.15
Freeway LOS D	10.45	15.52	1.81
Freeway LOS E	3.06	18.10	1.42

Table 4
Comparison of Chase Car Facility and LOS Travel Distributions by City

Freeway LOS F	6.96	30.74	0
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As Table 4 illustrates, the freeway travel fraction in Spokane (9.79%) is lower than that in Baltimore (16.91%) and Los Angeles (25.77%), and the fraction of travel on arterials and collectors in Spokane exceeds that in Baltimore and Los Angeles. Table 4 also shows that the LOS distribution varies dramatically on freeways. The freeway travel under LOS D or worse on the congested Los Angeles freeway network totaled over 63% of the freeway driving time. Conversely, LOS D or worse accounted for a little over 3% of freeway driving in Spokane.

Despite these variations in the mix of travel by facility and congestion level, the overall average speeds of both chase car and instrumented vehicle data compared quite closely from city to city. For example, the average chase car speed for Spokane, Washington (26.9 mph) was comparable to that recorded in Los Angeles, California (26.3 mph). This comparison indicates that similarities in overall average speed can “mask” large differences in the amount of travel by type of roadway and by level of congestion. Detailed analysis of the chase car data suggested that most of the differences between overall travel in different cities were related to 1) the fraction of total travel that occurred on freeways, and 2) the mix of congestion levels associated with freeway travel.

Table 5 illustrates the differences in freeway and non-freeway travel between the three cities for which chase car data were available. The values shown in the table were calculated by summing the absolute value of the differences between the percent of operation in each cell of a 31×18 matrix (SAFD) of acceleration rates and speeds for facility-specific chase car data. (Appendix A contains the detailed matrices and the rest of the driving comparison statistics referenced above.) Each matrix was constructed by subtracting the frequency of operation recorded in the second city listed in the title of the table from the frequency of operation recorded in the first city.

Table 5
Comparison Of Chase-Car Freeway and Non-Freeway
Driving Differences Between Cities
(Sum of Differences in Percent Operation in 31 x 18 Speed-Accel Matrix;
200 = Maximum Difference)

City-Pair	Total Difference	
	Freeway	Non-Freeway
LA vs. Baltimore	60.41	23.85
Spokane vs. Baltimore	42.16	25.27
Spokane vs. LA	73.45	29.60

By studying the detailed matrices, the differences in the freeway operation between the three cities become apparent. Los Angeles has more freeway travel at low speeds than either Baltimore or Spokane. Conversely, Los Angeles has less travel at free-flow speeds of 55-70 mph. However, as mentioned earlier, smaller differences between cities were observed for freeway operation at a particular level of service. For example, LOS A-C activity in Baltimore was similar to LOS A-C activity in Spokane and Los Angeles.* In contrast to the large differences in freeway travel, differences in non-freeway travel between the three cities are relatively small.

Area-Wide Cycle Construction Methodology

Based on the findings summarized above, it was determined that area-wide vehicle operation for different cities could be represented by a multi-segment driving cycle with city-specific weighting factors applied to each of the segments. The segments needed in the cycle are as follows:

1. freeway operation at LOS A-C;
2. freeway operation at LOS D;
3. freeway operation at LOS E;
4. freeway operation at LOS F;
5. freeway ramp operation; and
6. non-freeway operation.

*Large differences occur at the congestion levels when limited data are available for one of the cities.

The facility-specific cycles developed to represent freeway travel cover five of the six segments needed for the area-wide cycle. To complete the cycle, these five segments were strung together with a sixth cycle representing “non-freeway” operation. The application of the resultant cycle to individual cities would be as follows:

$$\begin{aligned} \text{Composite Emissions} = & \text{ } WT_{FwyAC} \times \text{Emissions}_{FwyAC} + WT_{FwyD} \times \text{Emissions}_{FwyD} + \\ & WT_{FwyE} \times \text{Emissions}_{FwyE} + WT_{FwyF} \times \text{Emissions}_{FwyF} + \\ & WT_{FwyRamp} \times \text{Emissions}_{FwyRamp} + WT_{NonFwy} \times \text{Emissions}_{NonFwy} \end{aligned}$$

where each WT is a city-specific weighting factor representing the fraction of travel (in miles) for each operation group; these can be developed by transportation modeling agencies in each urban area.

Although chase car data collected in Los Angeles, Baltimore, and Spokane could have been used to construct a cycle representing non-freeway operation, analysis of differences in chase car and instrumented vehicle data indicated that the chase car method was under-representing short trips (< five minutes in length). Routes driven in chase car studies are based on trips estimated by an urban transportation planning model. Evidence indicates short “intrazonal” trips are not well-represented by transportation planning models. To compensate for this limitation, and to utilize the more robust instrumented vehicle data base, the following technique was used:

- Compute Initial Travel Mix - Freeway and non-freeway travel fractions were computed for the urban area of interest.
- Adjust Travel Mix - The initial freeway vs. non-freeway travel splits were adjusted to reflect the “short trip” bias not captured by transportation planning model or chase car data.
- Derive Non-Freeway Target Driving - The target SAFD for non-freeway driving was back-calculated by subtracting the chase-car-based freeway SAFD, weighted by the adjusted freeway travel fraction, from the full instrumented vehicle SAFD as follows:

$$SAFD_{NonFwy} = SAFD_{IV} - TF_{Fwy} \times SAFD_{FwyCC}$$

where $SAFD_{NonFwy}$ is the computed non-freeway target driving distribution, $SAFD_{IV}$ is the full instrumented vehicle driving distribution, TF_{Fwy} is the adjusted fraction of freeway travel, and $SAFD_{FwyCC}$ is the chase-car-based freeway driving distribution.

By itself, the resultant non-freeway target driving distribution was assumed to be city-independent.

- Develop Non-Freeway Driving Trace - Sierra then applied the microtrip-based Hybrid-Random/Incremental cycle development methodology (discussed in Section 3) to generate 12,000 candidate driving traces. The procedures for selecting and editing the “best” non-freeway area-wide cycle were identical to those described in Section 3. Unlike the facility-specific cycles, the candidate non-freeway area-wide cycles were developed exclusively from actual second-by-second instrumented vehicle driving data.
- Generate Composite Area-Wide Cycle - The non-freeway driving trace developed in the above step was then chained together with the facility-specific freeway cycles covering LOS A-F and the ramp cycle.

Appendix B contains a detailed description of the travel mix adjustment procedure and the adjusted mixes calculated for Baltimore, Spokane and Los Angeles.

The following weighting factors compiled for an individual city would then be applied to emission test results collected from each segment:

- freeway driving at LOS A-C travel fraction (mileage-based);
- freeway driving at LOS D travel fraction;
- freeway driving at LOS E travel fraction;
- freeway driving at LOS F fraction;
- freeway ramp travel fraction; and
- non-freeway driving travel fraction.

A set of city-specific fleet correction factors can then be compiled by combining city-specific travel fractions with the segment-specific emissions for a test fleet of vehicles, using either modal data collection or individual sample bags for each segment.

Characteristics of the Non-Freeway Area-Wide Segment

Table 6 summarizes several characteristics of the non-freeway portion of the new area-wide cycle. Figure 12 shows the speed-time profile for the non-freeway segment.

Table 6 Non-Freeway Segment of New Area-Wide Speed Correction Cycle					
Cycle	Average Speed (mph)	Maximum Speed (mph)	Maximum Accel Rate (mph/s)	Length (seconds)	Length (miles)
Non-Freeway Urban Travel	19.4	52.3	6.4	1,348	7.25

Figure 12

**Edited Non-Freeway/Ramp Cycle
Driving Trace**

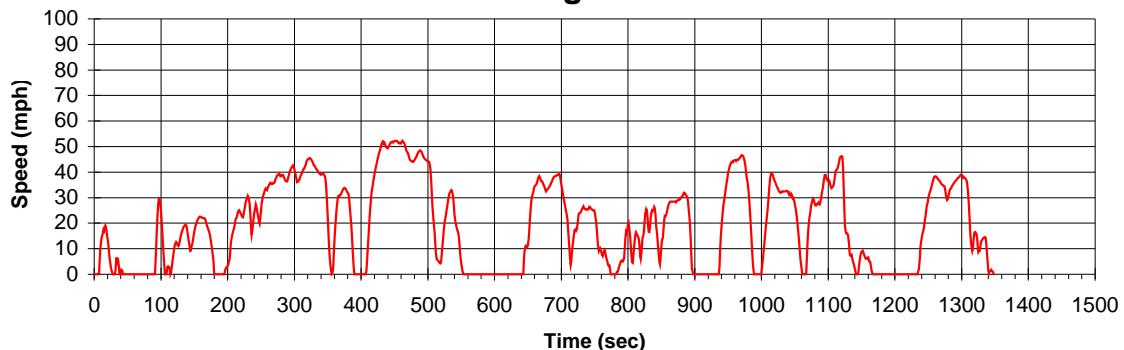
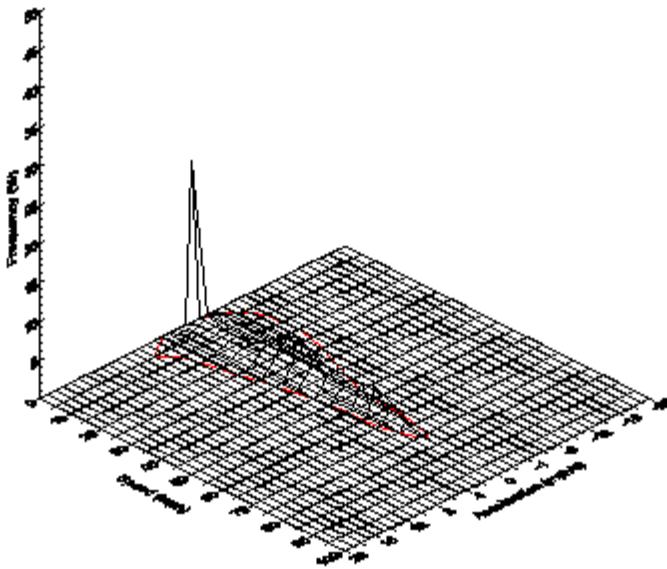


Figure 13 is a three-dimensional SAFD (Watson Plot) for the new area-wide cycle, with weighting factors applied to each of the segments based on chase car data collected in Baltimore. Figure 14 is a Watson Plot of the instrumented vehicle data collected in Baltimore. By comparing the two figures, it can be seen that the SAFD resulting from the application of appropriate weighting factors to the new area-wide cycle closely matches the SAFD generated from the instrumented vehicle data set.

Figure 13

Baltimore Instrumented Vehicle Driving SAFD (%)

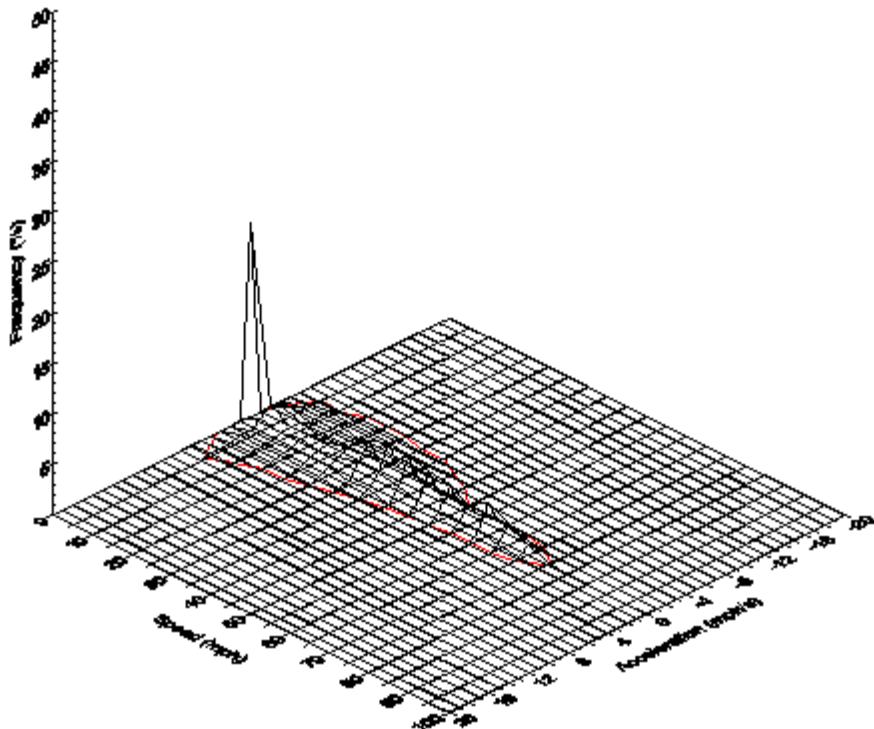


Note: Boundary line shows distribution 'envelope' at 0.1% frequency.

nObs = 336480

Figure 14

Baltimore-Weighted Area-Wide Cycle SAFD (%)



Note : Boundary line shows distribution 'envelope' at 0.1% frequency.

NObs = 3434

5. EVALUATION OF DRIVING CYCLES

During the development of both the facility-specific and area-wide driving cycles, a comprehensive series of statistics were generated to test the representativeness of each individual cycle against the target driving population it was intended to match. This section provides an evaluation of each of the cycles developed under this study by summarizing these statistical comparisons. For perspective, a comparison of the same statistics for CARB's LA92 composite driving cycle and its target driving population is also provided. Finally, the entire multi-segment, area-wide driving cycle is compared to the LA92 cycle.

Facility-Specific Cycle Evaluation

Table 7 compares the key driving statistics for each of the facility-specific cycles with their respective target driving populations. The statistical tests for the cycles developed under this study can be compared to that of the Unified LA92 cycle, shown at the bottom of Table 7. As seen in the table, average speeds for each cycle match their target driving with 1-2 mph; however, speed and acceleration maximums for all of the cycles never reach the entire range contained in the target populations. Comparison of the critical DiffSum (sum of differences between cycle and target joint speed and acceleration frequencies) statistic (listed as "Total SAFD Difference" in the table) indicates that, with the exception of the ramp cycle,* each facility-specific cycles developed under this study matches the joint speed-acceleration frequencies of its target better than the LA92 cycle.

A detailed set of all cycle evaluation statistical comparisons stated in the Work Plan is presented in a series of tabular summaries contained in Appendix C. These detailed tables include the following statistics:

- time in acceleration;
- time in deceleration;

*Candidate ramp cycles proved difficult to develop using the segment-based Hybrid-Random/Incremental procedure. As they were being generated, segment building for many of the candidate ramp cycles was prematurely terminated before reaching the targeted cycle length. Due to the extreme transient nature of freeway ramp activity, segment endpoint matches could not always be found for currently selected segments, causing premature termination of the segment-building iterations. As a result, the match of best ramp cycle's SAFD against target ramp driving proved to be inferior to that of the other cycles.

Table 7
Comparison of Key Representativeness Statistics for Facility-Specific Cycles

Driving Cycle	Mean Speed (mph)		Maximum Speed (mph)		Maximum Accel Rate (mph/sec)		Total SAFD Difference (%)	High-Power Difference (%)
	Cyc.	Pop.	Cyc.	Pop.	Cyc.	Pop.		
Freeway High-Speed*	63.2	62.7	74.7	80.9	2.7	5.8	9.41	0.16
Freeway LOS A-C	59.7	59.2	73.1	83.2	3.4	6.8	12.12	0.39
Freeway LOS D	52.9	52.0	70.6	75.8	2.3	6.1	15.10	0.35
Freeway LOS E	30.5	32.1	63.0	71.3	5.3	8.5	25.17	0.18
Freeway LOS F	18.6	19.9	49.9	69.5	6.9	9.6	23.83	0.06
Freeway LOS G	13.1	14.4	35.7	49.1	3.8	5.7	18.80	0.10
Freeway Ramp	34.6	35.4	60.2	79.1	5.7	9.3	42.74	0.99
Arterial LOS A-B	24.8	25.2	58.9	74.9	5.0	14.9	17.04	0.40
Arterial LOS C-D	19.2	18.9	49.5	71.3	5.7	10.4	16.86	0.21
Arterial LOS E-F	11.6	12.0	39.9	56.8	5.8	10.2	17.86	0.24
Local Roadways	12.8	14.6	38.3	62.7	3.7	12.5	21.80	0.11
LA92 Cycle	24.6	26.3	67.2	80.3	6.9	10.4	30.27	0.19

- time at cruise;
- time at idle;
- maximum speed;
- average speed;
- average or predominant speed during cruise (“subjective” cycle speed);
- average non-idle speed;
- average positive acceleration rate;
- average negative deceleration rate;
- maximum acceleration rate;
- maximum deceleration rate;
- maximum power;
- length (time and miles);

*The first high-speed freeway cycle had an average speed of 64.2 mph, with a population average speed of 64.0 mph. Its Total SAFD and High-Power differences were 8.62% and 0.95%. As demonstrated in Table 7, the revised high-speed cycle exhibits a far superior match of high power events (0.16% vs. 0.95%) than the original high speed cycle, which is well in line with the high-power matches obtained for the other facility-specific cycles.

- stops per mile;
- average PKE;
- average total specific power;
- average non-zero specific power; and
- detailed distributions of speed and acceleration frequencies (SAFDs).

The statistical summary tables for each cycle in Appendix C are ordered as follows: 1) cycle statistics, 2) target driving population statistics, and 3) difference between cycle and target statistics.

Area-Wide Cycle Evaluation

Table 8 compares key statistics for the non-freeway segment of the area-wide cycle. (As before, statistics for the Unified LA92 cycle are also listed for comparison.) The average and maximum speeds of the non-freeway segment closely match that of its target instrumented vehicle-based driving. The non-freeway segment's DiffSum (total SAFD difference) and high-power summed difference compare favorably to those of the LA92 cycle.

Table 8 Comparison of Key Representativeness Statistics for the Non-Freeway Segment of the Area-Wide Cycle								
Driving Segment/Cycle	Mean Speed (mph)		Maximum Speed (mph)		Maximum Accel Rate (mph/sec)		Total SAFD Difference (%)	High- Power Difference (%)
	Cyc.	Pop.	Cyc.	Pop.	Cyc.	Pop.		
Non-Freeway Area-Wide Segment	19.4	19.6	52.3	52.5	6.4	12.0	8.79	0.11
LA92 Cycle	24.6	26.3	67.2	80.3	6.9	10.4	30.27	0.19

A second series of statistical tests of the entire six-segment composite area-wide cycle was developed by generating driving distributions using segment-weighting factors for Los Angeles. These statistics for the LA-weighted cycle were then compared to both the LA92 cycle and the Los Angeles chase car driving data population. The results, summarized in Table 9, indicate that the 34.21% total SAFD difference between the two composite cycles (area-wide vs. LA92) exceeds that of each of the cycles developed under this study when compared to their target driving distributions. The area-wide cycle is compared against the 1992 Los Angeles chase car driving population in the second row of Table 9. Both the total SAFD difference and the high power difference of the

Table 9
**Comparison of the Los Angeles-Weighted Area-Wide Cycle Against
the Unified LA92 Composite Cycle and Los Angeles Chase Car Data**

Data Comparison	Total SAFD Difference (%)	High-Power Difference (%)
Area-Wide Cycle vs. Unified LA92 Cycle	34.21	0.05
Area-Wide Cycle vs. LA Chase Car Data	18.85	0.14
LA92 Cycle vs. LA Chase Car Data	30.27	0.19

Los Angeles-weighted area-wide cycle, 18.85% and 0.14%, respectively, are exceeded by the differences between the LA92 cycle and the target driving population (30.27% and 0.19%).

Appendix D provides detailed tabular statistical comparisons performed in evaluating the area-wide cycle from which the results in Tables 8 and 9 are based.

###

6. INTERSECTION INFLUENCE ANALYSIS

Driving cycles based on vehicle operation over surface streets (as opposed to freeways) can be heavily affected by the influence of intersections. This section first discusses several considerations in identifying “intersection influence.” It then describes the methodology used to analyze and quantify the influence of intersections on the speed traces of the arterial and local roadways driving cycles described earlier. It also includes an evaluation of the representativeness of the level of “intersection influence” in these cycles to that in their respective target driving populations.

In analyzing the effect of intersection influence, only signalized (e.g., traffic lights, stop signs) intersections were addressed. Intersections for which no traffic signal affected the direction of travel for the chase car were ignored. In conjunction with second-by-second emissions data collected on the new speed correction cycles, the analysis presented herein may allow the cycles to be used to evaluate the effect of changes in signalization strategies and intersection density.

Considerations for Identifying Intersection Influence

Driving cycles based on vehicle operation over surface streets (as opposed to freeways) can be heavily affected by the influence of intersections. Using straight-line travel on an arterial/collector as an example, under low congestion levels, decel-idle-accel and decel-accel (no idle) sequences would be expected to occur in the vicinity of intersections when the traffic signal is red; quasi-steady cruise operation would be expected through “green light” intersections and between intersections. To the extent that information is available on how changes in signalization affects the frequency of encountering “red light” intersections, second-by-second emissions data collected on the speed correction cycles could be re-weighted to project the effect of alternative signalization strategies. The effect of signalization strategies that reduce the frequency of decel-idle-accel and decel-accel sequences could be estimated by applying a weighting factor of less than 1.0 to the portions of the speed correction cycle that represent these sequences.

As increased congestion levels are encountered, the extent to which speed-time profiles are influenced by intersections becomes more complicated. Under high levels of congestion, 100% of the travel *between* intersections can still be influenced by the subsequent intersection. This situation can occur whenever the traffic density is such that the queue of vehicles waiting at a red light does not clear during the green light.

Depending on the length of the remaining queue and the distance between intersections, free-flow speed may not be achieved between intersections. The speed-time profile of vehicles approaching the intersection is affected regardless of whether the signal is red or green.

Turns are another activity that influences the speed-time profile in the vicinity of intersections. Even under uncongested green light conditions, decel-accel sequences occur during virtually all 90° turns. This pattern of activity typifies operation on “local” roadways.

Based on the expected pattern of intersection influences described above, it would be tempting to associate all decel-idle-accel and decel-accel sequences occurring during surface street travel with turns and red lights; however, numerous other factors cause similar sequences to occur in real driving. Vehicles entering and leaving parking locations (e.g., at roadside businesses) are one example; vehicles slowing down during lane changes are another. *Because of the variety of conditions that can lead to decel-accel sequences, the actual conditions that caused such sequences in the speed-time segments used to construct the speed correction cycles may not be representative of the conditions that cause such sequences in overall operation.* The pattern of activity incorporated into the new speed correction cycles for arterials/collectors and local roadways reflects the amount of decel-idle-accel and decel-accel sequences associated with the combination of intersection density and traffic signalization strategies encountered during the chase car operation, *but the specific conditions that caused decel-accel sequences in the new speed correction cycles may not represent the conditions that cause such sequences in overall operation.*

Methodology Used to Quantify Intersection Influence

Portions of the videotape archives of all of the three-city chase car driving were reviewed to classify second-by-second driving traces of the three arterial cycles and the single local roadways cycle into one of the following categories:

1. Signal Influenced Straight Flow or Right Turns;
2. Signal Influenced Left Turns; and
3. Non-Signal Influenced Operation.

Given the relatively short length of these speed correction cycles (compared to the amount of driving in each of their target driving populations), a representative occurrence of each of these conditions compared to those in the larger target driving populations is not ensured. To determine the representativeness of the intersection influenced behavior in each of the four surface street cycles, a series of segment traces from each cycle’s driving population were randomly selected. These random segment traces were then video reviewed as resources permitted under the Work Assignment.

Date/time stamps were included in both the driving data and on the forward-view video tapes on a second-by-second basis. Date/time stamps for each of the cycle traces and randomly selected driving population traces were used to identify the proper sections of video footage for review. These portions of the tapes were watched by an observer equipped with a multi-position switch box connected to a data logger similar to that actually used to record second-by-second information during the chase car studies. While viewing the videotape, second-by-second "markings" of intersection influence and the positions where intersections were crossed were identified and computerized.

Results

Table 10 summarizes second-by-second data files containing markings of the presence or absence of intersection influence for each of the surface street cycles (arterials A-B, C-D, E-F and local). Both distance- and time-based distributions are provided as well as the density of signalized intersections encountered per mile. As expected, the influence of intersections is greater for the more congested Arterial E-F cycle than the uncongested Arterial A-B cycle.

Table 10
Distribution of Signalized Intersection Influence Within
Surface Street Driving Cycles

	Arterial A-B	Arterial C-D	Arterial E-F	Local
Time-Based Distributions (% of time)				
Intersection Influenced, Left Turn	8.0%	5.4%	16.8%	7.6%
Intersection Influenced, Straight/Right Turn	29.5%	54.1%	66.5%	23.6%
Non-Intersection Influenced	62.5%	40.5%	16.6%	68.8%
Distance-Based Distributions (% of dist.)				
Intersection Influenced, Left Turn	3.4%	4.7%	7.5%	6.2%
Intersection Influenced, Straight/Right Turn	14.6%	26.5%	47.4%	19.6%
Non-Intersection Influenced	82.0%	68.8%	45.1%	74.2%
# of Intersections	13	17	7	5
Intersections/Mile	2.6	5.1	4.3	2.7

To provide an assessment of the representativeness of the intersection influence contained in these cycles, Table 11 shows similarly compiled results for a series of randomly selected segment traces from each cycle's "target" driving population.

Table 11
Distribution of Signalized Intersection Influence Within
Random Surface Street Driving Segments

	Arterial A-B	Arterial C-D	Arterial E-F	Local
Time-Based Distributions (% of time)				
Intersection Influenced, Left Turn	14.5%	22.1%	32.2%	16.2%
Intersection Influenced, Straight/Right Turn	32.8%	34.9%	55.0%	3.2%
Non-Intersection Influenced	57.7%	42.9%	12.7%	80.6%
Distance-Based Distributions (% of dist.)				
Intersection Influenced, Left Turn	2.6%	4.3%	5.2%	15.2%
Intersection Influenced, Straight/Right Turn	19.6%	19.3%	42.2%	1.9%
Non-Intersection Influenced	77.8%	76.4%	52.6%	82.9%
# of Intersections	17	21	9	2
Intersections/Mile	3.5	5.2	9.7	2.1

As shown in Table 11, the distributions and trends (from congested to uncongested driving) are similar for the arterial driving groups to the results given for the cycle traces in Table 10. The local roadways distributions for the random segments do not generally agree with the distribution of intersection influence for the local driving cycle. However, caution should be exercised in comparing the results in Tables 10 and 11. Because of the effort required to perform the video review, only small random samples of the driving populations for each cycle could be reviewed. For example, the random local roadways segments reviewed represented less than 0.5% of the entire population of local roadways driving.

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7. REFERENCES

1. T. Austin, et al, "Methodology for Generating Driving Cycles for Inventory Development," Sierra Research, Inc., Report No. SR95-09-02, prepared for the U.S. Environmental Protection Agency, September 29, 1995.
2. J. Cohen, et al, "Methods for Driving Cycle Development and Validation," prepared for the U.S. Environmental Protection Agency, Systems Applications International, SYSAPP-93/194, September 30, 1993.
3. T. Austin, et al, "Characterization of Driving Patterns and Emissions from Light-Duty Vehicles in California," Sierra Research Report No. SR93-11-01, prepared for the California Air Resources Board, November 1993.
4. "Highway Capacity Manual - Special Report 209," Transportation Research Board, 1994.
5. T. Carlson and T. Austin, "Evaluation of New Driving Cycles," Sierra Research, Inc., Report No. SR94-09-03, prepared for the U.S. Environmental Protection Agency, September 22, 1994.
6. S. Kishan and T. Defries, "Light-Duty Vehicle Driving Behavior: Private Vehicle Instrumentation, Volume 1 - Technical Report," Radian Corporation, August 1992.

Appendix A

Detailed Driving Data Statistics

BALTIMORE SELF-WEIGHTING CHASE CAR DATA
TRAVEL STATISTICS BY FACILITY TYPE AND LOS

10:18 Friday, August 16, 199

# OF OBS	FACILITY	LOS	%FREQ	%VMT	DIST	CSPD	CACL	PWR			
								POWER		MEAN	
								MIN	MAX	MIN	MAX
212,918	ALL	100.000	100.000	0.00	0.00	28.23	80.91	-21.1	14.9	25.24	56.425
491	FACILITY	0.231	0.053	0.00	6.45	23.00	-3.4	4.9	8.33	63.747	35.438
5,294	OTHER	2.486	0.769	0.00	8.73	55.20	-6.3	9.5	10.99	64.299	34.510
34,870	PRIVATE	16.377	8.089	0.00	13.94	62.70	-12.1	12.5	15.24	59.943	37.944
128,872	LOCAL	60.527	52.461	0.00	24.46	74.50	-21.1	14.9	25.06	56.894	35.508
7,395	ART/COLL	3.473	4.947	0.00	40.20	72.69	-9.1	9.3	38.06	52.725	32.454
35,996	RAMP	16.906	33.681	0.00	56.23	80.91	-14.3	9.7	35.25	50.836	37.185
0	FREWAY										
164	OTHER	0.077	0.021	0.00	7.72	18.95	-3.3	4.3	9.20	58.537	41.463
324	A	0.152	0.032	0.00	5.85	23.00	-3.4	4.9	7.96	66.049	32.716
3	B	0.001	0.000	0.00	1.93	4.00	-2.2	0.0	0.00	100.000	-
4,442	PRIVATE	2.086	0.637	0.00	8.61	55.20	-6.3	8.5	10.93	64.903	33.814
424	A	0.199	0.066	0.00	9.38	31.99	-5.8	9.5	12.14	60.613	38.208
320	B	0.150	0.047	0.00	8.90	27.50	-3.9	4.3	10.72	62.813	37.188
108	C	0.051	0.019	0.00	10.33	22.20	-3.9	4.3	9.78	58.333	41.667
1	D	0.000	0.000	0.00	25.80	25.80	0.8	0.8	40.64	100.000	-
32,958	LOCAL	15.479	7.751	0.00	14.13	62.70	-12.1	12.5	15.33	59.588	38.309
1,382	A	0.649	0.222	0.00	11.83	43.40	-9.6	5.8	15.21	65.919	30.897
383	B	0.180	0.062	0.00	9.71	34.40	-6.7	5.0	11.90	61.880	38.120
146	C	0.069	0.004	0.00	1.76	25.00	-4.4	3.3	3.26	78.767	21.233
125	D	0.059	0.023	0.00	10.92	34.40	-4.3	5.0	17.18	69.600	24.000
58,048	ART/COLL	27.263	28.254	0.00	29.25	74.50	-15.3	14.9	26.15	54.998	37.224
34,666	A	13.192	0.00	22.87	65.00	-15.4	10.5	25.60	57.907	33.889	7.347
7,359	B	0.000	0.000	0.00	19.83	63.15	-21.1	9.2	24.05	58.728	33.895
22,301	C	7.359	0.000	17.40	71.29	-9.1	10.4	22.25	57.628	36.180	6.493
9,884	D	4.642	2.861	0.00	12.15	56.77	-8.0	10.2	17.08	64.305	31.230
3,359	E	1.578	0.679	0.00	11.47	43.20	-4.9	6.2	16.52	57.669	38.855
489	F	0.230	0.093	0.00	42.11	69.80	-8.7	9.3	39.25	50.078	34.492
3,221	G	2.517	0.000	39.67	71.15	-9.1	9.1	39.32	51.865	32.827	13.443
2,306	H	1.083	1.522	0.00	42.54	68.52	-6.0	4.0	38.75	53.815	30.823
996	I	0.468	0.705	0.00	44.36	72.69	-5.9	3.4	36.28	58.273	29.317
556	J	0.261	0.410	0.00	28.50	47.60	-5.4	3.8	32.21	55.405	29.730
74	K	0.035	15.31	0.00	4.31	42.40	-3.3	4.7	13.21	78.099	16.529
242	L	0.114	0.017	0.00	59.50	80.91	-14.3	6.8	33.33	51.619	37.694
8,553	M	4.017	8.468	0.00	59.42	77.30	-7.1	5.6	36.35	51.274	36.304
11,503	N	5.403	11.374	0.00	59.42	75.84	-5.1	4.6	35.03	50.496	37.259
8,575	O	4.027	8.479	0.00	56.83	75.80	-5.5	5.0	37.30	50.585	35.771
3,760	P	1.766	3.555	0.00	44.42	71.03	-5.8	5.1	42.15	46.685	36.966
1,101	Q	0.517	0.814	0.00	23.82	69.47	-6.7	9.7	28.01	49.521	41.454
2,504	R	1.176	0.992	0.00							

LOS ANGELES SELF-WEIGHTING CHASE CAR DATA TRAVEL STATISTICS BY FACILITY TYPE AND LOS

PWR											
DIST	%FREQ	CSPD	%VMT	CACL	POWER	MEAN	MIN	MAX	MEAN	%FREQ	%FREQ
# OF OBS	%FREQ										%FREQ
ALL	110,909	100.000	100.000	0.00	26.34	80.30	-15.0	10.4	25.22	55.839	36.770
FFACILITY											
OTHER	67	0.060	0.012	0.00	5.27	18.95	-3.3	4.3	7.01	65.672	34.328
PRIVATE	290	0.261	0.059	0.00	5.99	18.95	-3.5	4.3	7.68	65.862	34.138
LOCAL	2,515	2.268	1.041	0.00	12.09	37.20	-6.9	6.3	13.85	61.113	37.893
ART/COLL	73,779	66.522	49.640	0.00	63.10	-15.0	23.98	57.957	34.790	6.815	0.994
RAMP	5,671	5.113	5.542	0.00	28.55	67.09	-11.2	8.5	34.16	56.004	30.682
FREEWAY	28,586	25.774	43.705	0.00	44.66	80.30	-11.2	7.8	27.87	49.752	43.021
HOV LANE	1	0.001	26.56	26.56	0.5	0.5	0.5	0.00	100.000	6.605	0.440
LOS											
OTHER	67	0.060	0.012	0.00	5.27	18.95	-3.3	4.3	7.01	65.672	34.328
PRIVATE	A	0.168	0.031	0.00	4.94	18.95	-3.5	4.3	6.89	68.280	31.720
B	54	0.049	0.015	0.00	8.14	18.95	-3.5	4.3	10.22	61.111	38.889
C	50	0.045	0.013	0.00	7.55	18.95	-3.3	3.9	7.90	62.000	38.000
LOCAL	A	2,512	2.265	1.040	0.00	12.09	37.20	-6.9	6.3	13.86	61.107
B	2	0.002	0.000	0.00	0.00	0.00	0.0	0.0	0.00	100.000	-
C	1	0.001	35.70	35.70	0.8	0.8	0.8	28.40	-	100.000	-
ART/COLL	O	32,169	29.005	21.136	0.00	19.19	61.10	-15.0	10.1	23.75	58.193
A	B	18,141	16.357	13.562	0.00	21.84	63.10	-12.3	8.3	25.73	56.816
C	C	13,466	12.141	9.388	0.00	20.36	59.10	-9.6	10.4	24.13	57.939
D	D	6,746	4.194	4.194	0.00	18.16	53.00	-9.6	9.1	22.00	58.227
E	E	2,552	1.132	0.00	12.96	47.69	-8.8	8.0	19.37	62.108	32.053
F	F	701	0.632	0.226	0.00	9.41	38.80	-11.2	6.3	14.12	59.344
RAMP	O	1	0.001	38.40	38.40	1.5	1.5	14.22	100.000	37.090	3.566
A	A	857	0.773	0.884	0.00	30.15	61.10	-11.2	6.5	40.11	-
B	B	1,310	1.181	1.438	0.00	32.06	64.50	-8.9	7.7	47.03	51.374
C	C	1,294	1.167	1.282	0.00	28.95	66.80	-10.4	8.0	34.13	59.274
D	D	1,043	0.940	0.950	0.00	26.61	67.09	-10.4	8.5	23.52	62.224
E	E	584	0.527	0.652	0.00	32.59	63.70	-5.9	6.9	28.47	59.247
F	F	582	0.525	0.334	0.00	16.78	49.20	-7.9	6.9	21.06	44.502
FREEWAY	A	716	0.646	1.411	32.60	57.55	76.36	-2.3	2.6	36.39	48.464
B	B	2,275	2.051	4.912	40.30	63.07	76.00	-3.8	5.9	50.725	39.868
C	C	7,196	6.488	15.026	40.00	60.99	80.30	-9.2	5.8	28.96	53.446
D	D	4,438	4.001	8.484	0.00	55.84	73.97	-11.2	4.1	28.74	54.214
E	E	5,175	4.666	6.874	0.00	38.80	69.50	-10.0	7.8	30.13	48.947
F	F	8,786	7.922	6.999	0.00	23.27	66.56	-8.5	7.1	23.71	44.799
HOV LANE	E	1	0.001	26.56	26.56	0.5	0.5	0.00	100.000	50.455	0.205

**COMBINED SELF-WEIGHTING CHASE CAR DATA (LA92, BALT, SPKN)
TRAVEL STATISTICS BY FACILITY TYPE AND LOS**

BALTIMORE SELF-WEIGHTING CHASE CAR DATA
TRAVEL STATISTICS BY DAY-OF-WEEK AND TIME-OF-DAY

10:18 Friday, August 16, 199

	# OF OBS	%FREQ	%VMT	DIST	CSPD	CACL	POWER	PWR				
								MIN	MEAN	MAX	%FREQ	
								%FREQ	%FREQ	%FREQ	%FREQ	
ALL	212,918	100.000	100.000	0.00	28.23	80.91	-21.1	14.9	25.24	56.425	36.060	6.585
PERIOD												0.768
NIGHT	39,989	18.781	18.525	0.00	27.84	75.84	-14.5	10.9	24.47	56.048	36.978	6.237
AM PEAK	33,405	15.689	15.781	0.00	28.39	73.89	-14.1	9.7	25.87	56.530	35.617	6.759
MIDDAY	85,491	40.152	43.517	0.00	30.59	80.91	-15.4	12.5	26.95	55.544	36.132	7.237
PM PEAK	54,033	25.377	22.177	0.00	24.67	73.48	-21.1	14.9	22.70	58.031	35.539	5.702
DAY TYPE	PERIOD											0.895
WEEKDAY	NIGHT	39,989	18.781	18.525	0.00	27.84	75.84	-14.5	10.9	24.47	56.048	36.978
AM PEAK	33,405	15.689	15.781	0.00	28.39	73.89	-14.1	9.7	25.87	56.530	35.617	6.237
MIDDAY	85,491	40.152	43.517	0.00	30.59	80.91	-15.4	12.5	26.95	55.544	36.132	7.237
PM PEAK	54,033	25.377	22.177	0.00	24.67	73.48	-21.1	14.9	22.70	58.031	35.539	5.702

