MT's CAR PLAN TO SAVE TAXPAYERS $320 MILLION!

YOU'VE GOT THE WRONG CAR, OFFICER!

Don't let size scare you. Not too many years ago, the universal police car was smaller—repeat *smaller*—than today's compact car.

Part 2/By John Christy

There is no logical, tactical, economic, legal or moral reason why any sedan used by any government agency need be larger than that size commonly known as an intermediate. This applies to municipal, county, state and federal agencies and it applies equally to emergency response as well as administrative vehicles. A strong statement? We'll carry it one step further and make the claim that the purposes of government, including emergency police or fire response, are best served by compact cars of the *proper specifications*.

Please take note of the italics above because it's iconoclasm time. *Motor Trend* and that exemplary law enforcement organization, the Los Angeles Sheriff's Department, have gathered sufficient data on the subject to make a predictive if not evidentiary case in support of those statements that could be presented before any tribunal in the land. To torpedo two more fuel-crisis-generated myths, we are also prepared to show that under the normal conditions in which an urban-suburban police car is operated the American V-8 can be more economical by a significant amount than the American six-cylinder and that the higher performance four-barrel carbureted V-8 is significantly more economical than the equivalent low performance two-barrel carbureted V-8. Note that we said "under the normal conditions", not under any unrealistic steady-state cruise condition. The real world, where it counts, with real police officers driving.

And, just to spread the shock around a little and not lay it all on the public-service community, the top-scoring police vehicle is not made in the United States. It's made in Sweden. To soften that blow, it must be admitted that the margin of superiority was a mere three hundredths of a point over the top-scoring American car. However, this brings up the point about those italicized words mentioned above. Both of these cars were put together specifically as police cars, differing primarily in the national philosophy of those who put them together. Running a strong third in the test scores was another American compact.

The cars, in case you haven't run ahead of the story, in order of scoring, are the Volvo 164E Police Special, the Chevrolet Nova 350 with police package and the Dodge Dart 360 four-barrel.

All the evaluation, testing and scoring with the exception of the instrumented performance tests was done by personnel of the Los Angeles Sheriff's Department and compiling of the scores was done by the department's Automotive Section. The most striking point of the whole exercise is the fact that the three cars mentioned scored significantly higher overall than the intermediate Matador now in use by LASD and the intermediate Dodge Coronet and Plymouth Satellite tested as possible replacements. What makes it even more interesting is that the test procedures were devised to test the intermediates and thus in no way could be considered weighted in favor of the smaller cars. The scores of the intermediates were: Matador: 67.672, Satellite: 69.831, Coronet: 68.503.

To recap from our last issue, the test procedure consists of seven separate tests individually scored. These scores are averaged for a grand-total overall rating.

The first test is a preliminary slow and high speed ride and handling evaluation (always done by the same two Sheriff's driver-training instructors for consistency) to weed out the obvious unacceptables—those that are obviously unstable, that wallow or otherwise exhibit unsafe characteristics.

Test two is the instrumented performance test using *Motor Trend's* electronic equipment.

The third phase is the *Motor Trend* 73-mile urban-suburban-exurban fuel-mileage loop driven in a manner to simulate actual police use.

Phase four is the ergonomics evaluation, an exhaustive cross check of the human factors and space utilization, weighted differently for patrol and administrative uses.

The fifth phase is a mechanical repairability evaluation handled in the same manner as the ergonomics phase.

Test six is a four-way heat check of the transmission, engine oil, water and underhood temperatures.

The final check is by communications to score the ease and cost of equipping the car.

Thus, no one factor has an overriding influence on total scoring. Just because a car will go like stink in a straight line doesn't mean that it will necessarily make a great police car, even for pursuit purposes. By far the fastest car of all those considered—there were 20 considered and 12 completed the full test—was the Plymouth Satellite 440, which would rip off consistent 14-second standing-start quarter miles at 90 mph plus, yet it scored a solid fourth in the standings. Its 9.38 mpg economy (score: 46.9), deficiencies in handling and braking in comparison with the lighter cars and its only moderate ergonomics score brought the overall rating down.

