

COUNCIL ACTION FORM

SUBJECT: FLEET REPLACEMENT PROGRAM-POLICE PATROL CARS

BACKGROUND:

Several years ago the City was notified that Ford would discontinue production of the Crown Victoria, the vehicle that served as the standard for our patrol car fleet in recent years. The last of the Crown Victorias were produced by Ford in September of 2011. Although we were able to make a multiple vehicle purchase near the end of the production run, we have now reached the point where a new replacement vehicle must be selected and purchased.

Aware that the Crown Victoria would be discontinued, the Police Department joined with Fleet Services over a year ago to study the alternatives and identify a vehicle or vehicles that could be expected to perform well in the police patrol environment. The process was designed to methodically review replacement vehicles with a goal of choosing the vehicle that will provide exceptional service at the best possible price. There are several vehicles available that are marketed as police patrol vehicles. After reviewing the offering from Ford, Dodge, and Chevrolet the team selected the Ford and the Chevrolet for further analysis. The Dodge was excluded from further analysis by the team due to the fact that dealership support was not available within the city. Dealership repair would have meant shuttling cars to Boone or Nevada resulting in officers being out of the city for extended periods of time - an unacceptable cost to the city.

Fleet Services then specified, sought bids, and purchased a Ford and Chevrolet unit for evaluation. Police drove and reviewed a newly designed 2013 Ford Police Interceptor and the redesigned 2012 Chevy Caprice. The Caprice was in the department hands for a substantially longer period than the Ford, but the Ford was in service long enough for a reasonably thorough review.

The evaluation included a review of the literature available on the vehicles, testing done by outside agencies, a review of specifications and performance data from the manufacturers, performance data from our Fleet's experience with the cars we purchased and the personal experience of the officers who drove the two vehicles.

Configuration

The Ford that was tested was a 2013 model with a 3.5 liter engine in an all wheel drive (AWD) configuration. At the time of the purchase, the only other option from Ford was a 3.5 liter EcoBoost engine that generates significantly more horsepower. Since our test, Ford has announced that it will now make the 3.7 liter engine the standard in its Police Interceptor (and the only option in the all wheel drive model) in response to users' complaints that the Ford was underpowered. Our officers made the same observation. Power in the vehicle is important for response times, but more important to the safe and efficient operation of the patrol vehicle. Power demands for lights and other electrical equipment put extra stress on the vehicle and an underpowered vehicle will not provide appropriate performance in critical situations, sometimes due to the failure of other equipment in the car. The 3.7 liter engine is expected to eliminate the issues experienced by the users.

The Chevy that was purchased was a 2012 Caprice with a 6.0L V-8. The Caprice provided the power necessary for a police vehicle, but at the cost of fuel economy. The additional power did not seem to translate into improved all-around performance with this vehicle.

The Fords can be keyed alike – allowing an officer with a key to start any patrol vehicle in the fleet. Chevy has a key that is vehicle-specific and very expensive to replace. This is particularly problematic in the Ames Police environment where we share cars across shifts. Having a single key run the entire fleet (available from Ford) gives officers much greater safety and control over the vehicles - any officer can relocate or secure any vehicle without searching for the “right key.” Additional, Chevy keys are expensive and, during the period of our testing, replacement keys were unavailable.

A critical aspect of the configuration of the vehicles was the all wheel drive design. Ford is proposing this as the primary configuration due to the safety, traction, and overall performance of the unit. The Ford we tested was an all wheel drive configuration. The Chevy is a rear wheel drive vehicle (as are the Crown Victorias). The Ford is the only police patrol vehicle that is currently available as an all wheel drive vehicle although Dodge has recognized the need for this and will likely be marketing their patrol vehicles in this configuration.

The cost difference between the Ford two wheel drive and all wheel drive configuration is approximately \$1,000. The offsetting benefits are better control over the vehicle, better performance in hazardous weather, longer tire life, and anticipated improvements in winter gas mileage. Fleet Services analysis suggests that the savings in tire life and winter fuel mileage are anticipated to offset the higher purchase price of the all wheel drive. From a performance perspective, police officers report exceptional winter driving capabilities reducing the need for “borrowed and poorly equipped substitute vehicles” during snowstorms and icy conditions. Roadway-related emergency calls spike in bad weather. Having patrol units that can more safely reach motorists in these dangerous circumstances will be of value to citizens. In previous snowstorms, police utilized four

wheel drive units from other city departments for some tasks. Unfortunately, these units are not equipped with emergency lighting, police radios, or the computer equipment used to document and report accidents. Fully equipped patrol units can provide better service to citizens. Both through national testing and our own officers' experience, the all wheel drive provides superior handling, better traction in the ice and snow, while providing a safer driving unit for officers.

Finally, comments from Fleet's two experienced mechanics indicate that the Ford is better constructed. The Ford has higher quality of components (heavier front end push points, stronger interior dash and kick panels) and all engine and drive train components are shielded or set above shields. The Fords have better ground clearance than the Chevy. The Chevy's components have proven to be less durable and subject to breakage. Ford also has a history of superior suspensions, a critical element on the police vehicle.