COMBINED 3-CITY INSTRUMENTED VEHICLE DATA TRAVEL STATISTICS BY DAY-OF-WEEK AND TIME-OF-DAY

 22:19 Wednesday, August 14, 1996¹

				DIST		CSPD		CACL		POWER		PWR					
# OF OBS	%FREQ	%VNT	MIN	MEAN	MAX	MIN	MAX	MEAN	MAX	MIN	MAX	0	1-99	100-199	200-299	300+	
ALL PERIOD	9,111,532	100.000	100.000	0.00	25.94	96.50	-19.5	16.7	20.18	59.428	35.272	4.904	0.366	0.029			
NIGHT	2,289,951	25.132	27.037	0.00	27.91	96.50	-18.6	14.6	20.14	58.798	36.014	4.765	0.388	0.034			
AM PEAK	1,283,788	14.090	14.100	0.00	25.96	89.90	-19.5	14.5	20.47	60.272	34.201	5.096	0.402	0.030			
MIDDAY	3,344,686	36.708	35.504	0.00	25.09	95.30	-15.4	16.7	20.20	59.413	35.227	4.981	0.353	0.026			
PM PEAK	2,193,107	24.070	23.360	0.00	25.18	94.50	-18.6	15.9	20.04	59.613	35.193	4.820	0.344	0.030			
DAY TYPE PERIOD																	
WEEKDAY NIGHT	1,645,369	18.058	19.041	0.00	27.35	96.50	-18.6	14.6	20.36	58.811	35.877	4.867	0.407	0.039			
WEEKDAY AM PEAK	1,169,954	12.840	12.677	0.00	25.61	89.90	-19.5	14.5	20.39	60.435	34.072	5.066	0.398	0.029			
WEEKDAY MIDDAY	2,440,357	26.783	25.549	0.00	24.75	95.30	-15.4	15.1	20.36	59.374	35.177	5.066	0.357	0.026			
WEEKDAY PM PEAK	1,691,849	18.568	17.241	0.00	24.09	94.50	-18.6	15.9	20.09	59.898	34.849	4.863	0.357	0.032			
WEEKEND NIGHT	644,582	7.074	7.995	0.00	29.32	90.10	-14.3	12.1	19.57	58.766	36.363	4.507	0.340	0.024			
WEEKEND AM PEAK	113,834	1.249	1.423	0.00	29.54	79.90	-13.6	12.7	21.28	58.599	35.530	5.404	0.436	0.031			
WEEKEND MIDDAY	904,329	9.925	9.955	0.00	26.02	82.40	-13.4	16.7	19.77	59.520	35.361	4.753	0.341	0.025			
WEEKEND PM PEAK	501,258	5.501	6.119	0.00	28.85	84.30	-14.1	13.2	19.87	58.649	36.355	4.675	0.299	0.022			

BALTIMORE INSTRUMENTED VEHICLE DATA TRAVEL STATISTICS
BY DAY-OF-WEEK AND TIME-OF-DAY

16:34 Wednesday, August 14, 1996 2

PWR										
		DIST	CSPD	CACL	POWER	0	1-99	100-199	200-299	300+
	# OF OBS	%FREQ	%VMT	MIN	MEAN	MAX	MEAN	%FREQ	%FREQ	%FREQ
ALL	3,365	481	100.000	100.000	0.00	24.50	94.50	-19.5	15.1	19.25
PERIOD										
NIGHT	838	218	24.906	25.577	0.00	25.16	89.40	-14.7	13.9	18.74
AM PEAK	515	101	15.305	15.690	0.00	25.11	83.70	-19.5	12.9	19.55
MIDDAY	1,194	571	35.495	35.162	0.00	24.27	80.60	-12.6	15.1	19.16
PM PEAK	817	591	24.293	23.570	0.00	23.77	94.50	-11.8	14.7	19.72
DAY TYPE	PERIOD									
WEEKDAY	NIGHT	599	929	17.826	17.641	0.00	24.24	89.40	-14.7	13.9
WEEKDAY	AM PEAK	470	651	13.985	14.351	0.00	25.14	83.70	-19.5	12.9
WEEKDAY	MIDDAY	851	217	25.293	24.04	0.00	23.64	80.60	-12.0	15.1
WEEKDAY	PM PEAK	635	833	18.893	17.777	0.00	23.05	94.50	-11.8	14.7
WEEKEND	NIGHT	238	289	7.080	7.937	0.00	27.46	81.20	-12.9	12.1
WEEKEND	AM PEAK	44	450	1.321	1.339	0.00	24.84	74.10	-11.8	12.7
WEEKEND	MIDDAY	343	354	10.202	10.758	0.00	25.83	80.10	-12.6	14.9
WEEKEND	PM PEAK	181	758	5.401	5.794	0.00	26.28	83.10	-11.4	13.2

SPOKANE INSTRUMENTED VEHICLE DATA TRAVEL STATISTICS
BY DAY-OF-WEEK AND TIME-OF-DAY

	# OF OBS	%FREQ	DIST	CSPD	CACL	POWER	PWR		
							0		100-199
							MIN	MAX	200-299
ALL PERIOD	2,081,177	100.000	100.000	0.00	23.24	77.50	-15.4	15.9	300+
NIGHT	424,937	20.418	22.558	0.00	25.68	77.20	-13.7	12.2	300+
AM PEAK	260,859	12.534	12.665	0.00	23.49	77.50	-13.6	12.0	300+
MIDDAY	839,944	40.359	38.561	0.00	22.21	77.20	-15.4	14.6	300+
PM PEAK	555,437	26.689	26.216	0.00	22.83	73.90	-13.3	15.9	300+
DAY TYPE PERIOD									
WEEKDAY NIGHT	304,212	14.617	15.868	0.00	25.23	75.00	-13.7	12.2	300+
WEEKDAY AM PEAK	232,015	11.148	11.080	0.00	23.10	77.50	-11.4	12.0	300+
WEEKDAY MIDDAY	611,277	29.372	28.086	0.00	22.23	75.20	-15.4	14.6	300+
WEEKDAY PM PEAK	448,695	21.560	20.480	0.00	22.08	73.90	-13.3	15.9	300+
WEEKEND NIGHT	120,725	5.801	6.690	0.00	26.81	77.20	-12.3	11.6	300+
WEEKEND AM PEAK	28,844	1.386	1.585	0.00	26.59	73.40	-13.6	11.6	300+
WEEKEND MIDDAY	228,667	10.987	10.475	0.00	22.16	77.20	-13.2	14.3	300+
WEEKEND PM PEAK	106,742	5.129	5.736	0.00	25.99	73.00	-10.2	12.2	300+

SELF-WEIGHTING CHASE CAR DATA
TRAVEL STATISTICS BY FACILITY GROUP

17:56 Thursday, September 5, 199

CITY BALTIMORE

FACILITY GROUP	# OF OBS	% TIME	% VMT	DIST				CSPD				CACL				POWER				PWR			
				MIN		MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN		MAX	
				%	mi	%	mi	%	mi	%	mi	%	mi	%	mi	%	mi	%	mi	%	mi	%	mi
F/R	43,391	20.379	38.629	0.00	53.50	80.91	-14.3	9.7	35.73	51.158	36.379	10.403	1.650	0.410	0.00	21.76	74.50	-21.1	14.9	22.55	57.73	35.978	5.607
NON-F/R	169,527	79.621	61.371	0.00	53.50	80.91	-14.3	9.7	35.73	51.158	36.379	10.403	1.650	0.410	0.00	21.76	74.50	-21.1	14.9	22.55	57.73	35.978	5.607

CITY LOS ANGELES

FACILITY GROUP	# OF OBS	% TIME	% VMT	DIST				CSPD				CACL				POWER				PWR			
				MIN		MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN		MAX	
				%	mi	%	mi	%	mi	%	mi	%	mi	%	mi	%	mi	%	mi	%	mi	%	mi
F/R	34,257	30.887	49.247	0.00	41.99	80.30	-11.2	8.5	28.91	50.787	40.978	7.219	0.774	0.242	0.00	19.34	63.10	-15.0	10.4	23.57	58.098	34.889	6.592
NON-F/R	76,652	69.113	50.753	0.00	41.99	80.30	-11.2	8.5	28.91	50.787	40.978	7.219	0.774	0.242	0.00	19.34	63.10	-15.0	10.4	23.57	58.098	34.889	6.592

CITY SPOKANE

FACILITY GROUP	# OF OBS	% TIME	% VMT	DIST				CSPD				CACL				POWER				PWR			
				MIN		MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN		MAX	
				%	mi	%	mi	%	mi	%	mi	%	mi	%	mi	%	%	mi	%	mi			
F/R	22,686	11.341	23.609	0.00	56.03	83.15	-7.3	7.7	25.84	53.456	40.443	5.232	0.670	0.198	0.00	23.19	74.90	-13.8	9.7	19.72	59.525	35.945	4.227
NON-F/R	177,351	88.659	76.391	0.00	56.03	83.15	-7.3	7.7	25.84	53.456	40.443	5.232	0.670	0.198	0.00	23.19	74.90	-13.8	9.7	19.72	59.525	35.945	4.227

SELF-WEIGHTING CHASE CAR DATA
TRAVEL STATISTICS BY FACILITY GROUP

17:56 Thursday, September 5, 199

ALL

FACILITY GROUP	# OF OBS	% TIME	% VMT	DIST			CSPD			CACL			POWER			PWR		
				MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX
				%TIME	%TIME	%TIME	%TIME	%TIME	%TIME	%TIME	%TIME							
F/R	100,334	19.153	35.146	0.00	50.14	83.15	-14.3	9.7	31.17	51.551	38.868	8.147	1.129	1.129	0.305	0.305	0.305	
NON-F/R	423,530	80.847	64.854	0.00	21.92	74.90	-21.1	14.9	21.55	58.565	35.767	5.207	0.377	0.377	0.377	0.084	0.084	0.084

SELF-WEIGHTING CHASE CAR DATA
FREEWAY/RAMP TRAVEL STATISTICS BY LOS

17:56 Thursday, September 5, 199

CITY BALTIMORE

	# OF OBS	%TIME	%VMT	DIST	CSPD			CACL			POWER			PWR		
					MIN	MEAN	MAX	MIN	MAX	MEAN	0	1-99	100-199	200-299	300+	
					%TIME	%TIME	%TIME	%TIME	%TIME	%TIME	%TIME	%TIME	%TIME	%TIME	%TIME	
LOS	11,774	27.135	27.764	0.00	54.74	80.91	-14.3	9.3	34.95	51.198	36.818	10.311	1.401	0.272		
A	13,809	31.825	33.384	0.00	50.12	77.30	-9.1	9.1	36.85	51.372	35.723	10.457	1.912	0.536		
B	9,571	22.058	23.775	0.00	57.67	75.84	-6.0	4.6	36.31	50.841	36.590	10.521	1.661	0.387		
C	4,316	9.947	10.266	0.00	55.22	75.80	-5.9	5.0	37.17	51.576	34.940	11.191	1.784	0.510		
D	1,175	2.708	2.198	0.00	43.42	71.03	-5.8	5.1	41.53	47.234	36.511	13.702	1.872	0.681		
E	2,746	6.329	2.614	0.00	22.10	69.47	-6.7	9.7	26.71	52.039	39.257	7.465	1.056	0.182		

CITY LOS ANGELES

	# OF OBS	%TIME	%VMT	DIST	CSPD			CACL			POWER			PWR		
					MIN	MEAN	MAX	MIN	MAX	MEAN	0	1-99	100-199	200-299	300+	
					%TIME	%TIME	%TIME	%TIME	%TIME	%TIME	%TIME	%TIME	%TIME	%TIME	%TIME	
LOS	1	0.003	0.003	38.40	38.40	38.40	1.5	1.5	142.31	-	100.00	-	-	-	-	
O	1,573	4.592	4.660	0.00	42.62	76.36	-11.2	6.5	38.42	52.702	33.376	11.570	2.098	0.254		
A	3,585	10.465	12.893	0.00	51.74	76.00	-8.9	7.7	36.85	50.962	36.039	10.488	2.064	0.446		
B	8,490	24.783	33.116	0.00	56.11	80.30	-10.4	8.0	29.74	54.335	37.161	7.197	0.860	0.448		
C	5,481	16.000	19.156	0.00	50.28	73.97	-11.2	8.5	27.74	55.738	35.760	7.626	0.675	0.201		
D	5,759	16.811	15.281	0.00	38.17	69.50	-10.0	7.8	29.96	49.991	41.275	8.040	0.521	0.174		
E	9,368	27.346	14.891	0.00	22.87	66.00	-8.5	7.1	23.55	44.780	50.480	4.505	0.192	0.043		

SELF-WEIGHTING CHASE CAR DATA FREEWAY/RAMP TRAVEL STATISTICS BY LOS

CITY SPOKANE

	# OF OBS	%TIME	%VMT	DIST	CSPD	CACL	POWER	PWR.									
								0		1-99		100-199		200-299		300+	
								MIN	MAX	MEAN	MAX	MEAN	MAX	MEAN	MAX	MEAN	MAX
LOS																	
A	9,469	41.739	42.587	0.00	57.16	83.15	-7.3	7.7	26.45	54.377	38.758	5.872	0.855	0.137			
B	6,988	30.803	30.759	0.00	55.95	73.83	-6.2	4.6	25.83	53.320	40.655	5.180	0.601	0.243			
C	5,596	24.667	24.208	0.00	54.98	70.70	-6.9	5.1	25.25	52.788	41.833	4.610	0.500	0.268			
D	355	1.565	1.533	31.57	54.89	60.04	-2.3	1.5	17.74	50.141	49.014	0.845	-	-			
E	278	1.225	0.912	24.95	41.72	55.70	-3.8	2.3	27.30	43.165	53.597	2.878	0.360	-			

ATT

										PWR									
				CSPD		CACL		POWER		0		1-99		100-199		200-299		300+	
# OF OBS		%TIME		%VMT		DIST		MIN		MEAN		MAX		MIN		MEAN		MAX	
LOS	0	1	0.001	0.001	38.40	38.40	1.5	1.5	142.31	-	52.621	37.386	8.555	-	100.000	0.000	-	-	-
A	22,816	22.740	24.903	0.00	54.91	83.15	-14.3	9.3	31.66	52.621	37.386	8.555	1.223	0.099	0.099	0.099	0.099	0.215	
B	24,382	24.301	26.362	0.00	55.43	77.30	-9.1	9.1	33.69	51.870	37.183	8.949	1.559	0.439	0.439	0.439	0.439	0.439	
C	23,657	23.578	26.555	0.00	56.47	80.30	-10.4	8.0	31.34	52.555	38.035	7.930	1.099	0.380	0.380	0.380	0.380	0.380	
D	10,152	10.118	10.612	0.00	52.54	75.80	-11.2	8.5	31.40	53.773	35.875	8.705	1.123	0.325	0.325	0.325	0.325	0.325	
E	7,212	7.188	5.614	0.00	39.16	71.03	-11.0	7.8	31.74	49.279	40.973	8.763	0.735	0.250	0.250	0.250	0.250	0.250	
F	12,114	12.074	5.464	0.00	22.69	69.47	-8.5	9.7	24.26	46.426	47.936	5.176	0.388	0.074	0.074	0.074	0.074	0.074	

SELF-WEIGHTING CHASE CAR DATA NON-FREEWAY/RAMP TRAVEL STATISTICS BY LOS

CITY BALTIMORE

CITY LOS ANGELES

	# OF OBS	%TIME	DIST	CSPD				CACL				POWER				PWR			
				%VMT		MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	0	1-99	200-299	300+	
				%TIME	%TIME	%TIME	%TIME	%TIME	%TIME	%TIME	%TIME	%TIME							
LOS				4	0.005	0.004	0.00	16.23	32.60	0.0	0.3	17.63	50.000	50.000	-	-	-	-	
0	34,934	45.575	43.779	0.00	18.58	61.10	-15.0	10.1	22.92	58.470	35.026	6.172	0.252	0.080	-	-	-	-	
A	18,197	23.740	26.751	0.00	21.79	63.10	-12.3	8.3	25.68	56.834	35.110	7.468	0.467	0.121	-	-	-	-	
B	13,517	17.634	18.525	0.00	20.32	59.10	-9.6	10.4	24.07	57.949	34.564	6.976	0.399	0.111	-	-	-	-	
C	6,746	8.801	8.264	0.00	18.16	53.00	-9.6	9.1	22.80	58.227	35.073	6.559	0.237	0.104	-	-	-	-	
D	2,553	3.331	2.232	0.00	12.96	47.69	-8.8	8.0	19.36	62.123	32.041	5.523	0.313	-	-	-	-	-	
E	701	0.915	0.445	0.00	9.41	38.80	-11.2	6.3	14.12	59.344	37.090	3.566	-	-	-	-	-	-	

# OF OBS	%TIME	%VMT	DIST	CSPD			CACL			POWER			PWR		
				MIN	MEAN	MAX	MIN	MAX	MEAN	0	1-99	100-199	200-299	300+	
LOS															
O	115,403	0.082	0.016	0.00	4.40	21.10	-4.2	4.3	7.17	73.793	26.207	-	-	-	
A	37,441	65.070	66.204	0.00	23.59	74.90	-13.8	9.0	19.15	60.567	35.226	3.929	0.230	0.049	
B	21,111	23.289	0.00	25.58	69.50	-11.9	9.7	22.26	57.245	36.965	5.331	0.337	0.123	-	
C	18,741	10.567	8.517	0.00	18.69	56.68	-9.2	9.5	19.40	77.996	37.549	4.253	0.139	0.064	
D	4,666	2.631	1.711	0.00	15.08	53.40	-8.6	8.4	16.87	57.823	38.791	3.215	0.171	-	
E	577	0.325	0.213	0.00	15.21	34.50	-7.0	8.2	15.21	50.607	46.620	2.773	-	-	
F	378	0.213	0.051	0.00	5.51	36.90	-4.7	5.0	6.61	72.222	26.984	0.794	-	-	

ALL										PWR									
# OF OBS	% TIME	DIST				CSPD				CACL				POWER				---	
		%VMT	%TIME	MIN	MEAN	MAX	MEAN	MIN	MAX	MEAN	MIN	MAX	MEAN	0	1-99	100-199	200-299	300+	
LDS																			
0	4.39	0.104	0.036	0.00	7.65	34.40	-4.3	5.0	10.95	6.6	51.15	31.663	1.822	-	-	-	-	-	
A	246,109	58.109	60.060	0.00	22.66	74.90	-15.3	14.9	20.66	58.910	36.053	4.649	0.322	0.065	-	-	-	-	
B	92,113	21.749	23.348	0.00	23.53	69.50	-15.4	10.5	24.04	57.560	35.354	6.457	0.506	0.123	-	-	-	-	
C	55,262	13.048	11.566	0.00	19.43	63.15	-21.1	10.4	22.31	58.335	35.346	5.769	0.440	0.110	-	-	-	-	
D	21,550	5.088	3.945	0.00	16.99	71.29	-9.6	10.4	21.07	58.005	36.325	5.234	0.357	0.079	-	-	-	-	
E	6,489	1.532	0.890	0.00	12.74	56.77	-8.8	10.2	17.88	62.228	32.917	4.577	0.247	0.031	-	-	-	-	
F	1,568	0.370	0.154	0.00	9.11	43.20	-11.2	6.3	13.05	61.926	35.204	2.806	0.064	-	-	-	-	-	

Population-Weighted 3-City Instrumented Vehicle Driving SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)																		TOTALS			
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	
-20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-11	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-8	0.001	0.006	0.008	0.006	0.005	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	
-7	0.002	0.006	0.022	0.026	0.022	0.014	0.007	0.004	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	
-6	0.007	0.033	0.071	0.072	0.058	0.038	0.020	0.010	0.004	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	
-5	0.029	0.126	0.261	0.171	0.139	0.090	0.052	0.025	0.011	0.004	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	
-4	0.133	0.293	0.316	0.311	0.257	0.176	0.110	0.059	0.029	0.012	0.004	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	
-3	0.456	0.438	0.431	0.417	0.361	0.282	0.191	0.122	0.065	0.030	0.012	0.006	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	
-2	1.048	0.524	0.485	0.454	0.437	0.363	0.261	0.173	0.101	0.057	0.034	0.020	0.010	0.004	0.002	0.001	0.001	0.001	0.001	0.001	0.001	
-1	1.731	0.724	0.649	0.636	0.817	1.067	1.176	1.033	0.838	0.623	0.479	0.395	0.290	0.144	0.049	0.011	0.003	0.000	0.000	0.000	0.000	
0	18.883	2.242	1.145	1.078	1.184	1.893	3.248	4.208	3.845	3.338	2.847	3.067	3.728	3.178	1.578	0.464	0.081	0.015	0.003	0.000	0.000	
1	0.218	1.128	0.755	0.894	0.975	1.359	1.645	1.630	1.331	1.000	0.679	0.493	0.378	0.255	0.116	0.038	0.010	0.004	0.001	0.000	0.000	
2	0.081	0.703	0.615	0.820	0.855	0.790	0.622	0.478	0.246	0.128	0.062	0.034	0.018	0.009	0.004	0.001	0.000	0.000	0.000	0.000	0.000	
3	0.050	0.532	0.492	0.572	0.494	0.316	0.177	0.086	0.035	0.013	0.006	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4	0.035	0.396	0.284	0.233	0.168	0.078	0.031	0.012	0.004	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
5	0.022	0.241	0.109	0.059	0.034	0.016	0.006	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
6	0.014	0.117	0.028	0.009	0.005	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
7	0.007	0.051	0.005	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
8	0.003	0.024	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
9	0.001	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
10	0.000	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
11	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
12	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
20	19.285	8.860	5.582	5.822	5.776	6.575	7.839	8.281	6.978	5.803	4.368	4.152	4.563	3.756	1.853	0.556	0.405	0.022	0.004	0.000	0.000	0.000
Totals	19.285	8.860	5.582	5.822	5.776	6.575	7.839	8.281	6.978	5.803	4.368	4.152	4.563	3.756	1.853	0.556	0.405	0.022	0.004	0.000	0.000	0.000

Summary Statistics

Avg Speed 26.63 mph

Avg Segment Dist 5.49 miles

Avg Segment Time 12.31 min

Avg Power 20.93 mph2/s

Total 1-Sec Obs 911550

Modal Region Frequencies

Total Idle 19.29%

Total Cruise 37.14%

Total Accel 22.67%

Total Beyond LA-4 20.91%

Outside LA-4 Frequencies

Above LA-4 Accel 2.18%

Above LA-4 Decel 3.48%

Above LA-4 Speed 10.36%

Total Beyond LA-4 16.52%

Total Outside LA-4 20.91%

Specific Power Distribution

0 mph2/sec 59.23%

>0 - <100 mph2/sec 35.11%

100 - <200 mph2/sec 5.23%

200 - <300 mph2/sec 0.40%

>=300 mph2/sec 0.03%

A-19

Combined 3-City Chase Car Driving SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)																			TOTALS	
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	
-20																					
-19																					
-18																					
-17																					
-16																					
-15																					0.001
-14																					0.001
-13		0.000																			0.001
-12																					0.001
-11																					0.003
-10		0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.006	
-9	0.001	0.000	0.003	0.003	0.003	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.015
-8	0.000	0.006	0.010	0.013	0.007	0.006	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.047
-7	0.000	0.015	0.028	0.025	0.018	0.012	0.008	0.003	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.113
-6	0.006	0.052	0.078	0.073	0.062	0.040	0.021	0.011	0.003	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.349
-5	0.036	0.157	0.206	0.203	0.163	0.101	0.053	0.027	0.013	0.005	0.003	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.970
-4	0.000	0.126	0.244	0.272	0.236	0.235	0.161	0.091	0.050	0.023	0.012	0.005	0.003	0.002	0.001	0.001	0.001	0.001	0.001	0.001	1.511
-3	0.009	0.402	0.594	0.391	0.443	0.416	0.328	0.223	0.112	0.063	0.035	0.025	0.012	0.007	0.002	0.001	0.001	0.001	0.001	0.001	3.052
-2	0.000	1.077	0.571	0.767	0.399	0.481	0.480	0.239	0.149	0.117	0.093	0.079	0.037	0.013	0.001	0.001	0.001	0.001	0.001	0.001	4.887
-1	0.007	1.822	0.600	0.684	0.803	0.884	1.273	1.354	1.036	0.706	0.649	0.762	0.790	0.489	0.186	0.025	0.004	0.001	0.001	0.001	12.074
0	14.564	2.007	1.161	0.974	1.345	2.229	3.911	4.832	3.609	2.287	2.326	3.997	3.832	2.265	0.911	0.120	0.022	0.002	0.001	0.001	49.794
1	0.285	1.186	1.271	1.287	1.219	1.537	2.004	1.904	1.300	0.877	0.763	0.869	0.850	0.466	0.158	0.023	0.003	0.001	0.001	0.001	16.003
2	0.078	0.856	0.459	0.907	0.856	0.886	0.886	0.407	0.242	0.154	0.112	0.087	0.059	0.027	0.008	0.002	0.001	0.001	0.001	0.001	5.367
3	0.058	0.768	0.559	0.693	0.560	0.560	0.369	0.179	0.080	0.041	0.026	0.013	0.008	0.006	0.003	0.002	0.001	0.001	0.001	0.001	3.365
4	0.229	0.363	0.266	0.201	0.122	0.058	0.023	0.014	0.008	0.003	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	1.292
5	0.018	0.227	0.109	0.064	0.030	0.008	0.005	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.467
6	0.004	0.076	0.028	0.009	0.005	0.005	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.128
7	0.002	0.014	0.008	0.003	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.031
8	0.003	0.008	0.001	0.001	0.000	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.014
9	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005
10	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
11	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Totals	15,252	8,980	6,105	6,580	6,431	7,364	9,216	9,377	6,680	4,308	4,038	5,253	5,636	3,297	1,279	0,172	0,030	0,002	0,000	0,000	100,000

Summary Statistics

Avg Speed	27.33 mph	Total Idle	15.25%	Above LA-4 Accel	2.22%
Avg Trip Length	6.94 miles	Total Cruise	35.23%	Below LA-4 Decel	3.60%
Avg Trip Time	15.24 min	Total Accel	26.50%	Above LA-4 Speed	10.42%
Avg Non-Zero Power	54.68 mph ² /s	Total Dclcl	23.02%	Total Beyond LA-4	16.24%
Total 1-Sec Obs	52,864				

Modal Region Frequencies

Outside LA-4 Frequencies	Above LA-4 Accel	2.22%	Specific Power Distribution
	Below LA-4 Decel	3.60%	
	Above LA-4 Speed	10.42%	
	Total Beyond LA-4	16.24%	

0 mph ² /sec	57.22%
>0 - <100 mph ² /sec	36.36%
100 - <200 mph ² /sec	5.77%
200 - <300 mph ² /sec	0.52%
>=300 mph ² /sec	0.13%

Combined 3-City Instrumented Vehicle Driving SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)																		TOTALS		
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
-20																					0.000
-19																					0.000
-18																					0.000
-17																					0.000
-16																					0.000
-15																					0.000
-14																					0.000
-13																					0.000
-12																					0.001
-11																					0.001
-10																					0.002
-9																					0.008
-8																					0.021
-7																					0.093
-6																					0.289
-5																					0.782
-4																					1.667
-3																					2.808
-2																					4.369
-1																					10.524
0																					56.954
1																					12.448
2																					5.288
3																					2.737
4																					1.218
5																					0.481
6																					0.180
7																					0.068
8																					0.031
9																					0.014
10																					0.007
11																					0.002
12																					0.001
13																					0.000
14																					0.000
15																					0.000
16																					0.000
17																					0.000
18																					0.000
19																					0.000
20																					0.000
Totals	19.045	8.819	5.712	6.041	6.104	7.276	9.517	9.829	6.771	4.622	3.556	3.763	4.169	2.891	1.419	0.379	0.070	0.015	0.003	0.000	100.000

Summary Statistics

Avg Speed	25.91 mph	Total Idle	19.05%	Above LA-4 Accel	2.12%
Avg Trip Length	4.94 miles	Total Cruise	38.35%	Below LA-4 Decel	3.21%
Avg Trip Time	11.47 min	Total Accel	22.04%	Above LA-4 Speed	8.95%
Avg Non-Zero Power	49.86 mph ² /s	Total Diesel	20.57%	Total Beyond LA-4	14.28%
Total 1-Sec Obs	9111550				

Modal Region Frequencies

Outside LA-4 Frequencies	Above LA-4 Accel	2.12%
	Below LA-4 Decel	3.21%
	Above LA-4 Speed	8.95%
	Total Beyond LA-4	14.28%

Specific Power Distribution

Specific Power Distribution	0 mph ² /sec	59.43%
	>0 - <100 mph ² /sec	35.27%
	100 - <200 mph ² /sec	4.90%
	200 - <300 mph ² /sec	0.37%
	>=300 mph ² /sec	0.03%

Combined 3-City Instrumented Vehicle Weekday Driving SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)																			TOTALS	
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	
-20																					0.000
-19																					0.000
-18																					0.000
-17																					0.000
-16																					0.000
-15																					0.000
-14																					0.000
-13																					0.000
-12																					0.001
-11																					0.001
-10																					0.002
-9																					0.007
-8																					0.025
-7		0.003	0.005	0.021	0.024	0.019	0.011	0.006	0.003	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.093
-6		0.008	0.033	0.070	0.068	0.052	0.032	0.016	0.007	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.291
-5		0.031	0.130	0.172	0.132	0.078	0.042	0.019	0.008	0.003	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.791
-4		0.137	0.306	0.328	0.325	0.259	0.161	0.091	0.046	0.022	0.009	0.004	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1.689
-3		0.479	0.455	0.458	0.447	0.387	0.279	0.164	0.095	0.048	0.023	0.009	0.004	0.002	0.001	0.000	0.000	0.000	0.000	0.000	2.852
-2		1.078	0.534	0.510	0.487	0.509	0.461	0.334	0.213	0.135	0.079	0.047	0.027	0.016	0.007	0.003	0.001	0.000	0.000	0.000	4.452
-1		1.708	0.757	0.692	0.708	0.971	1.328	0.945	0.673	0.492	0.394	0.318	0.213	0.101	0.030	0.007	0.003	0.000	0.000	0.000	10.650
0		19.031	2.184	1.193	1.163	1.346	2.384	4.712	5.848	3.983	2.753	2.244	2.699	3.200	2.213	1.124	0.229	0.044	0.012	0.003	56.365
1		0.224	1.110	0.738	0.978	1.071	1.542	1.840	1.613	1.119	0.774	0.530	0.400	0.299	0.186	0.081	0.024	0.008	0.003	0.000	12.601
2		0.082	0.709	0.652	0.888	0.892	0.807	0.397	0.197	0.107	0.050	0.029	0.015	0.007	0.003	0.001	0.000	0.000	0.000	0.000	5.372
3		0.052	0.547	0.505	0.580	0.504	0.302	0.154	0.070	0.028	0.011	0.005	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	2.773
4		0.035	0.412	0.275	0.227	0.170	0.074	0.027	0.010	0.004	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.237
5		0.023	0.233	0.249	0.106	0.054	0.015	0.006	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.488
6		0.014	0.121	0.028	0.010	0.005	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.183
7		0.007	0.054	0.006	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.069
8		0.003	0.027	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.032
9		0.001	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.014
10		0.000	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.007
11		0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
12		0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
13		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Totals	19,473	8,880	5,786	6,169	6,263	7,464	9,687	9,864	6,661	4,534	3,439	3,587	3,867	2,638	1,318	0,287	0,060	0,019	0,004	0,000	100,000

Summary Statistics

Avg Speed	25.33 mph
Avg Trip Length	4.86 miles
Avg Trip Time	11.54 min
Avg Non-Zero Power	50.17 mph ² /s
Total 1-Sec Obs	6947540

Modal Region Frequencies

Total Idle	19.47%
Total Cruise	37.33%
Total Accel	22.34%
Total Decel	20.86%

Outside LA-4 Frequencies

Above LA-4 Accel	2.16%
Below LA-4 Decel	3.24%
Above LA-4 Speed	8.19%
Total Beyond LA-4	13.59%

Specific Power Distribution

0 mph ² /sec	59.55%
>0 - <100 mph ² /sec	35.08%
100 - <200 mph ² /sec	4.97%
200 - <300 mph ² /sec	0.38%
>=300 mph ² /sec	0.03%

Combined 3-City Instrumented Vehicle Weekend Driving SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)												TOTALS							
	0	5	10	15	20	25	30	35	40	45	50	55								
-20																				
-19													0.000							
-18													0.000							
-17													0.000							
-16													0.001							
-15													0.002							
-14																				
-13																				
-12																				
-11																				
-10																				
-9	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009	0.000	0.000	0.008							
-8	0.001	0.006	0.011	0.018	0.024	0.031	0.036	0.044	0.052	0.060	0.000	0.000	0.029							
-7	0.002	0.006	0.021	0.024	0.018	0.011	0.005	0.003	0.001	0.000	0.000	0.000	0.093							
-6	0.007	0.032	0.064	0.066	0.054	0.031	0.016	0.007	0.003	0.001	0.001	0.000	0.283							
-5	0.028	0.122	0.166	0.160	0.128	0.091	0.059	0.039	0.023	0.017	0.008	0.000	0.754							
-4	0.136	0.281	0.302	0.311	0.245	0.156	0.088	0.043	0.024	0.009	0.003	0.001	1.598							
-3	0.453	0.415	0.420	0.425	0.353	0.263	0.162	0.092	0.048	0.023	0.009	0.003	2.667							
-2	1.004	0.504	0.463	0.436	0.453	0.417	0.323	0.204	0.127	0.075	0.044	0.028	4.102							
-1	1.622	0.718	0.610	0.601	0.845	1.172	1.260	0.949	0.669	0.494	0.409	0.354	10.122							
0	17.253	2.241	1.181	1.056	1.140	2.085	4.410	5.845	4.474	3.154	2.747	3.419	4.416							
1	0.220	1.111	0.736	0.886	0.922	1.347	1.684	1.565	1.137	0.774	0.529	0.411	0.314							
2	0.077	0.679	0.602	0.808	0.820	0.761	0.564	0.342	0.179	0.090	0.046	0.026	0.015							
3	0.043	0.518	0.480	0.563	0.482	0.282	0.146	0.066	0.024	0.010	0.004	0.001	0.000							
4	0.032	0.375	0.266	0.219	0.160	0.069	0.025	0.009	0.003	0.001	0.000	0.000	1.159							
5	0.021	0.236	0.096	0.051	0.030	0.015	0.006	0.002	0.001	0.000	0.000	0.000	0.458							
6	0.009	0.114	0.027	0.010	0.006	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.170							
7	0.006	0.053	0.005	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.066							
8	0.002	0.024	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.027							
9	0.001	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.012							
10	0.000	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006							
11	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003							
12	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001							
13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000							
14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000							
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000							
16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000							
17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000							
18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000							
19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000							
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000							
Totals	17.665	8.622	5.476	5.628	5.592	6.669	8.972	9.723	7.134	4.906	3.931	4.325	5.132	3.702	1.744	0.674	0.101	0.002	0.001	100.000

Summary Statistics

Avg Speed	27.88 mph
Avg Trip Length	5.21 miles
Avg Trip Time	1:24 min
Avg Non-Zero Power	48.39 mph ² /s
Total 1-Sec Obs	2164010

Modal Region Frequencies

Total Idle	17.67%
Total Cruise	41.59%
Total Accel	21.09%
Total Decel	19.66%
Total Beyond LA-4	16.47%

Outside LA-4 Frequencies

Above LA-4 Accel	2.01%
Below LA-4 Decel	3.10%
Above LA-4 Speed	11.36%
Total Beyond LA-4	16.47%

Specific Power Distribution

0 mph ² /sec	59.05%
>0 - <100 mph ² /sec	35.90%
100 - <200 mph ² /sec	4.70%
200 - <300 mph ² /sec	0.34%
>=300 mph ² /sec	0.02%

Atlanta Instrumented Vehicle Driving SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)																			TOTALS	
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	
-20																					0.000
-19											0.000	0.000									0.000
-18											0.000	0.000									0.000
-17											0.000	0.000									0.000
-16											0.000	0.000									0.000
-15											0.000	0.000									0.000
-14											0.000	0.000									0.000
-13											0.000	0.000									0.000
-12											0.000	0.000									0.000
-11											0.000	0.000									0.001
-10											0.000	0.000									0.003
-9											0.000	0.001									0.010
-8											0.000	0.002									0.036
-7											0.000	0.004									0.121
-6											0.000	0.005									0.353
-5											0.000	0.006									0.884
-4											0.000	0.007									1.736
-3											0.000	0.009									2.805
-2											0.000	0.010									4.492
-1											0.000	0.012									10.945
0											0.000	0.017									54.743
1											0.000	0.027									13.425
2											0.000	0.036									5.507
3											0.000	0.043									2.868
4											0.000	0.048									1.294
5											0.000	0.045									0.496
6											0.000	0.050									0.175
7											0.000	0.055									0.062
8											0.000	0.051									0.025
9											0.000	0.053									0.011
10											0.000	0.055									0.005
11											0.000	0.056									0.002
12											0.000	0.056									0.000
13											0.000	0.057									0.000
14											0.000	0.058									0.000
15											0.000	0.059									0.000
16											0.000	0.060									0.000
17											0.000	0.060									0.000
18											0.000	0.060									0.000
19											0.000	0.060									0.000
20											0.000	0.060									0.000
Totals	17.725	9.027	5.463	5.433	5.142	5.444	6.198	7.283	7.670	7.108	5.495	4.385	5.047	4.753	2.681	0.905	0.190	0.040	0.008	0.001	100.000

Summary Statistics

Avg Speed	28.82 mph
Avg Trip Length	6.25 miles
Avg Trip Time	13.03 min
Avg Non-Zero Power	54.88 mph ² /s
Total 1-Sec Obs	3664881

Modal Region Frequencies

Total Idle	17.73%
Total Cruise	37.42%
Total Accel	23.47%
Total Decel	21.39%
Total Beyond LA-4	19.78%

Outside LA-4 Frequencies

Above LA-4 Accel	2.27%
Below LA-4 Decel	3.89%
Above LA-4 Speed	13.63%
Total Beyond LA-4	19.78%

Specific Power Distribution

0 mph ² /sec	58.36%
>0 - <100 mph ² /sec	34.92%
100 - <200 mph ² /sec	6.17%
200 - <300 mph ² /sec	0.52%
>=300 mph ² /sec	0.04%

