Memorandum
Department of Public Works

TO: Michael O. Geisel, P.E.
City Administrator

FROM: James A. Eckrich, P.E.
Public Works Dir. / City Engineer

DATE: June 1, 2020

RE: Vehicle Replacement Plan

As you know, the Public Works Department maintains a multi-year plan to prepare for the replacement of its assets, including trucks and vehicles (hereafter referred to as "vehicles"). As shown on the attached table (Appendix 1) the Public Works Department, including Administration, contains 51 vehicles. This does NOT include the vehicles within the Parks Department and Police Department (an additional 74 vehicles). While all City vehicles are maintained by the Public Works Department – Fleet Division, we do not plan and budget for the replacement of Police and Parks vehicles.

The Public Works Capital Replacement Plan includes all Public Works vehicles and equipment, the purchase year, an estimated replacement cost, and the anticipated replacement cycle. The replacement cycle has been generated based upon industry standards, the City's experience over its 30+ years of existence, and the knowledge of our Fleet Maintenance Staff. The Fleet Maintenance Division is an ASE Blue Seal certified shop, comprised of a Fleet Maintenance Supervisor and five mechanics. All of the Fleet Maintenance personnel are ASE certified, and five of the six are ASE Master Technicians.

It is imperative that an organization of our size maintain a Fleet Replacement Program. As stated in *Planned Fleet Replacement* (APWA, July 2012)

> "The purpose of a fleet replacement program is to provide exceptional service at the best possible price to the end recipient, the citizen. The citizens and community create the need for the fleet, and a sustainable, effective and supported fleet replacement program will provide the citizens with the best value for their tax dollars."

Historically, the City's Fleet Replacement Program has begun with the vehicles at the end of their expected life, as defined within the replacement cycle. Those vehicles are

analyzed by the Fleet Maintenance Staff, who then determine whether the vehicle should be recommended for replacement at this time. This list is supplemented by vehicles which may warrant replacement but have yet to reach their expected life. Finally, but rarely, additions to the fleet are considered. The results are submitted to the Director of Public Works for consideration of inclusion in the Budget.

During the 2020 Budget deliberations members of City Council clearly expressed their desire for the Public Works staff to better refine the Vehicle Replacement Program. Specifically, members of Council asked for specific data to support the recommendations for replacement. While I cautioned against using any one metric (such as mileage) to determine replacement needs, I fully support the request to better define and refine the Vehicle Replacement Program. This document is the Public Works Department's response to the direction of City Council

Before getting into the details of vehicle replacement, it is useful to consider the manner in which the City procures vehicles. Almost exclusively, the City purchases vehicles via the State of Missouri Cooperative Procurement Program (State Bid). Cities and government agencies can purchase these vehicles at prices substantially lower than the average person. During a recent meeting with Enterprise Fleet Management, a representative from Enterprise cited the State Bid as the number one benefit to government fleet managers. In fact, he argued that from solely an economic perspective the State Bid is so beneficial it would actually be in the City's best interest to turn over its entire fleet every year. This is strictly because of the minimal difference between the cost of a vehicle on the state bid and the resale value of a one-year old vehicle on the open market. Of course, this differs substantively from a vehicle purchased at a dealership, which does not include the state bid discount and depreciates precipitously once driven off the lot.

While the State Bid is certainly advantageous economically, it does come with disadvantages. This includes that vehicles are only available at certain times, and it can take a long time to acquire vehicles. This is especially true for heavy duty trucks, which can take over a year to acquire via the State Bid.

This is important information because it differs dramatically from the manner in which a typical resident manages his / her vehicle or "household fleet". Most fiscally conservative people drive their vehicle until one of the following occurs: 1) the cost of vehicle ownership over a specific period exceeds the cost of purchasing another vehicle; 2) the cost of a vehicle repair exceeds the value the owner has placed on the vehicle; or 3) the reliability of the vehicle becomes intolerable. This is possible because a person can acquire another vehicle rather quickly via one of the myriad automotive dealerships in the St. Louis area. However, the same cannot be said of the City. In order to obtain the substantial savings available through the State Bid, the City must plan its purchases well in advance.