A police car is a tool, not merely a piece of transportation to lug one or two policemen and a radio around a beat nor is it a black and white "race" car. What we are looking for is a vehicle that will have a balance of all factors. These include performance enough to give quick response, to (hopefully) negate most pursuits before they start ("...the best pursuit is no pursuit and the next best is a short pursuit."—Gordon Browning, LAPD), handling safely and quickly at speed both for the sake of public safety and officer survival; braking that is quick, even and predictable, an interior layout that is as efficient as possible and that one or two policemen can climb out of after an eight-hour shift and not fall flat on their faces. Additionally such a car ideally should inspire confidence on the part of its occupant and the public in its ability to do its job which, in the last analysis, is a mobile police station. Finally it should be able to do this job with the least damage to the public purse in terms of final (not first) cost, mileage and maintenance.

Leaving aside the fact that a downed police car (or any public vehicle) is one that is not responding or otherwise doing its job, it is a $100-a-day drain on the exchequer. If, like the intermediate and full-sized cars in current use, a police car on patrol duty gets an average of six miles or less to the gallon, while a so-called compact (which if you read the specs isn't all that compact) can get 11 mpg under the same circumstances—the difference—in gallons and in dollars, your dollars—gets very heavy. It begins to get obvious that reliability and mile-

age begin to assume importance with performance and handling. Which brings us to that $320,000,000 question all those blurbs and headlines have been shouting about.

Bear with us while we whip through some actuary and accounting exercises. The figures we are about to use are conservative and based on a mixture of actual test data and figures sent out to law enforcement agencies by the Law Enforcement Assistance Administration of the U.S. Department of Justice, hereinafter referred to as LEAA and USDOJ respectively. The figures on fuel mileage of marked police cars were gathered from the L.A. Sheriff's Department surveys as is the figure for average annual miles traveled, which is based on a three-year life, 70,000-mile tour of duty for the usual LASD black-and-white. The figures for the number of patrol cars in the U.S. come from LEAA. The figure for the price of gasoline is an average of what various agencies pay for the precious stuff per gallon, post-crisis. It could be higher in certain areas and lower in others and is about par for the course in Southern California.

So, let us take one black-and-white LASD patrol car and go from there. The LASD black-and-white Matador on patrol duty averages six miles to the gallon and runs an average 25,000 miles in a year. That means it burns a statistical average of 4166.6 gallons of gas in that year and in its three-year lifetime can be expected to burn 12,500 gallons. At 35 cents per gallon, this three year supply of fuel *at current prices* can be figured at $4374.99 or just short of $1500 a year.

From tests just completed, we know that the two top compact cars tested—the Volvo 164 and the Nova 350—get 17.83 and 16.15 mpg respectively when driven by deputies over the 73-mile test loop with lights, radios and air conditioners turned on. Tests further showed that the fuel-injected Volvo can get *no less* than 14 mpg when driven hard at what might be called Code 2½ conditions, i.e. having the hell barreled out of it. The same type of driving gets the Nova down to about 13 mpg or a little better. It should be understood, however, that patrol driving or operation isn't just barreling; in fact that's only about two to three percent of its operation. What tears up the mileage is stop-and-go traffic, slow cruising in second gear and a lot of idling time just keeping an eye on the neighborhood and doing paper work. This sort of thing can be figured to average out to 11 mpg for these two cars or others of similar specification and like performance.

So let's take a second look at the patrol situation using the 11 mpg figure that can be expected from such cars. At 25,000 miles per year such a car would use 2272.7 actuarial gallons of fuel. In its three-year life-