Atlanta Instrumented Vehicle Weekday Driving SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)												TOTALS								
	0	5	10	15	20	25	30	35	40	45	50	55									
-20																					
-19													0.000								
-18													0.000								
-17																					
-16																					
-15																					
-14																					
-13		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000								
-12		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001								
-11		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003								
-10		0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000									
-9		0.000	0.001	0.002	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.010								
-8		0.001	0.006	0.009	0.007	0.004	0.002	0.001	0.000	0.000	0.000	0.000									
-7		0.002	0.005	0.025	0.028	0.025	0.018	0.011	0.006	0.002	0.001	0.000	0.123								
-6		0.007	0.034	0.075	0.078	0.067	0.050	0.029	0.014	0.006	0.003	0.001	0.364								
-5		0.030	0.123	0.168	0.179	0.156	0.112	0.073	0.038	0.016	0.006	0.003	0.906								
-4		0.123	0.284	0.298	0.295	0.266	0.203	0.147	0.087	0.043	0.018	0.006	0.003								
-3		0.435	0.420	0.402	0.394	0.344	0.300	0.241	0.172	0.096	0.043	0.017	0.003								
-2		1.045	0.514	0.463	0.417	0.418	0.427	0.354	0.249	0.143	0.075	0.040	0.407								
-1		1.803	0.745	0.635	0.567	0.567	0.635	0.665	0.862	1.114	1.211	0.819	0.547								
0		17.722	2.384	1.182	1.047	1.001	1.273	1.969	3.010	3.787	4.032	3.367	2.970								
1		0.194	1.191	0.762	0.833	0.835	1.114	1.454	1.746	1.688	1.376	0.910	0.435								
2		0.077	0.700	0.572	0.737	0.768	0.790	0.719	0.552	0.358	0.187	0.085	0.040								
3		0.050	0.514	0.462	0.548	0.517	0.381	0.242	0.127	0.061	0.018	0.007	0.010								
4		0.035	0.399	0.298	0.251	0.196	0.103	0.043	0.018	0.006	0.002	0.001	0.003								
5		0.022	0.242	0.118	0.067	0.038	0.019	0.007	0.002	0.001	0.000	0.000	0.000								
6		0.015	0.119	0.031	0.011	0.005	0.003	0.001	0.000	0.000	0.000	0.000	0.000								
7		0.007	0.046	0.006	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000								
8		0.003	0.022	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000								
9		0.002	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000								
10		0.000	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000								
11		0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000								
12		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000								
13		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000								
14		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000								
15		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000								
16		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000								
17		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000								
18		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000								
19		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000								
20		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000								
Totals	18.128	9.068	5.550	5.570	5.321	5.626	6.418	7.92	7.774	7.143	5.403	4.244	4.723	4.292	2.355	0.667	0.166	0.050	0.010	0.001	100.000

Summary Statistics

Avg Speed	28.1 mph
Avg Trip Length	6.27 miles
Avg Trip Time	13.4 min
Avg Non-Zero Power	55.51 mph ² /s
Total 1-Sec Obs	2793704

Modal Region Frequencies

Total Idle	18.13%
Total Cruise	36.15%
Total Accel	23.93%
Total Decel	21.80%
Total Beyond LA-4	18.59%

Outside LA-4 Frequencies

Above LA-4 Accel	2.35%
Below LA-4 Decel	3.98%
Above LA-4 Speed	12.26%
Total Beyond LA-4	18.59%

Specific Power Distribution

0 mph ² /sec	58.41%
>0 - <100 mph ² /sec	34.72%
100 - <200 mph ² /sec	6.30%
200 - <300 mph ² /sec	0.53%
>=300 mph ² /sec	0.04%

Atlanta Instrumented Vehicle Weekend Driving SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)																			TOTALS	
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	
-20																					
-19																					0.000
-18																					0.000
-17																					
-16																					
-15																					
-14																					
-13																					
-12																					
-11																					
-10																					
-9																					
-8																					
-7																					
-6																					
-5																					
-4																					
-3	0.393	0.379	0.362	0.355	0.366	0.272	0.219	0.153	0.093	0.043	0.017	0.005	0.002	0.001	0.001	0.000	0.000	0.000	0.000	2.601	
-2	0.951	0.476	0.413	0.354	0.365	0.374	0.319	0.229	0.129	0.068	0.043	0.025	0.014	0.006	0.001	0.000	0.000	0.000	0.000	4.123	
-1	1.768	0.702	0.556	0.478	0.549	0.697	0.941	1.094	1.015	0.809	0.584	0.481	0.418	0.290	0.098	0.020	0.001	0.000	0.000	10.443	
0	16.064	2.551	1.165	0.916	0.783	1.061	1.655	2.713	3.709	4.121	3.820	3.519	5.067	5.402	3.289	1.488	0.231	0.005	0.001	57.541	
1	0.191	1.199	0.714	0.741	0.703	0.947	1.234	1.505	1.568	1.294	0.883	0.606	0.469	0.377	0.185	0.074	0.011	0.001	0.000	12.702	
2	0.075	0.681	0.535	0.690	0.665	0.707	0.649	0.520	0.466	0.376	0.355	0.199	0.099	0.035	0.019	0.009	0.004	0.003	0.001	5.155	
3	0.038	0.489	0.432	0.519	0.479	0.341	0.221	0.116	0.040	0.014	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.698	
4	0.028	0.344	0.261	0.214	0.178	0.093	0.034	0.013	0.004	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.172	
5	0.018	0.210	0.086	0.031	0.016	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.434	
6	0.009	0.092	0.024	0.008	0.004	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.140	
7	0.006	0.041	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.054	
8	0.002	0.016	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.020	
9	0.000	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005	
10	0.000	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	
11	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Totals	16.432	8.895	5.195	4.995	4.568	4.861	5.493	6.616	7.336	6.997	5.792	4.838	6.088	6.235	3.725	1.669	0.265	0.007	0.002	100.000	

Summary Statistics

Avg Speed	31.15 mph
Avg Trip Length	6.22 miles
Avg Trip Time	1:39 min
Avg Non-Zero Power	52.9 mph ² /s
Total 1-Sec Obs	87177

Modal Region Frequencies

Total Idle	16.43%
Total Cruise	41.48%
Total Accel	22.02%
Total Decel	20.07%

Outside LA-4 Frequencies

Above LA-4 Accel	2.01%
Below LA-4 Decel	3.60%
Above LA-4 Speed	17.99%
Total Beyond LA-4	23.60%

Specific Power Distribution

0 mph ² /sec	58.19%
>0 - <100 mph ² /sec	35.55%
100 - <200 mph ² /sec	5.77%
200 - <300 mph ² /sec	0.46%
>=300 mph ² /sec	0.03%

Baltimore Chase Car Driving SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)																				TOTALS
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	
-20																					
-19																					
-18																					
-17																					
-16																					
-15																					0.001
-14																					0.002
-13		0.000																			0.002
-12																					0.001
-11																					0.004
-10																					0.004
-9																					
-8	0.000	0.003	0.006	0.009	0.006	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.016
-7	0.001	0.010	0.016	0.019	0.011	0.009	0.009	0.003	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.074
-6	0.003	0.032	0.062	0.048	0.046	0.034	0.021	0.008	0.003	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.250
-5	0.030	0.106	0.155	0.143	0.107	0.143	0.127	0.104	0.094	0.094	0.094	0.094	0.094	0.094	0.094	0.094	0.094	0.094	0.094	0.094	0.703
-4	0.000	0.142	0.228	0.265	0.281	0.225	0.143	0.093	0.057	0.035	0.019	0.007	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	1.505
-3	0.009	0.403	0.553	0.361	0.395	0.361	0.280	0.186	0.115	0.081	0.048	0.029	0.023	0.013	0.005	0.005	0.005	0.005	0.005	0.005	2.854
-2	0.001	1.073	0.616	0.786	0.418	0.479	0.481	0.384	0.287	0.229	0.200	0.183	0.177	0.179	0.179	0.179	0.179	0.179	0.179	0.179	5.424
-1	0.022	1.807	0.636	0.706	0.820	1.091	1.147	1.237	1.034	0.990	1.008	1.102	1.184	0.695	0.256	0.256	0.256	0.256	0.256	0.256	13.584
0	14.928	2.007	1.195	0.944	1.367	2.135	3.154	3.548	2.696	2.485	2.817	3.191	4.049	2.408	0.677	0.677	0.677	0.677	0.677	0.677	47.691
1	0.323	0.957	1.306	1.261	1.201	1.432	1.737	1.654	1.314	1.178	1.111	1.219	1.233	0.664	0.207	0.207	0.207	0.207	0.207	0.207	16.816
2	0.120	0.871	0.567	0.912	0.814	0.764	0.571	0.420	0.325	0.247	0.206	0.185	0.136	0.053	0.019	0.003	0.003	0.003	0.003	0.003	6.224
3	0.122	0.679	0.531	0.565	0.458	0.303	0.179	0.093	0.056	0.046	0.023	0.019	0.015	0.007	0.004	0.000	0.000	0.000	0.000	0.000	3.100
4	0.264	0.304	0.244	0.196	0.129	0.076	0.034	0.017	0.014	0.006	0.005	0.005	0.005	0.005	0.001	0.001	0.000	0.000	0.000	0.000	1.289
5	0.046	0.111	0.056	0.044	0.022	0.004	0.003	0.004	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.296
6	0.011	0.032	0.013	0.007	0.004	0.001	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.074
7	0.006	0.005	0.002	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.020
8	0.008	0.008	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.016
9	0.004	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004
10	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
11	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Totals	15.860	8.438	6.100	6.282	6.141	6.870	7.859	7.706	5.939	5.314	5.444	5.944	6.826	3.932	1.197	0.140	0.007	0.000	0.000	0.000	100.000

Summary Statistics

Avg Speed	28.23 mph	Total Idle	15.86%	Above LA-4 Accel	2.24%
Avg Trip Length	7.59 miles	Total Cruise	32.78%	Below LA-4 Decel	3.46%
Avg Trip Time	16.13 min	Total Accel	26.94%	Above LA-4 Speed	12.10%
Avg Non-Zero Power	57.92 mph ² /s	Total Dwell	24.44%	Total Beyond LA-4	17.80%
Total 1-Sec Obs	212918				

Modal Region Frequencies

Outside LA-4 Frequencies	Above LA-4 Accel	2.24%
	Below LA-4 Decel	3.46%
	Above LA-4 Speed	12.10%
	Total Beyond LA-4	17.80%

Specific Power Distribution

Specific Power Distribution	0 mph ² /sec	56.43%
	>0 - <100 mph ² /sec	36.06%
	100 - <200 mph ² /sec	6.59%
	200 - <300 mph ² /sec	0.77%
	>=300 mph ² /sec	0.16%

Baltimore-Exeter Instrumented Vehicle Driving SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)																		TOTALS		
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
-20																					
-19																					0.000
-18																					0.000
-17																					0.001
-16																					0.002
-15																					
-14																					
-13																					
-12																					
-11																					
-10																					
-9																					
-8																					
-7																					
-6																					
-5																					
-4																					
-3	0.538	0.546	0.542	0.523	0.445	0.273	0.139	0.071	0.028	0.014	0.006	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-2	1.224	0.612	0.594	0.588	0.489	0.315	0.163	0.095	0.056	0.032	0.021	0.011	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	
-1	23.628	2.181	1.100	1.244	1.694	2.875	4.484	5.033	3.263	2.167	1.863	1.465	1.845	0.969	0.237	0.031	0.001	0.000	0.000	0.000	
0	0.030	0.149	0.203	0.188	0.121	0.047	0.014	0.031	0.014	0.005	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
1	0.243	1.139	0.826	1.118	1.421	1.946	2.026	1.546	0.898	0.572	0.399	0.325	0.222	0.118	0.033	0.006	0.001	0.000	0.000	0.000	
2	0.091	0.736	0.773	1.070	1.069	0.873	0.514	0.257	0.121	0.062	0.040	0.027	0.013	0.008	0.003	0.003	0.000	0.000	0.000	0.000	
3	0.066	0.639	0.610	0.680	0.484	0.223	0.090	0.034	0.018	0.008	0.006	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4	0.047	0.466	0.328	0.224	0.124	0.042	0.015	0.006	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
5	0.031	0.279	0.107	0.047	0.024	0.009	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
6	0.019	0.132	0.026	0.008	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
7	0.009	0.060	0.007	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
8	0.004	0.029	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
9	0.001	0.015	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
10	0.000	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
11	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
12	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Totals	24.140	9.602	6.231	6.981	7.476	8.607	9.510	8.674	5.355	3.466	2.766	3.206	2.354	1.256	0.325	0.048	0.002	0.000	100.000		

Summary Statistics

Avg Speed	20.93 mph	Total Idle	24.14%	Above LA-4 Accel	2.19%
Avg Trip Length	3.95 miles	Total Cruise	31.44%	Below LA-4 Decel	3.20%
Avg Trip Time	1.35 min	Total Accel	23.02%	Above LA-4 Speed	3.99%
Avg Non-Zero Power	47.32 mph ² /s	Total Diesel	21.40%	Total Beyond LA-4	9.38%
Total 1-Sec Obs	1686877				

Modal Region Frequencies

Outside LA-4 Frequencies	24.14%	Above LA-4 Accel	2.19%
Total Idle	31.44%	Below LA-4 Decel	3.20%
Total Cruise	23.02%	Above LA-4 Speed	3.99%
Total Accel	21.40%	Total Beyond LA-4	9.38%
Total Diesel			

Specific Power Distribution

0 mph ² /sec	60.98%
>0 - <100 mph ² /sec	34.78%
100 - <200 mph ² /sec	3.99%
200 - <300 mph ² /sec	0.23%
>=300 mph ² /sec	0.02%

Baltimore Instrumented Vehicle Driving SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)																			TOTALS	
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	
-20																					0.000
-19																					0.000
-18																					0.000
-17																					0.000
-16																					0.000
-15																					0.000
-14																					0.000
-13																					0.000
-12																					0.001
-11																					0.001
-10																					0.002
-9																					0.008
-8																					0.028
-7																					0.090
-6																					0.286
-5																					0.777
-4																					1.680
-3																					2.830
-2																					4.393
-1																					10.396
0																					57.013
1																					12.522
2																					5.291
3																					2.690
4																					1.195
5																					0.488
6																					0.177
7																					0.070
8																					0.033
9																					0.015
10																					0.007
11																					0.003
12																					0.001
13																					0.000
14																					0.000
15																					0.000
16																					0.000
17																					0.000
18																					0.000
19																					0.000
20																					0.000
Totals	21.322	8.678	5.656	6.179	6.429	7.585	8.947	8.670	6.242	4.287	3.425	4.075	4.183	2.939	1.073	0.224	0.020	0.004	0.001	0.000	100.000

Summary Statistics

Avg Speed	24.52 mph
Avg Trip Length	4.84 miles
Avg Trip Time	1.185 min
Avg Non-Zero Power	48.27 mph ² /s
Total 1-Sec Obs	3365489

Modal Region Frequencies

Total Idle	21.32%
Total Cruise	36.17%
Total Accel	22.02%
Total Decel	20.50%
Total Beyond LA-4	13.74%

Outside LA-4 Frequencies

Above LA-4 Accel	2.11%
Below LA-4 Decel	3.13%
Above LA-4 Speed	8.51%
Total Beyond LA-4	13.74%

Specific Power Distribution

0 mph ² /sec	60.12%
>0 - <100 mph ² /sec	35.21%
100 - <200 mph ² /sec	4.35%
200 - <300 mph ² /sec	0.30%
>=300 mph ² /sec	0.02%

Baltimore Instrumented Vehicle Weekday Driving SAFFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)																			TOTALS	
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	
-20																					0.000
-19																					0.000
-18																					0.000
-17																					0.000
-16																					0.000
-15																					0.000
-14																					0.000
-13																					0.000
-12																					0.000
-11																					0.001
-10																					0.001
-9																					0.002
-8																					0.008
-7																					0.021
-6																					0.089
-5																					0.287
-4																					0.780
-3																					1.697
-2																					2.873
-1																					4.493
0																					10.569
1																					56.346
2																					12.708
3																					5.391
4																					2.727
5																					1.204
6																					0.489
7																					0.180
8																					0.071
9																					0.033
10																					0.015
11																					0.007
12																					0.003
13																					0.001
14																					0.000
15																					0.000
16																					0.000
17																					0.000
18																					0.000
19																					0.000
20																					0.000
Totals	21.795	8.771	5.741	6.310	6.552	7.785	9.136	8.762	6.197	4.117	3.260	3.801	3.702	2.805	1.060	0.187	0.014	0.006	0.001	0.000	100.000

Summary Statistics

Avg Speed	23.94 mph
Avg Trip Length	4.69 miles
Avg Trip Time	11.77 min
Avg Non-Zero Power	48.74 mph ² /s
Total 1-Sec Obs	2557635

Modal Region Frequencies

Total Idle	21.80%
Total Cruise	35.03%
Total Accel	22.35%
Total Decel	20.83%

Outside LA-4 Frequencies

Above LA-4 Accel	2.13%
Below LA-4 Decel	3.15%
Above LA-4 Speed	7.77%
Total Beyond LA-4	13.05%

Specific Power Distribution

0 mph ² /sec	60.25%
>0 - <100 mph ² /sec	35.00%
100 - <200 mph ² /sec	4.41%
200 - <300 mph ² /sec	0.31%
>=300 mph ² /sec	0.03%

Baltimore Instrumented Vehicle Weekend Driving SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)																		TOTALS		
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
-20																					
-19																					
-18																					
-17																					
-16																					
-15																					
-14																					
-13																					
-12		0.000																			
-11		0.000																			
-10		0.000																			
-9		0.001	0.003																		
-8		0.001	0.007	0.004																	
-7		0.003	0.007	0.024	0.026																
-6		0.005	0.035	0.068	0.073	0.054															
-5		0.031	0.131	0.176	0.167	0.128	0.034														
-4		0.143	0.299	0.325	0.322	0.240	0.153	0.081													
-3		0.467	0.442	0.449	0.429	0.356	0.252	0.156	0.079												
-2		1.029	0.515	0.482	0.450	0.452	0.416	0.311	0.179	0.099											
-1		1.596	0.665	0.609	0.653	0.879	1.109	1.204	0.894	0.623	0.452	0.421	0.376								
0		19.372	1.988	1.039	1.033	1.359	2.275	3.877	4.651	3.963	3.282	2.889	4.041	4.961	3.152	0.931	0.274	0.031			59.127
1		0.241	1.039	0.688	0.865	1.041	1.446	1.765	1.579	1.055	0.694	0.482	0.410	0.325	0.198	0.079	0.025	0.002			11.932
2		0.682	0.674	0.618	0.860	0.789	0.769	0.592	0.392	0.35	0.062	0.035	0.023	0.015	0.007	0.003	0.001				4.976
3		0.049	0.531	0.513	0.588	0.465	0.242	0.113	0.043	0.017	0.008	0.004	0.002	0.000	0.000						2.575
4		0.037	0.395	0.293	0.237	0.132	0.047	0.018	0.006	0.001	0.000	0.000									1.167
5		0.025	0.253	0.108	0.053	0.029	0.012	0.003	0.000	0.000	0.000										0.485
6		0.010	0.118	0.027	0.007	0.005	0.001	0.000													0.168
7		0.004	0.054	0.004	0.001																0.064
8		0.003	0.028	0.001	0.000	0.000															0.032
9		0.001	0.012	0.000																	0.013
10		0.000	0.005																		0.005
11		0.000	0.002	0.000																	0.003
12		0.000																			0.000
13		0.000																			0.000
14																					
15																					0.000
16																					
17																					
18																					
19																					
20																					
Totals	19.825	8.382	5.389	5.764	6.042	6.950	8.348	8.377	6.383	4.828	3.949	4.945	5.706	3.614	1.115	0.344	0.038	0.000	100.000		

Summary Statistics

Avg Speed	26.38 mph
Avg Trip Length	5.33 miles
Avg Trip Time	12.13 min
Avg Non-Zero Power	46.79 mph ² /s
Total 1-Sec Obs	80754

Modal Region Frequencies

Total Idle	19.83%
Total Cruise	39.78%
Total Accel	20.97%
Total Dclcl	19.45%

Outside LA-4 Frequencies

Above LA-4 Accel	2.03%
Below LA-4 Dclcl	3.06%
Above LA-4 Speed	10.82%
Total Beyond LA-4	15.91%

Specific Power Distribution

0 mph ² /sec	59.70%
>0 - <100 mph ² /sec	35.86%
100 - <200 mph ² /sec	4.17%
200 - <300 mph ² /sec	0.25%
>=300 mph ² /sec	0.01%

Baltimore-Rossville Instrumented Vehicle Driving SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)																		TOTALS		
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
-20																					0.000
-19																					0.000
-18																					0.000
-17																					0.000
-16																					0.000
-15																					0.000
-14																					0.000
-13																					0.000
-12																					0.000
-11																					0.001
-10																					0.001
-9																					0.003
-8																					0.010
-7																					0.033
-6																					0.104
-5																					0.297
-4																					0.747
-3																					1.528
-2																					2.558
-1																					3.991
0																					10.309
1																					58.969
2																					12.205
3																					4.349
4																					2.517
5																					1.139
6																					0.474
7																					0.164
8																					0.062
9																					0.030
10																					0.012
11																					0.007
12																					0.003
13																					0.001
14																					0.000
15																					0.000
16																					0.000
17																					0.000
18																					0.000
19																					0.000
20																					0.000
Totals	18,490	7,748	5,079	5,373	5,377	6,557	8,381	8,666	7,133	5,112	4,088	4,949	6,021	4,750	1,825	0,402	0,037	0,008	0,002	0,000	100,000

Summary Statistics

Avg Speed	28.14 mph
Avg Trip Length	5.81 miles
Avg Trip Time	12.4 min
Avg Non-Zero Power	49.17 mph ² /s
Total 1-Sec Obs	1678612

Modal Region Frequencies

Total Idle	18.49%
Total Cruise	40.91%
Total Accel	21.02%
Total Decel	19.58%

Outside LA-4 Frequencies

Above LA-4 Accel	2.02%
Below LA-4 Decel	3.06%
Above LA-4 Speed	13.05%
Total Beyond LA-4	18.12%

Specific Power Distribution

0 mph ² /sec	59.25%
>0 - <100 mph ² /sec	35.64%
100 - <200 mph ² /sec	4.72%
200 - <300 mph ² /sec	0.37%
>=300 mph ² /sec	0.03%

Los Angeles 92 Chase Car Driving SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)																				TOTALS
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	
-20																					
-19																					
-18																					
-17																					
-16																					
-15																					
-14																					
-13																					
-12																					
-11																					
-10																					
-9																					
-8																					
-7																					
-6																					
-5																					
-4																					
-3																					
-2																					
-1																					
0	14.130	2.3822	1.148	1.120	1.435	2.2022	3.471	3.8688	3.680	2.518	1.616	2.009	3.299	2.708	1.087	0.209	0.039	0.005	0.005	0.005	
1	0.287	1.487	1.195	1.296	1.352	1.678	2.097	2.130	1.512	0.935	0.667	0.747	0.810	0.490	0.164	0.040	0.005	0.005	0.005	0.005	
2	0.060	0.866	0.356	0.855	1.027	1.089	0.905	0.502	0.276	0.148	0.086	0.052	0.029	0.011	0.002	0.001	0.001	0.001	0.001	0.001	
3	0.023	0.783	0.575	0.810	0.660	0.474	0.199	0.086	0.042	0.022	0.012	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	
4	0.173	0.455	0.308	0.294	0.141	0.063	0.023	0.015	0.009	0.003	0.002	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	
5	0.005	0.347	0.172	0.172	0.085	0.033	0.013	0.007	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	
6	0.001	0.135	0.054	0.017	0.010	0.005	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	
7	0.032	0.015	0.004	0.004	0.004	0.004	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	
8	0.014	0.003	0.003	0.002	0.001	0.001	0.001	0.003													
9	0.003	0.002																			
10	0.001	0.001																			
11																					
12																					
13																					
14																					
15																					
16																					
17																					
18																					
19																					
20																					
Totals	14.679	10.033	6.193	7.035	7.128	7.997	9.267	8.876	7.203	4.602	3.040	3.497	4.899	3.761	1.455	0.284	0.051			100.000	

Summary Statistics

Avg Speed	26.34 mph	Total Idle	14.68%	Above LA-4 Accel	2.60%
Avg Trip Length	7.88 miles	Total Cruise	32.80%	Below LA-4 Decel	4.57%
Avg Trip Time	17.95 min	Total Accel	28.76%	Above LA-4 Speed	10.45%
Avg Non-Zero Power	57.11 mph ² /s	Total Dcll	23.76%	Total Beyond LA-4	17.62%
Total 1-Sec Obs	110909				

Modal Region Frequencies

Outside LA-4 Frequencies	Above LA-4 Accel	2.60%
	Below LA-4 Decel	4.57%
	Above LA-4 Speed	10.45%
	Total Beyond LA-4	17.62%

Summary Statistics

Specific Power Distribution	0 mph ² /sec	55.84%
	>0 - <100 mph ² /sec	36.77%
	100 - <200 mph ² /sec	6.79%
	200 - <300 mph ² /sec	0.47%
	>=300 mph ² /sec	0.14%

Spokane Chase Car Driving SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)																			TOTALS	
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	
-20																					
-19																					
-18																					
-17																					
-16																					
-15																					
-14																					
-13																					
-12																					
-11																					
-10																					
-9																					
-8																					
-7																					
-6																					
-5																					
-4																					
-3																					
-2																					
-1																					
0	14.633	1.6311	1.142	0.858	1.237	0.290	0.274	0.208	0.124	0.058	0.027	0.014	0.007	0.002	0.001	0.001	0.001	0.001	0.001	1.338	
1	0.246	1.114	1.313	1.304	1.105	1.489	2.177	1.929	1.074	0.518	0.511	0.643	0.508	0.245	0.102	0.011	0.002	0.001	0.001	14.303	
2	0.055	0.830	0.414	0.915	0.848	0.810	0.582	0.297	0.168	0.068	0.045	0.123	0.011	0.006	0.002	0.001	0.001	0.001	0.001	5.035	
3	0.029	0.844	0.572	0.704	0.561	0.330	0.158	0.060	0.025	0.010	0.003	0.004	0.001	0.001	0.001	0.001	0.001	0.001	0.001	3.302	
4	0.249	0.351	0.246	0.173	0.097	0.035	0.012	0.008	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	1.178	
5	0.002	0.224	0.098	0.062	0.036	0.008	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.436	
6	0.000	0.059	0.017	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.084	
7	0.007	0.007	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.017	
8	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.007	
9	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
11																					
12																					
13																					
14																					
15																					
16																					
17																					
18																					
19																					
20																					
Totals	15.217	8.471	6.020	6.424	6.024	7.224	10.523	11.549	6.898	3.007	3.630	6.317	5.184	1.185	0.091	0.032	0.006	100.000			

Summary Statistics

Avg Speed	26.91 mph	Total Idle	15.22%	Above LA-4 Accel	1.84%
Avg Trip Length	5.98 miles	Total Cruise	40.13%	Below LA-4 Decel	2.76%
Avg Trip Time	13.34 min	Total Accel	23.78%	Above LA-4 Speed	8.70%
Avg Non-Zero Power	49.6 mph ² /s	Total Diesel	20.87%	Total Beyond LA-4	13.30%
Total 1-Sec Obs	20037				

Modal Region Frequencies

Outside LA-4 Frequencies	Above LA-4 Accel	1.84%
	Below LA-4 Decel	2.76%
	Above LA-4 Speed	8.70%
	Total Beyond LA-4	13.30%

Specific Power Distribution

0 mph ² /sec	58.84%
>0 - <100 mph ² /sec	36.45%
100 - <200 mph ² /sec	4.34%
200 - <300 mph ² /sec	0.29%
>=300 mph ² /sec	0.08%

Spokane Instrumented Vehicle Driving SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)																			TOTALS	
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	
-20																					
-19																					
-18																					
-17																					
-16																					
-15																					0.000
-14																					0.000
-13																					0.000
-12																					0.001
-11																					0.000
-10																					0.002
-9																					0.005
-8																					0.019
-7																					0.067
-6																					0.229
-5																					0.685
-4																					1.585
-3																					2.789
-2																					4.221
-1																					10.230
0	17.653	1.594	1.214	1.311	1.276	1.529	3.228	7.870	9.717	4.724	1.767	1.278	2.380	2.966	0.807	0.472	0.006			59.107	
1	0.230	1.079	0.856	1.079	1.153	1.780	2.149	1.541	0.668	0.281	0.202	0.195	0.125	0.047	0.012	0.001				11.396	
2	0.079	0.700	0.694	0.973	0.928	0.807	0.506	0.216	0.079	0.037	0.020	0.014	0.008	0.003	0.001	0.000	0.000	0.000		5.065	
3	0.049	0.556	0.531	0.609	0.513	0.262	0.103	0.034	0.012	0.005	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000		2.652	
4	0.033	0.418	0.245	0.206	0.174	0.064	0.017	0.005	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		1.164	
5	0.022	0.257	0.090	0.039	0.029	0.014	0.007	0.002	0.001	0.000											0.459
6	0.012	0.126	0.028	0.010	0.006	0.004	0.002	0.000													0.188
7	0.005	0.060	0.006	0.002	0.000	0.000	0.000														0.074
8	0.003	0.030	0.001	0.000	0.000	0.000															0.034
9	0.001	0.014	0.000	0.000	0.000																0.016
10	0.000	0.008	0.000	0.000																	0.008
11	0.000	0.002	0.000																		0.002
12	0.001																				0.001
13	0.000																				0.000
14	0.000	0.000																			0.000
15	0.000																				0.000
16	0.000																				0.000
17																					
18																					
19																					
20																					
Totals	18.087	8.751	6.018	6.511	6.741	8.799	13.406	13.532	6.02	2.471	1.747	2.827	3.276	0.921	0.503	0.008					100.000

Summary Statistics

Avg Speed	23.28 mph
Avg Trip Length	3.52 miles
Avg Trip Time	9.08 min
Avg Non-Zero Power	42.67 mph ² /s
Total 1-Sec Obs	2081180

Modal Region Frequencies

Total Idle	18.09%
Total Cruise	41.45%
Total Accel	20.63%
Total Decel	19.83%
Total Beyond LA-4	9.31%

Outside LA-4 Frequencies

Above LA-4 Accel	2.00%
Below LA-4 Decel	2.60%
Above LA-4 Speed	4.71%
Total Beyond LA-4	9.31%

Specific Power Distribution

0 mph ² /sec	60.21%
>0 - <100 mph ² /sec	36.00%
100 - <200 mph ² /sec	3.56%
200 - <300 mph ² /sec	0.21%
>=300 mph ² /sec	0.03%

Spokane Instrumented Vehicle Weekday Driving SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)																			TOTALS	
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	
-20																					
-19																					
-18																					
-17																					
-16																					
-15																					0.000
-14																					0.000
-13																					0.000
-12																					0.001
-11																					0.000
-10																					0.002
-9																					0.004
-8																					0.011
-7																					0.067
-6																					0.229
-5																					0.687
-4																					1.594
-3	0.510	0.466	0.496	0.499	0.425	0.260	0.101	0.034	0.013	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.815	
-2	1.103	0.534	0.534	0.566	0.585	0.585	0.483	0.254	0.098	0.046	0.027	0.010	0.002	0.001	0.000	0.000	0.000	0.000	0.000	4.255	
-1	1.621	0.816	0.746	0.816	1.247	1.833	1.561	0.726	0.292	0.199	0.026	0.151	0.062	0.015	0.001	0.000	0.000	0.000	0.000	10.281	
0	18.056	2.109	1.303	1.293	1.600	3.322	7.923	9.579	4.411	1.678	1.201	2.284	2.888	0.718	0.508	0.006	0.000	0.000	0.000	58.878	
1	0.230	1.074	0.870	1.105	1.193	1.820	2.178	1.519	0.631	0.266	0.196	0.188	0.118	0.043	0.012	0.001	0.000	0.000	0.000	11.444	
2	0.061	0.756	0.997	0.939	0.814	0.501	0.210	0.078	0.019	0.013	0.007	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	5.107	
3	0.051	0.563	0.513	0.614	0.516	0.262	0.102	0.033	0.011	0.004	0.002	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	2.672	
4	0.034	0.428	0.245	0.205	0.175	0.064	0.016	0.004	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.174	
5	0.022	0.260	0.092	0.038	0.029	0.012	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.460	
6	0.013	0.124	0.027	0.009	0.005	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.184	
7	0.005	0.059	0.005	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.072	
8	0.003	0.031	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.035	
9	0.001	0.015	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.016	
10	0.000	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.008	
11	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	
12	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	
13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Totals	18.498	8.801	6.067	6.628	6.915	8.982	13.507	13.337	6.013	2.343	1.654	2.716	3.176	0.818	0.537	0.008				100.000	

Summary Statistics

Avg Speed	22.92 mph	Total Idle	18.50%	Above LA-4 Accel	2.00%
Avg Trip Length	3.46 miles	Total Cruise	40.82%	Below LA-4 Decel	2.59%
Avg Trip Time	9.07 min	Total Accel	20.74%	Above LA-4 Speed	4.54%
Avg Non-Zero Power	42.66 mph ² /s	Total Diesel	19.95%	Total Beyond LA-4	9.13%
Total 1-Sec Obs	1596201				

Modal Region Frequencies

Outside LA-4 Frequencies	Above LA-4 Accel	2.00%
	Below LA-4 Decel	2.59%
	Above LA-4 Speed	4.54%
	Total Beyond LA-4	9.13%

Specific Power Distribution

0 mph ² /sec	60.42%
>0 - <100 mph ² /sec	35.82%
100 - <200 mph ² /sec	3.54%
200 - <300 mph ² /sec	0.20%
>=300 mph ² /sec	0.02%

Spokane Instrumented Vehicle Weekend Driving SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)																			TOTALS	
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	
-20																					
-19																					0.000
-18																					0.000
-17																					0.001
-16																					0.001
-15																					0.002
-14																					
-13																					
-12																					
-11																					
-10																					
-9																					
-8																					
-7																					
-6																					
-5																					
-4																					
-3																					
-2																					
-1																					
0	16.324	2.173	1.338	1.220	1.297	2.918	7.689	10.170	5.752	2.060	1.532	2.697	3.221	1.102	0.382	0.006					59.861
1	0.229	1.095	0.808	0.983	1.021	1.649	2.052	1.612	0.789	0.333	0.223	0.216	0.149	0.059	0.013	0.001					11.240
2	0.075	0.683	0.653	0.853	0.855	0.787	0.522	0.234	0.081	0.041	0.025	0.020	0.011	0.005	0.002						4.927
3	0.043	0.533	0.486	0.582	0.503	0.261	0.105	0.037	0.016	0.007	0.002	0.001	0.000	0.000							2.587
4	0.029	0.387	0.245	0.206	0.169	0.066	0.021	0.006	0.002	0.001	0.000	0.000	0.000								1.133
5	0.020	0.245	0.083	0.045	0.030	0.018	0.010	0.003	0.001	0.000											0.455
6	0.008	0.132	0.031	0.014	0.009	0.006	0.004	0.000													0.203
7	0.006	0.063	0.007	0.002	0.000	0.001	0.000														0.079
8	0.002	0.027	0.001	0.000																	
9	0.001	0.013	0.000	0.000																	
10	0.000	0.007	0.000																		
11	0.003																				0.003
12	0.001																				0.001
13																					
14		0.000																			0.000
15																					
16																					
17																					
18																					
19																					
20																					
Totals	16.737	8.589	5.855	6.126	6.167	8.195	13.074	14.177	7.683	2.892	2.052	3.194	3.603	1.257	0.390	0.008					100.000

Summary Statistics

Avg Speed	24.44 mph
Avg Trip Length	3.7 miles
Avg Trip Time	9.09 min
Avg Non-Zero Power	42.86 mph ² /s
Total 1-Sec Obs	484979

Modal Region Frequencies

Total Idle	16.74%
Total Cruise	43.54%
Total Accel	20.27%
Total Decel	19.46%
Total Beyond LA-4	9.88%

Outside LA-4 Frequencies

Above LA-4 Accel	2.00%
Below LA-4 Decel	2.63%
Above LA-4 Speed	5.26%
Total Beyond LA-4	9.88%

Specific Power Distribution

0 mph ² /sec	59.49%
>0 - <100 mph ² /sec	36.58%
100 - <200 mph ² /sec	3.64%
200 - <300 mph ² /sec	0.25%
>=300 mph ² /sec	0.04%

Difference Between Chase Car and Instrumented Driving SAFD (%) in Baltimore

ACCEL BIN (mph/s)	SPEED BIN (mph)																				NET TOTALS	ABS TOTALS	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		
-20																							
-19										0.000													0.000
-18																							
-17																							
-16										0.000	0.000												0.000
-15										0.001	0.000												0.000
-14										0.000	0.001												0.001
-13										0.000	0.000												0.001
-12										0.000	0.000												0.000
-11										0.000	0.001												0.003
-10										0.000	0.000												0.002
-9										0.001	0.002												0.002
-8										0.001	0.002												0.002
-7										0.004	0.006												0.005
-6										0.003	0.003												0.007
-5										0.004	0.004												0.018
-4										0.028	0.024												0.036
-3										0.084	0.108												0.136
-2										0.001	0.071												1.261
-1										0.131	0.266												3.681
0										0.063	0.039												3.683
1										0.115	0.177												9.323
2										0.077	0.101												11.901
3										0.097	0.097												5.148
4										0.122	0.093												1.439
5										0.082	0.082												0.559
6										0.002	0.002												0.022
7										0.004	0.004												0.005
8										0.004	0.019												0.009
9										0.003	0.003												0.005
10										0.002	0.004												0.005
11										0.004	0.004												0.005
12										0.003	0.003												0.005
13										0.000	0.000												0.000
14										0.000	0.000												0.000
15										0.000	0.000												0.000
16										0.000	0.000												0.000
17										0.000	0.000												0.000
18										0.000	0.000												0.000
19										0.000	0.000												0.000
20										0.000	0.000												0.000
NET TOTALS	-5.465	-0.239	0.444	0.104	-0.290	-0.719	-1.091	-0.965	-0.302	1.026	2.016	1.865	2.642	0.932	1.126	-0.985	-0.015	-0.005	0.000	0.000	0.000	0.000	
ABS TOTALS	6.385	1.067	1.232	1.094	0.604	0.857	1.385	1.711	1.910	1.508	2.016	1.866	2.642	1.101	0.532	0.995	0.015	0.005	0.000	0.000	0.000	26.024	

Summary Statistics Differences

Difference in Average Speed
Difference in Average Power

3.71 mph
9.65 mph/2s

0 mph/2sec
>0 - <10 mph/2sec

100 - >200 mph/2sec

200 - >300 mph/2sec

>=300 mph/2sec

Total Absolute Difference
High-Power Difference

7.38%
0.61%

Specific Power Distribution Differences

0 mph2/sec
>0 - <10 mph2/sec
100 - >200 mph2/sec
200 - >300 mph2/sec
>=300 mph2/sec

Difference Between Chase Car and Instrumented Driving SAFD (%) in Spokane

ACCEL BIN (mph/s)	SPEED BIN (mph)																				NET TOTALS	ABS TOTALS	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		
-20																							
-19																							
-18																							
-17																							
-16																							
-15																							
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16																							
17																							
18																							
19																							
20																							
	NET TOTALS																					0.00%	
	ABS TOTALS	3.337	1.635	1.566	1.384	0.932	1.866	3.364	3.320	1.038	0.534	1.880	3.488	1.907	1.276	0.681	0.084	0.032	0.005				28.39

Summary Statistics Differences

Difference in Average Speed
Difference in Average Power

Specific Power Distribution Differences

0 mph2/sec	3.63 mph	-1.37%
>0 - <10 mph2/sec	6.93 mph2/s	0.48%
100 - <200 mph2/sec		0.75%
200 - <300 mph2/sec		0.07%
>=300 mph2/sec		0.05%