As stated above, one factor the City has used in determining whether to purchase a replacement vehicle is the vehicle's age. This is not only practical from a budgeting perspective, but it is predictive indicator of the condition of the vehicle. A second and

related factor is mileage. While mileage on City vehicles can vary substantially, the vast majority of our vehicles are used, in some capacity, every day. Many low mileage City vehicles have an inordinate amount of wear and tear. Similarly, in private industry, an over-the-road sales vehicle driven across the country may have high mileage but low wear and tear. Because our vehicles rarely leave the City, they generally have low mileage but high usage. This is why mileage is considered, but age is generally a more useful metric for the City.

The next factor to consider when assessing the condition of a vehicle is the type of service that it provides. Our 2.5 ton dump trucks, including the plow and spreader, are absolutely necessary during snow events. We need these trucks to function properly, and cannot tolerate having multiple trucks down in a snow event. Alternatively, a City Hall pool vehicle used by a Staff Engineer to meet with a resident regarding a storm water problem is still absolutely necessary, but it requires a much lower reliability. While we need these vehicles to be safe and of an acceptable condition / appearance to our citizens, the need for a reliable pool vehicle simply cannot be compared to that of a truck used during a snow event. When a pool vehicle does not start someone is late for a meeting; when a 2.5 ton truck is down during a snow event, streets are not getting salted / plowed.

Another factor to consider regarding vehicles is reliability. We have all had vehicles that drove perfectly almost any time we turned the key. Unfortunately many of us have also had vehicles that always seemed to have a problem. Even if these problems did not result in expensive repairs (such as a door handle sticking shut), the problems prevent you from using the vehicle as intended. These vehicles with persistent problems are well-known to our fleet maintenance staff, and it is in the City's best interest to dispose of these vehicles at our earliest opportunity.

During the budget deliberations, there was substantial discussion about maintenance and repair costs (M&R). The City currently uses a program called Roadbase where we log all vehicle maintenance, including preventative maintenance (PMs). As discussed during the presentation, the City has had problems with Roadbase, including a period where all data entered has been lost. This is extraordinarily frustrating, and we will be moving to a new software this year. Nevertheless, M&R is an important factor to consider when determining whether to recommend a vehicle for replacement. This not only includes M&R incurred, but also near-future M&R expected. As detailed above, our fleet maintenance personnel are experts. In many cases they may recommend that we keep a vehicle that has recently undergone expensive M&R - because they know we do not expect those repairs in the near future. Alternatively, a vehicle with low M&R may be providing indications of repairs needed in the future. Regardless, M&R is useful data that must be maintained by Fleet personnel so that future decisions on the vehicle can be made.

The final factor to consider is the vehicle's condition. This includes interior condition, body condition, paint, etc. Condition varies greatly in our heavy duty trucks and those used for snow plowing. The use of salt leads to rust and, sometimes, poor vehicle appearance. Other vehicles, especially pool vehicles, generally age well and can be in excellent condition for their age.

Fleet Replacement Guidelines

While the factors described above are generally not debatable, how to specifically use them when determining whether or not to replace a vehicle certainly is. I attended a seminar a few years ago which included a presentation from the Fleet Manager of Dakota County, Minnesota. During that presentation, he described a point system they used to determine whether vehicles were eligible for replacement. I later learned that that plan was originally derived in Charleston County, South Carolina, and was subsequently published by APWA. This plan, shown in the annotated table on the next page, assigns points for a vehicles age, mileage, type of service, reliability, M&R costs, and condition. Those points are then used to assign a condition of the vehicle: Excellent, Good, Qualifies for Replacement, or Needs Immediate Consideration.

It is my professional opinion that the implementation of similar Point Replacement Guidelines would be effective for the City of Chesterfield. We could still maintain a long-term capital plan based upon the age of each vehicle. However, prior to incorporation into the budget, a vehicle would also need to meet the Points Replacement Guidelines. If it did, it could be incorporated into the City Budget, subject to Council approval. If it did not, money could be set aside to fund the vehicle replacement at future date – either later that year or in a subsequent year. Incorporation into the budget would still require Council authorization.

Using this system, points have been assigned to every Public Works vehicle as shown in Appendix 2. The result is an average rating of 18.4.