EMERGENCY RESPONSE VEHICLES

VEHICLE MAKE/TYPE	VOLVO 164E	CHEVROLET Nova	DODGE Dart	PONTIAC Ventura	AMC Hornet	PLYMOUTH Valiant
Engine—Cubic Inches	182—Six	350-V8	360-V8	350-V8	232—Six	275—Six
Carburetor/Exhaust	Fuel Injection/Single	4 BBL/Dual	4 BBL/Dual	2 BBL/Single	1 BBL/Single	1 BBL/Single
Horsepower @ RPM	138 @ 5500	185 @ 4000	245 @ 4500	150 @ 4000	100 @ 3600	105 @ 3800
Torque-Lbs. Ft. & RPM	154 @ 3500	270 @ 2600	320 @ 3600	270 @ 2000	185 @ 1800	180 @ 1600
Compression Ratio	8.7	8.5	8.4	8.0	8.0	8.4
Axle Ratio	3.31	3.08	3.21	2.73	2.73	3.55
Steering	Power	Power	Power	Power	Power	Power
Tire Size	175SR-15	E70-14	DR70-14	ER78-14	D78-14	D78-14
Suspension—Front	Independent with Unequal A Arms	Coil Springs Stabilizer Bar	Torsion Bar	Coil Springs	Coil Springs	Torsion Bar
Suspension—Rear	Coil Springs	Leaf Springs Stabilizer Bar	Asymmetrical Leaf Springs	Leaf Springs	Leaf Springs	Asymmetrical Leaf Springs
Brakes	Front—Disc Rear—Disc	Front—Disc Rear—Drum	Front—Disc Rear—Drum	Front—Disc Rear—Drum	Front—Disc Rear—Drum	Front—Disc Rear—Drum
Overall Length	191.7	196.7	201.7	199.4	186.9	201.7
Overall Height	54.7	53.9	54.1	53.9	52.5	54.1
Weight	3225	3434	3230	3169	2841	3230
Wheelbase	107.0	111	111	111	108.0	111.0
Head Room—Front/Rear	37.4/35.0	39.5/37.3	38.4/37.2	39.5/37.3	38.1/36.0	38.4/37.2
Leg Room—Front/Rear	45.0/45.0	41.7/35.3	31.7/35.9	41.7/35.3	42.2/31.6	41.7/35.9
Shoulder Room—Front/Rear	54.7/54.7	56.6/56.2	55.4/55.5	56.6/56.2	54.9/53.3	55.4/55.5
Hip Room—Front/Rear	56.3/56.3	55.9/54.9	57.2/57.2	55.9/54.9	54.8/53.3	57.2/57.2
PERFORMANCE RESULTS	**VOLVO 164E**	**CHEVROLET Nova**	**DODGE Dart**	**PONTIAC Ventura**	**AMC Hornet**	**PLYMOUTH Valiant**
PRELIMINARY HANDLING AND PERFORMANCE TEST	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable
INSTRUMENTED PERFORMANCE						
ACCELERATION	SCORE	SCORE	SCORE	SCORE	SCORE	SCORE
0-30	4.0 sec. 6.0	3.8 sec. 6.2	3.1 sec. 6.9	3.8 sec. 6.2	5.25 sec. 4.75	5.8 sec. 4.2
0-45	6.8 sec. 8.2	6.0 sec. 9.0	5.3 sec. 9.7	7.0 sec. 8.0	10.30 sec. 4.70	10.3 sec. 4.7
0-60	10.8 sec. 9.2	10.0 sec. 10.0	8.1 sec. 11.9	11.5 sec. 8.5	17.8 sec. 2.2	17.8 sec. 2.2
Standing Start 1/4 Mile	84.5 MPH 8.45	83.0 MPH 8.30	89.5 MPH 8.95	76.8 MPH 7.68	65 MPH 6.5	65 MPH 6.5
MAXIMUM FORCE (g's)	0.60 g 6.0	0.62 g 6.2	0.70 g 7.0	0.65 g 6.5	0.52 g 5.2	0.45 g 4.5
30-50	4.0 sec. 6.0	4.0 sec. 6.0	3.7 sec. 6.3	5.0 sec. 5.0	7.5 sec. 2.5	9.1 sec. .9
30-65	9.4 sec. 5.6	7.5 sec. 7.5	7.4 sec. 7.6	10.5 sec. 4.5	17.6 sec. 0	20.9 sec. 0
60-80	6.8 sec. 8.2	7.4 sec. 7.6	6.0 sec. 9.0	10.5 sec. 4.5	28.5 sec. 0	N/A 0
60-95	13.5 sec. 6.5	14.8 sec. 5.2	11.5 sec. 8.5	22.8 sec. 0	N/A 0	N/A 0
BRAKING						
30-0	1.0 g 10.0	1.0 g 10.0	0.80 g 8.0	0.67 g 6.7	1.0 g 10.0	0.82 g 8.2
60-0	0.95 g 9.5	0.96 g 9.6	0.75 g 7.5	0.67 g 6.7	0.76 g 7.6	0.80 g 8.0
HANDLING & RECOVERY						
One Lane Change	0.56 g 5.6	0.60 g 6.0	0.52 g 5.2	0.60 g 6.0	0.50 g 5.0	0.49 g 4.9
Two Lane Changes	0.80 g 8.0	0.75 g 7.5	0.76 g 7.6	0.75 g 7.5	0.56 g 5.6	0.74 g 7.4
Three Lane Changes	0.80 g 8.0	0.90 g 9.0	0.72 g 7.2	0.90 g 9.0	0.72 g 7.2	0.77 g 7.7
Recovery	0.86 g 8.6	0.86 g 8.6	0.86 g 8.6	0.75 g 7.5	0.78 g 7.8	0.75 g 7.5
Left Circle (200' DIA)	0.86 g 8.6	0.79 g 7.96	0.64 g 6.4	0.73 g 7.35	0.72 g 7.2	0.63 g 6.32
Right Circle (200' DIA)	0.79 g 7.9	0.75 g 7.57	0.68 g 6.8	0.64 g 6.43	0.68 g 6.8	0.64 g 6.43
PERFORMANCE AVERAGE	64.875	66.115	66.575	54.03	41.525	39.725
ECONOMY ROAD TEST (Miles Per Gallon/Score)	17.83 mpg 89.15	16.15 mpg 80.75	13.79 mpg 68.95	12.45 mpg 62.25	13.24 mpg 66.20	15.89 mpg 79.45
ERGONOMICS EVALUATION	76	64	65	55	42	33
MECHANICAL EVALUATION	75	77	70	65	70	60
HEAT TEST (Degrees/Score)						
Radiator	198° 90	215° 84	211° 87	214° 85	224° 79	208° 86
Engine Oil	248° 68	261° 65	253° 68	250° 70	244° 72	231° 77
Transmission Fluid	228° 78	232° 78	221° 82	217° 84	193° 92	202° 87
Engine Compartment	96° 100	151° 100	107° 100	178° 97	122° 100	88° 100
HEAT AVERAGE	84	81	84.25	84	85.75	87.5
COMMUNICATIONS EVALUATION	80	100	92	90	60	55
TOTAL AVERAGE SCORE	78.17	78.14	74.46	68.38	60.91	59.11