Total Absolute Difference
High-Power Difference

Difference Between Instrumented Driving SAFD (%) Atlanta vs. Baltimore

ACCEL BIN (mph/s)	SPEED BIN (mph)																				NET TOTALS	ABS TOTALS	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		
-20																						0.000	0.000
-19										0.000	0.000											0.000	0.000
-18										0.000	0.000											0.000	0.000
-17										0.000	0.000											0.000	0.000
-16										0.000	0.000											0.000	0.000
-15										0.000	0.000											0.000	0.000
-14										0.000	0.000											0.000	0.000
-13										0.000	0.000											0.000	0.000
-12										0.000	0.000											0.000	0.000
-11										0.000	0.000											0.000	0.000
-10										0.000	0.000											0.000	0.000
-9										0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	
-8										0.000	0.002	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.008	
-7										0.001	0.001	0.002	0.004	0.007	0.007	0.003	0.001	0.001	0.000	0.000	0.000	0.034	
-6										0.001	0.002	0.001	0.006	0.016	0.021	0.013	0.008	0.003	0.002	0.001	0.000	0.068	
-5										0.003	0.015	0.013	0.001	0.026	0.040	0.035	0.022	0.010	0.009	0.000	0.000	0.074	
-4										0.024	0.034	-0.049	-0.041	0.007	0.045	0.062	0.048	0.026	0.010	0.003	0.002	0.000	0.107
-3										0.060	-0.059	-0.077	-0.075	-0.047	0.022	0.084	0.087	0.058	0.025	0.009	0.003	0.001	0.056
-2										0.049	-0.040	-0.068	-0.100	-0.104	-0.046	0.081	0.160	0.136	0.075	0.029	0.010	0.004	0.027
-1										0.118	0.036	-0.069	0.175	0.350	-0.22	-0.165	0.285	0.473	0.359	0.128	0.071	0.067	0.099
0										0.321	0.380	0.098	-0.474	-1.265	-2.262	-1.943	-1.327	-1.137	-0.029	0.674	1.565	1.427	0.544
1										0.053	0.135	0.007	-0.154	-0.348	-0.569	-0.458	0.115	0.617	0.673	0.418	0.161	0.103	0.270
2										0.009	-0.016	-0.101	-0.184	-0.177	-0.039	0.158	0.236	0.199	0.105	0.038	0.007	0.001	0.094
3										0.046	0.049	0.079	-0.062	0.032	0.112	0.120	0.075	0.026	0.007	0.000	0.001	0.000	0.216
4										0.004	-0.037	-0.011	0.016	0.053	0.047	0.020	0.009	0.003	0.001	0.001	0.000	0.000	0.576
5										0.004	-0.014	0.005	0.008	0.006	0.004	0.002	0.001	0.000	0.005	0.003	0.002	0.001	0.202
6										0.001	-0.007	0.002	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.045
7										0.000	-0.010	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.012
8										0.001	-0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.013
9										0.000	-0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004
10										0.000	-0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004
11										0.000	-0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
12										0.000	-0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
13										0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14										0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15										0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16										0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17										0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18										0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19										0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20										0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NET	3.599	0.349	-0.194	-0.745	-1.288	-2.143	-2.750	-3.387	1.428	2.821	2.069	0.310	0.963	1.752	1.609	0.682	1.170	0.034	0.008	0.000	0.000	0.000	0.000
ABS	3.599	0.917	0.492	0.801	1.498	2.585	3.626	2.829	1.494	2.821	2.069	0.370	0.863	1.754	1.609	0.682	1.170	0.034	0.008	0.000	0.000	0.000	28.221

Summary Statistics Differences

Difference in Average Speed

Difference in Average Power

0 mph2/sec
6.61 mph2/s

> -10 mph2/sec
-0.29%

100 - <200 mph2/sec
1.82%

200 - <300 mph2/sec
0.22%

>=300 mph2/sec
0.01%

Total Absolute Difference
High-Power Difference

4.10%
0.23%

Specific Power Distribution Differences

0 mph2/sec
-1.78%

> -10 mph2/sec
-0.29%

100 - <200 mph2/sec
1.82%

200 - <300 mph2/sec
0.22%

>=300 mph2/sec
0.01%

Difference Between Instrumented Driving SAFD (%) Spokane vs. Baltimore

ACCEL BIN (mph/s)	SPEED BIN (mph)																			NET TOTALS	ABS TOTALS	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
-20																						0.000
-19										0.000												0.000
-18																						
-17																						
-16										0.000												0.000
-15										0.000												0.000
-14										0.000												0.000
-13										0.000												0.000
-12										0.000												0.000
-11										0.000												0.000
-10										0.000												0.000
-9										0.000												0.000
-8										0.000												0.000
-7										0.000												0.000
-6										0.000												0.000
-5										0.000												0.000
-4										0.000												0.000
-3										0.000												0.000
-2										0.000												0.000
-1										0.000												0.000
0										0.000												0.000
1										0.000												0.000
2										0.000												0.000
3										0.000												0.000
4										0.000												0.000
5										0.000												0.000
6										0.000												0.000
7										0.000												0.000
8										0.000												0.000
9										0.000												0.000
10										0.000												0.000
11										0.000												0.000
12										0.000												0.000
13										0.000												0.000
14										0.000												0.000
15										0.000												0.000
16										0.000												0.000
17										0.000												0.000
18										0.000												0.000
19										0.000												0.000
20										0.000												0.000
NET TOTALS	3.235	0.075	0.363	0.331	0.343	1.212	4.458	4.962	0.163	-1.845	-1.679	-1.249	-0.908	-0.260	-0.569	-0.216	-0.020	-0.005	0.000	0.000	0.000	
ABS TOTALS	3.235	0.269	0.613	0.483	0.399	1.276	4.714	5.490	1.683	1.815	1.679	1.248	0.908	0.260	0.569	0.216	0.020	0.005	0.000	0.000	26.702	

Summary Statistics Differences

Difference in Average Speed

Difference in Average Power

-1.24 mph

-5.60 mph2/s

Specific Power Distribution Differences

0 mph2/sec
>-10 mph2/sec
100 - <200 mph2/sec
200 - <300 mph2/sec
>=300 mph2/sec

0.09%
0.79%
-0.79%
-0.09%
0.00%

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Difference Between Instrumented Driving SAFD (%) Spokane vs. Atlanta

ACCEL BIN (mph/s)	SPEED BIN (mph)										NET										ABS TOTALS
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
-20																					0.000
-19																					0.000
-18																					0.000
-17																					0.000
-16																					0.000
-15																					0.000
-14																					0.000
-13																					0.000
-12																					0.000
-11																					0.000
-10																					0.000
-9																					0.005
-8																					0.005
-7																					0.019
-6																					0.053
-5																					0.125
-4																					0.236
-3																					0.457
-2																					0.863
-1																					1.373
0																					2.639
1																					4.363
2																					6.452
3																					9.226
4																					11.443
5																					13.645
6																					15.588
7																					16.457
8																					17.212
9																					18.028
10																					18.843
11																					19.658
12																					20.473
13																					21.288
14																					22.093
15																					22.898
16																					23.693
17																					24.498
18																					25.293
19																					26.098
20																					26.893
NET TOTALS	0.364	-0.274	0.557	1.076	1.601	3.355	7.208	6.249	-1.265	-4.636	-3.748	-1.558	-1.771	-3.832	-2.178	-8.898	-1.90	-0.039	-0.008	0.000	
ABS TOTALS	0.370	0.954	0.683	1.232	1.755	3.823	8.317	3.175	4.636	3.748	1.558	1.771	3.832	2.178	8.898	1.90	0.039	0.008	0.000		47.503

Summary Statistics Differences

Difference in Average Speed Difference in Average Power

Specific Power Distribution Differences

	Total	Absolute	Difference
Hirsch-Pawley	0.85%	0.31%	
difference	0.85%	0.31%	
0 mph/2/sec	1.85%		
>0 - <100 mph/2/sec	1.08%		
>100 - <200 mph/2/sec	-2.61%		
>200 - <300 mph/2/sec	-0.30%		
>=300 mph/2/sec	-0.01%		

All Chase Car Freeway & Ramp Driving at LOS A-C SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)										TOTALS										
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
-20																					
-19																					
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19																					
20																					
Totals	1.272	1.033	.569	0.690	0.771	1.310	1.644	2.027	2.245	3.565	8.359	18.557	28.360	19.610	8.283	1.056	.192	0.017		100.000	

Summary Statistics

Avg Speed 55.61 mph
Avg Segment Dist 4.45 miles
Avg Segment Time 4.8 min
Avg Power 32.1 mph/2s
Total 1-Sec Obs 70856

Modal Region Frequencies

Total Idle	1.27%
Total Cruise	58.38%
Total Accel	20.76%
Total Decel	19.60%

Outside LA-4 Frequencies

Above LA-4 Accel	1.41%
Below LA-4 Decel	2.18%
Above LA-4 Speed	58.02%
Total Beyond LA-4	61.61%

Specific Power Distribution

<100 mph/2sec	0 mph/2sec	52.52%
>100 - <200 mph/2sec	>0 - <100 mph/2sec	37.42%
>200 - <300 mph/2sec	100 - <200 mph/2sec	8.42%
>=300 mph/2sec	200 - <300 mph/2sec	1.29%
	>=300 mph/2sec	0.35%

Baltimore Chase Car Freeway & Ramp Driving at LOS A-C SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)										TOTALS										
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
-20																					
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Totals	0.328	0.523	0.358	0.430	0.506	1.183	1.641	2.071	2.250	4.159	8.779	19.238	31.328	19.821	6.107	0.737	0.040			100.000	

Summary Statistics

Avg Speed 56.08 mph
 Avg Segment Dist 4.68 miles
 Avg Segment Time 5.01 min
 Avg Power 35.9 mph2/s
 Total 1-Sec Obs 35154

Modal Region Frequencies

Total Idle	0.83%	Above LA-4 Accel	1.61%
Total Cruise	52.67%	Below LA-4 Decel	2.19%
Total Accel	23.78%	Above LA-4 Speed	58.03%
Total Decel	22.72%	Total Beyond LA-4	61.84%

Outside LA-4 Frequencies

0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
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Specific Power Distribution

0 mph2/sec	51.35%
>0 - <100 mph2/sec	36.22%
100 - <200 mph2/sec	10.36%
200 - <300 mph2/sec	1.66%
>=300 mph2/sec	0.41%

Los Angeles Chase Car Freeway & Ramp Driving at LOS A-C SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)																		TOTALS		
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
-20																					0.022
-19																					0.029
-18																					0.007
-17																					
-16																					
-15																					
-14																					
-13																					
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-10																					
-9																					
-8	0.007	0.022	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.051
-7	0.007	0.037	0.007	0.015	0.015	0.022	0.007	0.007	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.139
-6	0.015	0.037	0.037	0.036	0.022	0.037	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.286
-5	0.066	0.044	0.066	0.103	0.110	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.601
-4	0.051	0.029	0.044	0.059	0.088	0.073	0.125	0.051	0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.630
-3	0.132	0.066	0.103	0.110	0.117	0.132	0.095	0.198	0.183	0.117	0.117	0.117	0.117	0.117	0.117	0.117	0.117	0.117	0.117	0.117	1.451
-2	0.198	0.117	0.154	0.154	0.161	0.154	0.154	0.154	0.154	0.154	0.154	0.154	0.154	0.154	0.154	0.154	0.154	0.154	0.154	0.154	2.462
-1	0.396	0.139	0.161	0.139	0.308	0.212	0.278	0.403	0.462	1.128	2.191	3.136	3.136	3.136	3.136	3.136	3.136	3.136	3.136	3.136	13.583
0	2.044	0.901	0.059	0.176	0.227	0.557	0.513	0.703	0.571	1.150	2.989	7.173	15.789	16.426	7.598	1.685	3.15	58.376			
1	0.081	0.484	0.088	0.198	0.205	0.315	0.432	0.513	0.586	0.762	1.612	2.682	3.773	2.835	1.150	0.322	0.044	16.082			
2	0.117	0.051	0.205	0.271	0.315	0.388	0.366	0.388	0.388	0.388	0.381	0.322	0.205	0.110	0.066	0.015	0.007	3.209			
3	0.015	0.117	0.169	0.161	0.190	0.227	0.139	0.132	0.147	0.103	0.073	0.073	0.073	0.073	0.073	0.073	0.073	0.073	0.073	0.073	1.509
4	0.015	0.095	0.044	0.088	0.066	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.342
5	0.125	0.059	0.015	0.037	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.300
6	0.059	0.037	0.022	0.007	0.007																0.169
7	0.022	0.007																			0.037
8	0.007																				0.015
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Totals	2.154	2.718	.982	1.480	1.597	2.352	2.308	2.535	2.579	3.407	6.696	12.638	23.145	22.580	10.133	2.279	0.418				100.000

Summary Statistics

Avg Speed 53.4 mph
 Avg Segment Dist 2.47 miles
 Avg Segment Time 2.77 min
 Avg Power 32.41 mph/2s
 Total 1-Sec Obs 13649

Modal Region Frequencies

Total Idle 56.833%
 Total Cruise 21.75%
 Total Accel 19.26%
 Total Decel 1.26%

Outside LA-4 Frequencies

Above LA-4 Accel 1.90%
 Below LA-4 Decel 3.20%
 Above LA-4 Speed 58.55%
 Total Beyond LA-4 63.65%
 Total LA-4 1.00%

Specific Power Distribution

0 mph/2/sec 53.55%
 >0 - <100 mph/2/sec 36.24%
 100 - <200 mph/2/sec 8.49%
 200 - <300 mph/2/sec 1.31%
 >=300 mph/2/sec 0.43%

Spokane Chase Car Freeway & Ramp Driving at LOS A-C SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)																			TOTALS	
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	
-20																					
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-1																					
0	1.397	0.159	0.036	0.082	0.082	0.082	0.082	0.082	0.082	0.082	0.082	0.082	0.082	0.082	0.082	0.082	0.082	0.082	0.082	0.082	
1	0.014	0.086	0.086	0.086	0.086	0.086	0.086	0.086	0.086	0.086	0.086	0.086	0.086	0.086	0.086	0.086	0.086	0.086	0.086	0.086	
2	0.014	0.059	0.059	0.086	0.086	0.086	0.086	0.086	0.086	0.086	0.086	0.086	0.086	0.086	0.086	0.086	0.086	0.086	0.086	0.086	
3	0.005	0.068	0.023	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	
4	0.005	0.036	0.005																		
5	0.005	0.036	0.014	0.009	0.009																
6	0.005	0.005																			
7																					
8		0.005																			
9																					
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Totals	1.433	0.803	0.468	0.617	0.630	0.366	1.238	1.641	2.031	2.716	8.720	21.135	28.463	17.435	10.606	0.807	0.295	0.054		100.000	

Summary Statistics

Avg Speed 56.22 mph
 Avg Segment Dist 7.33 miles
 Avg Segment Time 7.82 min
 Avg Power 25.85 mph²/s
 Total 1-Sec Obs 22053

Modal Region Frequencies

Total Idle	1.43%	Above LA-4 Accel	0.78%
Total Cruise	68.43%	Below LA-4 Decel	1.53%
Total Accel	15.32%	Above LA-4 Speed	57.66%
Total Decel	14.82%	Total Beyond LA-4	59.98%

Outside LA-4 Frequencies

0 mph/2/sec	53.76%
>0 - <100 mph/2/sec	40.07%
100 - <200 mph/2/sec	5.28%
200 - <300 mph/2/sec	0.68%
>=300 mph/2/sec	0.20%

Specific Power Distribution

All Chase Car Freeway & Ramp Driving at LOS D SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)														TOTALS							
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	
-20																						
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Totals	2.443	2.000	1.152	0.670	0.591	1.231	1.980	2.403	3.842	5.102	9.909	20.784	24.340	17.996	5.230	0.345					100.000	

Summary Statistics

Avg Speed 52.54 mph
 Avg Segment Dist 1.56 miles
 Avg Segment Time 1.78 min
 Avg Power 31.06 mph2/s
 Total 1-Sec Obs 10152

Modal Region Frequencies

Total Idle	2.44%
Total Cruise	52.15%
Total Accel	22.34%
Total Decel	23.07%

Specific Power Distribution

>0 mph2/sec	54.25%
>0 - <100 mph2/sec	35.52%
100 - <200 mph2/sec	8.80%
200 - <300 mph2/sec	1.12%
>=300 mph2/sec	0.32%

Baltimore Chase Car Freeway & Ramp Driving at LOS D SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)																			TOTALS	
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	
-20																					
-19																					
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Totals	1.460	0.718	0.960	0.371	0.255	0.626	1.228	1.807	4.680	5.839	10.102	18.198	22.220	23.378	7.461	0.718				100.000	

Summary Statistics

Avg Speed 55.22 mph
 Avg Segment Dist 1.84 miles
 Avg Segment Time 2 min
 Avg Power 36.88 mph²/s
 Total 1-Sec Obs 4316

Modal Region Frequencies

Total Idle	1.46%	Above LA-4 Accel	1.39%
Total Cruise	47.94%	Below LA-4 Decel	2.67%
Total Accel	25.12%	Above LA-4 Speed	53.78%
Total Decel	25.49%	Total Beyond LA-4	57.83%

Outside LA-4 Frequencies

0 mph ² /sec	0
>0 - <100 mph ² /sec	1.39%
100 - <200 mph ² /sec	53.78%
200 - <300 mph ² /sec	57.83%
>=300 mph ² /sec	0.51%

Specific Power Distribution

0 mph ² /sec	0
>0 - <100 mph ² /sec	52.03%
100 - <200 mph ² /sec	34.62%
200 - <300 mph ² /sec	11.08%
>=300 mph ² /sec	1.78%

Los Angeles Chase Car Freeway & Ramp Driving at LOS D SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)														TOTALS							
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	
-20																						
-19																						
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Totals	3.375	3.138	1.387	0.949	0.894	1.788	2.573	2.609	3.375	4.835	10.381	20.919	24.977	14.924	3.813	0.073					100.000	

Summary Statistics

Avg Speed 50.28 mph
 Avg Segment Dist 1.37 miles
 Avg Segment Time 1.63 min
 Avg Power 27.35 mph/2s
 Total 1-Sec Obs 5481

Modal Region Frequencies

Total Idle	3.38%
Total Cruise	53.71%
Total Accel	20.95%
Total Decel	21.97%

Outside LA-4 Frequencies

Above LA-4 Accel	1.06%
Below LA-4 Decel	3.80%
Above LA-4 Speed	43.79%
Total Beyond LA-4	48.64%

Specific Power Distribution

0 mph/2/sec	56.26%
>0 - <100 mph/2/sec	35.38%
100 - <200 mph/2/sec	7.52%
200 - <300 mph/2/sec	0.68%
>=300 mph/2/sec	0.18%

Spokane Chase Car Freeway & Ramp Driving at LOS D SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)										TOTALS											
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	
-20																						
-19																						
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Totals												1.972	6.479	0.845	0.282	0.282	49.839	40.282				
																					100.000	

Summary Statistics

Avg Speed 54.89 mph
 Avg Segment Dist 1.8 miles
 Avg Segment Time 1.97 min
 Avg Power 17.67 mph²/s
 Total 1-Sec Obs 355

Modal Region Frequencies

Total Idle	0.00%	Above LA-4 Accel	0.00%
Total Cruise	79.16%	Below LA-4 Decel	0.28%
Total Accel	10.14%	Above LA-4 Speed	40.28%
Total Decel	10.70%	Total Beyond LA-4	40.56%

Outside LA-4 Frequencies

0 mph ² /sec	0.00%	>0 - <100 mph ² /sec	50.57%
100 - <200 mph ² /sec	48.87%	200 - <300 mph ² /sec	0.85%
>=300 mph ² /sec	0.00%		0.00%

Specific Power Distribution

0 mph ² /sec	0.00%	>0 - <100 mph ² /sec	50.57%
100 - <200 mph ² /sec	48.87%	200 - <300 mph ² /sec	0.85%
>=300 mph ² /sec	0.00%		0.00%

All Chase Car Freeway & Ramp Driving at LOS E SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)														TOTALS						
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
-20																					
-19																					
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Totals	0.915	3.827	3.064	4.285	7.039	8.153	10.469	6.531	8.098	9.290	7.654	13.237	12.365	3.813	0.541						100.000

Summary Statistics		Modal Region Frequencies				Outside LA-4 Frequencies				Specific Power Distribution										
Avg Speed	39.16 mph	Total Idle	0.92%	Above LA-4 Accel	1.35%	0 mph/2/sec	49.70%													
Avg Segment Dist	1.15 miles	Total Cruise	43.77%	Below LA-4 Decel	3.77%	>0 - <100 mph/2/sec	40.70%													
Avg Segment Time	1.77 min	Total Accel	30.42%	Above LA-4 Speed	17.32%	100 - <200 mph/2/sec	8.64%													
Avg Power	31.42 mph2/s	Total Decel	24.89%	Total Beyond LA-4	22.44%	200 - <300 mph/2/sec	0.72%													
Total 1-Sec Obs	7212					>=300 mph/2/sec	0.25%													

Baltimore Chase Car Freeway & Ramp Driving at LOS E SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)															TOTALS						
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	
-20																						
-19																						
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20																						
Totals	0.085	1.532	1.702	2.298	5.937	10.468	13.532	4.340	2.128	4.170	7.745	21.447	19.489	3.660	1.447							100.000

Summary Statistics

Avg Speed 43.42 mph
 Avg Segment Dist 1.09 miles
 Avg Segment Time 1.51 min
 Avg Power 41.36 mph/2s
 Total 1-Sec Obs 1175

Modal Region Frequencies

Total Idle	0.09%	Above LA-4 Accel	3.57%
Total Cruise	38.04%	Below LA-4 Decel	4.00%
Total Accel	34.55%	Above LA-4 Speed	24.60%
Total Decel	27.32%	Total Beyond LA-4	32.17%

Outside LA-4 Frequencies

0 mph/2/sec	0 mph/2/sec
>0 - <100 mph/2/sec	>0 - <100 mph/2/sec
100 - <200 mph/2/sec	100 - <200 mph/2/sec
200 - <300 mph/2/sec	200 - <300 mph/2/sec
>=300 mph/2/sec	>=300 mph/2/sec

Specific Power Distribution

0.085	0.511
1.06	2.043
1.106	6.394
1.1681	16.381
38.043	38.043
23.89	23.89
7.489	7.489
2.894	2.894
0.681	0.681
0.085	0.085

Los Angeles Chase Car Freeway & Ramp Driving at LOS E SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)																		TOTALS		
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
-20																					
-19																					
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Totals	1,129	4,480	3,490	4,897	7,675	7,901	10,123	6,807	7,710	9,724	7,328	12,058	12,259	4,028	0.382					100,000	

Summary Statistics

Avg Speed 38.17 mph
 Avg Segment Dist 1.13 miles
 Avg Segment Time 1.78 min
 Avg Power 29.61 mph²/s
 Total 1-Sec Obs 5759

Modal Region Frequencies

Total Idle	1.13%	Above LA-4 Accel	0.92%
Total Cruise	44.45%	Below LA-4 Decel	3.87%
Total Accel	28.66%	Above LA-4 Speed	16.67%
Total Decel	24.76%	Total Beyond LA-4	21.46%

Outside LA-4 Frequencies

0 mph ² /sec	0.92%
>0 - <100 mph ² /sec	3.87%
100 - <200 mph ² /sec	16.67%
200 - <300 mph ² /sec	21.46%
>=300 mph ² /sec	0.50%

Specific Power Distribution

0 mph ² /sec	50.43%
>0 - <100 mph ² /sec	41.00%
100 - <200 mph ² /sec	7.90%
200 - <300 mph ² /sec	0.50%
>=300 mph ² /sec	0.17%

Spokane Chase Car Freeway & Ramp Driving at LOS E SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)										TOTALS											
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	
-20																						
-19																						
-18																						
-17																						
-16																						
-15																						
-14																						
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19																						
20																						
Totals												3.597	4.676	10.072	41.367	21.942	14.029	4.317				
																					100.000	

Summary Statistics

Avg Speed: 41.72 mph
 Avg Segment Dist: 3.22 miles
 Avg Segment Time: 4.63 min
 Avg Power: 27.21 mph²/s
 Total 1-Sec Obs: 278

Modal Region Frequencies

Total Idle	0.00%	Above LA-4 Accel	0.72%
Total Cruise	53.96%	Below LA-4 Decel	0.72%
Total Accel	28.78%	Above LA-4 Speed	0.00%
Total Decel	17.27%	Total Beyond LA-4	1.44%

Outside LA-4 Frequencies

0 mph ² /sec	43.68%
>0 - <100 mph ² /sec	53.43%
100 - <200 mph ² /sec	2.89%
200 - <300 mph ² /sec	0.36%
>=300 mph ² /sec	0.00%

Specific Power Distribution

0 mph ² /sec	43.68%
>0 - <100 mph ² /sec	53.43%
100 - <200 mph ² /sec	2.89%
200 - <300 mph ² /sec	0.36%
>=300 mph ² /sec	0.00%

All Chase Car Freeway & Ramp Driving at LOS F SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)																		TOTALS		
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
-20																					
-19																					
-18																					
-17																					
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-8																					
-7																					
-6																					
-5																					
-4																					
-3																					
-2																					
-1																					
0	3.170	4.672	3.451	4.416	4.730	5.035	3.459	2.650	1.882	1.445	1.428	0.958	0.966	0.380							
1	0.182	2.691	2.204	2.988	3.517	2.906	2.675	2.122	1.403	1.213	0.925	0.512	0.371	0.182	0.008						
2	0.050	1.048	1.204	1.288	1.379	1.197	0.801	0.495	0.338	0.223	0.149	0.107	0.025	0.025							
3	0.371	0.462	0.462	0.383	0.256	0.190	0.091	0.033	0.025	0.017	0.008	0.008									
4	0.006	0.206	0.190	0.091	0.050	0.017	0.008	0.008													
5	0.008	0.074	0.025	0.041	0.017	0.017	0.008														
6		0.033	0.017	0.017																	
7		0.025	0.008	0.008																	
8																					
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20																					
Totals	3.426	12.316	10.930	13.241	14.347	13.175	9.840	7.165	4.672	3.558	3.063	1.839	1.610	0.710	0.050						

Summary Statistics

Avg Speed 22.69 mph
 Avg Segment Dist 1.91 miles
 Avg Segment Time 5.05 min
 Avg Power 24.22 mph²/s
 Total 1-Sec Obs 12114

Modal Region Frequencies

Total Idle	3.43%	Above LA-4 Accel	1.31%
Total Cruise	35.47%	Below LA-4 Decel	2.22%
Total Accel	35.08%	Above LA-4 Speed	2.37%
Total Decel	26.03%	Total Beyond LA-4	5.90%

Outside LA-4 Frequencies

0 mph/2/sec	46.59%
>0 - <100 mph/2/sec	47.79%
100 - <200 mph/2/sec	5.17%
200 - <300 mph/2/sec	0.39%
>=300 mph/2/sec	0.07%

Specific Power Distribution

0 mph/2/sec	46.59%
>0 - <100 mph/2/sec	47.79%
100 - <200 mph/2/sec	5.17%
200 - <300 mph/2/sec	0.39%
>=300 mph/2/sec	0.07%

Baltimore Chase Car Freeway & Ramp Driving at LOS F SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)															TOTALS						
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	
-20																						
-19																						
-18																						
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-15																						
-14																						
-13																						
-12																						
-11																						
-10																						
-9																						
-8																						
-7		0.036																				
-6		0.036																				
-5		0.036																				
-4		0.182																				
-3		0.328																				
-2		0.910																				
-1		2.258																				
0		8.376																				
1		0.491																				
2		0.182																				
3		0.291																				
4		0.036																				
5		0.036																				
6		0.109																				
7		0.036																				
8																						
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Totals	9.068	10.597	13.401	12.491	14.421	9.905	6.846	5.717	3.532	3.168	2.950	2.234	3.642	1.748	0.218						100.000	

Summary Statistics

Avg Speed 22.1 mph
 Avg Segment Dist 2.11 miles
 Avg Segment Time 5.72 min
 Avg Power 26.59 mph/2s
 Total 1-Sec Obs 2746

Modal Region Frequencies

Total Idle	9.07%
Total Cruise	29.68%
Total Accel	32.63%
Total Decel	28.62%

Outside LA-4 Frequencies

Above LA-4 Accel	2.08%
Below LA-4 Decel	2.29%
Above LA-4 Speed	5.61%
Total Beyond LA-4	9.98%

Specific Power Distribution

0 mph/2/sec	52.24%
>0 - <100 mph/2/sec	39.13%
100 - <200 mph/2/sec	7.43%
200 - <300 mph/2/sec	1.06%
>=300 mph/2/sec	0.18%

Los Angeles Chase Car Freeway & Ramp Driving at LOS F SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)														TOTALS							
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	
-20																						
-19																						
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Totals	1,772	12,820	10,205	13,461	14,325	14,133	10,717	7,590	5,006	3,672	3,096	1,753	1,014	0,406								100,000

Summary Statistics

Avg Speed 22.87 mph
 Avg Segment Dist 1.86 miles
 Avg Segment Time 4.88 min
 Avg Power 23.53 mph²/s
 Total 1-Sec Obs 9368

Modal Region Frequencies

Total Idle 1.77%
 Total Cruise 37.17%
 Total Accel 35.79%
 Total Decel 25.27%

Outside LA-4 Frequencies

Above LA-4 Accel 1.09%
 Below LA-4 Decel 2.20%
 Above LA-4 Speed 1.42%
 Total Beyond LA-4 4.71%

Specific Power Distribution

0 mph²/sec 44.93%
 >0 - <100 mph²/sec 50.34%
 100 - <200 mph²/sec 4.51%
 200 - <300 mph²/sec 0.19%
 >=300 mph²/sec 0.04%

Freeway/Ramp Driving at LOS A-C Los Angeles vs. Baltimore Difference SAFD (%)

Summary Statistics Differences

Difference in Average Speed Difference in Average Power

Specific Power Distribution Differences

	Total	Absolute Difference	High-Power Difference
0 mph/sec	2.19%	0.02%	0.37%
>0 - <100 mph/sec	-1.88%	-0.35%	
100 - <200 mph/sec			
>200 - <300 mph/sec			
>=300 mph/sec	0.02%		

Freeway/Ramp Driving at LOS A-C Spokane vs. Baltimore Difference SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)																NET TOTALS	ABS TOTALS
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
-20																		
-19																		
-18																		
-17																		
-16																		
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	NET TOTALS																0.000	
	ABS TOTALS	0.686	0.281	0.093	0.194	0.172	-0.320	-0.004	-0.431	-0.218	-1.443	-0.060	1.897	-2.864	-2.386	4.498	0.070	0.254
		0.289	0.195	0.246	0.236	0.584	0.548	0.505	0.284	1.443	3.042	8.201	10.404	4.376	5.742	0.132	0.272	0.055
																		37.238

Summary Statistics Differences

Difference in Average Speed
Difference in Average Power

0 mph/sec
>0 - <10 mph/sec
100 - >200 mph/sec
200 - >300 mph/sec
>=300 mph/sec

0.14 mph
-10.05 mph/s

0 mph2/sec
>0 - <10 mph2/sec
100 - >200 mph2/sec
200 - >300 mph2/sec
>=300 mph2/sec

0.0000
-0.0000

Specific Power Distribution Differences

Total Absolute Difference
High-Power Difference

12.5%
1.18%

Freeway/Ramp Driving at LOS A-C Spokane vs. Los Angeles Difference SAFD (%)

Summary Statistics Differences

Difference in Average Speed Difference in Average Power

Specific Power Distribution Differences

	High-Power Difference	Total Absolute Difference
0 mph2/sec	0.22%	8.11%
>0 - <100 mph2/sec	3.83%	0.85%
100 - >200 mph2/sec	-3.20%	
200 - >300 mph2/sec	-0.63%	
>=300 mph2/sec	-0.22%	

Freeway/Ramp Driving at LOS D Los Angeles vs. Baltimore Difference SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)																NET TOTALS	ABS TOTALS
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
-20																		
-19																		
-18																		
-17																		
-16																		
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NET TOTALS	1.915	2.419	0.435	0.575	0.636	1.161	1.244	0.798	-1.305	-1.006	0.279	2.719	2.757	-8.455	-3.647	-6.647		0.000
ABS TOTALS	2.029	2.419	0.367	0.689	0.660	1.161	1.452	1.150	2.385	1.362	1.783	4.718	8.111	8.491	3.647	0.647		41.681

Summary Statistics Differences

Difference in Average Speed
Difference in Average Power

-4.94 mph
-9.53 mph2/s

0 mph2/sec
>-10 mph2/sec

0.000
0.000

100 - <200 mph2/sec
200 - <300 mph2/sec
>=300 mph2/sec

-0.33%
-0.33%

Specific Power Distribution Differences

0 mph2/sec
4.23%
>-10 mph2/sec
0.76%
0.27%
0.48%
0.410
0.656
0.410
0.883
0.915
-1.032
2.64%
-4.57%
5.73%
19.239
7.745
-3.481
7.417
-1.519
2.605
0.879
0.152
0.244
0.085
0.131
0.109
0.109
0.072
0.072

Freeway/Ramp Driving at LOS D Spokane vs. Baltimore Difference SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)																NET TOTALS	ABS TOTALS
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
-20																		
-19																		
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-16																		
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NET	-1.460	-0.718	-0.949	-0.372	-0.255	-0.625	0.744	4.671	-3.835	-5.557	-9.820	31.670	18.062	-23.378	-7.460	-0.719		0.000
ABS	1.460	0.718	0.949	0.372	0.255	0.625	1.880	5.551	4.121	5.557	9.820	36.704	23.392	23.378	7.460	0.719		123.861

Summary Statistics Differences

Difference in Average Speed
Difference in Average Power

-0.33 mph
-19.21 mph2/s

0 mph2/sec
>0 - <10 mph2/sec
100 - <200 mph2/sec
200 - <300 mph2/sec
>=300 mph2/sec

-1.48%
14.25%
-10.25%
-1.78%
-0.51%

Total Absolute Difference
High-Power Difference
2.29%

Specific Power Distribution Differences

Freeway/Ramp Driving at LOS D Spokane vs. Los Angeles Difference SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)																NET TOTALS	ABS TOTALS
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
-20																		
-19																		
-18																		
-17																		
-16																		
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NET TOTALS	-3.375	-3.137	-1.384	-0.947	-0.891	-1.786	-0.600	3.873	-2.530	-4.551	-10.099	28.052	15.305	-14.923	-3.813	-0.072		0.000
ABS TOTALS	3.375	3.137	1.384	0.947	0.891	1.786	2.866	5.181	2.546	4.551	10.099	32.490	16.865	14.923	3.813	0.072		104.726

Summary Statistics Differences

Difference in Average Speed

Difference in Average Power

4.61 mph

-9.68 mph2/s

0 mph2/sec

>0 - <10 mph2/sec

13.49%

100 - >200 mph2/sec

-6.67%

200 - >300 mph2/sec

-0.68%

>=300 mph2/sec

-0.18%

Total Absolute Difference

26.71%

High-Power Difference

0.86%

Specific Power Distribution Differences

0 mph2/sec

>0 - <10 mph2/sec

-5.68%

100 - >200 mph2/sec

13.49%

200 - >300 mph2/sec

-6.67%

>=300 mph2/sec

-0.18%

Freeway/Ramp Driving at LOS E Los Angeles vs. Baltimore Difference SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)																NET TOTALS	ABS TOTALS
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
-20																		
-19																		
-18																		
-17																		
-16																		
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NET TOTALS	1,043	2,950	1,789	2,598	1,777	-2,568	-3,407	2,468	5,584	5,555	-4,417	-3,373	-7,229	3,369	-1,064		0.000	
ABS TOTALS	1,075	3,484	2,173	3,224	3,207	2,968	3,849	2,840	6,090	6,091	2,681	9,448	7,403	2,057	1,038		57,688	

Summary Statistics Differences

Difference in Average Speed

Difference in Average Power

-5.25 mph

-11.75 mph/s

0 mph/2/sec

>-10 mph/2/sec

100 - <200 mph/2/sec

200 - <300 mph/2/sec

>=300 mph/2/sec

2.82%

4.72%

-5.75%

-1.37%

-0.51%

Total Absolute Difference

15.14%

High-Power Difference

1.88%

Specific Power Distribution Differences

0 mph/2/sec	0.086
>-10 mph/2/sec	0.138
100 - <200 mph/2/sec	0.046
200 - <300 mph/2/sec	0.006
>=300 mph/2/sec	0.880
Total Absolute Difference	1.556
High-Power Difference	1.452

Freeway/Ramp Driving at LOS E Spokane vs. Baltimore Difference SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)																NET TOTALS	ABS TOTALS
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
-20																		
-19																		
-18																		
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19																		
20																		
	NET TOTALS																0.000	
	ABS TOTALS	0.085	1.530	1.700	2.297	5.956	6.870	8.895	8.772	40.602	19.813	8.513	17.128	19.489	3.659	1.446		
																	146.755	

Summary Statistics Differences

Difference in Average Speed
Difference in Average Power

-1.70 mph
-14.15 mph2/s

0 mph2/sec
>-100 mph2/sec
100 - <200 mph2/sec
200 - <300 mph2/sec
≥=300 mph2/sec

-3.93%
17.14%
-10.74%
-1.51%
-0.68%

Total Absolute Difference

34.01%

High-Power Difference

A-65

Specific Power Distribution Differences

0 mph2/sec
>-100 mph2/sec
100 - <200 mph2/sec
200 - <300 mph2/sec
≥=300 mph2/sec

-1.681
1.721
-4.014
7.612
-3.011

24.02%

15.917

3.588

6.050

-6.050

2.891

0.680

-0.680

0.085

Freeway/Ramp Driving at LOS E Spokane vs. Los Angeles Difference SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)																NET TOTALS	ABS TOTALS
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
-20																		
-19																		
-18																		
-17																		
-16																		
-15																		
-14																		
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20																		
NET	-1.128	-4.480	-3.489	-4.895	-7.673	-4.302	-5.448	3.264	33.658	12.248	6.702	-7.750	-12.260	-4.028	-4.382			0.000
ABS	1.128	4.480	3.489	4.895	7.673	4.302	6.216	7.308	35.986	15.136	8.146	8.018	12.260	4.028	0.382			123.447

Summary Statistics Differences

Difference in Average Speed
Difference in Average Power

0 mph/2/sec
>0 - <10 mph/2/sec
100 - >200 mph/2/sec
200 - >300 mph/2/sec
>=300 mph/2/sec

Total Absolute Difference
High-Power Difference

24.51%
0.32%

Specific Power Distribution Differences

0 mph/2/sec
>0 - <10 mph/2/sec
100 - >200 mph/2/sec
200 - >300 mph/2/sec
>=300 mph/2/sec