Vehicle Replacement Cycles

My research has shown that vehicle replacement cycles vary significantly among organizations. Our replacement cycles (sedans – 8 years; light duty trucks – 7 years; medium duty and heavy duty trucks – 8 years) are within the cycle limits common to other agencies. That said, unless we are going to turn over our vehicles every year (not recommended) there is a financial benefit to the City to extend the life of its vehicles for as long as possible. Accordingly, in conjunction with the Fleet Replacement Guideline (Points) system, I am also recommending that we extend the expected life cycle of our vehicles. Specifically: sedans should be increased from 8 years to 10 years; light duty trucks should be increased from 7 to 8 years; medium and heavy duty trucks should be increased from 8 years to 10 years.

If the extended replacement cycles prove to be effective, there will be no negative impact to the Public Works Department and the City of Chesterfield. If we have over-

extended the life of these vehicles, this will show in the annual calculation of the Point Replacement Guidelines detailed above. Regardless, use of the Guidelines will provide us a tangible justification for the life cycle of our vehicles. A potential vehicle replacement breakdown is provided in Appendix 3.

Action Recommended

This matter should be forwarded to the Planning and Public Works Committee of City Council for consideration. No action is required of City Council at this time.

Please forward to PPW for review and direction

2020-6-1

Appendix 1

Vehicle	Driver	VIN	TYPE	Year	Make	Model	Depar	Odometer	
CA1	City Hall Pool	3FA6P0LUXDR311872	1	2013	FORD	FUSION	1	64986	
CA2	City Hall Pool	3FADP0L36BR298615	1	2011	FORD	FUSION	1	88430	
E7	City Hall Pool	1FAHP3F21CL132041	1	2012	FORD	FOCUS	4	83451	
FA1	City Hall Pool	1FAHP3F2XCL132040	1	2012	FORD	FOCUS	1	47091	
CA4	Forestry Tech	1FADP3F20FL295802	1	2015	FORD	FOCUS	1	33870	
CA5	City Hall Pool	3FA6P0UU7HR113867	1	2017	FORD	FUSION	1	59537	
CA7	PT Eng Tech	1FADP3F20GL325558	1	2016	FORD	FOCUS	1	15957	
CA6	PW Director	1FMCU9G99HUA25313	1	2017	FORD	ESCAPE	1	76304	
E20	City Administrator	1FTEW1E46KKC22488	2	2019	FORD	F-150	1	12687	
PZ2	PDS Director	1FMCU9DG1AKC04630	1	2010	FORD	ESCAPE	1	86930	
E22	PW Superintendent of Maint	1FTFX1E53KKD76196	2	2019	FORD	F-150	5	4594	
E13	Facility Maint Truck	1FTFX1CF8EKD33697	2	2014	FORD	F-150	1	53545	
E14	Core Truck	1GCEK19057Z591361	2	2007	CHEVROLET	K1500	2	76201	Oldest truck - not in replacement cycle
E15	Eng Inspector	1GTV2TEH2EZ328796	2	2014	GMC	SIERRA 1500	2	49435	
E16	Eng Inspector	1FTFX1EF8FKD18163	2	2015	FORD	F-150	1	68965	
E17	Project Manager	1FTEX1CF8FKD18162	2	2015	FORD	F-150	2	40424	