time it would use 6818.2 gallons at an expected cost of $2386.36 to the taxpayer. Taken another way you come up with a saving of 5681.8 gallons of scarce and expensive gasoline and a saving to the public purse of $1988.63 *per car,* in its operational lifetime.

The latest surveys by the LEAA/USDOJ show that there is an estimated total of 159,300 marked patrol cars in the United States. This does not include federal agencies such as National Parks, Border Patrol, Military Police, Shore Patrol and the like, so again the figures are conservative. Cranking that 159,300 figure into the equation, we come up with a current fuel-use figure of 1,991,000,000 gallons used during the lifetimes of those taxpayer-supported cars. The cost of all this precious fluid comes to $696,935,900, which isn't exactly pin money, even by federal budget standards.

The compacts, if universally adopted (unfortunately a physical impossibility to implement immediately), would use 1,086,000,000 gallons of fuel at a cost of $380,147,140. Saved in the process are 905,112,650 actuarial gallons of fuel and $316,788,750—not far off that $320 million figure we've been throwing around.

These figures are for patrol cars which, according to the LEAA, represent only an average of 70 percent of total police-agency vehicles in use. We won't burden you with the calculations on these but the actuarial minded among the readers can play around with the figure of 57,390 unmarked "solids" and a mileage figure of 12 mpg, again at a cost of 35 cents to the gallon.

You can also write to your senator or congressman and see if he can come up with the number of federal vehicles, marked and unmarked, in law enforcement use and then crank in the same equations. We say we have been conservative in all this figuring because we have used the Los Angeles County Sheriff's typical patrol car and its mileage as an example.

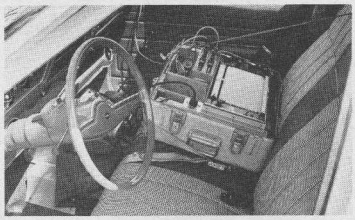
If you want to use federal figures and can stand the shock, the LEAA puts the annual mileage figure for a marked police car at 50,000 miles. This raises the lifetime mileage ante to a round figure of 3,982,000,000-plus gallons at a cost of $1,393,763,000. Using the same compact-car figures as above, the *savings* in fuel is 1,809,909,000 gallons of gas and a dollar saving of $633,577,500 for the various state, county and city exchequers.