A-66

Freeway/Ramp Driving at LOS F Los Angeles vs. Baltimore Difference SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)																NET TOTALS	ABS TOTALS
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
-20																		
-19																		
-18																		
-17																		
-16																		
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20																		
NET	-7.295	2.224	-3.193	0.972	-0.092	4.229	3.975	1.874	1.475	0.504	0.147	-0.512	-2.626	-1.341	-0.248			
ABS	7.295	3.942	3.917	2.892	1.880	5.555	4.739	3.162	2.935	1.404	1.143	1.032	2.626	1.353	0.218			
TOTALS	7.295	3.942	3.917	2.892	1.880	5.555	4.739	3.162	2.935	1.404	1.143	1.032	2.626	1.353	0.218			
																		44.103
																		0.000

Summary Statistics Differences

Difference in Average Speed

Difference in Average Power

0 mph/2/sec

>0 - <100 mph/2/sec

100 - >200 mph/2/sec

200 - >300 mph/2/sec

>=300 mph/2/sec

Total Absolute Difference

High-Power Difference

22.4%

1.00%

Specific Power Distribution Differences

0.043

0.029

-0.031

0.203

0.159

0.547

-0.047

0.479

-0.056

1.266

1.989

-1.585

3.672

-1.056

21.219

5.616

2.762

-1.594

1.359

-1.043

0.236

-0.166

0.320

-0.102

0.144

0.007

0.037

-0.036

0.036

-0.036

0.036

All Chase Car Freeway & Ramp Driving SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)																		TOTALS		
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
-20																					
-19																					
-18																					
-17																					
-16																					
-15																					
-14																					
-13																					
-12																					
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Totals	1.625	2.694	2.016	2.462	2.846	3.226	3.302	3.009	3.121	4.131	7.826	16.391	23.370	16.029	6.424	0.780	0.136	0.012		100.000	

Summary Statistics

Avg Speed 50.14 mph
 Avg Segment Dist 6.99 miles
 Avg Segment Time 8.36 min
 Avg Power 31.08 mph2/s
 Total 1-Sec Obs 100334

Modal Region Frequencies

Total Idle	1.63%
Total Cruise	53.93%
Total Accel	23.34%
Total Decel	21.10%

Outside LA-4 Frequencies

Above LA-4 Accel	1.37%
Below LA-4 Decel	2.40%
Above LA-4 Speed	47.35%
Total Beyond LA-4	51.12%

Specific Power Distribution

0 mph2/sec	51.66%
>0 - <100 mph2/sec	38.80%
100 - <200 mph2/sec	8.11%
200 - <300 mph2/sec	1.13%
>=300 mph2/sec	0.31%

Baltimore Chase Car Freeway & Ramp Driving SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)										TOTALS										
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
-20																					
-19																					
-18																					
-17																					
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-15																					
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20																					
Totals	1.392	1.208	1.279	1.238	1.510	1.931	2.252	1.931	2.337	2.570	2.570	4.264	8.513	18.121	28.349	18.594	5.743	0.668	0.032	100.000	100.000

Summary Statistics

Avg Speed 53.5 mph
 Avg Segment Dist 6.72 miles
 Avg Segment Time 7.53 min
 Avg Power 35.62 mph2/s
 Total 1-Sec Obs 43391

Modal Region Frequencies

Total Idle	1.39%	Above LA-4 Accel	1.67%
Total Cruise	50.35%	Below LA-4 Decel	2.30%
Total Accel	24.77%	Above LA-4 Speed	53.39%
Total Decel	23.49%	Total Beyond LA-4	57.35%

Outside LA-4 Frequencies

0 mph/2/sec	51.28%
>0 - <100 mph/2/sec	36.31%
100 - <200 mph/2/sec	10.36%
200 - <300 mph/2/sec	1.64%
>=300 mph/2/sec	0.41%

Specific Power Distribution

0 mph/2/sec	51.28%
>0 - <100 mph/2/sec	36.31%
100 - <200 mph/2/sec	10.36%
200 - <300 mph/2/sec	1.64%
>=300 mph/2/sec	0.41%

Los Angeles Chase Car Freeway & Ramp Driving SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)																			TOTALS	
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	
-20																					
-19																					
-18																					
-17																					
-16																					
-15																					
-14																					
-13																					
-12																					
-11																					
-10																					
-9																					
-8	0.016	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	
-7	0.009	0.023	0.009	0.018	0.009	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	
-6	0.012	0.029	0.032	0.053	0.018	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	
-5	0.015	0.070	0.061	0.067	0.093	0.085	0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.044	
-4	0.044	0.080	0.102	0.098	0.102	0.099	0.093	0.093	0.093	0.093	0.093	0.093	0.093	0.093	0.093	0.093	0.093	0.093	0.093	0.093	
-3	0.155	0.196	0.187	0.245	0.207	0.190	0.163	0.181	0.181	0.181	0.181	0.181	0.181	0.181	0.181	0.181	0.181	0.181	0.181	0.181	
-2	0.368	0.307	0.312	0.356	0.394	0.400	0.271	0.196	0.274	0.271	0.271	0.271	0.271	0.271	0.271	0.271	0.271	0.271	0.271	0.271	
-1	0.928	0.654	0.917	1.010	1.001	0.914	0.733	0.628	0.715	1.016	1.784	2.207	1.667	0.595	0.105	0.018	0.018	0.018	0.018	0.018	
0	1.973	2.189	1.103	1.617	1.842	2.332	2.105	1.530	1.451	1.798	3.062	6.287	10.456	8.766	3.553	0.677	0.126	0.048	0.048	0.048	
1	0.082	1.261	0.800	1.109	1.387	1.372	1.448	1.264	1.159	1.344	1.611	2.324	2.583	1.582	0.531	0.128	0.018	0.018	0.018	0.018	
2	0.003	0.429	0.356	0.517	0.613	0.587	0.523	0.391	0.350	0.333	0.236	0.166	0.088	0.035	0.035	0.035	0.035	0.035	0.035	0.035	
3	0.006	0.196	0.222	0.234	0.187	0.213	0.114	0.085	0.082	0.050	0.032	0.006	0.006	0.012	0.003	0.003	0.003	0.003	0.003	0.003	
4	0.006	0.108	0.076	0.076	0.076	0.076	0.076	0.044	0.020	0.026	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	
5	0.003	0.076	0.032	0.026	0.023	0.015	0.012	0.012	0.009	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	
6	0.035	0.026	0.026	0.012	0.012	0.012	0.009	0.006	0.006	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	
7	0.023	0.012	0.006	0.006	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	
8	0.006	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	
9	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	
10	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	
11	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	
12	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	
13	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	
14	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	
15	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	
16	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	
17	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	
18	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	
19	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	
20	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	
Totals	2.073	5.844	3.980	5.246	5.987	6.416	5.964	4.647	4.233	4.770	6.407	10.837	15.556	12.173	4.711	0.920	0.1661			100.000	

Summary Statistics

Avg Speed 41.99 mph
 Avg Segment Dist 6.77 miles
 Avg Segment Time 9.68 min
 Avg Power 28.85 mph/2s
 Total 1-Sec Obs 34257

Modal Region Frequencies

Total Idle 2.07%
 Total Cruise 48.88%
 Total Accel 26.79%
 Total Decel 22.26%

Outside LA-4 Frequencies

Above LA-4 Accel 3.14%
 Below LA-4 Decel 33.53%
 Above LA-4 Speed 38.04%
 Total Beyond LA-4 0.00%

Specific Power Distribution

0 mph/2/sec 50.88%
 >0 - <100 mph/2/sec 40.92%
 100 - <200 mph/2/sec 7.19%
 200 - <300 mph/2/sec 0.77%
 >=300 mph/2/sec 0.24%

Spokane Chase Car Freeway & Ramp Driving SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)																		TOTALS		
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
-20																					
-19																					
-18																					
-17																					
-16																					
-15																					
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0	1.358	0.154	0.035	0.079	0.079	0.229	0.357	0.617	0.917	1.142	1.560	15.309	21.934	13.012	8.384	8.547	21.212	0.048	69.774		
1	0.013	0.084	0.031	0.066	0.106	0.132	0.256	0.450	0.555	0.679	1.503	2.934	3.161	1.895	0.858	0.093	0.022	12.998			
2	0.013	0.071	0.048	0.071	0.101	0.093	0.128	0.181	0.225	0.225	0.141	0.148	0.044	0.044	0.018	0.018	0.018	0.018	1.534		
3	0.013	0.057	0.057	0.084	0.088	0.123	0.101	0.062	0.075	0.044	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.754		
4	0.004	0.066	0.022	0.048	0.048	0.123	0.119	0.212	0.185	0.198	0.158	0.115	0.053	0.022	0.009	0.009	0.009	0.009	0.009	1.499	
5	0.004	0.035	0.013	0.019	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	11.844	
6	0.004	0.004																			0.004
7																					
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13																					
14																					
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20																					
Totals	1.393	0.780	0.445	0.599	0.661	0.386	1.292	1.821	2.495	2.914	8.653	21.379	28.299	16.949	10.310	0.785	0.287	0.053		100.000	

Summary Statistics

Avg Speed 56.03 mph
 Avg Segment Dist 7.85 miles
 Avg Segment Time 8.4 min
 Avg Power 25.74 mph/2s
 Total 1-Sec Obs 22686

Modal Region Frequencies

Total Idle	1.39%	Above LA-4 Accel	0.77%
Total Cruise	68.42%	Below LA-4 Decel	1.50%
Total Accel	15.41%	Above LA-4 Speed	56.68%
Total Decel	14.78%	Total Beyond LA-4	58.96%

Specific Power Distribution

0 mph/2/sec	53.57%
>0 - <200 mph/2/sec	40.38%
100 - <300 mph/2/sec	5.19%
200 - <300 mph/2/sec	0.67%
>=300 mph/2/sec	0.20%

All Chase Car Non-Freeway & Non-Ramp Driving SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)																			TOTALS	
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	
-20																					
-19																					
-18																					
-17																					
-16																					
-15																					0.001
-14																					0.001
-13																					0.001
-12																					0.001
-11																					0.003
-10																					0.005
-9																					0.016
-8																					0.048
-7																					0.106
-6																					0.357
-5																					1.024
-4																					1.699
-3																					3.418
-2																					5.344
-1		0.011	0.014	0.027	0.025	0.018	0.011	0.007	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
0		0.005	0.052	0.080	0.076	0.067	0.042	0.022	0.008	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
1		0.340	1.273	1.501	1.472	1.333	1.714	2.270	2.123	0.101	0.050	0.021	0.009	0.002	0.000	0.000	0.000	0.000	0.000	0.000	
2		1.007	1.501	1.064	1.064	1.009	0.980	0.731	0.419	0.231	0.120	0.067	0.036	0.009	0.002	0.001	0.000	0.000	0.000	0.000	
3		0.079	0.920	0.659	0.799	0.639	0.400	0.192	0.081	0.032	0.020	0.008	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	
4		0.294	0.416	0.309	0.231	0.156	0.064	0.024	0.012	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
5		0.025	0.244	0.115	0.070	0.033	0.008	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
6		0.005	0.076	0.027	0.009	0.004	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
7		0.003	0.012	0.008	0.003	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
8		0.004	0.009	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
9		0.002	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
10		0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
11		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
12		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
13		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
14		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
15		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
16		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
17		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
18		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
19		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
20		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Totals	18.619	10.232	7.085	7.451	7.125	8.195	10.565	10.940	7.391	4.318	3.393	3.005	1.484	0.203	0.021	0.003				100.000	

Summary Statistics

Avg Speed	21.92 mph	Total Idle	18.62%	Above LA-4 Accel	2.35%
Avg Segment Dist	3.19 miles	Total Cruise	31.24%	Below LA-4 Decel	3.67%
Avg Segment Time	8.74 min	Total Accel	26.78%	Above LA-4 Speed	1.71%
Avg Power	21.67 mph/2s	Total Decel	23.37%	Total Beyond LA-4	7.73%
Total 1-Sec Obs	423630				

Modal Region Frequencies

Outside LA-4 Frequencies				
Above LA-4 Accel				
Below LA-4 Decel				
Above LA-4 Speed				
Total Beyond LA-4				

Specific Power Distribution

>=0 mph/2/sec	58.59%
>0 - <100 mph/2/sec	35.74%
100 - <200 mph/2/sec	5.20%
200 - <300 mph/2/sec	0.38%
>=300 mph/2/sec	0.09%

Baltimore Chase Car Non-Freeway & Non-Ramp Driving SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)																		TOTALS		
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
-20																					0.002
-19																					0.002
-18																					0.002
-17																					0.002
-16																					0.005
-15																					0.019
-14																					0.042
-13	0.001																				0.001
-12																					0.002
-11																					0.005
-10																					0.002
-9	0.002																				0.001
-8	0.004																				0.001
-7	0.001	0.011																			0.001
-6	0.004	0.040																			0.001
-5	0.037	0.170																			0.028
-4	0.001	0.176	0.278																		0.765
-3	0.001	0.491	0.684	0.438																	3.310
-2	0.002	1.320	0.741	0.933	0.497																5.304
-1	0.028	2.196	0.737	0.836	0.986	1.056															12.433
0	18.421	2.431	1.403	1.111	1.607	2.625	3.789	4.256	3.169	2.711	2.578	1.646	0.908	0.111	0.013	0.004				46.883	
1	0.390	1.159	1.566	1.524	1.437	1.709	2.057	1.951	1.501	1.214	0.855	0.478	0.160	0.027	0.008	0.001				16.059	
2	0.147	1.066	0.683	1.106	0.985	0.910	0.671	0.464	0.343	0.220	0.136	0.080	0.014	0.003	0.001	0.001				6.830	
3	0.152	0.838	0.648	0.695	0.553	0.360	0.200	0.101	0.049	0.040	0.018	0.009	0.004	0.001	0.001					3.667	
4	0.328	0.371	0.288	0.236	0.155	0.088	0.055	0.035	0.018	0.013	0.005	0.002	0.002							1.551	
5	0.057	0.138	0.068	0.053	0.025	0.005	0.002	0.003	0.002	0.002	0.001	0.001	0.001							0.356	
6	0.013	0.039	0.016	0.008	0.005	0.001	0.002	0.002	0.001	0.001	0.001	0.001	0.001							0.088	
7	0.008	0.005	0.003	0.004	0.002	0.001														0.023	
8	0.010	0.009	0.001																	0.020	
9	0.004	0.003	0.001																	0.009	
10	0.002	0.002																		0.005	
11	0.001																			0.001	
12	0.001																			0.001	
13																					
14																					
15																				0.001	
16																					
17																					
18																					
19																					
20																					
Totals	19.563	10.289	7.335	7.573	8.134	9.294	9.081	6.801	5.553	4.658	2.827	1.317	0.180	0.034	0.005					100.000	

Summary Statistics

Avg Speed 21.76 mph
 Avg Segment Dist 2.9 miles
 Avg Segment Time 8 min
 Avg Power 22.89 mph/2sec
 Total 1-Sec Obs 169527

Modal Region Frequencies

Total Idle 19.56%
 Total Cruise 28.26%
 Total Accel 27.50%
 Total Decel 24.68%

Outside LA-4 Frequencies

Above LA-4 Accel 3.75%
 Below LA-4 Decel 1.54%
 Above LA-4 Speed 7.68%
 Total Beyond LA-4

Specific Power Distribution

0 mph/2/sec 2.39%
 >0 - <100 mph/2/sec 35.94%
 100 - <200 mph/2/sec 5.60%
 200 - <300 mph/2/sec 0.54%
 >=300 mph/2/sec 0.12%

Los Angeles Chase Car Non-Freeway & Non-Ramp Driving SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)																		TOTALS		
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
-20																					
-19																					
-18																					
-17																					
-16																					
-15																					
-14																					
-13																					
-12																					
-11																					
-10																					
-9																					
-8																					
-7																					
-6																					
-5																					
-4																					
-3																					
-2																					
-1																					
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13																					
14																					
15																					
16																					
17																					
18																					
19																					
20																					
Totals	20.313	11.904	7.178	7.834	7.638	8.703	10.743	10.766	8.531	4.527	1.536	0.190	0.36	0.001						100.000	

Summary Statistics

Avg Speed 19.34 mph
 Avg Segment Dist 2.57 miles
 Avg Segment Time 7.98 min
 Avg Power 23.54 mph/2s
 Total 1-Sec Obs 76652

Modal Region Frequencies

Total Idle	20.31%
Total Cruise	25.62%
Total Accel	28.64%
Total Decel	24.43%

Outside LA-4 Frequencies

Above LA-4 Accel	3.14%
Below LA-4 Decel	5.22%
Above LA-4 Speed	0.14%
Total Beyond LA-4	8.49%

Specific Power Distribution

0 mph/2/sec	58.14%
>0 - <100 mph/2/sec	34.86%
100 - <200 mph/2/sec	6.58%
200 - <300 mph/2/sec	0.33%
>=300 mph/2/sec	0.09%

Spokane Chase Car Non-Freeway & Non-Ramp Driving SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)																		TOTALS		
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
-20																					0.001
-19																					0.001
-18																					0.001
-17																					0.002
-16																					0.005
-15																					0.010
-14																					0.039
-13																					0.065
-12																					0.266
-11																					0.308
-10																					1.471
-9	0.001	0.003	0.002	0.002	0.001	0.002	0.001	0.002	0.001	0.002	0.001	0.002	0.001	0.002	0.001	0.002	0.001	0.002	0.001	0.002	0.010
-8	0.005	0.006	0.008	0.006	0.017	0.012	0.014	0.007	0.007	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.039
-7	0.001	0.006	0.006	0.017	0.012	0.014	0.014	0.007	0.007	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.065
-6	0.004	0.036	0.053	0.058	0.054	0.054	0.054	0.027	0.015	0.003	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.266
-5	0.034	0.158	0.214	0.212	0.155	0.172	0.172	0.072	0.033	0.017	0.009	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.308
-4	0.104	0.263	0.321	0.305	0.229	0.138	0.061	0.027	0.015	0.027	0.007	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	1.471
-3	0.420	0.745	0.490	0.522	0.501	0.346	0.190	0.069	0.069	0.012	0.006	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	3.329
-2	1.239	0.624	0.894	0.437	0.523	0.516	0.341	0.154	0.045	0.028	0.011	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	4.818
-1	2.002	0.625	0.666	0.806	0.944	1.630	1.732	1.005	0.420	0.341	0.346	0.173	0.042	0.005	0.005	0.005	0.005	0.005	0.005	0.005	10.737
0	16.331	1.820	1.283	0.957	1.381	2.622	5.716	7.905	4.904	1.981	3.672	1.871	0.230	0.008	0.008	0.008	0.008	0.008	0.008	0.008	52.839
1	0.277	1.246	1.463	1.233	1.674	2.423	2.118	1.140	0.488	0.385	0.343	0.169	0.034	0.004	0.004	0.004	0.004	0.004	0.004	0.004	14.883
2	0.062	0.928	0.461	1.023	0.944	0.902	0.640	0.319	0.118	0.048	0.022	0.008	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	5.483
3	0.031	0.944	0.638	0.783	0.621	0.356	0.168	0.060	0.019	0.006	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	3.628
4	0.281	0.387	0.275	0.193	0.108	0.069	0.039	0.010	0.012	0.007	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	1.306
5	0.003	0.248	0.109	0.069	0.039	0.010	0.004	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.484
6	0.066	0.020	0.005	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.094
7	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.020
8	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.007
9	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.003
10	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
11																					
12																					
13																					
14																					
15																					
16																					
17																					
18																					
19																					
20																					
Totals	16.385	9.455	6.734	7.169	6.710	8.035	11.703	12.793	7.461	3.019	2.987	4.391	2.227	0.312	0.017	0.003					100.000

Summary Statistics

Avg Speed	23.19 mph	Total Idle	16.99%	Above LA-4 Accel	1.97%
Avg Segment Dist	3.89 miles	Total Cruise	36.51%	Below LA-4 Decel	2.92%
Avg Segment Time	10.05 min	Total Accel	24.86%	Above LA-4 Speed	2.56%
Avg Power	19.71 mph/2s	Total Decel	21.65%	Total Beyond LA-4	7.45%
Total 1-Sec Obs	177551				

Modal Region Frequencies

Above LA-4 Frequencies	0 mph/2/sec	59.54%
Below LA-4 Frequencies	>0 - <100 mph/2/sec	35.93%
Above LA-4 Speed	100 - <200 mph/2/sec	4.22%
Total Beyond LA-4	200 - <300 mph/2/sec	0.24%
	>=300 mph/2/sec	0.06%

Specific Power Distribution

Above LA-4 Accel	0 mph/2/sec	59.54%
Below LA-4 Decel	>0 - <100 mph/2/sec	35.93%
Above LA-4 Speed	100 - <200 mph/2/sec	4.22%
Total Beyond LA-4	200 - <300 mph/2/sec	0.24%
	>=300 mph/2/sec	0.06%

Non-Freeway/Ramp Driving Los Angeles vs. Baltimore Difference SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)															NET TOTALS	ABS TOTALS	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
-15	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85
-14																		-0.002
-13	-0.001																	-0.002
-12																		-0.003
-11																		-0.001
-10																		-0.005
-9																		-0.003
-8	-0.001	0.009	0.013	0.014	0.001	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.015
-7	-0.001	0.028	0.047	0.036	0.023	0.015	0.014	0.005	0.005	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.047
-6		0.009	0.079	0.108	0.074	0.066	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.002
-5		0.028	0.079	0.108	0.095	0.082	0.074	0.066	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.003
-4	-0.001	0.011	0.068	0.10	0.049	0.079	0.104	0.104	0.036	0.001	0.025	0.011	0.002	0.001	0.001	0.001	0.001	0.005
-3	-0.001	0.058	0.040	0.019	0.088	0.098	0.146	0.163	0.018	-0.033	-0.029	-0.005	-0.006	-0.002	-0.001	-0.001	-0.001	0.039
-2	-0.002	0.029	-0.094	-0.058	-0.025	-0.031	-0.085	-0.004	-0.126	-0.135	-0.083	-0.033	-0.006	-0.002	-0.001	-0.001	-0.001	0.173
-1	-0.028	0.095	-0.158	-0.164	-0.162	-0.206	0.009	0.036	0.160	-0.354	-0.589	-0.477	-0.174	-0.031	-0.008	-0.001	-0.001	0.387
0	1.141	0.037	-0.235	-0.213	-0.355	-0.382	-0.293	0.657	1.508	0.129	-1.609	-1.540	-0.808	-0.111	-0.013	-0.004	-0.004	0.903
1	-0.012	0.429	-0.215	-0.145	-0.101	0.106	0.330	0.566	0.169	-0.457	-0.610	-0.436	-0.143	-0.026	-0.008	-0.001	-0.001	3.754
2	-0.062	-0.005	-0.271	-0.041	-0.227	-0.404	-0.405	0.088	-0.100	-0.155	-0.118	-0.079	-0.011	-0.003	-0.001	-0.001	-0.001	1.970
3	-0.121	0.207	0.085	0.372	0.318	0.231	0.037	-0.015	-0.024	-0.031	-0.015	-0.009	-0.004	-0.001	-0.001	-0.001	-0.001	1.471
4	-0.080	0.211	0.114	0.069	0.015	-0.016	-0.012	-0.008	-0.008	-0.005	-0.002	-0.002	-0.001	-0.001	-0.001	-0.001	-0.001	0.276
5	-0.050	0.330	0.167	0.058	0.013	0.007	0.003	-0.002	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	0.634
6	-0.012	0.141	0.051	0.012	0.004	0.002	0.001	-0.002	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	0.194
7	-0.008	0.030	0.014	-0.001	-0.002	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.035
8	-0.010	0.009	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.025
9	-0.004	0.001	0.000	0.000	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	0.007
10	-0.002	-0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.004
11	-0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
12	-0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
13																		
14																		
15		-0.001																
NET	0.746	1.615	-0.157	0.285	0.311	0.569	1.449	1.985	1.730	-1.059	-3.126	-2.636	-1.181	-0.180	-0.034	-0.006	0.000	0.000
ABS	1.536	1.635	1.793	1.507	1.761	1.831	1.541	1.745	2.014	3.127	3.126	2.638	1.181	0.180	0.034	0.006	0.000	23.855

Summary Statistics Differences

Difference in Average Speed -2.42 mph
 Difference in Average Power 0.65 mph2/s

Specific Power Distribution Differences

0 mph2/sec
 >0 - <100 mph2/sec
 100 - <200 mph2/sec
 200 - <300 mph2/sec
 >=300 mph2/sec

Total Absolute Difference
 High-Power Difference
 0.35%
 -1.09%
 0.99%
 -0.22%
 -0.03%
 2.66%
 0.25%

Non-Freeway/Ramp Driving Spokane vs. Baltimore Difference SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)																NET TOTALS	ABS TOTALS	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
-15	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	-0.003
-14						-0.0001	-0.0001											-0.002	
-13	-0.001					0.000	-0.0001	-0.001										-0.003	
-12					0.000	-0.0001			-0.001									-0.002	
-11					-0.001	-0.0001	0.000	0.0001	-0.001	-0.001								-0.002	
-10					0.000	0.0001	-0.0001	0.0002	-0.0001		-0.001							-0.006	
-9	-0.001	0.001	-0.0002	-0.0002	0.0000	-0.0003	-0.0001	-0.0001	-0.0001									-0.009	
-8	-0.001	0.001	-0.0004	0.0000	0.0000	-0.0002	0.0000	-0.0003	-0.0003	-0.0001								-0.013	
-7	0.000	-0.005	-0.0003	-0.011	0.000	-0.003	0.005	-0.001	-0.001	0.000	-0.001							-0.013	
-6	0.000	-0.004	-0.005	0.010	-0.003	-0.014	-0.010	-0.006	-0.002	-0.001	0.000	0.001						-0.020	
-5	-0.003	0.028	0.023	0.040	0.026	-0.016	-0.012	-0.007	0.001	0.002	0.001	0.001	0.001					-0.034	
-4	-0.001	-0.072	-0.015	0.000	-0.041	-0.039	-0.025	-0.040	-0.033	-0.018	-0.007	-0.007	-0.001	0.000				-0.161	
-3	-0.001	-0.071	0.061	0.052	0.048	0.068	0.017	-0.014	-0.054	-0.047	-0.026	-0.006	-0.004	-0.002	-0.001			-0.292	
-2	-0.002	-0.081	-0.059	-0.060	-0.041	-0.117	-0.101	-0.150	-0.185	-0.137	-0.076	-0.030	-0.003	-0.001	0.001			-0.472	
-1	-0.028	-0.194	-0.112	-0.170	-0.160	-0.111	-0.294	0.272	-0.193	-0.619	-0.505	-0.161	-0.017	-0.011	-0.003	0.000		-1.083	
0	-2.090	-0.611	-0.120	-0.154	-0.226	0.087	1.927	3.649	1.735	-0.760	-0.392	2.026	0.963	0.119	-0.006	-0.003		-1.696	
1	-0.114	0.087	-0.109	-0.061	-0.204	-0.035	0.366	0.167	-0.361	-0.716	-0.470	-0.135	0.009	0.007	-0.004	0.000		6.155	
2	-0.085	-0.138	-0.222	-0.083	-0.041	-0.008	-0.031	-0.145	-0.225	-0.172	-0.114	-0.072	-0.008	-0.001	0.000			-1.573	
3	-0.121	0.106	-0.010	0.088	0.068	-0.034	-0.041	-0.030	-0.034	-0.016	-0.007	-0.004	-0.001	-0.001	0.000			-2.845	
4	-0.047	0.016	-0.023	-0.043	-0.047	-0.050	-0.023	-0.011	-0.004	-0.001	-0.002	0.001						-1.345	
5	-0.054	0.110	0.041	0.016	0.014	0.005	0.006	0.002	-0.002	-0.001	-0.001							-0.565	
6	-0.013	0.027	0.004	-0.003	-0.003	0.000	-0.001	-0.002	0.001	-0.001	-0.001							-0.245	
7	-0.008	0.003	0.005	-0.003	-0.001	-0.001	0.001	0.001	-0.001	-0.001	-0.001							0.249	
8	-0.010	-0.006	0.000	0.002	0.001													0.057	
9	-0.003	-0.002	0.000	0.001	-0.001													0.024	
10	-0.002	-0.001																0.013	
11	-0.001																	0.019	
12	-0.001																	0.009	
13																		0.003	
14																		0.001	
15		-0.001																0.001	
NET	-2.581	-0.833	-0.598	-0.403	-0.616	-2.100	2.414	3.714	0.660	-2.564	-1.673	1.564	0.910	0.132	-0.015	-0.002			
ABS	2.581	1.531	0.878	0.769	0.988	2.806	4.476	2.814	2.566	1.673	2.490	1.038	0.146	0.015	0.004			25.269	

Summary Statistics Differences

Difference in Average Speed 1.43 mph
 Difference in Average Power -3.18 mph²/s

Specific Power Distribution Differences

0 mph ² /sec	1.75%
>0 - <100 mph ² /sec	-0.01%
100 - <200 mph ² /sec	-1.37%
200 - <300 mph ² /sec	-0.30%
>=300 mph ² /sec	-0.06%

Total Absolute Difference 3.49%
 High-Power Difference 0.36%

Non-Freeway/Ramp Driving Spokane vs. Los Angeles Difference SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)															NET TOTALS	ABS TOTALS		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
-15	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	
-14				-0.001	0.001		-0.001										-0.001	0.001	
-13																		0.000	0.002
-12			0.000		-0.001													-0.001	0.001
-11					0.000	0.000		0.001										0.001	0.001
-10			-0.001	0.002	-0.004	-0.001	0.001		-0.002	-0.003								-0.003	0.009
-9			0.001	-0.004	-0.002	-0.001	-0.002		-0.002	-0.003								-0.014	0.016
-8			-0.008	-0.014	-0.010	-0.010	-0.005	-0.003	-0.005	-0.001								-0.042	0.042
-7		0.001	-0.033	-0.050	-0.047	-0.023	-0.018	-0.009	-0.006	0.001	0.001							-0.183	0.189
-6			-0.009	-0.083	-0.113	-0.064	-0.049	-0.019	-0.015	-0.002	0.000	0.001	0.001					-0.421	0.425
-5			-0.031	-0.130	-0.149	-0.130	-0.153	-0.124	-0.066	-0.008	-0.004	0.002	0.001	0.001				-0.814	0.822
-4			-0.083	-0.083	-0.010	-0.080	-0.118	-0.129	-0.076	-0.032	0.007	0.004	0.001	0.001				-0.608	0.634
-3			-0.129	0.021	0.033	-0.040	-0.030	-0.129	-0.177	-0.072	-0.014	0.003	-0.001	0.002				-0.533	0.651
-2			-0.110	-0.023	-0.005	0.038	-0.016	-0.010	-0.186	-0.146	-0.059	-0.002	0.007	0.003	0.001			-0.504	0.610
-1			-0.289	0.046	-0.006	0.002	0.095	0.285	0.236	-0.353	-0.265	0.084	0.316	0.157	0.042			0.356	2.182
0		-3.231	-0.648	0.115	0.059	0.129	0.479	1.634	2.992	0.227	-0.889	1.217	3.566	1.771	0.230	0.008	0.001	7.660	17.196
1		-0.102	-0.342	0.106	0.084	-0.103	-0.141	0.036	-0.399	-0.530	-0.259	0.140	0.301	0.152	0.033	0.004	0.001	-1.019	2.733
2		-0.023	-0.133	0.049	-0.042	-0.268	-0.412	-0.233	-0.233	-0.125	-0.017	0.004	0.007	0.003	0.002	0.001		-1.623	1.755
3	0.000	-0.101	-0.085	-0.284	-0.250	-0.235	-0.071	-0.026	-0.006	-0.003	-0.001	0.002						-1.070	1.074
4	0.033	-0.195	-0.137	-0.112	-0.062	-0.034	-0.011	-0.003	-0.003	0.001	0.001							-0.521	0.533
5	-0.004	-0.220	-0.126	-0.042	0.001	-0.002	-0.001	0.000	0.000	-0.001								-0.395	0.397
6	-0.001	-0.114	-0.047	-0.015	-0.007	-0.002	-0.002	0.001	0.001	0.001								-0.187	0.189
7		-0.027	-0.009	-0.002	0.001	-0.004	-0.001	-0.001	0.001									-0.041	0.045
8		-0.015	-0.003	0.002	0.001	-0.003												-0.018	0.024
9	0.001	-0.003	0.000	0.001	0.001													0.000	0.006
10	0.000	-0.001																-0.001	0.001
11																			
12																			
13																			
14																			
15																			
NET	-3.327	-2.448	-0.441	-0.688	-0.927	-0.669	0.965	2.029	-1.070	-1.505	1.453	4.200	2.091	0.312	0.019	0.004	0.000	0.000	
ABS	3.395	2.450	1.117	1.030	1.273	1.819	2.947	4.429	1.528	1.459	4.202	2.091	0.312	0.019	0.004	0.000	0.000	29.598	

Summary Statistics Differences

Difference in Average Speed 3.85 mph
 Difference in Average Power -3.83 mph2/s

Specific Power Distribution Differences

0 mph2/sec	1.40%
>0 - <100 mph2/sec	1.07%
100 - <200 mph2/sec	-2.36%
200 - <300 mph2/sec	-0.09%
>=300 mph2/sec	-0.03%

Total Absolute Difference 4.95%
 High-Power Difference 0.12%

Freeway/Ramp Driving Los Angeles vs. Baltimore Difference SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)																NET TOTALS	ABS TOTALS	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
-15																			
-14																		-0.002	
-13																			
-12																			
-11																			
-10																			
-9																			
-8																			
-7																			
-6																			
-5																			
-4																			
-3																			
-2																			
-1																			
0	0.692	1.841	0.720	1.324	1.413	1.724	1.430	0.746	0.603	0.199	-0.690	-2.963	-5.863	-2.617	0.283	0.282	0.112	11.794	
1	0.020	1.095	0.590	0.879	1.106	1.022	0.964	0.773	0.578	0.295	-0.498	-1.790	-2.840	-1.568	-0.453	0.034	0.013	0.220	23.482
2	-0.013	0.318	0.241	0.365	0.468	0.393	0.142	0.099	-0.017	-0.246	-0.429	-0.523	-0.262	-0.084	-0.013	-0.002	-0.002	14.518	
3	0.001	0.138	0.148	0.179	0.059	0.130	0.015	0.023	-0.001	-0.019	-0.012	-0.049	-0.054	-0.018	-0.011	-0.002	-0.002	3.958	
4	-0.008	0.067	0.044	0.032	0.048	0.016	-0.008	0.014	0.002	0.007	0.001	-0.002	-0.004	-0.004	-0.002	-0.002	-0.002	2.947	
5	-0.002	0.069	0.023	0.017	0.011	0.013	0.007	-0.001										-3.188	
6	-0.005	0.028	0.026	0.012	0.010	0.007												-0.784	
7		0.021	0.012	0.006															
8		0.006																	
9	-0.002	-0.002	0.003																
10	-0.002																		
11																			
12																			
13																			
14																			
15																			
NET	0.681	4.638	2.713	4.010	4.477	4.487	3.713	2.310	1.666	0.507	-2.107	-7.223	-12.794	-6.420	-1.031	0.252	0.136	0.000	
ABS	0.745	4.642	2.713	4.010	4.481	4.497	3.737	2.312	1.722	0.749	2.207	7.251	12.834	6.426	1.599	0.340	0.148	60.413	

Summary Statistics Differences

Difference in Average Speed -11.51 mph
 Difference in Average Power -6.77 mph²/s

Specific Power Distribution Differences

0 mph ² /sec	-0.40%
>0 - <100 mph ² /sec	4.62%
100 - <200 mph ² /sec	-3.18%
200 - <300 mph ² /sec	-0.87%
>=300 mph ² /sec	-0.17%

Total Absolute Difference 9.23%
 High-Power Difference 1.04%

Freeway/Ramp Driving Spokane vs. Baltimore Difference SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)																NET TOTALS	ABS TOTALS	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
-15	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	
-14																			-0.002
-13																			
-12																			
-11																			
-10																			
-9																			
-8																			
-7																			
-6																			
-5																			
-4																			
-3																			
-2																			
-1																			
0	0.077	-0.194	-0.348	-0.214	-0.350	-0.379	-0.318	-0.167	0.069	-0.457	1.608	6.079	5.615	1.629	0.132	0.198	18.142	22.996	
1	-0.049	-0.082	-0.179	-0.164	-0.175	-0.218	-0.228	-0.041	-0.026	-0.360	-0.606	-1.130	-2.262	-1.255	-0.116	-0.001	6.875	6.909	
2	-0.016	-0.040	-0.067	-0.081	-0.044	-0.101	-0.052	-0.117	-0.070	-0.125	-0.257	-0.454	-0.563	-0.253	-0.072	-0.007	-2.321	2.321	
3	0.008	-0.001	-0.017	0.029	0.000	0.040	0.002	0.000	-0.008	-0.025	-0.026	-0.037	-0.030	-0.014	-0.002	-0.002	-0.130	0.288	
4	-0.010	0.025	-0.010	-0.023	-0.015	-0.015	-0.006	-0.015	-0.016	-0.002	-0.005	-0.011	-0.002	-0.007	-0.002	-0.002	-0.098	0.154	
5	-0.005	0.028	0.004	0.000	-0.003	-0.002	-0.005	-0.007		-0.002		-0.005					0.003	0.061	
6	-0.001	-0.003			-0.002	-0.002						-0.005					-0.013	0.013	
7		-0.002					-0.002					-0.002					-0.006	0.006	
8		0.004							-0.002								0.002	0.006	
9	-0.002	-0.002						-0.002									-0.006	0.006	
10	-0.002																-0.002	0.002	
11																			
12																			
13																			
14																			
15																			
NET	0.000	-0.428	-0.834	-0.636	-0.850	-1.045	-0.961	-0.517	-0.074	-1.351	0.139	3.257	-0.053	-1.645	4.567	0.118	0.255	0.052	0.000
ABS	0.170	0.576	0.974	0.772	0.906	1.195	1.027	0.561	0.304	1.351	3.093	8.901	11.295	4.903	5.661	0.152	0.257	0.052	42.160

Summary Statistics Differences

Difference in Average Speed 2.53 mph
 Difference in Average Power -9.88 mph²/s

Specific Power Distribution Differences

0 mph ² /sec	2.29%
>0 - <100 mph ² /sec	4.08%
100 - <200 mph ² /sec	-5.17%
200 - <300 mph ² /sec	-0.98%
>=300 mph ² /sec	-0.21%