E4	Project Manager	1FMCU0GX1DUC63239	1	2013	FORD	ESCAPE	2	100902	
G1	Fleet Truck	1GB3CZC87DF208684	3	2013	CHEVROLET	K3500	5	17300	
S60	Sign Truck	1GDE5C1206F406015	4	2006	GMC	C5500	5	62085	Fleet truck becomes sign truck - not in replacement cycle
CA3	City Arborist	3FA6P0UU8FR308003	1	2015	FORD	FUSION	1	38149	
S54	Street Maint 1 ton	1GD322CLICF206627	3	2012	GMC	K3500	5	54642	
S50	Street Maint Sup 1 ton	1GD321C83FF137563	3	2015	GMC	K3500	5	49320	
S56	Street Maint Sup 1 ton	1FDRF3H60KEC62666	3	2019	FORD	F350	5	2531	
S57	Street Maint Sup 1 ton	1FDRF3H69KEC62665	3	2019	FORD	F350	5	8122	
S102	Street Maint 2.5 ton	1HTWCAZR5BJ338048	5	2011	INTERNATIO	7400 SBA 4X2	5	49382	
S103	Street Maint 2.5 ton	1HTWCAZR3BJ338047	5	2011	INTERNATIO	7400 SBA 4X2	5	44401	
S104	Street Maint 2.5 ton	1HTWXAZR6CJ562916	5	2012	INTERNATIO	7400 SBA 4X2	5	26346	
S105	Street Maint 2.5 ton	1HTWDAZR4DJ175814	5	2013	INTERNATIO	7400 SFA 4X2	5	34116	
S106	Street Maint 2.5 ton	1HTWDAZR8EH781643	5	2014	INTERNATIO	7400 SBA 4X2	5	25662	
S107	Street Maint 2.5 ton	1HTWDAZRXEH781644	5	2014	INTERNATIO	7400 SFA 4X2	5	26218	
S113	Street Maint 2.5 ton	1HTWDAZR3FH552711	5	2014	INTERNATIO	7400 SFA 4X2	5	14469	
S115	Street Maint 2.5 ton	1FVAG9DX4JHJU2337	5	2018	FREIGHTLIN	114SD	5	12461	
S116	Street Maint 2.5 ton	1FVAG9DX6JHJU2338	5	2018	FREIGHTLIN	114SD	5	14426	
S117	Street Maint 2.5 ton	1FVAG9DX8JHJU2339	5	2018	FREIGHTLIN	114SD	5	10326	
S118	Street Maint 2.5 ton	1FVAG9DX4JHJU2340	5	2018	FREIGHTLIN	114SD	5	6575	
S119	Street Maint 2.5 ton	1FVAG9DX7JHJU2333	5	2018	FREIGHTLIN	114SD	5	4939	
S120	Street Maint 2.5 ton	1FVAG9DX9JHJU2334	5	2018	FREIGHTLIN	114SD	5	7278	
S121	Street Maint 2.5 ton	1FVAG9DX0JHJU2335	5	2018	FREIGHTLIN	114SD	5	5692	
S141	Street Maint Tandem	1HTWHAZT6DJ321629	5	2013	INTERNATIO	7400 SFA 6 X 4	5	28792	
S142	Street Maint Tandem	1HTWHAZT1FH552867	5	2015	INTERNATIO	7400 SFA 6 X 4	5	19797	
E18	Facility Maint Van	1GCWGAFG6H1322163	2	2017	CHEVROLET	EXPRESS	1	4922	
E21A	IT	1FM5K8AR8HGC87212	2	2017	FORD	EXPLORER	1	119213	
S71	Street Maint 1.5 ton	1GDE5C1969F411012	4	2009	GMC	C5500	5	46314	
S72	Street Maint 1.5 ton	1GDE5C1909F411393	4	2009	GMC	C5500	5	47015	
S75	Street Maint 1.5 ton	1HTJSSKK1EH781647	4	2014	INTERNATIO	Terra Star SFA 4x2	5	30623	
S76	Street Maint 1.5 ton	1GDE5C1949F408397	4	2009	GMC	C5500	5	64965	
S77	Street Maint 1.5 ton	1FDUF5HT0FEA77261	4	2015	FORD	F550	5	32104	
S78	Street Maint 1.5 ton	1FDUF5HYXFED69690	4	2015	FORD	F550 CNG	5	19208	
S192	Street Maint 2.5 ton	1HTWCAZR8EH781645	5	2014	INTERNATIO	7400 SBA 4X2	5	25043	Asphalt Patch Truck
S193	Street Maint 2.5 ton	1FVACXCY0HHHX7207	5	2017	FREIGHTLIN	M2-106	5	19501	Bucket Truck
S194	Street Maint 2.5 ton	1FVACXCY2HHHX7208	5	2017	FREIGHTLIN	BUSINESS	5	19994	Bucket Truck EAB ONLY - not in replacement cycle