A protest undoubtedly will be heard from the more conservative members of the public-service community and old-time law enforcement personnel to the effect that no compact can do the job of a full-size standard car, that "it takes a heavy car to stay

ADMINISTRATIVE VEHICLES

VEHICLE MAKE/TYPE	DATSUN 610	MAZDA RX4	TOYOTA Corona MK II
Engine—Cubic Inches	119—4 Cyl.	80 (Rotary)	156—6 Cyl.
Carburetor/Exhaust	2 BBL/Single	4 BBL/Single	2 BBL/Single
Horsepower @ RPM	94 @ 5600	110 @ 6000	122 @ 5200
Torque-Lbs. Ft. & RPM	99 @ 3200	117 @ 3500	141 @ 3600
Compression Ratio	8.5	9.2	8.5
Axle Ratio	3.90	3.09	3.90
Steering	Power	Power	Power
Tire Size	165-SR13	BR70-13	175SR-14
Suspension—Front	Independent Strut Type with Coil Springs	Strut Type with Coil Springs	Coil Springs Sway Bar
Suspension—Rear	Independent with Coil Springs	Leaf Spring	Coil Spring
Brakes	Front—Disc Rear—Drum	Front—Disc Rear—Drum	Front—Disc Rear—Drum
Overall Length	174.2	179.0	179.3
Overall Height	55.3	56.0	64.0
Weight	2450	2700	2820
Wheelbase	98.4	99.0	101.8
Head Room—Front/Rear	N/A	38.0/37.0	N/A
Leg Room—Front/Rear	40.1/N/A	41.0/34.0	39.5/26.5
Shoulder Room—Front/Rear	50.5/48.5	50.0/50.0	51.5/51.5
Hip Room—Front/Rear	N/A	N/A	51.5/51.5

PERFORMANCE RESULTS	DATSUN 610		MAZDA RX4 (Rotary)		TOYOTA Corona Mark II	
PRELIMINARY HANDLING AND PERFORMANCE TEST	Acceptable		Acceptable		Acceptable	
INSTRUMENTED PERFORMANCE ACCELERATION		SCORE		SCORE		SCORE
0-30	5.3 sec.	4.7	4.6 sec.	5.4	5.3 sec.	4.7
0-45	9.3 sec.	5.7	7.1 sec.	7.9	8.6 sec.	6.4
0-60	15.0 sec.	5.0	11.0 sec.	9.0	13.8 sec.	6.2
Standing Start 1/4 Mile	70.0 mph	7.0	81.5 mph	8.1	72 mph	7.2
MAXIMUM FORCE (g's)	0.55 g	5.5	.60 g	6.0	48 g	4.8
30-50	7.0 sec.	3.0	5.2 sec.	4.8	8.2 sec.	1.8
30-65	14.4 sec.	0.6	10.0 sec.	5.0	16.0 sec.	0.
60-80	15.5 sec.	0.	10.0 sec.	5.0	11.8 sec.	3.2
60-95	N/A	0.	19.1 sec.	0.9	25.0 sec.	0.
BRAKING 30-0	1.0 g	10.	1.9 g	11.0	1.2 g	12.0
60-0	0.95 g	9.5	1.0 g	10.0	1.0 g	10.0
HANDLING & RECOVERY One Lane Change	0.50 g	5.0	0.49 g	4.9	.60 g	6.0
Two Lane Changes	0.70 g	7.0	0.78 g	7.8	.75 g	7.5
Three Lane Changes	0.75 g	7.5	0.89 g	8.9	.76 g	7.6
Recovery	0.76 g	7.6	0.80 g	8.0	.78 g	7.8
Left Circle (200' DIA)	0.74 g	7.4	0.746 g	7.46	.735 g	7.35
Right Circle (200' DIA)	0.72 g	7.2	0.680 g	6.80	.691 g	6.91
PERFORMANCE AVERAGE		46.35		58.50		49.73
ECONOMY ROAD TEST (Miles Per Gallon/Score)	20.80 mpg	100	15.50 mpg	87.75	18.75 mpg	93.75
ERGONOMICS EVALUATION		77.25		68		31
MECHANICAL EVALUATION		90.12		91		52
HEAT TEST (Degrees/Score) Radiator	204°	87	169°	100	180°	96
Engine Oil	237°	75	196°	90	205°	87
Transmission Fluid	213°	84	218°	82	190°	93
Engine Compartment	90°	100	118°	100	91°	100
HEAT AVERAGE		86.5		93		94
COMMUNICATIONS EVALUATION		92		92		93
TOTAL AVERAGE SCORE		82.04		81.70		68.91