Total Absolute Difference 12.73%
 High-Power Difference 1.19%

Freeway/Ramp Driving Spokane vs. Los Angeles Difference SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)																NET TOTALS	ABS TOTALS		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16			
-15	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85		
-14																				
-13																				
-12																				
-11																				
-10																				
-9																				
-8																				
-7																				
-6																				
-5																				
-4																				
-3																				
-2																				
-1																				
0	-0.615	-2.035	-1.068	-1.538	-1.763	-2.103	-1.748	-0.913	-0.534	-0.656	-0.604	-0.655	-0.108	-0.660	-0.578	-0.313	-0.337	-0.004	0.451	
1	-0.069	-1.177	-0.769	-1.043	-1.281	-1.240	-1.192	-0.814	-0.604	-0.655	-0.111	-0.017	-0.011	-0.011	-0.011	-0.011	-0.011	-0.011	45.132	
2	-0.003	-0.358	-0.308	-0.446	-0.512	-0.494	-0.512	-0.259	-0.169	-0.108	-0.025	-0.025	-0.040	-0.009	-0.012	-0.006	-0.006	-0.006	18.926	
3	0.007	-0.139	-0.165	-0.150	-0.099	-0.099	-0.013	-0.023	-0.007	-0.006	-0.014	-0.012	-0.007	-0.003	-0.003	-0.003	-0.003	-0.003	10.879	
4	-0.002	-0.042	-0.054	-0.055	-0.063	-0.031	-0.007	-0.008	-0.018	-0.009	-0.006	-0.006	-0.001	-0.002	-0.003	-0.003	-0.003	-0.003	3.155	
5	-0.003	-0.041	-0.019	-0.017	-0.014	-0.015	-0.012	-0.006											2.156	
6	0.004	-0.034	-0.026	-0.012	-0.012	-0.009													8.451	
7		-0.023	-0.012	-0.006																
8		-0.002																		
9		-0.003																		
10																				
11																				
12																				
13																				
14																				
15																				
NET	-0.681	-5.066	-3.547	-4.646	-5.327	-5.532	-4.674	-2.927	-1.740	-1.858	2.246	10.480	12.741	4.775	5.598	-0.134	0.119	0.052	0.000	
ABS	0.703	5.066	3.547	4.646	5.327	5.532	4.674	2.927	1.772	1.858	2.874	10.750	13.001	4.895	5.610	0.200	0.119	0.052	73.453	

Summary Statistics Differences

Difference in Average Speed 14.04 mph
 Difference in Average Power -3.11 mph²/s

Specific Power Distribution Differences

0 mph ² /sec	2.69%
>0 - <100 mph ² /sec	-0.54%
100 - <200 mph ² /sec	-2.00%
200 - <300 mph ² /sec	-0.11%
>=300 mph ² /sec	-0.04%

Total Absolute Difference 5.38%
 High-Power Difference 0.15%

Appendix B

Travel Mix Adjustments for Area-Wide Cycle

Weighting Factors to Derive Non-Freeway Instrumented Driving

	<u>Baltimore</u>	<u>Spokane</u>	<u>Los Angeles</u>	<u>Atlanta</u>
Chase Car Short Trip "Bump Up" factor	6.21	3.49	3.85	5.50
Initial Travel Fractions (% time)				
Non-Freeway/Ramp	20.38%	11.34%	30.89%	19.15%
Freeway/Ramp	79.62%	88.66%	69.11%	80.85%
Adjusted Travel Fractions (% time)				
Freeway/Ramp LOS A-C	15.56%	10.20%	11.68%	-
Freeway/Ramp LOS D	1.91%	0.16%	4.69%	-
Freeway/Ramp LOS E	0.52%	0.13%	4.93%	-
Freeway/Ramp LOS F	1.22%	0.00%	8.02%	-
Freeway/Ramp Total	19.21%	10.50%	29.32%	-
Non-Freeway/Ramp Total	80.79%	89.50%	70.68%	-

Short Trip (< 5min) Percentages

<u>Driving Database</u>	<u>Short Trip % Time</u>
Baltimore Instrumented	6.86
Baltimore Chase Car	1.17
Spokane Instrumented	10.42
Spokane Chase Car	3.23
Atlanta Instrumented	6.13
Los Angeles Chase Car	1.88

Unadjusted Freeway/Ramp Travel Fractions (% time)

	<u>Baltimore</u>	<u>Spokane</u>	<u>Los Angeles</u>	<u>Combined</u>
<u>Freeway/Ramp Total</u>	20.38	11.34	30.89	19.15
Freeway/Ramp LOS A	27.14	41.74	4.60	22.74
Freeway/Ramp LOS B	31.83	30.80	10.47	24.30
Freeway/Ramp LOS C	22.06	24.67	24.78	23.58
Freeway/Ramp LOS A-C	81.02	97.21	39.84	70.62
Freeway/Ramp LOS D	9.95	1.57	16.00	10.12
Freeway/Ramp LOS E	2.71	1.23	16.81	7.19
Freeway/Ramp LOS F	6.33	-	27.35	12.07

<u>Non-Freeway/Ramp Total</u>	79.62	88.66	69.11	80.85
Non-Freeway/Ramp LOS A	56.59	65.12	45.58	58.17
Non-Freeway/Ramp LOS B	21.55	21.13	23.74	21.77
Non-Freeway/Ramp LOS C	13.59	10.58	17.63	13.06
Non-Freeway/Ramp LOS D	5.99	2.63	8.80	5.09
Non-Freeway/Ramp LOS E	1.98	0.33	3.33	1.53
Non-Freeway/Ramp LOS F	0.29	0.21	0.92	0.37
Freeway Only Total	16.91	9.79	25.77	
Ramp Only Total	3.47	1.55	5.11	

Short Trip-Adjusted Travel Fractions

	Baltimore	Spokane	Los Angeles	Atlanta
Instrumented Vehicle short trip % time (IVshort)	6.86	10.42	6.86	6.13
Chase Car short trip % time (CCshort)	1.17	3.23	1.88	1.17
Raw % time on freeway/ramp (Fraw)	20.38	11.34	30.89	-
Raw % time on non-freeway/ramp (NFraw)	79.62	88.66	69.11	-
Chase Car short trip "bump up" factor (BF)	6.21	3.49	3.85	5.50
Adjusted % time on freeway/ramp (Fadj)	19.21	10.50	29.32	-
Adjusted % time on non-freeway/ramp (NFadj)	80.79	89.50	70.68	-
Adjusted % time on freeways only total	15.93	9.06	24.46	-
Adjusted % time on freeways only LOS AC (bag 1)	12.91	8.81	9.75	-
Adjusted % time on freeways only LOS D (bag 2)	1.58	0.14	3.91	-
Adjusted % time on freeways only LOS E (bag 3)	0.43	0.11	4.11	-
Adjusted % time on freeways only LOS F (bag 4)	1.01	-	6.69	-
Adjusted % time on ramps only total (bag 5)	3.27	1.44	4.85	-
Adjusted % time on non-freeways/ramps (bag 6)	80.79	89.50	70.68	-

Short Trip Adjustment Procedure

Variable Definitions

FWYinit = % time driving on freeway/ramp (from chase car data)
NonFWYinit = % time driving on non-freeway/ramp facilities (also from chase car data)
SHORTcc = % time driving short trips from chase car data (5 minutes or less)
SHORTiv = % time driving short trips from instrumented data

Approach

The basic idea involves adjusting the initial freeway/ramp and non-freeway/ramp travel mix, which is based on chase car data, to contain the fraction of short (5 minutes or less) trips found in instrumented vehicle driving.

By assumption, short trips occur exclusively over non-freeway/ramp facilities. The following equation can then be applied to identify the “bump-up” factor needed to bring short trips in the chase car data in line with the instrumented vehicle short trip fraction:

$$\frac{\text{Shortcc} \times BF}{\text{SHORTcc} \times BF + (\text{NonFWYinit} - \text{SHORTcc}) + \text{FWY init}} \times 100 = \text{SHORTiv}$$

Solving for BF, the multiplicative bump-up factor, and simplifying yields:

$$BF = \frac{\text{SHORTiv} \times (1 - \text{SHORTcc}/100)}{\text{SHORTcc} \times (1 - \text{SHORTiv}/100)}$$

The adjusted freeway/ramp and non-freeway ramp fractions are then computed from the following equations:

$$FWYadj = \frac{FWYinit}{\text{SHORTcc} \times (BF - 1) + 100} \times 100$$

$$NonFWYadj = 100 - FWYadj$$

Appendix C

Facility-Specific and Non-Freeway Area-Wide Cycle Statistical Comparisons

Edited High-Speed (>50 mph) Freeway Driving Cycle SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)										TOTALS										
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
-20																					
-19																					
-18																					
-17																					
-16																					
-15																					
-14																					
-13																					
-12																					
-11																					
-10																					
-9																					
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-4																					
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11																					
12																					
13																					
14																					
15																					
16																					
17																					
18																					
19																					
20																					
Totals																12.623	33.607	35.082	17.213	1.475	
																					100.000

Cycle Summary Statistics

Avg Speed (mph)	63.23	Time at Idle (%)	0.000	Avg PKE (miles/hr ²)	1761.75
Max Speed (mph)	74.70	Time at Cruise (%)	69.016	Avg Total Specific Power (mph ² /sec)	30.95
Avg Non-Idle Speed (mph)	63.23	Time in Accel (%)	15.574	Avg Non-Zero Specific Power (mph ² /sec)	77.36
Avg Cruise Speed (mph)	62.79	Time in Decel (%)	15.410	Max Specific Power (mph ² /sec)	364.00
Avg Acceleration (mph/sec)	0.61	Cycle Length (miles)	10.775	Spec Pwr Freq (%)	60.000
Max Acceleration (mph/sec)	2.70	Cycle Time (min)	10.107	Spec Pwr Freq (%): <0-100 mph ² /sec	29.508
Avg Deceleration (mph/sec)	-0.62	# Stops per Mile	0.000	Spec Pwr Freq (%): >100-200 mph ² /sec	9.344
Max Deceleration (mph/sec)	-2.30	# of 1-Sec Observations	610	Spec Pwr Freq (%): >200-300 mph ² /sec	0.820
				Spec Pwr Freq (%): >300 mph ² /sec	0.328

Target 3-City Chase Car High-Speed (>50 mph) Freeway Driving SAFD (%)

Cycle Summary Statistics

Avg Speed (mph)	62.68	Time at Idle (%)	0.000	Avg PKE (miles/h ²)	1735.35
Max Speed (mph)	80.91	Time at Cruise (%)	71.71	Avg Total Specific Power (mph ² /sec)	30.21
Avg Non-Idle Speed (mph)	62.68	Time in Acceleration (%)	13.958	Avg Non-Zero Specific Power (mph ² /sec)	64.42
Avg Cruise Speed (mph)	62.30	Time in Decel (%)	14.332	Max Specific Power (mph ² /sec)	1391.19
Avg Acceleration (mph/sec)	0.50	Avg Trip or Segment Length (miles)	3.603	Spec-Pwr Freq (%):	52.945
Max Acceleration (mph/sec)	5.79	Avg Trip or Segment Time (min)	3.449	>0-100 mph/2sec	38.295
Avg Deceleration (mph/sec)	-0.51	# Stops per Mile	0.000	Spec-Pwr Freq (%): >100-200 mph/2sec	7.467
Max Deceleration (mph/sec)	-8.49	# of 1-Second Observations	21107	Spec-Pwr Freq (%): >200-300 mph/2sec	0.974
				Spec-Pwr Freq (%): >300 mph/2sec	0.322

High-Speed (>50 mph) Freeway Driving: Cycle vs. Target Difference SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)										NET TOTALS	ABS TOTALS
	0	5	10	15	20	25	30	35	40	45		
-20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-11	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
11	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NET TOTALS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TOTALS ABS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.408

Difference in Cycle vs. Target Summary Statistics

Avg Speed (mph)	0.56	Time at Idle (%)	0.000	Avg PKE (miles/hr ²)	0.000
Max Speed (mph)	6.21	Time at Cruise (%)	2.694	Avg Total Specific Power (mph2/sec)	0.73
Avg Non-idle Speed (mph)	0.56	Time in Accel (%)	1.616	Max Specific Power (mph2/sec)	13.16
Avg Cruise Speed (mph)	0.49	Time in Decel (%)	1.078	Spec Pwr Freq (%): #####	#####
Avg Acceleration (mph/sec)	0.11	Avg Trip or Segment Length (miles)	-	Spec Pwr Freq (%): 0 mph2/sec	7.056
Max Acceleration (mph/sec)	3.09	Avg Trip or Segment Time (min)	-	Spec Pwr Freq (%): >0-100 mph2/sec	-8.787
Avg Deceleration (mph/sec)	-0.12	# Stops per Mile	0.000	Spec Pwr Freq (%): >100-200 mph2/sec	1.878
Max Deceleration (mph/sec)	6.19	# of 1-Sec Observations	-	Spec Pwr Freq (%): >200-300 mph2/sec	-0.152
				Spec Pwr Freq (%): >300 mph2/sec	0.006

Edited Freeway LOS A-C Driving Cycle SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)										TOTALS											
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	
-20																						
-19																						
-18																						
-17																						
-16																						
-15																						
-14																						
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18																						
19																						
20																						
Totals																2.519	8.333	22.287	34.302	22.093	9.486	0.969
																					100.000	

Cycle Summary Statistics

Time at Idle (%)	59.66	Avg PKE (miles/hr ²)	1889.37
Time at Cruise (%)	73.10	Avg Total Specific Power (mph ² /sec)	31.31
Time in Accel (%)	12.209	Avg Non-Zero Specific Power (mph ² /sec)	74.12
Time in Decel (%)	10.853	Max Specific Power (mph ² /sec)	316.51
Cycle Length (miles)	8.552	Spec Pwr Freq (%):	57.752
Cycle Time (min)	8.600	Spec Pwr Freq (%): >0-100 mph ² /sec	33.721
# Stops per Mile	0.000	Spec Pwr Freq (%): >100-200 mph ² /sec	7.588
# of 1-Sec Observations	516	Spec Pwr Freq (%): >200-300 mph ² /sec	0.581
		Spec Pwr Freq (%): >300 mph ² /sec	0.388

Target 3-City Chase Car LOS A-C Freeway Driving SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)										TOTALS										
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
-20																					
-19																					
-18																					
-17																					
-16																					
-15																					
-14																					
-13																					
-12																					
-11																					
-10																					
-9																					
-8																					
-7																					
-6																					
-5																					
-4																					
-3																					
-2																					
-1																					
0	0.216	0.033	0.021	0.031	0.009	0.027	0.059	0.160	0.425	1.327	4.516	13.147	21.756	15.568	6.582	0.780	0.137	0.016	64.321		
1	0.006	0.019	0.012	0.025	0.012	0.021	0.046	0.096	0.263	0.675	1.742	3.854	5.109	3.058	1.105	0.448	0.019	16.249			
2	0.001	0.010	0.010	0.006	0.013	0.021	0.018	0.037	0.055	0.140	0.270	0.349	0.349	0.167	0.053	0.012	0.001	1.513			
3	0.001	0.004	0.007	0.006	0.014	0.003	0.010	0.009	0.018	0.037	0.030	0.022	0.043	0.021	0.007	0.001	0.001	0.226			
4	0.012	0.003	0.003	0.001	0.001	0.003	0.006	0.004	0.006	0.006	0.006	0.006	0.004	0.001	0.001	0.001	0.001	0.061			
5	0.003	0.006	0.001	0.001	0.003	0.001	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.021			
6	0.003																	0.010			
7																		0.001			
8																					
9																					
10																					
11																					
12																					
13																					
14																					
15																					
16																					
17																					
18																					
19																					
20																					
Totals	0.228	0.148	0.111	0.115	0.084	0.108	0.196	0.397	1.005	2.797	8.180	21.197	32.642	22.326	9.205	1.109	0.194	0.018		100.000	

Target Driving Population Summary Statistics

Avg Speed (mph)	59.22	Time at Idle (%)	0.228	Avg PKE (miles/hr ²)	1841.59
Max Speed (mph)	83.15	Time at Cruise (%)	76.747	Avg Total Specific Power (mph ² /sec)	30.29
Avg Non-Idle Speed (mph)	59.35	Time in Accel (%)	11.264	Avg Non-Zero Specific Power (mph ² /sec)	64.07
Avg Cruise Speed (mph)	58.80	Time in Decel (%)	11.761	Max Specific Power (mph ² /sec)	1381.19
Avg Acceleration (mph/sec)	0.54	Avg Trip or Segment Length (miles)	3.218	Spec Pwr Freq (%)	52.722
Max Acceleration (mph/sec)	6.84	Avg Trip or Segment Time (min)	3.281	>0-100 mph ² /sec	38.674
Avg Deceleration (mph/sec)	-0.56	# Stops per Mile	0.009	>100-200 mph ² /sec	7.330
Max Deceleration (mph/sec)	-14.25	# of 1-Sec Observations	67681	>200-300 mph ² /sec	0.929
				Spec Pwr Freq (%)	0.344

Freeway LOS A-C Driving: Cycle vs. Target Difference S AFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)										NET TOTALS	ABS TOTALS
	0	5	10	15	20	25	30	35	40	45		
-20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-11	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-6	0.000	-0.001	-0.001	-0.001	-0.003	-0.003	-0.004	-0.004	-0.004	-0.004	-0.004	-0.004
-5	0.000	0.000	-0.003	-0.003	-0.003	-0.004	-0.004	-0.004	-0.004	-0.004	-0.004	-0.004
-4	0.000	-0.004	-0.003	-0.003	-0.007	-0.006	-0.006	-0.010	-0.010	-0.012	-0.015	-0.018
-3	0.000	-0.003	-0.003	-0.007	-0.003	-0.010	-0.012	-0.013	-0.018	-0.022	-0.044	-0.124
-2	0.000	-0.024	-0.007	-0.015	-0.009	-0.001	-0.004	-0.019	-0.044	-0.124	-0.477	-1.244
-1	0.000	-0.034	-0.028	-0.015	-0.012	-0.010	-0.021	-0.035	-0.151	-0.229	-0.638	-1.638
0	-0.216	-0.033	-0.022	-0.031	-0.009	-0.027	-0.059	-0.160	-0.425	-0.930	-0.059	-0.105
1	-0.066	-0.019	-0.012	-0.025	-0.012	-0.021	-0.046	-0.096	-0.263	-0.594	-0.196	-0.563
2	-0.001	-0.010	-0.010	-0.006	-0.013	-0.021	-0.018	-0.037	-0.055	-0.054	-0.076	-0.349
3	-0.001	-0.004	-0.003	-0.007	-0.006	-0.003	-0.010	-0.009	-0.018	-0.018	-0.157	-0.164
4	0.000	-0.012	-0.003	-0.007	-0.006	-0.004	-0.003	-0.001	-0.003	-0.003	-0.021	-0.021
5	0.000	-0.003	-0.006	-0.001	-0.001	-0.003	-0.000	-0.000	-0.000	-0.006	-0.006	-0.004
6	-0.003	0.000	0.000	-0.001	0.000	-0.001	0.000	0.000	0.000	0.000	-0.001	-0.001
7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
11	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NET TOTALS	-0.227	-0.147	-0.109	-0.114	-0.082	-0.106	-0.195	-0.396	-1.004	-2.75	0.156	1.151
TOTALS ABS	0.227	0.147	0.109	0.114	0.082	0.106	0.195	0.396	1.004	0.757	0.526	2.229
TOTALS	0.227	0.147	0.109	0.114	0.082	0.106	0.195	0.396	1.004	0.757	0.517	3.34

Difference in Cycle vs. Target Summary Statistics

Avg Speed (mph)	-0.45	Time at Idle (%)	-0.228	Avg PKE (miles/hr ²)	47.79
Max Speed (mph)	-1.05	Time at Cruise (%)	0.191	Avg Total Specific Power (mph ² /sec)	1.02
Avg Non-idle Speed (mph)	0.31	Time in Accel (%)	0.945	Avg Non-Zero Specific Power (mph ² /sec)	1.04
Avg Cruise Speed (mph/sec)	0.25	Time in Decel (%)	-0.908	Max Specific Power (mph ² /sec)	-1074.7
Avg Acceleration (mph/sec)	0.10	Avg Trip or Segment Length (miles)	-	Spec Pwr Freq (%):	5.030
Max Acceleration (mph/sec)	3.44	Avg Trip or Segment Time (min)	-	Spec Pwr Freq (%): >0-100 mph ² /sec	-4.953
Avg Deceleration (mph/sec)	-0.02	# Stops per Mile	-0.009	Spec Pwr Freq (%): >100-200 mph ² /sec	-0.228
Max Deceleration (mph/sec)	11.15	# of 1-Sec Observations	-	Spec Pwr Freq (%): >200-300 mph ² /sec	-0.348
				Spec Pwr Freq (%): >300 mph ² /sec	0.043

Edited Freeway LOS D Driving Cycle SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)										TOTALS										
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
-20																					
-19																					
-18																					
-17																					
-16																					
-15																					
-14																					
-13																					
-12																					
-11																					
-10																					
-9																					
-8																					
-7																					
-6																					
-5																					
-4																					
-3																					
-2																					
-1																					
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17																					
18																					
19																					
20																					
Totals																					
	0.3985	3.202	4.187	8.128	9.852	13.793	23.359	20.690	12.069	3.695											100.000

Cycle Summary Statistics

Avg Speed (mph)	52.87	Time at Idle (%)	0.000	Avg PKE (miles/hr ²)	2247.74
Max Speed (mph)	70.60	Time at Cruise (%)	80.049	Avg Total Specific Power (mph ² /sec)	33.01
Avg Non-idle Speed (mph)	52.87	Time in Accel (%)	8.867	Avg Non-Zero Specific Power (mph ² /sec)	71.68
Avg Cruise Speed (mph)	51.90	Time in Decel (%)	11.084	Max Specific Power (mph ² /sec)	238.51
Avg Acceleration (mph/sec)	0.69	Cycle Length (miles)	5.963	Spec Pwr Freq (%)	53.941
Max Acceleration (mph/sec)	2.30	Cycle Time (min)	6.767	Spec Pwr Freq (%); >0-100 mph ² /sec	38.670
Avg Deceleration (mph/sec)	-0.82	# Stops per Mile	0.000	Spec Pwr Freq (%); >100-200 mph ² /sec	6.650
Max Deceleration (mph/sec)	-3.90	# of 1-Sec Observations	406	Spec Pwr Freq (%); >200-300 mph ² /sec	0.739
				Spec Pwr Freq (%); >300 mph ² /sec	0.000

Target 3-City Chase Car LOS D Freeway Driving SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)										TOTALS										
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
-20																					
-19																					
-18																					
-17																					
-16																					
-15																					
-14																					
-13																					
-12																					
-11																					
-10																					
-9																					
-8																					
-7																					
-6																					
-5																					
-4																					
-3																					
-2																					
-1																					
0	0.157	0.106	0.179	0.230	0.259	0.543	0.975	1.725	2.901	4.604	7.483	13.538	13.078	7.813	2.201	0.095					
1	0.006	0.062	0.118	0.084	0.151	0.286	0.549	0.969	1.602	2.438	3.316	4.488	3.501	1.883	0.465	0.034					
2	0.017	0.034	0.034	0.067	0.095	0.129	0.235	0.291	0.330	0.358	0.280	0.213	0.095	0.022							
3	0.022	0.022	0.017	0.017	0.039	0.056	0.022	0.045	0.034	0.028	0.034	0.024	0.017	0.006	0.011						
4	0.006																				
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					
13																					
14																					
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17																					
18																					
19																					
20																					
Totals	0.168	0.347	0.493	0.571	0.773	1.568	2.632	4.352	6.912	9.891	13.941	22.247	20.550	12.109	3.243	0.202					100.000

Target Driving Population Summary Statistics

Avg Speed (mph)	52.04	Avg Total Specific Power (mph ² /sec)	2161.27
Avg Non-Idle Speed (mph)	52.13	Avg Non-Zero Specific Power (mph ² /sec)	31.24
Avg Cruise Speed (mph)	51.49	Max Specific Power (mph ² /sec)	66.21
Avg Acceleration (mph/sec)	0.64	Spec Pwr Freq (%)	1009.32
Max Acceleration (mph/sec)	6.10	Spec Pwr Freq (%); >0-100 mph ² /sec	52.812
Avg Deceleration (mph/sec)	-0.75	Spec Pwr Freq (%); >100-200 mph ² /sec	37.762
Max Deceleration (mph/sec)	-11.20	Spec Pwr Freq (%); >200-300 mph ² /sec	8.334
		Spec Pwr Freq (%); >300 mph ² /sec	0.790
		# of 1-Sec Observations	17854
			0.303

Freeway LOS D Driving: Cycle vs. Target Difference SAFD (%)

Difference in Cycle vs. Target Summary Statistics

Avg Speed (mph)	0.83	Time at Idle (%)	-0.168	Avg PKE (miles/hr ²)	86.47
Max Speed (mph)	5.20	Time at Cruise (%)	-0.538	Avg Total Specific Power (mph2/sec)	5.46
Avg Non-Idle Speed (mph)	0.74	Time in Accel (%)	0.281	Avg Non-Zero Specific Power (mph2/sec)	-770.81
Avg Cruise Speed (mph)	0.40	Time in Decel (%)	0.425	Max Specific Power (mph2/sec)	1.129
Avg Acceleration (mph/sec)	0.06	Avg Trip or Segment Length (miles)	-	Spec Pwr Freq (%): 0 mph/sec	0.908
Max Acceleration (mph/sec)	-3.80	Avg Trip or Segment Time (min)	-	Spec Pwr Freq (%): >0-100 mph2/sec	-1.684
Avg Deceleration (mph/sec)	-0.06	# Stops per Mile	-0.016	Spec Pwr Freq (%): >100-200 mph2/sec	-0.051
Max Deceleration (mph/sec)	7.30	# of 1-Sec Observations	-	Spec Pwr Freq (%): >200-300 mph2/sec	-0.303
				Spec Pwr Freq (%): >300 mph2/sec	

Edited Freeway LOS E Driving Cycle SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)										TOTALS										
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
-20																					
-19																					
-18																					
-17																					
-16																					
-15																					
-14																					
-13																					
-12																					
-11																					
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-8																					
-7																					
-6																					
-5																					
-4																					
-3																					
-2																					
-1																					
0	0.877	1.754	1.974	2.632	4.605	6.140	5.263	4.167	3.728	3.289	3.070	3.509	3.056	0.658	1.036	1.096					
1	0.219	1.096	1.316	1.096	1.974	3.070	3.509	2.632	2.412	1.036	0.877	1.316	0.219								
2	0.219	0.877	1.096	1.316	1.096	1.974	3.070	3.509	2.632	2.412	1.036	0.877	1.316	0.219							
3	0.219	0.439	0.877	1.096	1.316	1.096	1.974	3.070	3.509	2.632	2.412	1.036	0.877	1.316	0.219						
4	0.219	0.439	0.877	1.096	1.316	1.096	1.974	3.070	3.509	2.632	2.412	1.036	0.877	1.316	0.219						
5	0.439																				
6																					
7																					
8																					
9																					
10																					
11																					
12																					
13																					
14																					
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19																					
20																					
Totals	1.096	4.825	6.798	8.772	12.061	12.719	12.500	10.307	7.237	6.140	4.805	5.579	5.482	0.377							100.000

Cycle Summary Statistics

Avg Speed (mph)	30.50	Time at Idle (%)	1.097	Avg PKE (miles/hr ²)	2884.45
Max Speed (mph)	63.00	Time at Cruise (%)	77.632	Avg Total Specific Power (mph ² /sec)	24.44
Avg Non-idle Speed (mph)	30.84	Time in Accel (%)	9.888	Avg Non-Zero Specific Power (mph ² /sec)	56.00
Avg Cruise Speed (mph)	32.40	Time in Decel (%)	11.404	Max Specific Power (mph ² /sec)	231.20
Avg Acceleration (mph/sec)	1.07	Cycle Length (miles)	3.863	Spec Pwr Freq (%)	56.360
Max Acceleration (mph/sec)	5.30	Cycle Time (min)	7.600	Spec Pwr Freq (%); >0-100 mph ² /sec	39.474
Avg Deceleration (mph/sec)	-1.30	# Stops per Mile	0.518	Spec Pwr Freq (%); >100-200 mph ² /sec	3.728
Max Deceleration (mph/sec)	-8.10	# of 1-Sec Observations	456	Spec Pwr Freq (%); >200-300 mph ² /sec	0.439
				Spec Pwr Freq (%); >300 mph ² /sec	0.000

Target 3-City Chase Car LOS E Freeway Driving SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)										TOTALS												
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100		
-20																							
-19																							
-18																							
-17																							
-16																							
-15																							
-14																							
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-7																							
-6																							
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-4																							
-3																							
-2																							
-1																							
0	0.6896	1.624	1.952	2.769	4.600	6.068	6.337	4.293	3.647	3.163	2.719	2.598	2.139	1.685	1.433	1.029	0.913	0.736	0.217	0.025			
1	0.050	0.918	1.049	1.549	2.310	2.996	3.163	2.719	2.598	0.777	0.747	0.656	0.424	0.323	0.187	0.151	0.081	0.005					
2		0.373	0.393	0.605	0.772	0.777	0.747	0.656	0.424	0.035	0.050	0.030	0.010	0.010	0.005	0.005	0.005	0.005					
3			0.126	0.192	0.252	0.368	0.338	0.303	0.151	0.106	0.061	0.040	0.010	0.010	0.010	0.010	0.010	0.010					
4				0.035	0.040	0.061	0.035	0.015	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005					
5					0.010	0.015	0.015	0.010	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005					
6						0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005					
7							0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005					
8								0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005					
9									0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005					
10										0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005				
11											0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005				
12												0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005			
13													0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005			
14														0.005	0.005	0.005	0.005	0.005	0.005	0.005			
15															0.005	0.005	0.005	0.005	0.005	0.005			
16																0.005	0.005	0.005	0.005	0.005			
17																	0.005	0.005	0.005	0.005			
18																		0.005	0.005	0.005			
19																			0.005	0.005			
20																				0.005	0.005		
Totals	0.742	4.263	5.135	7.637	11.093	13.655	12.626	10.109	8.258	7.072	6.184	6.476	5.216	4.397	3.197	2.000	1.000	0.500	0.250	0.125	0.0625		

Target Driving Population Summary Statistics

Avg Speed (mph)	32.09	Time at Idle (%)	0.742	Avg PKE (miles/hr ²)	3038.92
Max Speed (mph)	71.03	Time at Cruise (%)	81.95	Avg Total Specific Power (mph ² /sec)	27.09
Avg Non-Idle Speed (mph)	32.33	Time in Accel (%)	8.192	Avg Non-Zero Specific Power (mph ² /sec)	52.71
Avg Cruise Speed (mph)	32.71	Time in Decel (%)	9.272	Max Specific Power (mph ² /sec)	788.81
Avg Acceleration (mph/sec)	0.84	Avg Trip or Segment Length (miles)	0.822	Spec Pwr Freq (%)	48.613
Max Acceleration (mph/sec)	8.50	Avg Trip or Segment Time (min)	1.537	>0-100 mph ² /sec	44.648
Avg Deceleration (mph/sec)	-1.01	# Stops per Mile	0.192	>100-200 mph ² /sec	6.159
Max Deceleration (mph/sec)	-10.00	# of 1-Sec Observations	19824	>200-300 mph ² /sec	0.419
				Spec Pwr Freq (%)	0.161

Freeway LOS E Driving: Cycle vs. Target Difference SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)										NET TOTALS	ABS TOTALS
	0	5	10	15	20	25	30	35	40	45		
-20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-11	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-6	0.000	0.000	-0.010	-0.030	0.174	0.209	-0.005	-0.010	-0.015	-0.020	-0.015	-0.015
-5	0.000	-0.010	0.419	0.158	0.164	0.179	-0.035	-0.050	-0.076	-0.090	-0.015	-0.015
-4	0.000	-0.030	-0.101	-0.116	0.032	-0.172	0.098	-0.040	-0.043	-0.047	-0.015	-0.015
-3	0.000	0.313	0.466	0.625	0.290	-0.119	-0.139	-0.136	-0.151	-0.179	-0.061	-0.061
-2	0.000	-0.272	-0.134	-0.371	-0.497	-0.048	0.005	-0.177	-0.197	-0.214	-0.116	-0.116
-1	0.000	-0.068	0.065	-0.948	-0.407	-0.571	0.170	0.670	-0.570	0.218	-0.144	-0.153
0	0.191	0.130	0.022	-0.127	0.005	0.072	-0.074	-0.126	0.081	-0.071	-0.209	-0.163
1	0.169	0.178	0.267	-0.453	-0.36	0.074	-0.087	-0.186	-0.043	-0.088	-0.117	-0.067
2	0.000	-0.154	0.484	0.711	1.421	-0.119	-0.528	-0.217	-0.205	-0.104	-0.187	-0.067
3	0.000	0.093	0.247	0.680	-0.156	-0.660	-0.091	-0.050	-0.035	-0.030	-0.025	-0.025
4	0.000	-0.035	-0.040	0.158	0.035	-0.005	-0.015	-0.005	-0.005	-0.005	-0.005	-0.005
5	0.000	0.429	-0.015	-0.010	-0.005	-0.005	-0.005	0.000	0.000	0.000	0.000	0.000
6	0.000	-0.005	0.000	-0.005	-0.005	0.000	-0.005	0.000	0.000	0.000	0.000	0.000
7	-0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
8	0.000	-0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
11	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NET TOTALS	0.355	0.564	1.665	1.134	0.970	-0.936	-0.127	0.201	-1.020	-0.934	-1.580	0.163
TOTALS ABS	0.365	1.722	2.275	4.552	3.620	2.402	1.713	1.421	1.576	1.712	1.580	0.833
TOTALS	0.365	1.722	2.275	4.552	3.620	2.402	1.713	1.421	1.576	1.712	1.580	0.833
												0.669
												0.520
												0.196
												0.000
												0.000
												0.000
												0.000
												0.000
												0.000
												25.156

Difference in Cycle vs. Target Summary Statistics

Avg Speed (mph)	0.355	Time at Idle (%)	-154.47
Max Speed (mph)	8.03	Time at Cruise (%)	-2.65
Avg Non-idle Speed (mph)	-1.49	Time in Accel (%)	3.28
Avg Cruise Speed (mph/sec)	-0.32	Time in Decel (%)	-567.61
Avg Acceleration (mph/sec)	0.23	Avg Trip or Segment Length (miles)	7.747
Max Acceleration (mph/sec)	-3.20	Avg Trip or Segment Time (min)	-5.174
Avg Deceleration (mph/sec)	-0.29	# Stops per Mile	>0-100 mph/2/sec
Max Deceleration (mph/sec)	1.90	# of 1-Sec Observations	>100-200 mph/2/sec
			Spec Pwr Freq (%)
			>200-300 mph/2/sec
			>300 mph/2/sec

Edited Freeway LOS F Driving Cycle SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)											TOTALS
	0	5	10	15	20	25	30	35	40	45	50	
-20												
-19												
-18												
-17												
-16												
-15												
-14												
-13												
-12												
-11												
-10												
-9												
-8												
-7												
-6												
-5												
-4												
-3												
-2												
-1												
0	2.036	5.882	4.977	5.882	6.109	5.330	3.846	2.262	1.357	0.679	0.905	
1	0.226	3.394	4.072	3.620	2.036	3.394	2.262	1.584	0.905	0.679	0.452	
2		1.584	1.357	1.357	0.905	0.905	1.131	0.452	0.226	0.226		
3			0.452	0.452	0.905	1.131	0.226					
4				0.452	0.226							
5					0.226							
6						0.226						
7							0.226					
8								0.226				
9									0.226			
10										0.226		
11											0.226	
12												0.226
13												
14												
15												
16												
17												
18												
19												
20												
Totals	2.262	15.158	14.253	17.421	15.158	14.480	9.739	4.977	3.394	1.810	1.357	100.000

Cycle Summary Statistics

Avg Speed (mph)	18.62	Time at Idle (%)	18.62	Avg PKE (miles/hr ²)	4291.00
Max Speed (mph)	49.90	Time at Cruise (%)	73.529	Avg Total Specific Power (mph ² /sec)	2.262
Avg Non-Idle Speed (mph)	19.05	Time in Accel (%)	12.670	Avg Non-Zero Specific Power (mph ² /sec)	22.19
Avg Cruise Speed (mph)	19.69	Time in Decel (%)	11.539	Max Specific Power (mph ² /sec)	44.38
Avg Acceleration (mph/sec)	1.17	Cycle Length (miles)	2.236	Spec Pwr Freq (%): 0 mph ² /sec	222.75
Max Acceleration (mph/sec)	6.90	Cycle Time (min)	7.367	Spec Pwr Freq (%): >0-100 mph ² /sec	50.000
Avg Deceleration (mph/sec)	-1.36	# Stops per Mile	1.312	Spec Pwr Freq (%): >100-200 mph ² /sec	44.344
Max Deceleration (mph/sec)	-6.10	# of 1-Sec Observations	442	Spec Pwr Freq (%): >200-300 mph ² /sec	5.430
				Spec Pwr Freq (%): >300 mph ² /sec	0.226
					0.000

Target 3-City Chase Car LOS F Freeway Driving SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)										TOTALS										
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
-20																					
-19																					
-18																					
-17																					
-16																					
-15																					
-14																					
-13																					
-12																					
-11																					
-10																					
-9																					
-8																					
-7																					
-6																					
-5																					
-4																					
-3																					
-2																					
-1																					
0	2.037	5.976	4.890	5.934	5.976	5.410	3.780	2.296	1.270	0.725	0.446	0.247	0.130	0.064	0.031	0.015	0.006	0.002	0.001	0.000	
1	0.130	3.340	2.984	3.621	4.019	3.252	2.711	1.634	0.817	0.637	0.466	0.290	0.189	0.109	0.054	0.026	0.013	0.006	0.002	0.001	
2	0.017	1.199	1.178	1.525	1.471	1.094	0.686	0.381	0.197	0.109	0.075	0.046	0.021	0.013	0.008	0.004	0.002	0.001	0.000	0.000	
3	0.004	0.448	0.490	0.406	0.348	0.218	0.134	0.046	0.021	0.013	0.008	0.004	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	
4	0.004	0.176	0.151	0.098	0.042	0.042	0.042	0.008	0.004	0.004	0.004	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
5	0.004	0.067	0.029	0.025	0.013	0.004	0.004	0.004	0.004	0.004	0.004	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
6		0.025	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
7		0.008	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
8																					
9																					
10																					
11																					
12																					
13																					
14																					
15																					
16																					
17																					
18																					
19																					
20																					
Totals	2.196	14.734	13.422	15.857	16.272	13.611	9.751	5.670	2.977	1.819	1.584	0.964	0.817	0.360	0.025						100.000

Target Driving Population Summary Statistics

Avg Speed (mph)	19.92	Time at Idle (%)	2.196	Avg PKE (miles/hr ²)	3813.33
Max Speed (mph)	69.47	Time at Cruise (%)	77.710	Avg Total Specific Power (mph ² /sec)	21.10
Avg Non-Idle Speed (mph)	20.36	Time in Accel (%)	11.139	Avg Non-Zero Specific Power (mph ² /sec)	39.31
Avg Cruise Speed (mph)	20.65	Time in Decel (%)	8.985	Max Specific Power (mph ² /sec)	837.94
Avg Acceleration (mph/sec)	0.99	Avg Trip or Segment Length (miles)	1.031	Spec C Pwr Freq (%)	46.335
Max Acceleration (mph/sec)	9.65	Avg Trip or Segment Time (min)	3.107	>0-100 mph ² /sec	49.591
Avg Deceleration (mph/sec)	-1.06	# Stops per Mile	0.833	>100-200 mph ² /sec	3.784
Max Deceleration (mph/sec)	-10.80	# of 1-Sec Observations	23863	>200-300 mph ² /sec	0.243
				Spec C Pwr Freq (%)	0.046
				Spec Pwr Freq (%)	
				Spec D Pwr Freq (%)	
				Spec E Pwr Freq (%)	