Fuel Economy and Cost of Operation

Rated at a combined 21 mpg, the Ford with the 3.7 liter in the all wheel drive configuration exceeded the Chevy's 18 mpg combined rating. Incidentally, both are better than the ratings on the Crown Victoria. **Our experience also showed somewhat better fuel economy for the Ford demonstrating an overall cost per mile of 34 cents and the Chevy with overall costs per mile at 37 cents. In addition, the Ford is a flex-fuel vehicle and the Chevy is not.**

Fleet's experience is that the all wheel drive will provide a better platform for long term maintenance as the parts wear more evenly in this configuration. **Fleet reports that the Chevy is averaging 10,000 to 12,000 miles on a set of brakes and 12,000 to 14,000 on a set of tires. The Ford still had usable wear on the brakes and tires at its first 12,000 mile service.** For comparison the Crown Victoria's would average 16,000 on brakes and 20,000 to 25,000 on tires, extending the difference in operational cost in favor of the Ford as the car ages.

Additional Considerations

The all wheel drive configuration provides additional safety for officers operating in wet or icy conditions. The Ford demonstrated these capabilities during our driver training session where it outperformed all of our other vehicles in evasive maneuvers, gravel and wet-weather handling, and precision vehicle handling. The Ford also has better braking ability as reported on national tests. Our Ames Police driver instructors suggested that the Ford made all of our officers safer drivers.

Officers were surveyed as a part of this evaluation process. They overwhelmingly favored the Ford (91%) noting safety, fit, functionality, and the AWD performance as noteworthy differences. Both vehicles have less interior space than the Crown Victoria. We currently run one Crown Victoria with a half-cage to allow additional extension of the

seat and better fit for the larger officers. In general, the officers strongly favored the Ford.

The Ford is manufactured in the United States (Chicago) versus Australia for the Caprice. Fleet has noted this difference when ordering or requesting part information. The parts for the Ford seem to be much more accessible with shorter wait times. This remains a critical factor as down time affects our operational level on patrol. Another important factor is the timeframe from when we order a new vehicle to the time it is delivered. Although we attempt to order in advance, a shorter delivery time allows us more leverage should an incident take a patrol car out of service unexpectedly, e.g., accident. Delivery time for the Chevy was five to six months as compared to 10 to 12 weeks for the Ford.

Warranty for both the Ford and Chevy are relatively similar. Both offer a three year/36,000 bumper to bumper and 100,000 mile power train warranty. The Chevy has been in for more warranty items, but has also been in testing for a longer period of time. Both Chevy and Ford have stood behind their products and have fulfilled all warranty work as required.

The two initial “test” cars (one Ford and one Chevy) were purchased through the City’s formal bid process. The winning bid at the time for the Chevy Caprice was awarded to George White Chevrolet in the amount of \$26,200. The Ford Interceptor winning bid was awarded to Willey Inc. for the amount of \$24,867.88. Both prices, \$26,200 and \$24,867.88, closely reflect the state bid price. As stated earlier, Fleet was able to provide costs per mile for each vehicle tested. This cost includes fuel usage and associated maintenance costs. Currently, the Chevy costs 37 cents per mile to operate and the Ford costs 34 cents per mile.

It is important to note that the all wheel drive option adds about \$1,000 to the purchase price of the Ford. Fleet agrees that the efficiency of the all wheel drive will likely pay for the additional up front cost over the life of the vehicle.

It should also be noted that there are two other cars built for police patrol use. They are the Chevy Impala and the Dodge Charger. The Impala was not tested as it is a smaller unit with less space for officers, equipment, and prisoner transport. These elements made it less suitable than the Caprice for our needs and so the Caprice was selected for testing. Part of the rationale for limiting the variety of vehicles in police service comes from the changeout costs. Approximately two-thirds of the changeout costs can be recovered if equipment can be rotated into the same model of vehicle when a unit is being replaced. Although future testing of a Dodge alternative may be warranted, we have a current need for replacement vehicles.

In summary, we are requesting permission to proceed with the purchase of Ford Interceptors in the all wheel drive configuration for the replacement of police patrol vehicles coming out of service. These units have the lowest purchase

price, lowest cost of operation, greatest emphasis on safety, and highest degree of officer and fleet service satisfaction.

ALTERNATIVES:

1. Approve the request to purchase, through normal city purchasing policies, the Ford Interceptor all wheel drive police sedan.
2. Do not approve this request, direct staff to solicit bids on both Ford Interceptors and Chevrolet Caprice police cars.

MANAGER'S RECOMMENDED ACTION:

The Director of Fleet Services and the Police Department agree that purchasing Ford Interceptor all wheel drive sedans will provide the best, safest, and most economical level of law enforcement service for the City of Ames. Also, knowing that vehicle manufacturers modify their designs and features, staff will continue to monitor and evaluate other makes and models of law enforcement to determine if any of them will provide acceptable service in the future.

Therefore, it is the Manager's recommendation that Council adopt Alternative #1, to approve the request to purchase, through normal city purchasing policies, the Ford Interceptor all wheel drive police sedan.

The Council should understand that this alternative will allow the staff to seek bids only from dealers who can sell the Ford Interceptor, based on the information gathered from our recent test experience.