on the road" and that small cars are unsafe, citing such "tests" as the Connecticut exercise in which it was shown that a Cadillac would mash a Volkswagen in a head-on crash. They forget that not too many years ago the universal police car was a Ford that was smaller—repeat *smaller*—than the current compact and more recently was a Chevy of the same dimensions of a current compact. We refer these to the specifications and test results included with this article and to the Automotive Section or Sheriff's Information Bureau, Los Angeles County Sheriff's Department, Hall of Justice, Los Angeles CA 90012.

Unfortunately space in this issue prohibits a detailed analysis of each car tested but suffice it to say that experienced police officers have indicated that at least four of the cars shown here are either the superior, or the equal of, cars now in actual use, i.e. they would trust their lives to them, the top two in particular.

It should also be pointed out that the high scores shown by the Datsun, Mazda & Toyota subcompacts were due to the fact that they were not evaluated as danger/emergency response vehicles but as administrative-only cars for which duty they are admirably suited. Go through the test figures again carefully. And think about it. Your police deserve the best tools that can be found—and you deserve a break since you're paying for them.

VOLVO 164-E—SCORE: 78.17—Volvo's current slogan for the regular version of the 164 is "...a civilized car for an uncivilized world." We aren't sure what their idea of an uncivilized world might be but the world of the patrol car can get very uncivilized indeed, and Volvo's version of a patrol car is very obviously meant to help civilize it. In its fully optioned form, the car is a mobile police station with a place for everything and everything in its place. The 164 slated for police use is taken off the line while virtually a metal turtle shell and turned over to Special Vehicles. There it's fitted with special suspension, heavy-duty interior and very special seats. It also gets heavy-duty wiring and extra relays for emergency equipment, a transmission that is valved and timed for optimum performance. It is sent back to the line for the standard bits and finish and then back to Special Vehicles for its final finish and fitting to suit the particular police agency. Performance is shockingly good for a 180-cubic-inch six and it will reel-in both the Nova and the in-use Matador inside of a half mile from a stop or almost instantly with the cars starting from a speed of 60 to 65. It will stick in the turns with all but the very best sports cars and it will make a U turn in a two-lane residential street. It is, in short, very probably the best general law enforcement vehicle available anywhere.

Its initial cost is high at $4600 to $5100, depending on options, but its service life in England and Europe is 150,000 miles and up. At the LASD turnover point of three years or 70,000 miles, a Volvo 164 has a loan value of nearly $2000, a wholesale of $2200. Add in the $2000 fuel saving and you have a police car with a total comparative cost of roughly $1000 for the normal U.S. service life. Makes fiscal sense.

CHEVROLET NOVA 350—SCORE: 78.14—Chevrolet's compact version of a police car is a very solid rebuttal to the notion that Detroit can't build a compact police car. Not as sophisticated in its manner and available equipment as the Volvo 164, it does everything the Volvo does, though where the Volvo is mannerly, the Nova is muscular. It is the second attempt on the part of the Nova-Camaro engineering team in interesting law enforcement agencies in the Nova and a highly successful one. Outwardly a low-line version of the Nova four-door with simple bench seats, it is more like a Z-28 or four-door Corvette in disguise. Power comes from a 350-cubic-inch V-8 with four-barrel carburetion and dual exhausts and is transmitted through a Turbo-hydramatic transmission to a 3.08 rear end. The chassis is a mixture of standard Nova, optional Nova and some Camaro bits and the braking is handled by semi-metallic linings from the B-bodied, or full-size police car package. Steering is power but has the same valving as the Z-28 Camaro and thus imparts more road feeling than the standard item. Tires are E70-14 on seven-inch rims, and both front and rear suspensions are stabilizer-bar equipped.