Freeway LOS F Driving: Cycle vs. Target Difference SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)										NET TOTALS	ABS TOTALS
	0	5	10	15	20	25	30	35	40	45		
-20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-11	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-7	0.000	0.000	-0.003	-0.013	-0.017	-0.024	-0.034	-0.044	-0.054	-0.064	-0.074	-0.084
-6	0.000	-0.021	-0.029	-0.046	-0.063	-0.080	-0.098	-0.106	-0.114	-0.122	-0.130	-0.138
-5	0.000	0.213	-0.080	-0.109	-0.146	-0.172	-0.202	-0.232	-0.262	-0.292	-0.322	-0.352
-4	0.000	-0.063	0.042	-0.079	-0.125	-0.159	-0.196	-0.232	-0.267	-0.302	-0.337	-0.372
-3	0.000	-0.076	0.162	0.335	0.239	-0.310	-0.138	-0.142	-0.188	-0.255	-0.084	-0.247
-2	0.000	-0.561	-0.159	-0.775	-0.223	-0.423	-0.113	-0.260	-0.260	-0.422	-0.211	-0.008
-1	0.000	-0.496	-1.052	-0.453	-0.047	0.569	0.588	-0.667	-0.185	0.029	-0.218	-0.105
0	-0.001	-0.094	0.087	-0.052	0.133	0.020	0.066	-0.034	0.087	-0.046	0.159	-0.466
1	0.096	0.054	-1.088	-0.001	-0.983	0.142	-0.449	-0.050	0.088	-0.042	-0.017	-0.260
2	-0.017	0.385	0.179	-0.168	-0.566	-0.189	-0.485	0.071	0.029	0.117	-0.075	-0.054
3	-0.004	0.004	-0.038	0.042	0.489	0.783	0.008	-0.134	0.205	-0.013	-0.008	-0.004
4	0.000	-0.176	-0.151	0.364	0.184	-0.042	-0.008	0.000	0.000	-0.004	0.000	0.000
5	-0.004	-0.067	-0.029	-0.025	0.000	-0.013	-0.004	-0.004	0.000	0.000	0.000	0.000
6	0.000	-0.026	-0.222	-0.008	-0.013	-0.004	0.000	0.000	0.000	0.000	0.000	0.000
7	0.000	0.218	-0.004	-0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
8	0.000	0.000	0.000	-0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9	0.000	-0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	-0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
11	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NET TOTALS	0.066	0.423	0.830	1.562	-1.116	0.867	-0.022	-0.693	0.475	-0.009	-0.226	-0.963
TOTALS ABS	0.126	2.447	3.930	3.212	4.244	2.051	2.280	1.503	0.945	0.385	0.544	0.933
TOTALS	0.126	2.447	3.930	3.212	4.244	2.051	2.280	1.503	0.945	0.385	0.544	0.933

Difference in Cycle vs. Target Summary Statistics

Avg Speed (mph)	-1.30	Time at Idle (%)	0.067	Avg PKE (miles/hr ²)	477.67
Max Speed (mph)	1.957	Time at Cruise (%)	-4.181	Avg Total Specific Power (mph ² /sec)	1.09
Avg Non-idle Speed (mph)	-1.32	Time in Accel (%)	1.551	Avg Non-Zero Specific Power (mph ² /sec)	5.07
Avg Cruise Speed (mph)	-0.96	Time in Decel (%)	2.583	Max Specific Power (mph ² /sec)	-635.19
Avg Acceleration (mph/sec)	0.18	Avg Trip or Segment Length (miles)	-	Spec Pwr Freq (%)	3.665
Max Acceleration (mph/sec)	-2.75	Avg Trip or Segment Time (min)	-	Spec Pwr Freq (%)	-5.248
Avg Deceleration (mph/sec)	-0.30	# Stops per Mile	0.479	Spec Pwr Freq (%)	1.646
Max Deceleration (mph/sec)	4.7	# of 1-Sec Observations	-	Spec Pwr Freq (%)	-0.017
				Spec Pwr Freq (%)	-0.046

Edited Freeway LOS G Driving Cycle SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)										TOTALS										
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
-20																					
-19																					
-18																					
-17																					
-16																					
-15																					
-14																					
-13																					
-12																					
-11																					
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20																					
Totals	4.103	26.154	23.846	15.641	15.385	8.718	3.077	3.077													100.000

Cycle Summary Statistics

Avg Speed (mph)	13.13	Time at Idle (%)	4.103	Avg PKE (miles/hr ²)	3568.94
Max Speed (mph)	35.70	Time at Cruise (%)	79.231	Avg Total Specific Power (mph ² /sec)	13.02
Avg Non-idle Speed (mph)	13.69	Time in Accel (%)	7.692	Avg Non-Zero Specific Power (mph ² /sec)	30.04
Avg Cruise Speed (mph)	13.77	Time in Decel (%)	8.974	Max Specific Power (mph ² /sec)	111.65
Avg Acceleration (mph/sec)	1.06	Cycle Length (miles)	1.423	Spec Pwr Freq (%)	56.667
Max Acceleration (mph/sec)	3.80	Cycle Time (min)	6.500	Spec Pwr Freq (%): <0-100 mph ² /sec	42.821
Avg Deceleration (mph/sec)	-1.05	# Stops per Mile	2.109	Spec Pwr Freq (%): >100-200 mph ² /sec	0.513
Max Deceleration (mph/sec)	-4.20	# of 1-Sec Observations	390	Spec Pwr Freq (%): >200-300 mph ² /sec	0.000
				Spec Pwr Freq (%): >300 mph ² /sec	0.000

Target 3-City Chase Car LOS G Freeway Driving SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)																		TOTALS		
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
-20																					
-19																					
-18																					
-17																					
-16																					
-15																					
-14																					
-13																					
-12																					
-11																					
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-1																					
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10																					
11																					
12																					
13																					
14																					
15																					
16																					
17																					
18																					
19																					
20																					
Totals	3,334	26,158	20,544	16,156	13,337	9,439	4,560	3,751	2,255	0,270	0,196									100,000	

Target Driving Population Summary Statistics

Avg Speed (mph)	14.39	Time at Idle (%)	3.334	Avg PKE (miles/hr ²)	3187.39
Max Speed (mph)	49.10	Time at Cruise (%)	83.746	Avg Total Specific Power (mph ² /sec)	12.74
Avg Non-idle Speed (mph)	14.39	Time in Accel (%)	6.497	Avg Non-Zero Specific Power (mph ² /sec)	25.54
Avg Cruise Speed (mph)	14.32	Time in Decel (%)	6.423	Max Specific Power (mph ² /sec)	389.84
Avg Acceleration (mph/sec)	0.83	Avg Trip or Segment Length (miles)	0.741	Spec Pwr Freq (%): 0 mph ² /sec	50.110
Max Acceleration (mph/sec)	5.70	Avg Trip or Segment Time (min)	3.090	Spec Pwr Freq (%): >0-100 mph ² /sec	48.909
Avg Deceleration (mph/sec)	-0.89	# Stops per Mile	1.533	Spec Pwr Freq (%): >100-200 mph ² /sec	0.883
Max Deceleration (mph/sec)	-6.90	# of 1-Sec Observations	4079	Spec Pwr Freq (%): >200-300 mph ² /sec	0.074
				Spec Pwr Freq (%): >300 mph ² /sec	0.025

Freeway LOS G Driving: Cycle vs. Target Difference SAFD (%)

ACCEL BIN (mph/s)		SPEED BIN (mph)										NET TOTALS	ABS TOTALS
		0	5	10	15	20	25	30	35	40	45		
-20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-11	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-7	0.000	-0.025	-0.025	-0.025	-0.025	-0.025	-0.025	-0.025	-0.025	-0.025	-0.025	-0.025	-0.075
-6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-5	0.000	-0.074	-0.025	-0.049	-0.058	-0.025	-0.025	-0.025	-0.025	-0.025	-0.025	-0.025	0.271
-4	0.000	-0.074	-0.147	-0.109	-0.025	-0.158	-0.109	-0.109	-0.109	-0.109	-0.109	-0.109	-0.329
-3	0.000	0.499	0.475	-0.319	0.524	0.109	-0.156	-0.098	-0.049	-0.049	-0.049	-0.049	0.563
-2	0.000	-0.179	1.182	0.340	-0.121	0.317	-0.112	-0.112	-0.112	-0.112	-0.112	-0.112	2.345
-1	0.000	-0.786	0.338	-0.121	0.467	-0.154	-0.711	-0.283	-0.368	-0.025	-0.049	-0.049	1.975
0	0.146	-0.233	-0.051	-0.053	0.051	-0.163	-0.986	-0.213	-1.348	-0.123	-0.147	-0.147	3.302
1	0.622	-0.134	0.549	0.072	0.378	-0.095	-0.238	0.322	-0.466	-0.049	-0.049	-0.049	3.524
2	0.000	0.361	-0.102	0.301	-0.417	0.366	-0.172	-0.025	0.000	0.000	0.000	0.000	1.071
3	0.000	0.499	0.035	0.011	-0.158	-0.025	0.000	-0.025	0.000	0.000	0.000	0.000	3.035
4	0.000	-0.172	0.207	-0.074	0.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.105
5	0.000	-0.025	-0.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.050
6	0.000	-0.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.025
7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
11	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NET TOTALS	0.768	-0.010	3.299	-0.517	2.046	-0.724	-1.483	-0.675	-2.256	-0.271	-0.196	0.000	0.000
TOTALS	0.768	3.086	3.795	0.969	2.392	1.258	2.849	0.957	2.256	0.271	0.196	0.000	0.000

Difference in Cycle vs. Target Summary Statistics

Avg Speed (mph)	-1.26	Time at Idle (%)	0.768	Avg PKE (miles/hr ²)	381.55
Max Speed (mph)	-1.340	Time at Cruise (%)	-4.545	Avg Total Specific Power (mph ² /sec)	0.28
Avg Non-idle Speed (mph)	-1.19	Time in Accel (%)	1.196	Avg Non-Zero Specific Power (mph ² /sec)	4.50
Avg Cruise Speed (mph/sec)	-1.15	Time in Decel (%)	2.581	Max Specific Power (mph ² /sec)	-278.19
Avg Acceleration (mph/sec)	0.22	Avg Trip or Segment Length (miles)	-	Spec Pwr Freq (%)	6.556
Max Acceleration (mph/sec)	-1.90	Avg Trip or Segment Time (min)	-	Spec Pwr Freq (%)	-0.089
Avg Deceleration (mph/sec)	-0.15	# Stops per Mile	0.576	>0-100 mph ² /sec	-0.370
Max Deceleration (mph/sec)	2.70	# of 1-Sec Observations	-	>100-200 mph ² /sec	-0.074
				>200-300 mph ² /sec	-0.025
				>300 mph ² /sec	-

Edited Ramp Driving Cycle SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)																			TOTALS	
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	
-20																					
-19																					
-18																					
-17																					
-16																					
-15																					
-14																					
-13																					
-12																					
-11																					
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-9																					
-8																					
-7																					
-6																					
-5																					
-4																					
-3																					
-2																					
-1																					
0	6.391	2.256	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	
1	0.752	0.752	0.752	0.752	0.752	0.752	0.752	0.752	0.752	0.752	0.752	0.752	0.752	0.752	0.752	0.752	0.752	0.752	0.752	0.752	
2	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	
3	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	
4	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	
5	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	
6	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	
7	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	
8	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	
9	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	
10	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	
11	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	
12	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	
13	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	
14	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	
15	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	
16	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	
17	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	
18	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	
19	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	
20	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	0.376	
Totals	6.767	5.639	2.632	2.266	4.511	8.271	9.023	12.030	10.150	12.030	10.150	12.030	10.150	12.030	10.150	12.030	10.150	12.030	5.263	100.000	

Cycle Summary Statistics

Avg Speed (mph)	34.38	Time at Idle (%)	6.767	Avg PKE (miles/hr2)	4645.48
Max Speed (mph)	60.20	Avg Total Specific Power (mph2/sec)	62.782	44.63	
Avg Non-Ride Speed (mph)	37.09	Avg Non-Zero Specific Power (mph2/sec)	18.045	90.62	
Avg Cruise Speed (mph)	38.73	Max Specific Power (mph2/sec)	12.406	229.23	
Avg Acceleration (mph/sec)	1.38	Time in Decel (%)	2.555	50.752	
Max Acceleration (mph/sec)	5.70	Cycle length (miles)	4.433	>0-100 mph2/sec	
Avg Deceleration (mph/sec)	-1.33	Cycle Time (min)	0.000	>100-200 mph2/sec	
Max Deceleration (mph/sec)	-5.70	# Stops per Mile	266	>200-300 mph2/sec	
				>300 mph2/sec	
				Spec Pwr Freq (%)	

Target 3-City Chase Car Ramp Driving SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)										TOTALS										
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
-20																					
-19																					
-18																					
-17																					
-16																					
-15																					
-14																					
-13																					
-12																					
-11																					
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-8																					
-7																					
-6																					
-5																					
-4																					
-3																					
-2																					
-1																					
0	6.710	2.424	0.396	0.482	0.612	1.905	2.356	2.838	2.517	2.894	4.861	4.916	4.057	1.262	0.272	0.006	0.025				
1	0.026	1.169	0.414	0.470	0.544	1.095	1.540	1.892	1.917	2.338	2.925	2.251	1.416	0.489	0.111	0.012					
2	0.025	0.359	0.284	0.489	0.581	0.655	0.829	0.928	1.045	1.113	0.853	0.386	0.204	0.130	0.037	0.012					
3	0.037	0.315	0.328	0.334	0.421	0.575	0.439	0.439	0.328	0.380	0.179	0.068	0.049	0.006	0.006						
4	0.049	0.235	0.124	0.198	0.173	0.148	0.105	0.099	0.056	0.025	0.012	0.006									
5	0.012	0.167	0.062	0.068	0.087	0.025	0.025	0.019													
6	0.006	0.074	0.049	0.049	0.025	0.019	0.019														
7		0.043	0.019	0.006	0.006	0.006	0.006														
8		0.012	0.006	0.006	0.006	0.006	0.006														
9		0.006																			
10																					
11																					
12																					
13																					
14																					
15																					
16																					
17																					
18																					
19																					
20																					
Totals	7.031	6.884	2.962	3.457	3.964	6.623	8.085	9.072	9.070	9.832	12.331	10.581	7.043	2.430	0.612	0.062	0.031			100.000	

Target Driving Population Summary Statistics

Avg Speed (mph)	35.43	Avg PKE (miles/hr ²)	3717.15
Max Speed (mph)	79.10	Avg Total Specific Power (mph ² /sec)	36.58
Avg Non-Idle Speed (mph)	38.11	Avg Non-Zero Specific Power (mph ² /sec)	82.62
Avg Cruise Speed (mph)	39.90	Max Specific Power (mph ² /sec)	663.66
Avg Acceleration (mph/sec)	1.25	Spec C Pwr Freq (%)	56.723
Max Acceleration (mph/sec)	9.30	Spec C Pwr Freq (%); >0-100 mph ² /sec	29.800
Avg Deceleration (mph/sec)	-1.45	Spec C Pwr Freq (%); >100-200 mph ² /sec	11.583
Max Deceleration (mph/sec)	-11.20	Spec C Pwr Freq (%); >200-300 mph ² /sec	2.455
		Spec C Pwr Freq (%); >300 mph ² /sec	0.439

Ramp Driving: Cycle vs. Target Difference SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)										NET					ABS TOTALS					
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
-20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-11	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
0	-0.168	-0.020	-0.106	-0.082	-0.351	-0.632	-0.170	-0.637	-1.041	-0.026	-0.405	-0.266	-0.453	-0.272	-0.006	-0.025	0.000	0.000	0.000	0.000	
1	-0.186	-0.477	-0.414	-0.084	-0.208	-0.409	-0.036	-1.36	-0.136	-0.192	-0.192	-0.192	-0.192	-0.192	-0.192	-0.192	-0.192	-0.192	-0.192	-0.192	
2	-0.025	-0.359	-0.284	-0.113	-0.171	-1.225	-1.051	-0.567	-0.567	-0.567	-0.567	-0.567	-0.567	-0.567	-0.567	-0.567	-0.567	-0.567	-0.567	-0.567	
3	0.339	0.437	0.800	0.042	-0.045	-0.375	-0.063	-0.424	-0.424	-0.424	-0.424	-0.424	-0.424	-0.424	-0.424	-0.424	-0.424	-0.424	-0.424	-0.424	
4	-0.049	-0.235	-0.252	-0.198	-0.203	-1.448	-0.148	-0.148	-0.148	-0.148	-0.148	-0.148	-0.148	-0.148	-0.148	-0.148	-0.148	-0.148	-0.148	-0.148	
5	-0.012	-0.167	-0.062	-0.068	-0.087	-0.025	-0.025	-0.025	-0.025	-0.025	-0.025	-0.025	-0.025	-0.025	-0.025	-0.025	-0.025	-0.025	-0.025	-0.025	
6	-0.006	-0.302	-0.649	-0.025	-0.019	-0.019	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	
7	0.000	-0.043	-0.019	-0.006	-0.006	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	
8	0.000	-0.012	0.000	-0.006	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	
9	-0.006	0.000	-0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
11	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
NET	-0.264	-1.224	-0.330	-1.200	0.548	1.650	2.959	1.142	2.188	0.077	-1.557	-1.780	-2.431	-0.612	-0.061	-0.031	0.000	0.000	0.000	0.000	
TOTALS	0.842	2.702	2.638	1.676	2.630	4.482	3.937	3.853	4.388	6.488	1.693	2.271	1.908	2.431	0.612	0.061	0.031	0.000	0.000	0.000	4.2743

Difference in Cycle vs. Target Summary Statistics

Avg Speed (mph)	-0.85	Time at Cruise (%)	0.794	Avg Total Specific Power (mph ² /sec)	8.04
Avg Non-idle Speed (mph)	-1.02	Time in Accel (%)	2.746	Avg Non-Zero Specific Power (mph ² /sec)	7.99
Avg Cruise Speed (mph)	-1.17	Time in Decel (%)	-3.276	Max Specific Power (mph ² /sec)	-434.43
Avg Acceleration (mph/sec)	0.13	Avg Trip or Segment Length (miles)	-	Spec Pwr Freq (%): 0 mph ² /sec	-4.971
Max Acceleration (mph/sec)	-3.60	Avg Trip or Segment Time (min)	-	Spec Pwr Freq (%): >0-100 mph ² /sec	-0.101
Avg Deceleration (mph/sec)	0.12	# Stops per Mile	-0.440	Spec Pwr Freq (%): >100-200 mph ² /sec	4.959
Max Deceleration (mph/sec)	5.50	# of 1-Sec Observations	-	Spec Pwr Freq (%): >200-300 mph ² /sec	0.553
				Spec Pwr Freq (%): >300 mph ² /sec	-0.439

Edited Arterial LOS A-B Driving Cycle SAFD (%)

Cycle Summary Statistics

Avg Speed (mph)	24.75	Time at Idle (%)	14.925	Avg PKE (miles/h ²)	3342.93
Max Speed (mph)	58.90	Time at Cruise (%)	58.837	Avg Total Specific Power (mph ² /sec)	22.99
Avg Non-Idle Speed (mph)	29.10	Time in Accel (%)	11.533	Avg Non-Zero Specific Power (mph ² /sec)	55.00
Avg Cruise Speed (mph)	32.95	Time in Decel (%)	13.704	Max Specific Power (mph ² /sec)	200.07
Avg Acceleration (mph/sec)	1.25	Cycle Length (miles)	5.068	Spec. Pwr Freq (%):	0 mph/2sec
Max Acceleration (mph/sec)	5.00	Cycle Time (min)	12.283	Spec. Pwr Freq (%): >0-100 mph/2sec	36.228
Avg Deceleration (mph/sec)	-1.54	# Stops per Mile	0.789	Spec. Pwr Freq (%): >100-200 mph/2sec	5.427
Max Deceleration (mph/sec)	-6.60	# of 1-Sec Observations	737	Spec. Pwr Freq (%): >200-300 mph/2sec	0.136
				Spec. Pwr Freq (%): >300 mph/2sec	0.000

Target 3-City Chase Car LOS A-B Arterial Driving SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)										TOTALS										
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
-20																					
-19																					
-18																					
-17																					
-16																					
-15																					
-14																					
-13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-12																					
-11																					
-10																					
-9																					
-8																					
-7																					
-6	0.004	0.057	0.084	0.080	0.074	0.047	0.029	0.010	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-5	0.038	0.171	0.236	0.251	0.200	0.119	0.063	0.030	0.014	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-4	0.000	0.147	0.278	0.320	0.349	0.297	0.203	0.107	0.057	0.027	0.013	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-3	0.000	0.450	0.633	0.448	0.510	0.524	0.417	0.274	0.128	0.060	0.028	0.013	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	
-2	0.000	1.102	0.544	0.763	0.408	0.524	0.564	0.460	0.286	0.168	0.102	0.051	0.019	0.005	0.001	0.000	0.000	0.000	0.000	0.000	
-1	0.007	1.756	0.491	0.566	0.669	0.834	1.508	1.793	1.375	0.921	0.684	0.456	0.216	0.046	0.006	0.001	0.000	0.000	0.000	0.000	
0	14.328	1.726	0.963	0.720	1.030	2.107	4.942	7.196	5.358	3.182	2.777	3.056	1.721	0.218	0.012	0.003	0.000	0.000	0.000	0.000	
1	0.297	0.961	-1.150	1.126	1.032	1.582	2.401	2.408	1.680	1.063	0.700	0.469	0.198	0.039	0.006	0.001	0.000	0.000	0.000	0.000	
2	0.082	0.770	0.418	0.886	0.964	1.044	0.817	0.475	0.275	0.147	0.079	0.047	0.012	0.003	0.001	0.000	0.000	0.000	0.000	0.000	
3	0.065	0.784	0.596	0.813	0.710	0.454	0.226	0.099	0.039	0.024	0.010	0.007	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	
4	0.232	0.401	0.310	0.263	0.148	0.070	0.027	0.013	0.007	0.003	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
5	0.018	0.262	0.120	0.072	0.033	0.009	0.004	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
6	0.004	0.080	0.027	0.007	0.004	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
7	0.001	0.010	0.003	0.003	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
8	0.003	0.007	0.002	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
9	0.002	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
10	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
11	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
12																					
13																					
14																					
15																					
16																					
17																					
18																					
19																					
20																					
Totals	15.142	8.514	5.791	6.353	6.238	7.756	11.302	12.934	9.252	5.617	4.399	4.183	2.173	0.313	0.027	0.005					100.000

Target Driving Population Summary Statistics

Avg Speed (mph)	25.17	Time at Idle (%)	15.142	Avg PKE (miles/hr ²)	3319.39
Max Speed (mph)	74.90	Time at Cruise (%)	60.725	Avg Total Specific Power (mph ² /sec)	23.21
Avg Non-Idle Speed (mph)	29.66	Time in Accel (%)	11.861	Avg Non-Zero Specific Power (mph ² /sec)	55.25
Avg Cruise Speed (mph)	33.32	Time in Decel (%)	12.272	Max Specific Power (mph ² /sec)	913.43
Avg Acceleration (mph/sec)	1.23	Avg Trip or Segment Length (miles)	1.801	Spec C Pwr Freq (%)	57.998
Max Acceleration (mph/sec)	14.86	Avg Trip or Segment Time (min)	4.201	0 mph ² /sec	35.545
Avg Deceleration (mph/sec)	-1.41	# Stops per Mile	1.287	>0-100 mph ² /sec	5.925
Max Deceleration (mph/sec)	-15.42	# of 1-Sec Observations	271701	>100-200 mph ² /sec	0.434
				Spec C Pwr Freq (%)	0.098
				Spec C Pwr Freq (%)	>200-300 mph ² /sec
				Spec C Pwr Freq (%)	>300 mph ² /sec

Arterial LOS A-B Driving: Cycle vs. Target Difference SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)										NET					ABS TOTALS					
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
-20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-11	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-6	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-5	0.000	0.000	0.038	-0.035	-0.100	-0.115	-0.064	0.017	-0.063	-0.030	-0.014	-0.003	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
-4	0.000	0.000	-0.011	0.129	0.358	0.058	-0.161	-0.067	-0.027	-0.027	-0.013	-0.003	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
-3	0.000	0.000	-0.450	-0.060	0.366	0.575	0.281	0.404	0.008	-0.060	-0.028	-0.013	-0.004	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
-2	0.000	0.119	-0.001	-0.117	-0.492	0.051	-0.117	-0.250	0.083	0.103	-0.102	-0.051	-0.019	-0.005	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
-1	-0.007	-0.138	0.187	-0.023	-0.126	0.387	0.256	0.107	0.118	-0.107	0.130	-0.059	0.055	-0.046	-0.006	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
0	0.090	-0.233	-0.149	-0.042	0.055	0.064	0.067	-0.005	-0.066	-0.197	-0.199	-0.111	-0.364	-0.218	-0.012	-0.003	-0.000	0.000	0.000	0.000	0.000
1	-0.026	-0.147	-0.472	-0.396	-0.082	-0.014	-0.410	-0.177	-0.306	-0.052	-0.520	-0.024	-0.022	-0.198	-0.062	-0.062	-0.001	-0.001	-0.000	-0.000	-0.000
2	-0.082	-0.227	-0.396	-0.137	-0.032	-0.047	-0.045	-0.172	-0.039	-0.024	-0.010	-0.007	-0.007	-0.007	-0.012	-0.012	-0.003	-0.001	-0.000	-0.000	-0.000
3	-0.065	0.301	-0.325	-0.137	-0.027	-0.070	-0.027	-0.013	-0.027	-0.003	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
4	-0.096	0.006	0.097	-0.117	-0.259	-0.070	-0.027	-0.007	-0.027	-0.003	-0.001	-0.001	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
5	-0.018	0.145	0.151	-0.072	-0.033	-0.009	-0.004	-0.004	-0.002	-0.001	-0.001	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
6	-0.004	-0.080	-0.027	-0.007	-0.004	-0.001	-0.001	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
7	-0.001	-0.010	-0.003	-0.001	-0.001	-0.001	-0.001	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
8	-0.003	-0.007	-0.002	-0.001	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
9	-0.002	-0.002	-0.001	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
10	0.000	-0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
11	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NET	-0.214	-0.643	-0.093	0.434	-0.818	0.793	0.366	0.905	0.112	-0.866	-0.329	-0.519	-0.409	-0.312	-0.027	-0.005	0.000	0.000	0.000	0.000	0.000
TOTALS	0.394	1.981	2.171	2.336	1.566	1.949	1.646	1.297	0.654	1.072	0.589	0.519	0.519	0.312	0.277	0.005	0.000	0.000	0.000	0.000	0.000

Difference in Cycle vs. Target Summary Statistics

Avg Speed (mph)	-0.42	Time at Cruise (%)	-0.888
Avg Non-idle Speed (mph)	-0.56	Time in Accel (%)	-0.328
Avg Cruise Speed (mph/sec)	-0.37	Time in Decel (%)	1.432
Avg Acceleration (mph/sec)	0.02	Avg Trip or Segment Length (miles)	-
Max Acceleration (mph/sec)	9.86	Avg Trip or Segment Time (min)	-
Avg Deceleration (mph/sec)	-0.13	# Stops per Mile	-0.498
Max Deceleration (mph/sec)	8.82	# of 1-Sec Observations	-
		Spec Pwr Freq (%):	>0-100 mph/2sec
		Spec Pwr Freq (%):	>100-200 mph/2sec
		Spec Pwr Freq (%):	>200-300 mph/2sec
		Spec Pwr Freq (%):	>300 mph/2sec

Time at Idle (%)
Time at Cruise (%)
Time in Accel (%)
Time in Decel (%)
Avg Trip or Segment Length (miles)
Avg Trip or Segment Time (min)
Stops per Mile
of 1-Sec Observations

Avg Total Specific Power (mph2/sec)
Avg Non-Zero Specific Power (mph2/sec)
Max Specific Power (mph2/sec)
Spec Pwr Freq (%):
Spec Pwr Freq (%):
Spec Pwr Freq (%):
Spec Pwr Freq (%):
Spec Pwr Freq (%):

Time at Idle (%)
Time at Cruise (%)
Time in Accel (%)
Time in Decel (%)
Avg Trip or Segment Length (

Edited Arterial LOS C-D Driving Cycle SAFD (%)

Cycle Summary Statistics

	4053.69
Avg Speed (mph)	19.23
Max Speed (mph)	45.50
Avg Non-Idle Speed (mph)	24.44
Avg Cruise Speed (mph)	27.12
Avg Acceleration (mph/sec)	1.45
Max Acceleration (mph/sec)	5.70
Avg Deceleration (mph/sec)	-1.60
Max Deceleration (mph/sec)	-7.70
Time at Idle (%)	21.304
Time at Cruise (%)	52.146
Time in Accelerate (%)	12.401
Time in Decel (%)	14.149
Cycle Length (miles)	3.145
Cycle Time (min)	10.483
# Stops per Mile	2.083
# of 1-Sec Observations	629
Avg PKE (miles/hr ²)	21.66
Avg Total Specific Power (mph ² /sec)	58.97
Avg Non-Zero Specific Power (mph ² /sec)	204.91
Max Specific Power (mph ² /sec)	63.275
Spec Pwr Free (%)	0 mph ² /sec
Spec Pwr Free (%)	>0-100 mph ² /sec
Spec Pwr Free (%)	>100-200 mph ² /sec
Spec Pwr Free (%)	>200-300 mph ² /sec
Spec Pwr Free (%)	>300 mph ² /sec

Target 3-City Chase Car LOS C-D Arterial Driving SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)										TOTALS										
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
-20																					
-19																					
-18																					
-17																					
-16																					
-15																					
-14																					
-13																					
-12																					
-11																					
-10																					
-9																					
-8																					
-7																					
-6																					
-5																					
-4																					
-3																					
-2																					
-1																					
0	20.34	3.350	0.988	1.302	1.806	2.854	4.841	4.932	3.129	1.471	0.870	0.407	0.091	0.001	0.005						
1	0.464	1.704	0.903	1.276	1.603	2.057	2.757	2.428	1.345	0.894	0.539	0.252	0.124	0.074	0.028	0.007	0.001				
2	0.119	1.054	0.625	1.069	1.220	1.187	1.884	0.539	0.045	0.461	0.197	0.083	0.032	0.018	0.009	0.001	0.001				
3	0.078	0.783	0.680	0.832	0.704	0.461	0.174	0.077	0.026	0.016	0.013	0.001	0.001	0.001							
4	0.103	0.565	0.407	0.247	0.174	0.077	0.026	0.016	0.013	0.001	0.001										
5	0.024	0.324	0.176	0.095	0.044	0.011	0.005	0.004	0.001	0.001	0.001										
6	0.003	0.114	0.036	0.020	0.007	0.001	0.003	0.001													
7		0.025	0.013	0.003	0.001																
8		0.001	0.017	0.001	0.001																
9			0.005																		
10		0.001		0.001																	
11																					
12																					
13																					
14																					
15																					
16																					
17																					
18																					
19																					
20																					
Totals	21.36	12.031	6.242	7.543	8.481	9.750	12.013	10.773	6.393	2.899	1.777	0.730	0.203	0.009	0.018						100.000

Target Driving Population Summary Statistics

Avg Speed (mph)	18.90	Time at idle (%)	21.136	Avg PKE (miles/hr2)	4191.29
Avg Non-idle Speed (mph)	71.29	Time at Cruise (%)	53.208	Avg Total Specific Power (mph2/sec)	22.01
Avg Cruise Speed (mph)	23.97	Time in Accel (%)	13.373	Avg Non-Zero Specific Power (mph2/sec)	52.87
Avg Acceleration (mph/sec)	26.49	Time in Decel (%)	12.282	Max Specific Power (mph2/sec)	853.63
Max Acceleration (mph/sec)	1.32	Avg Trip or Segment Length (miles)	0.800	Spec Pwr Freq (%)	58.379
Max Deceleration (mph/sec)	10.41	Avg Trip or Segment Time (min)	2.559	>0-100 mph2/sec	35.437
Avg Deceleration (mph/sec)	-1.43	# Stops per Mile	1.889	>100-200 mph2/sec	5.660
	-13.80	# of 1-Sec Observations	75710	>200-300 mph2/sec	0.421
				Spec Pwr Freq (%)	0.103

Arterial LOS C-D Driving: Cycle vs. Target Difference SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)										NET TOTALS	ABS TOTALS
	0	5	10	15	20	25	30	35	40	45		
-20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
-13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-0.002
-12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-11	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005
-9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-0.005
-8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.024
-7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
-6	0.000	-0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-0.002
-5	0.000	-0.050	0.136	0.271	-0.107	-0.045	-0.009	-0.001	0.000	0.000	0.000	0.422
-4	0.000	0.321	0.126	0.159	0.062	0.002	-0.040	-0.012	-0.003	0.000	0.000	0.113
-3	0.000	-0.087	-0.078	-0.049	0.071	0.017	0.434	-0.083	-0.037	-0.018	-0.003	0.370
-2	-0.001	0.002	-0.152	-0.173	-0.144	0.401	0.111	0.364	0.377	-0.013	-0.001	0.066
-1	-0.028	-0.608	-0.344	-0.016	0.874	0.053	0.321	0.257	-0.239	0.110	-0.166	0.978
0	0.036	-0.011	-0.034	0.129	-0.057	0.008	-0.231	0.314	0.051	0.119	0.084	0.042
1	0.172	-0.909	-0.108	-0.146	-0.149	-0.054	-0.361	0.404	0.350	-0.068	-0.141	3.188
2	0.040	-0.900	-0.011	-0.115	0.211	-0.233	0.080	0.097	-0.093	-0.124	-0.074	-0.044
3	-0.078	-0.306	-0.044	-0.044	-0.037	0.091	0.121	-0.083	-0.032	-0.018	-0.028	0.000
4	0.056	0.071	-0.089	-0.247	-0.017	-0.026	-0.016	0.013	-0.001	-0.001	-0.001	-0.001
5	-0.024	-0.006	-0.017	-0.223	-0.044	-0.011	-0.005	-0.004	-0.001	-0.001	-0.001	-0.001
6	-0.003	0.045	-0.636	-0.020	-0.007	-0.003	-0.001	0.000	0.000	-0.001	-0.001	-0.028
7	0.000	-0.025	-0.013	-0.003	-0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.118
8	-0.001	-0.017	-0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.044
9	0.000	-0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.020
10	-0.001	0.000	-0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006
11	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-0.002
12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NET TOTALS	0.168	-1.687	-0.677	-0.389	1.538	0.107	0.547	0.674	0.285	0.760	-0.344	-0.730
TOTALS ABS	0.440	2.575	1.215	1.631	2.238	1.325	1.547	1.914	1.353	1.152	0.512	0.730
TOTALS	0.440	2.575	1.215	1.631	2.238	1.325	1.547	1.914	1.353	1.152	0.512	0.730
												1.682

Difference in Cycle vs. Target Summary Statistics

Avg Speed (mph)	0.33	Time at Idle (%)	0.168	Avg PKE (miles/hr ²)	-137.60
Max Speed (mph)	2.179	Time at Cruise (%)	0.162	Avg Total Specific Power (mph ² /sec)	-0.35
Avg Non-idle Speed (mph)	0.47	Time in Accel (%)	-0.973	Avg Non-Zero Specific Power (mph ² /sec)	6.10
Avg Cruise Speed (mph)	0.63	Time in Decel (%)	1.867	Max Specific Power (mph ² /sec)	-6.872
Avg Acceleration (mph/sec)	0.13	Avg Trip or Segment Length (miles)	-	Spec Pwr Freq (%):	4.896
Max Acceleration (mph/sec)	-4.71	Avg Trip or Segment Time (min)	-	Spec Pwr Freq (%): >0-100 mph ² /sec	-9.912
Avg Deceleration (mph/sec)	-0.16	# Stops per Mile	0.214	Spec Pwr Freq (%): >100-200 mph ² /sec	0.223
Max Deceleration (mph/sec)	6.10	# of 1-Sec Observations	-	Spec Pwr Freq (%): >200-300 mph ² /sec	-0.103
				Spec Pwr Freq (%): >300 mph ² /sec	-0.103

Edited Arterial LOS E-F Driving Cycle SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)										TOTALS										
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
-20																					
-19																					
-18																					
-17																					
-16																					
-15																					
-14																					
-13																					
-12																					
-11																					
-10																					
-9																					
-8																					
-7																					
-6		0.198																			
-5			0.198																		
-4				0.198																	
-3					0.198																
-2						0.198															
-1							0.198														
0	31.746	5.357	1.984	1.786	1.587	2.183	2.579	1.786	0.595	0.595	0.595	0.595	0.595	0.595	0.595	0.595	0.595	0.595	0.595	0.595	
1	0.194	2.381	1.190	1.786	1.389	2.183	1.786	1.190	0.397	0.397	0.397	0.397	0.397	0.397	0.397	0.397	0.397	0.397	0.397	0.397	
2	0.198	1.786	1.389	0.992	1.389	1.389	1.389	1.389	1.190	0.397	0.397	0.397	0.397	0.397	0.397	0.397	0.397	0.397	0.397	0.397	
3	0.198	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	
4	0.595	0.198	0.198	0.198	0.198	0.198	0.198	0.198	0.198	0.198	0.198	0.198	0.198	0.198	0.198	0.198	0.198	0.198	0.198	0.198	
5	0.595																				
6		0.198																			
7																					
8																					
9																					
10																					
11																					
12																					
13																					
14																					
15																					
16																					
17																					
18																					
19																					
20																					
Totals	32.937	18.056	9.722	8.135	7.540	8.352	8.333	4.960	1.786												100.000

Cycle Summary Statistics

Avg Speed (mph)	11.56	Avg PKE (miles/hr ²)	32.937
Max Speed (mph)	39.90	Avg Total Specific Power (mph ² /sec)	40.873
Avg Non-idle Speed (mph)	17.23	Avg Non-Zero Specific Power (mph ² /sec)	14.087
Avg Cruise Speed (mph)	18.12	Max Specific Power (mph ² /sec)	12.103
Avg Acceleration (mph/sec)	1.48	Spec Pwr Freq (%)	1.618
Max Acceleration (mph/sec)	5.80	Spec Pwr Freq (%) >0-100 mph ² /sec	8.400
Avg Deceleration (mph/sec)	-1.66	Spec Pwr Freq (%) >100-200 mph ² /sec	4.326
Max Deceleration (mph/sec)	-5.80	Spec Pwr Freq (%) >200-300 mph ² /sec	504
		Spec Pwr Freq (%) >300 mph ² /sec	0.000

Target 3-City Chase Car LOS E-F Arterial Driving SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)										TOTALS										
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
-20																					
-19																					
-18																					
-17																					
-16																					
-15																					
-14																					
-13																					
-12																					
-11																					
-10																					
-9																					
-8																					
-7																					
-6																					
-5																					
-4																					
-3																					
-2																					
-1	0.0377	3.538	1.328	1.092	0.844	1.303	1.229	0.745	0.323	0.149	0.298	0.074									
0	31.852	5.623	1.850	1.889	1.390	2.321	2.567	1.949	0.596	0.571	0.546	0.335									
1	0.546	3.712	1.303	1.651	1.279	1.825	1.701	1.179	0.509	0.360	0.298	0.137									
2	0.236	1.887	0.566	1.030	1.005	1.030	0.608	0.323	0.124	0.062	0.074	0.025									
3	0.124	0.919	0.745	0.745	0.745	0.434	0.261	0.050	0.037	0.025	0.012	0.012									
4	0.037	0.497	0.335	0.211	0.174	0.037	0.012	0.012													
5	0.050	0.273	0.174	0.124	0.025																
6		0.137	0.087	0.012																	
7	0.012	0.025	0.012	0.012																	
8		0.012	0.012																		
9																					
10		0.012																			
11																					
12																					
13																					
14																					
15																					
16																					
17																					
18																					
19																					
20																					
Totals	32.320	19.141	8.590	8.131	6.393	8.069	7.249	4.580	1.750	1.241	1.291	0.645									100.000

Target Driving Population Summary Statistics

Avg Speed (mph)	12.03	Time at idle (%)	32.920	Avg PKE (miles/hr ²)	5031.00
Max Speed (mph)	56.77	Time at Cruise (%)	44.513	Avg Total Specific Power (mph ² /sec)	16.81
Avg Non-idle Speed (mph)	17.94	Time in Accel (%)	12.885	Avg Non-Zero Specific Power (mph ² /sec)	44.73
Avg Cruise Speed (mph)	19.12	Time in Decel (%)	9.682	Max Specific Power (mph ² /sec)	395.56
Avg Acceleration (mph/sec)	1.38	Avg Trip or Segment Length (miles)	0.508	Spec C Pwr Freq (%)	62.413
Max Acceleration (mph/sec)	10.20	Avg Trip or Segment Time (min)	2.533	0 mph ² /sec	33.131
Avg Deceleration (mph/sec)	-1.38	# Stops per Mile	3.231	>0-100 mph ² /sec	4.221
Max Deceleration (mph/sec)	-11.16	# of 1-Sec Observations	8086	>100-200 mph ² /sec	0.211
				Spec C Pwr Freq (%)	0.025
				Spec Pwr Freq (%)	>200-300 mph ² /sec
				Spec Pwr Freq (%)	>300 mph ² /sec

Arterial LOS E-F Driving: Cycle vs. Target Difference SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)										NET TOTALS	ABS TOTALS
	0	5	10	15	20	25	30	35	40	45		
-20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-11	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-8	0.000	0.000	-0.012	-0.050	-0.050	-0.012	0.000	0.000	0.000	0.000	0.000	0.000
-7	0.000	-0.025	-0.025	-0.012	-0.012	-0.012	0.000	0.000	0.000	0.000	0.000	0.000
-6	0.000	-0.173	-0.012	-0.062	-0.089	-0.012	-0.161	0.000	0.000	0.000	0.000	0.000
-5	0.000	-0.039	0.037	0.223	-0.074	0.049	-0.050	-0.025	0.000	0.000	0.000	0.000
-4	0.000	-0.112	-0.050	0.198	-0.124	-0.050	0.173	-0.026	-0.012	0.000	0.000	0.000
-3	0.000	0.088	0.036	0.173	0.025	0.124	0.161	0.124	0.173	-0.025	-0.012	0.000
-2	-0.012	0.386	-0.124	0.188	0.086	-0.287	0.211	-0.112	-0.050	0.000	0.000	0.000
-1	-0.037	-0.185	0.259	-0.100	0.148	0.086	-0.039	-0.150	0.272	-0.149	-0.298	-0.074
0	-0.106	-0.266	0.134	-0.113	0.197	-0.138	0.022	-0.163	-0.001	-0.571	-0.546	-0.347
1	0.248	-1.331	-0.113	-0.133	-0.135	0.140	0.358	0.085	0.085	-0.360	-0.112	-0.298
2	-0.038	-0.101	0.433	-0.038	0.193	0.359	0.582	0.074	-0.124	-0.062	-0.074	-0.025
3	0.074	0.073	0.247	-0.013	0.075	-0.236	-0.063	0.148	-0.037	-0.012	-0.012	-0.012
4	-0.037	0.098	-0.137	-0.013	0.024	-0.037	-0.012	-0.012	0.000	0.000	0.000	0.000
5	-0.050	0.322	-0.174	-0.124	-0.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000
6	0.000	-0.137	0.111	-0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7	-0.012	-0.025	-0.012	-0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
8	0.000	-0.012	0.000	-0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	-0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
11	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NET TOTALS	0.018	-1.088	1.130	0.006	1.147	0.467	1.082	0.379	0.034	-1.241	-1.290	-0.645
TOTALS	0.526	3.408	2.200	1.452	1.843	1.657	1.534	1.103	0.856	1.241	1.290	0.645

Difference in Cycle vs. Target Summary Statistics

Avg Speed (mph)	-0.47	Time at Idle (%)	0.017	Avg PKE (miles/hr ²)	0.017
Max Speed (mph)	-1.637	Time at Cruise (%)	3.640	Avg Total Specific Power (mph ² /sec)	0.02
Avg Non-idle Speed (mph)	-0.70	Time in Accel (%)	1.203	Avg Non-Zero Specific Power (mph ² /sec)	1.62
Avg Cruise Speed (mph/sec)	-1.00	Time in Decel (%)	2.421	Max Specific Power (mph ² /sec)	-207.91
Avg Acceleration (mph/sec)	0.10	Avg Trip or Segment Length (miles)	-	Spec Pwr Freq (%)	1.277
Max Acceleration (mph/sec)	-4.40	Avg Trip or Segment Time (min)	-	Spec Pwr Freq (%)	-0.789
Avg Deceleration (mph/sec)	-0.28	# Stops per Mile	1.095	>0-100 mph ² /sec	>100-200 mph ² /sec
Max Deceleration (mph/sec)	5.36	# of 1-Sec Observations	-	Spec Pwr Freq (%)	-0.252
				Spec Pwr Freq (%)	-0.211
				Spec Pwr Freq (%)	-0.025
				Spec Pwr Freq (%)	>200-300 mph ² /sec
				Spec Pwr Freq (%)	>300 mph ² /sec

Edited Local Roadway Driving Cycle SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)										TOTALS										
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
-20																					
-19																					
-18																					
-17																					
-16																					
-15																					
-14																					
-13																					
-12																					
-11																					
-10																					
-9																					
-8																					
-7																					
-6																					
-5																					
-4																					
-3																					
-2																					
-1																					
0	25.143	1.714	2.667	1.714	2.857	4.381	4.190	2.667	0.952												
1	0.571	1.905	3.429	3.619	1.905	2.476	1.143	1.333													
2	0.571	2.095	1.714	1.714	1.524	0.762	0.190														
3	0.190	1.905	1.143	1.143	0.381	0.190															
4	0.190																				
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					
13																					
14																					
15																					
16																					
17																					
18																					
19																					
20																					
Totals	26.476	13.524	13.333	12.762	10.286	10.476	7.238	4.762	1.143												100.000

Cycle Summary Statistics

Avg Speed (mph)	12.85	Avg PKE (miles/hr ²)	26.476
Max Speed (mph)	38.30	Avg Total Specific Power (mph ² /sec)	4294.82
Avg Non-idle Speed (mph)	17.47	Avg Non-Zero Specific Power (mph ² /sec)	15.33
Avg Cruise Speed (mph)	19.56	Time in Dwell (%)	37.77
Avg Acceleration (mph/sec)	1.32	Spec Pwr Freq (%)	142.56
Max Acceleration (mph/sec)	3.70	Spec Pwr Freq (>0-100 mph ² /sec)	59.429
Avg Deceleration (mph/sec)	-1.61	Spec Pwr Freq (>100-200 mph ² /sec)	38.286
Max Deceleration (mph/sec)	-5.90	Spec Pwr Freq (>200-300 mph ² /sec)	2.286
		# of 1-Sec Observations	0.000
		Spec Pwr Freq (>300 mph ² /sec)	0.000

Target 3-City Chase Car Local Roadway Driving SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)										TOTALS										
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
-20																					
-19																					
-18																					
-17																					
-16																					
-15																					
-14																					
-13																					
-12																					
-11																					
-10																					
-9																					
-8																					
-7																					
-6																					
-5																					
-4																					
-3																					
-2																					
-1																					
0	25.060	2.047	2.585	1.605	2.897	4.261	4.084	2.641	1.159	0.741	1.292	1.102	0.334	0.037						49.784	
1	0.357	1.542	3.186	2.853	3.43	2.093	1.480	0.883	0.381	0.247	0.167	0.059	0.024							15.862	
2	0.136	1.708	0.907	1.741	1.062	0.533	0.249	0.084	0.045	0.017	0.009	0.003								6.493	
3	0.132	1.551	0.928	0.799	0.334	0.134	0.047	0.014	0.005	0.002										3.953	
4	0.705	0.320	0.219	0.138	0.059	0.031	0.009	0.003												1.485	
5	0.047	0.080	0.024	0.035	0.024	0.003	0.002													0.216	
6	0.012	0.010	0.009	0.005	0.002	0.002														0.040	
7	0.014	0.002																		0.016	
8	0.009	0.003																		0.012	
9	0.003																			0.003	
10	0.002																			0.002	
11																					
12																					
13																					
14																					
15																					
16																					
17																					
18																					
19																					
20																					
Totals	26.486	12.829	11.707	11.254	9.780	9.411	7.410	4.516	2.005	1.225	1.873	1.304	0.397	0.003						100.000	

Target Driving Population Summary Statistics

Avg Speed (mph)	14.60	Avg PKE (miles/hr ²)	26.486
Max Speed (mph)	62.70	Avg Total Specific Power (mph ² /sec)	50.233
Avg Non-Idle Speed (mph)	19.87	Avg Non-Zero Specific Power (mph ² /sec)	11.184
Avg Cruise Speed (mph)	22.56	Max Specific Power (mph ² /sec)	12.087
Avg Acceleration (mph/sec)	1.29	Spec C Pwr Freq (%)	0.520
Max Acceleration (mph/sec)	12.50	Spec C Pwr Freq (%)	>0-100 mph ² /sec
Avg Deceleration (mph/sec)	-1.51	Spec C Pwr Freq (%)	>100-200 mph ² /sec
Max Deceleration (mph/sec)	-12.13	Spec C Pwr Freq (%)	>200-300 mph ² /sec
		Spec C Pwr Freq (%)	>300 mph ² /sec
			3704.93
			15.03
			38.66
			508.31
			61.125
			36.859
			1.904
			0.104
			0.007

Local Roadway Driving: Cycle vs. Target Difference SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)										NET TOTALS	ABS TOTALS
	0	5	10	15	20	25	30	35	40	45		
-20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-11	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-7	0.000	-0.002	-0.007	-0.035	-0.021	-0.007	-0.005	0.000	0.000	0.000	0.000	0.000
-6	0.000	-0.000	-0.033	0.119	-0.057	-0.035	-0.030	-0.029	-0.023	-0.002	0.000	0.000
-5	0.000	-0.038	0.018	0.122	0.209	-0.068	-0.059	-0.053	-0.017	-0.012	-0.005	0.000
-4	0.000	-0.139	-0.139	-0.160	0.017	0.009	0.112	-0.023	-0.012	-0.012	-0.005	0.000
-3	0.000	0.341	-0.032	0.459	-0.141	0.178	0.002	-0.052	-0.030	-0.030	-0.016	0.000
-2	0.000	-0.248	0.120	0.091	0.280	-0.794	-0.243	-0.045	-0.023	-0.023	-0.012	0.000
-1	-0.007	0.235	0.104	0.760	0.241	0.149	-0.168	-0.282	-0.129	-0.197	-0.186	-0.031
0	0.083	-0.333	0.082	0.109	-0.040	0.120	0.106	0.026	-0.207	-0.714	-1.292	-1.102
1	0.214	0.363	0.243	0.766	-0.438	0.377	-0.337	-0.450	-0.381	-0.247	-0.167	-0.059
2	0.435	0.387	0.807	-0.027	0.462	0.229	-0.059	-0.045	-0.045	-0.017	-0.009	-0.034
3	0.058	0.354	0.215	0.344	0.047	0.056	-0.047	-0.014	-0.005	-0.005	-0.002	0.000
4	0.705	-0.130	-0.219	-0.138	0.131	-0.031	-0.009	-0.003	0.000	0.000	0.000	0.000
5	-0.047	-0.080	-0.024	-0.035	-0.024	-0.003	-0.002	0.000	0.000	0.000	0.000	0.000
6	-0.012	-0.010	-0.009	-0.005	-0.005	-0.002	0.000	0.000	0.000	0.000	0.000	0.000
7	-0.014	-0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
8	-0.009	-0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9	-0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	-0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
11	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12	-0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NET	-0.011	0.695	1.627	1.506	0.506	1.065	-0.177	0.245	-0.862	-1.226	-1.673	-1.304
TOTALS	1.591	2.665	2.557	3.852	1.948	1.553	1.177	1.193	0.862	1.226	1.673	1.304
ABS	1.591	2.665	2.557	3.852	1.948	1.553	1.177	1.193	0.862	1.226	1.673	1.304
	1.591	2.665	2.557	3.852	1.948	1.553	1.177	1.193	0.862	1.226	1.673	1.304

Difference in Cycle vs. Target Summary Statistics

Avg Speed (mph)	-1.76	Time at Idle (%)	-0.010	Avg PKE (miles/hr ²)	589.90
Max Speed (mph)	24.40	Time at Cruise (%)	2.614	Avg Total Specific Power (mph ² /sec)	0.30
Avg Non-idle Speed (mph)	-2.39	Time in Accel (%)	1.989	Avg Non-Zero Specific Power (mph ² /sec)	-0.89
Avg Cruise Speed (mph/sec)	3.00	Time in Decel (%)	0.685	Max Specific Power (mph ² /sec)	-365.75
Avg Acceleration (mph/sec)	0.03	Avg Trip or Segment Length (miles)	-	Spec Pwr Freq (%)	-1.697
Max Acceleration (mph/sec)	-8.80	Avg Trip or Segment Time (min)	-	Spec Pwr Freq (%)	1.427
Avg Deceleration (mph/sec)	-0.11	# Stops per Mile	0.810	Spec Pwr Freq (%)	0.381
Max Deceleration (mph/sec)	6.23	# of 1-Sec Observations	-	Spec Pwr Freq (%)	-0.104
				Spec Pwr Freq (%)	-0.007

Edited Non-Freeway/Ramp Area-Wide Driving Cycle SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)											TOTALS
	0	5	10	15	20	25	30	35	40	45	50	
-20												
-19												
-18												
-17												
-16												
-15												
-14												
-13												
-12												
-11												
-10												
-9												
-8												
-7												
-6												
-5												
-4												
-3												
-2												
-1												
0	23.442	2.522	1.113	1.335	1.409	2.226	4.006	4.970	4.525	3.783	2.596	
1	0.371	1.484	0.964	1.484	1.261	1.484	2.003	2.077	1.484	0.964	0.445	
2	0.074	0.742	0.742	0.742	0.816	0.964	0.890	0.593	0.668	0.074		
3	0.074	0.742	0.742	0.445	0.668	0.519	0.445	0.223	0.074			
4		0.445	0.445	0.297	0.148							
5		0.371	0.148		0.074							
6	0.074	0.371	0.074									
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
Totals	24.036	10.831	6.602	7.493	6.899	7.938	9.050	10.015	7.864	5.712	3.561	100.000

Cycle Summary Statistics

Avg Speed (mph)	19.35	Time at Idle (%)	24.036	
Max Speed (mph)	52.30	Time at Cruise (%)	52.819	
Avg Non-Idle Speed (mph)	25.47	Time in Accel (%)	11.202	
Avg Cruise Speed (mph)	28.99	Time in Decel (%)	11.944	
Avg Acceleration (mph/sec)	1.28	Cycle Length (miles)	7.246	
Max Acceleration (mph/sec)	6.40	Cycle Time (min)	22.467	
Avg Deceleration (mph/sec)	-1.45	# Stops per Mile	1.932	
Max Deceleration (mph/sec)	-8.30	# of 1-Sec Observations	1348	
			Avg Pwr Freq (%)	0.000
			Avg Total Specific Power (mph2/sec)	3722.24
			Avg Non-Zero Specific Power (mph2/sec)	20.01
			Max Specific Power (mph2/sec)	50.51
			Spec Pwr Freq (%)	219.96
			Spec Pwr Freq (%) < 0-100 mph2/sec	60.386
			Spec Pwr Freq (%) > 100-200 mph2/sec	34.050
			Spec Pwr Freq (%) > 200-300 mph2/sec	5.341
			Spec Pwr Freq (%) > 300 mph2/sec	0.223

Target Instrumented Vehicle Non-Freeway/Ramp Driving SAFD (%)

(Baltimore-Weighted)

ACCEL BIN (mph/s)	SPEED BIN (mph)										TOTALS
	0	5	10	15	20	25	30	35	40	45	
-20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-11	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-6	0.000	0.008	0.039	0.085	0.085	0.071	0.044	0.023	0.010	0.003	0.002
-5	0.000	0.000	0.036	0.151	0.208	0.210	0.165	0.103	0.057	0.021	0.009
-4	0.000	0.000	0.163	0.360	0.386	0.310	0.208	0.123	0.063	0.028	0.009
-3	0.000	0.000	0.559	0.534	0.526	0.503	0.432	0.330	0.213	0.129	0.054
-2	0.000	0.000	1.286	0.635	0.583	0.545	0.544	0.507	0.419	0.281	0.163
-1	0.000	0.000	2.102	0.862	0.760	0.737	0.952	1.256	1.393	1.199	0.892
0	0.000	0.000	2.676	1.369	1.265	1.382	2.212	3.917	5.113	4.640	3.865
1	0.263	1.339	0.900	1.056	1.144	1.613	1.948	1.915	1.526	1.029	2.607
2	0.101	0.854	0.748	0.993	1.005	0.943	0.731	0.470	0.249	0.086	0.021
3	0.061	0.651	0.598	0.699	0.599	0.369	0.200	0.092	0.023	0.002	0.000
4	0.042	0.495	0.350	0.283	0.203	0.092	0.034	0.011	0.002	0.000	0.000
5	0.027	0.255	0.133	0.071	0.039	0.019	0.006	0.002	0.000	0.000	0.000
6	0.017	0.144	0.033	0.010	0.005	0.001	0.001	0.000	0.000	0.000	0.000
7	0.009	0.063	0.006	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000
8	0.004	0.030	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9	0.001	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	0.000	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
11	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Totals	23.975	10.719	6.727	6.392	6.884	7.758	9.306	8.147	6.134	3.545	0.000

Target Driving Population Summary Statistics

Avg Speed (mph)	19.60	Avg Total Specific Power (mph2/sec)	-
Max Speed (mph)	52.50	Avg Non-Zero Specific Power (mph2/sec)	-
Avg Cruise Speed (mph)	-	Max Specific Power (mph2/sec)	-
Avg Acceleration (mph/sec)	-	Spec Pwr Freq (%): 0 mph2/sec	75.458
Max Acceleration (mph/sec)	12.00	Spec Pwr Freq (%): >100 mph2/sec	19.398
Avg Deceleration (mph/sec)	-	Spec Pwr Freq (%): >100-200 mph2/sec	4.811
Max Deceleration (mph/sec)	-14.00	Spec Pwr Freq (%): >200-300 mph2/sec	0.320
		Spec Pwr Freq (%): >300 mph2/sec	0.013

Non-Freeway/Ramp Driving: Cycle vs. Target Difference SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)										NET TOTALS	ABS TOTALS
	0	5	10	15	20	25	30	35	40	45		
-20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-11	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-7	0.000	-0.003	-0.031	0.048	-0.016	-0.007	-0.016	-0.003	-0.003	-0.003	-0.003	-0.003
-6	0.000	-0.008	-0.039	-0.011	-0.011	-0.071	-0.044	-0.023	-0.023	-0.010	-0.009	-0.009
-5	0.000	0.112	-0.077	0.015	0.013	0.058	0.045	0.017	-0.021	-0.009	-0.002	-0.002
-4	0.000	0.060	0.233	0.059	0.135	0.060	0.059	0.011	-0.046	-0.049	-0.009	-0.009
-3	0.000	0.034	0.159	0.142	-0.132	0.087	-0.033	0.010	-0.129	-0.054	-0.017	-0.000
-2	0.000	-0.089	-0.116	0.159	0.048	-0.025	-0.036	-0.001	-0.001	0.000	-0.056	-0.000
-1	0.000	-0.099	0.228	-0.018	0.005	0.012	0.005	0.165	0.062	-0.150	0.077	0.000
0	-0.088	-0.154	-0.256	0.070	0.027	0.14	0.089	-0.143	-0.115	-0.082	-0.011	0.000
1	0.108	0.145	0.064	0.428	-0.117	-0.29	-0.055	0.162	-0.042	-0.065	-0.033	-0.000
2	-0.027	-0.112	-0.066	-0.177	-0.041	-0.053	-0.138	0.198	-0.175	-0.086	-0.023	-0.000
3	0.013	0.091	-0.153	-0.031	-0.080	0.076	0.023	-0.018	-0.023	-0.002	0.000	0.000
4	-0.042	-0.040	0.095	0.014	0.020	0.056	0.034	-0.011	-0.002	0.000	0.000	0.000
5	-0.027	0.076	0.015	-0.071	0.055	-0.019	-0.006	-0.002	0.000	0.000	0.000	0.000
6	0.057	0.227	0.041	-0.005	-0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7	-0.009	-0.063	-0.006	-0.002	-0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
8	-0.004	-0.030	-0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9	-0.001	-0.074	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	0.000	-0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
11	0.000	-0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12	0.000	-0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NET TOTALS	0.060	0.112	-0.127	0.532	0.014	0.179	-0.256	0.173	-0.284	-0.423	0.015	0.000
TOTALS ABS	0.295	1.378	1.96	1.239	0.642	0.796	0.633	1.073	0.751	0.516	0.208	0.000
TOTALS	0.295	1.378	1.96	1.239	0.642	0.796	0.633	1.073	0.751	0.516	0.208	0.000
												8.787

Difference in Cycle vs. Target Summary Statistics

Avg Speed (mph)	0.25	Time at Idle (%)	0.061	Avg PKE (miles/hr ²)	-
Max Speed (mph)	0.20	Time in Accel (%)	0.294	Avg Total Specific Power (mph ² /sec)	-
Avg Non-idle Speed (mph)	-	Time in Decel (%)	-0.486	Avg Non-Zero Specific Power (mph ² /sec)	-
Avg Cruise Speed (mph)	-	Time in Constant (%)	0.104	Max Specific Power (mph ² /sec)	-
Avg Acceleration (mph/sec)	-	Avg Trip or Segment Length (miles)	-	Spec Pwr Freq (%); 0 mph ² /sec	-15.073
Max Acceleration (mph/sec)	5.60	Avg Trip or Segment Time (min)	-	Spec Pwr Freq (%); >0-100 mph ² /sec	14.652
Avg Deceleration (mph/sec)	-	# Stops per Mile	-	Spec Pwr Freq (%); >100-200 mph ² /sec	0.530
Max Deceleration (mph/sec)	5.70	# 1-Second Observations	-	Spec Pwr Freq (%); >200-300 mph ² /sec	-0.097
				Spec Pwr Freq (%); >300 mph ² /sec	-0.013

Edited LA92 Driving Cycle SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)										TOTALS										
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
-20																					
-19																					
-18																					
-17																					
-16																					
-15																					
-14																					
-13																					
-12																					
-11																					
-10																					
-9																					
-8																					
-7																					
-6																					
-5																					
-4																					
-3																					
-2																					
-1																					
0	15.738	1.811	1.253	2.019	1.184	2.298	4.526	3.064	2.925	2.437	1.323	0.348	0.487	0.279	0.696	0.527					
1	0.6227	1.045	0.418	0.557	1.393	2.368	2.437	1.602	1.253	1.462	0.627	0.666	0.766	0.336							
2		0.6366	0.766	1.323	0.905	0.766	0.836	0.487	0.209	0.139	0.070										
3		0.070	1.114	0.905	1.114	0.975	0.627	0.139	0.139												
4			0.836	0.348	0.139				0.070												
5			0.279	0.070	0.070																
6				0.139																	
7				0.139																	
8																					
9																					
10																					
11																					
12																					
13																					
14																					
15																					
16																					
17																					
18																					
19																					
20																					
Totals	16.435	10.376	6.198	8.496	7.173	8.148	11.072	6.755	5.362	5.223	2.646	1.462	6.407	4.248							100.000

Cycle Summary Statistics

Avg Speed (mph)	24.59	Time at Idle (%)	16.435	Avg PkE (miles/hr2)	3656.17
Max Speed (mph)	67.20	Time at Cruise (%)	54.735	Avg Total Specific Power (mph2/sec)	24.97
Avg Non-Idle Speed (mph)	29.42	Time in Accel (%)	14.972	Avg Non-Zero Specific Power (mph2/sec)	65.32
Avg Cruise Speed (mph)	33.02	Time in Decel (%)	13.888	Max Specific Power (mph2/sec)	271.32
Avg Acceleration (mph/sec)	1.51	Cycle Length (miles)	9.808	Spec Pwr Freq (%)	0 mph2/sec
Max Acceleration (mph/sec)	6.90	Cycle Time (min)	23.933	Spec Pwr Freq (%)	>0-100 mph2/sec
Avg Deceleration (mph/sec)	-1.69	# Stops per Mile	1.631	Spec Pwr Freq (%)	>100-200 mph2/sec
Max Deceleration (mph/sec)	-15.00	# of 1-Sec Observations	1436	Spec Pwr Freq (%)	>200-300 mph2/sec
					>300 mph2/sec

Target Los Angeles 1992 Chase Car Driving SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)										TOTALS										
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
-20																					
-19																					
-18																					
-17																					
-16																					
-15																					
-14																					
-13																					
-12																					
-11																					
-10																					
-9																					
-8																					
-7																					
-6																					
-5																					
-4																					
-3																					
-2																					
-1																					
0	14.130	2.382	1.148	1.120	1.435	2.202	3.471	3.868	3.880	2.518	1.616	2.009	3.299	2.708	1.097	0.209	0.039			46.330	
1	0.287	1.487	-1.195	1.296	1.362	1.678	2.087	2.130	1.512	0.935	0.667	0.747	0.810	0.490	0.164	0.040	0.005			16.890	
2	0.060	0.866	0.395	0.395	0.885	1.027	1.089	0.905	0.502	0.276	0.148	0.086	0.052	0.029	0.011	0.002	0.001			6.343	
3	0.023	0.783	0.783	0.660	0.810	0.474	0.199	0.086	0.042	0.012	0.002	0.002	0.004	0.001						3.694	
4	0.173	0.495	0.308	0.234	0.141	0.063	0.023	0.015	0.009	0.003	0.002	0.001	0.002	0.001						1.409	
5	0.005	0.347	0.172	0.085	0.033	0.013	0.007	0.003	0.001											0.567	
6	0.001	0.135	0.054	0.017	0.010	0.005	0.002													0.225	
7		0.032	0.015	0.004	0.004	0.001	0.001													0.056	
8		0.014	0.003					0.003												0.020	
9		0.003	0.002																	0.005	
10		0.001	0.001																	0.002	
11																					
12																					
13																					
14																					
15																					
16																					
17																					
18																					
19																					
20																					
Totals	14.679	10.033	6.193	7.035	7.128	7.397	9.267	8.876	7.203	4.602	3.040	3.487	4.899	3.761	1.455	0.284	0.051			100.000	

Target Driving Population Summary Statistics

Avg Speed (mph)	26.34	Time at Idle (%)	14.679	Avg PKE (miles/hr ²)	3447.04
Max Speed (mph)	80.30	Time at Cruise (%)	58.241	Avg Total Specific Power (mph ² /sec)	25.22
Avg Non-Idle Speed (mph)	30.87	Time in Accel (%)	13.666	Avg Non-Zero Specific Power (mph ² /sec)	57.11
Avg Cruise Speed (mph)	33.83	Time in Decel (%)	13.45	Max Specific Power (mph ² /sec)	1048.00
Avg Acceleration (mph/sec)	1.24	Avg Trip of Segment Length (miles)	7.95	Spec C Pwr Freq (%)	55.840
Max Acceleration (mph/sec)	10.41	Avg Trip o Segment Time (min)	18.122	>0-100 mph ² /sec	36.770
Avg Deceleration (mph/sec)	-1.44	# Stops per Mile	1,235	>100-200 mph ² /sec	6.786
Max Deceleration (mph/sec)	-15.00	# of 1-Sec Observations	110909	>200-300 mph ² /sec	0.465
				Spec C Pwr Freq (%)	0.140
				Spec Pwr Freq (%)	
				Spec Pwr Freq (%)	
				Spec Pwr Freq (%)	

Los Angeles 1992 Chase Car Driving: Cycle vs. Target Difference SAFD (%)

ACCEL BIN (mph/s)	SPEED BIN (mph)										NET					ABS TOTALS					
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
-20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-11	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-6	0.000	-0.013	-0.021	-0.030	-0.037	-0.046	-0.054	-0.062	-0.070	-0.079	-0.086	-0.094	-0.102	-0.110	-0.118	-0.126	-0.134	-0.142	-0.150	-0.158	
-5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
-1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
0	1.608	-0.571	0.105	0.899	-0.251	0.096	1.055	0.048	-0.084	-0.134	-0.033	-0.043	-0.012	-0.036	-0.018	-0.065	-0.056	-0.065	-0.065	-0.065	
1	0.340	-0.442	-0.777	-0.739	-0.411	0.690	-0.340	-0.528	-0.122	-0.323	-0.089	-0.054	-0.075	-0.020	-0.010	-0.020	-0.005	-0.005	-0.005	-0.005	
2	-0.060	-0.170	0.371	-0.428	-0.121	-0.056	-0.313	-0.114	0.286	-0.122	-0.053	-0.153	-0.063	-0.023	-0.153	-0.153	-0.055	-0.055	-0.055	-0.055	
3	0.047	0.331	0.330	0.304	0.315	-0.153	-0.060	-0.086	-0.097	-0.067	-0.022	-0.022	-0.012	-0.002	-0.002	-0.002	-0.001	-0.001	-0.001	-0.001	
4	-0.173	0.401	0.040	-0.040	-0.041	-0.141	-0.063	-0.023	-0.095	-0.095	-0.033	-0.033	-0.005	-0.005	-0.005	-0.005	-0.001	-0.001	-0.001	-0.001	
5	-0.005	-0.068	-0.102	-0.015	-0.037	-0.013	-0.007	-0.003	-0.001	-0.001	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	
6	-0.001	0.004	-0.054	-0.017	-0.010	-0.005	-0.002	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	
7	0.000	0.107	-0.015	-0.004	-0.001	-0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
8	0.000	-0.014	-0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
9	0.000	-0.003	-0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
10	0.000	-0.001	-0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
11	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
NET	1.756	0.344	0.004	1.459	0.046	0.150	1.804	-2.119	-1.841	0.619	-0.395	-2.037	1.508	0.487	-1.455	-0.284	-0.051	0.000	0.000	0.000	0.000
TOTALS	2.234	2.908	2.384	3.945	1.488	2.300	2.564	2.357	2.321	0.939	0.457	2.237	1.782	0.571	1.455	0.284	0.051	0.000	0.000	0.000	3.267

Difference in Cycle vs. Target Summary Statistics

Avg Speed (mph)	-1.75	Time at Idle (%)	1.756	Avg PKE (miles/hr^2)	209.13
Avg Non-idle Speed (mph)	-1.45	Time in Accel (%)	1.306	Avg Total Specific Power (mph2/sec)	0.25
Avg Cruise Speed (mph)	-0.81	Time in Dcel (%)	0.443	Avg Specific Power (mph2/sec)	8.21
Avg Acceleration (mph/sec)	0.27	Avg Trip or Segment Length (miles)	-	Spec Pwr Freq (%):	-776.68
Max Acceleration (mph/sec)	-3.51	Avg Trip or Segment Time (min)	-	Spec Pwr Freq (%): >0-100 mph2/sec	5.929
Avg Deceleration (mph/sec)	-0.25	# Stops per Mile	-	Spec Pwr Freq (%): >100-200 mph2/sec	-0.060
Max Deceleration (mph/sec)	0.00	# of 1-Sec Observations	-	Spec Pwr Freq (%): >200-300 mph2/sec	-0.317
				Spec Pwr Freq (%): >300 mph2/sec	-0.047
					-0.140

Appendix D

Composite Los Angeles-Weighted Area-Wide Cycle Comparisons

Difference Between Area-Wide and LA92 "Unified" Cycle SAFD (%)

(Area-Wide Cycle Weighted for Los Angeles)

ACCEL BIN (mph/s)	SPEED BIN (mph)										NET					ABS TOTALS					
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
-20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-11	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	1.315	0.547	-0.034	-0.555	0.483	0.020	-1.036	0.734	0.889	1.669	1.849	-1.893	-0.822	0.729	0.094	0.000	0.000	0.000	0.000	0.000	0.000
1	-0.341	0.312	0.590	0.797	-0.248	-0.614	0.311	-0.874	-0.409	0.170	-0.409	0.186	0.057	0.094	-0.475	0.161	0.000	0.000	0.000	0.000	0.000
2	0.082	-0.057	-0.115	-0.583	-0.036	0.042	-0.231	0.106	-0.050	0.033	0.024	0.047	0.010	0.019	0.007	0.000	0.000	0.000	0.000	0.000	0.000
3	0.001	-0.514	-0.487	-0.527	-0.514	-0.297	0.037	0.089	-0.069	0.019	0.019	0.019	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4	0.000	-0.521	-0.326	0.067	0.689	0.562	-0.224	0.012	0.012	-0.239	-0.066	-0.014	0.065	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
5	0.000	-0.540	0.272	-0.629	-0.206	0.258	-0.359	0.472	0.551	0.055	0.234	0.361	0.087	-0.238	0.180	0.000	0.000	0.000	0.000	0.000	0.000
6	0.052	0.141	0.068	-0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7	0.000	-0.124	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
11	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NET	1.079	-1.236	-0.170	-1.563	-0.570	-0.605	-2.946	1.825	1.531	0.404	2.104	2.333	-1.772	-1.586	1.070	0.094	0.000	0.000	0.000	0.000	0.000
AES	1.761	3.238	2.552	3.697	2.198	2.247	3.020	2.127	2.009	1.692	2.244	2.483	2.154	1.624	1.070	0.094	0.000	0.000	0.000	0.000	0.000
TOTALS	1.761	3.238	2.552	3.697	2.198	2.247	3.020	2.127	2.009	1.692	2.244	2.483	2.154	1.624	1.070	0.094	0.000	0.000	0.000	0.000	34.210

Summary Statistics Differences

Avg Speed 1.15 mph
Avg Power -1.79 mph2/sec

Modal Region Frequency Differences

Total Idle 1.08%
Total Cruise -20.30%
Total Accel 10.73%
Total Decel 8.49%

Specific Power Distribution Differences

0 mph2/sec 3.15%
0 < 100 mph2/sec 4.23%
100 - < 200 mph2/sec -1.00%
200 - < 300 mph2/sec 0.01%
≥ 300 mph2/sec 0.04%

Difference Between Area-Wide Cycle and LA92 Chase Car Driving SAFD (%)

(Area-Wide Cycle Weighted for Los Angeles)

ACCEL BIN (mph/s)	SPEED BIN (mph)										NET					ABS TOTALS							
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100		
-20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
-19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
-18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
-17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
-16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
-15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
-14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
-13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
-12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
-11	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
-10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
-9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
-8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
-7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
-6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
-5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
-4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
-3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
-2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
-1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
0	2.923	-0.024	0.071	0.344	-0.157	0.091	-0.060	0.081	-0.061	-0.047	-0.042	0.019	-0.021	0.018	-0.014	0.010	0.013	-0.005	0.000	0.000	0.000		
1	-0.001	-0.130	-0.151	-0.104	-0.092	-0.061	-0.047	-0.041	-0.036	-0.018	-0.013	-0.010	-0.009	-0.008	-0.007	-0.005	-0.004	-0.003	-0.002	-0.001	-0.001		
2	-0.008	-0.227	-0.256	-0.155	-0.158	-0.281	-0.300	-0.091	-0.117	-0.024	-0.024	-0.024	-0.024	-0.024	-0.024	-0.024	-0.024	-0.024	-0.024	-0.024	-0.024		
3	0.048	-0.183	-0.157	-0.223	-0.198	-0.021	-0.023	-0.023	-0.023	-0.018	-0.150	-0.086	-0.120	-0.016	-0.039	-0.012	-0.009	-0.007	-0.007	-0.007	-0.007	-0.007	
4	-0.173	-0.129	-0.025	0.015	0.050	-0.024	-0.121	-0.024	-0.163	-0.022	-0.017	-0.014	-0.023	-0.003	-0.003	-0.003	-0.004	-0.004	-0.004	-0.004	-0.004		
5	-0.005	-0.067	-0.067	-0.085	0.019	-0.031	-0.048	-0.048	-0.094	-0.057	-0.057	-0.057	-0.057	-0.057	-0.057	-0.057	-0.057	-0.057	-0.057	-0.057	-0.057		
6	0.051	0.145	0.014	-0.017	-0.010	-0.005	-0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
7	0.000	-0.017	-0.015	-0.004	-0.000	-0.004	-0.001	-0.001	-0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
8	0.000	-0.014	-0.003	0.000	0.000	-0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
9	0.000	-0.003	-0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
10	0.000	-0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
11	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
NET	2.835	-0.892	-0.166	-0.104	-0.455	-1.142	-0.394	-0.310	-1.023	1.709	0.296	-0.264	-1.099	-0.385	-0.190	-0.051	0.000	0.000	0.000	0.000	0.000	0.000	
ABS	3.209	1.404	1.548	1.504	1.438	1.193	1.242	1.032	0.712	1.113	1.845	0.322	0.546	1.115	0.385	0.190	0.051	0.000	0.000	0.000	0.000	0.000	18.849

Summary Statistics Differences

Avg Speed -0.60 mph
Avg Power -2.04 mph2/s

Modal Region Frequency Differences

Total Idle 2.84%
Total Cruise -23.80%
Total Accel 12.04%
Total Decel 8.33%

Specific Power Distribution Differences

0 mph2/sec 2.78%
-0 < 100 mph2/sec -1.83%
100 - < 200 mph2/sec -0.68%
200 - < 300 mph2/sec -0.04%
>=300 mph2/sec -0.10%