Its only shortcoming from the suspension standpoint is its OEM shock absorbers which are nowhere near the quality they should be to go with the rest of the suspension. So impressive is it that 11 have been ordered by the L.A. Sheriff's Department. The only other agency to see the car prior to the '74 build-out time limit, Fountain Valley, California, Police Department, filled the remaining openings in their fleet with the new Novas after a mere three-day trial—and that should deliver a message.

DODGE DART 360—SCORE: 74.46—The Dart 360 was the stormer of the lot and would definitely overhaul any of the others in a straight-line situation, but if the road got twisty or there were a number of city corners taken, the advantage would disappear. At 245 rated horsepower, it has far more suds than the Chevrolet but the extra horses are paid for in fuel with an economy loop figure of 13.79 mpg. However, since the test car had just been purchased by the District Attorney's office and only had 43.7 miles on the clock, that figure could be expected to rise into the mid-14 mpg level with more use. For the long-term test phase, LASD has ordered 11 Darts with the 318 engine and some heavier-duty chassis modifications in an attempt to offset the handling and economy deficiencies that brought the overall score below the other two "highly acceptables."

PONTIAC VENTURA 350—SCORE: 68.38—The Ventura was a favorite among the executives on the Division and upper levels in LASD for its stylish-yet-purposeful looks and general good manners. Very likely an interbreeding of the Ventura and the Firebird with an admixture of available GTO bits would produce a car similar to the "Nascar" Nova. Unfortunately the Pontiac people didn't have the head start the Nova-Camaro group did and the car suffered for it as a "real" police car. It also was the surprising proof that a two-barrel carbureted, single exhaust V-8 pulling a tall rear-end was false economy in any but steady-state freeway cruising. In a real world situation it was just working too hard and the economy loop gave it a poor 12.45 mpg rating. That and the only moderate handling under stress situations brought it in nearly 10 points under the top two.

HORNET 232 SIX—SCORES: 60.91—The AMC Hornet as a police vehicle should be familiar to regular readers. The sheriff's department took delivery on a batch of 15 for general administrative use and also for extended testing as an urban patrol vehicle. One has since been put on patrol in the urban West Hollywood area and another is in patrol service on Catalina Island. These have the absolute basic 232-cubic-inch six and their performance is hardly calculated to give nosebleeds and blackouts. They do handle and stop surprisingly well which makes them viable for patrol use in an area like West Hollywood which is urban middle-class residential and business for the most part and where they have stronger cars for backup. Again, too small a horse pulling too big a load gives poor real world mileage: 13.24 mpg on the 73-mile loop. A 258-inch six Hornet in a regular *Motor Trend* test pulled over 21 mpg on the same loop albeit more lightly driven.

PLYMOUTH VALIANT 225 SIX—SCORE: 59.11—Again we have a car that is best suited for administrative use but which, looking at the low performance and merely moderate economy, would be better off with at least a 318 CID V-8. Surprising to those who had been familiar with Chrysler's slant six engine over the years, its performance wasn't even up to the level of the 232 Hornet. The years have added weight and a form of legally-required emphysema. The result is a car-and-engine combination that once was capable of turning 140 mph laps at Daytona and can now hardly climb out of the dents it leaves in the pavement. While the 225-inch six Valiant was given an "acceptable" in the preliminary runs due to its good road manners and lack of nasty surprises, the number of low subscores as well as the low total would indicate that its adaptability as a police vehicle is marginal even for urban or suburban use. Given a 360-inch, four-barrel V-8 engine and a bit more underneath, the picture could change radically.

ADMINISTRATIVE TESTS: Datsun 610, Mazda RX4 & Corona Mark II: These cars were tested and evaluated as purely administrative and executive cars for which they are all well suited. A thorough reading of the figures, sub-scores and overall averages indicates that the Mazda RX4 might best be put over into the emergency response category, especially in its wagon version. As a matter of fact, at least one Mazda RX 2 is currently in patrol use in Cotati, California. Serious consideration is being given by several agencies to the RX 4 wagon as a field sergeant's or field supervisor's car due to its performance and handling abilities. One LASD evaluator referred to its acceleration as "awesome." Coming from a policeman, that is high praise indeed. The Toyota Mark II was another car that received high marks on the executive level due to its adequate performance and elegant interior, which tended to make even large senior officers forget the relatively small size of the car. As for the Datsun, a glance over the figures tells the story. Datsun does indeed save—on fuel at any rate.■