Appendix 2

Vehicle	Year	Make	Model	VIN	Type	Costcenter	Odometer 2/26/2020	Age	Miles	Type of Service	Reliability	M & R	Condition	Sum	
E22	2019	FORD	F-150	1FTFX1E53KKD76196	2	5	12385	1	1	1	1	1	1	6	
E18	2017	CHEVROLET	EXPRESS 2500	1GCWGAFG6H13221	2	1	6000	2	1	1	1	1	1	7	
S122	2020	FREIGHTLIN	108SD	1FVAG5FE4LHLY5086	5	5	220	0	0	5	0	1	1	7	Replaced S102 in 2019 Budget
S123	2020	FREIGHTLIN	108SD	1FVAG5FE6LHLY5087	5	5	204	0	0	5	0	1	1	7	Replaced S103 in 2019 Budget
E20	2019	FORD	F-150	1FTEW1E46KKC22488	2	1	18849	1	2	1	2	1	1	8	
S56	2019	FORD	F350	1FDRF3H60KEC62666	3	5	4565	1	1	3	2	1	2	10	
S57	2019	FORD	F350	1FDRF3H69KEC62665	3	5	12293	1	1	3	2	1	2	10	
CA7	2016	FORD	FOCUS	1FADP3F20GL325558	1	1	17468	3	2	1	3	1	2	12	
S118	2018	FREIGHTLIN	114SD	1FVAG9DX4JHJU2340	5	5	9216	2	1	5	2	1	2	13	
CA4	2015	FORD	FOCUS	1FADP3F20FL295802	1	1	36413	4	3	1	3	1	2	14	
E17	2015	FORD	F-150	1FTEX1CF8FKD18162	2	2	43601	4	4	2	1	1	2	14	
S117	2018	FREIGHTLIN	114SD	1FVAG9DX8JHJU2339	5	5	13424	2	1	5	3	1	2	14	
S119	2018	FREIGHTLIN	114SD	1FVAG9DX7JHJU2333	5	5	6737	2	1	5	3	1	2	14	
S120	2018	FREIGHTLIN	114SD	1FVAG9DX9JHJU2334	5	5	9721	2	1	5	3	1	2	14	
S121	2018	FREIGHTLIN	114SD	1FVAG9DX0JHJU2335	5	5	8436	2	1	5	3	1	2	14	
CA3	2015	FORD	FUSION	3FA6P0UU8FR308003	1	1	39857	4	4	1	3	1	2	15	
CA5	2017	FORD	FUSION	3FA6POUU7HR113867	1	1	60501	2	6	1	3	1	2	15	
S116	2018	FREIGHTLIN	114SD	1FVAG9DX6JHJU2338	5	5	18387	2	2	5	3	1	2	15	
S194	2017	FREIGHTLIN	BUSINESS CLAS	1FVACXCY2HHHX7208	5	5	21688	2	2	5	2	1	3	15	
S115	2018	FREIGHTLIN	114SD	1FVAG9DX4JHJU2337	5	5	15782	2	2	5	4	1	2	16	
CA6	2017	FORD	ESCAPE	1FMCU9G99HUA253	1	1	84688	2	8	1	3	1	2	17	
S193	2017	FREIGHTLIN	M2-106	1FVACXCY0HHHX7207	5	5	22291	2	2	5	3	2	3	17	
E15	2014	GMC	SIERRA 1500	1GTV2TEH2EZ328796	2	2	52355	5	5	2	2	1	3	18	
S113	2014	INTERNATIO	7400 SFA 4X2	1HTWDAZR3FH552711	5	5	16048	5	2	5	2	1	3	18	
S142	2015	INTERNATIO	7400 SFA 6 X 4	1HTWHAZT1FH552867	5	5	22373	4	2	5	4	1	3	18	
S50	2015	GMC	K3500	1GD321C83FF137563	3	5	52775	4	5	3	3	2	2	19	
S78	2015	FORD	F550 CNG	1FDUF5HYXFED69690	4	5	21772	4	2	5	3	2	3	19	
CA1	2013	FORD	FUSION	3FA6P0LUXDR311872	1	1	68939	6	7	1	3	1	2	20	
E13	2014	FORD	F-150	1FTFX1CF8EKD33697	2	1	56096	5	6	2	2	2	3	20	
E16	2015	FORD	F-150	1FTFX1EF8FKD18163	2	1	73422	4	7	2	2	2	3	20	
FA1	2012	FORD	FOCUS	1FAHP3F2XCL132040	1	1	47700	7	5	1	2	3	2	20	
G1	2013	CHEVROLET	K3500	1GB3CZC87DF208684	3	5	18105	6	2	5	2	1	4	20	
S106	2014	INTERNATIO	7400 SBA 4X2	1HTWDAZR8EH7816	5	5	27769	5	3	5	3	2	3	21	
S107	2014	INTERNATIO	7400 SFA 4X2	1HTWDAZRXEH7816	5	5	28500	5	3	5	3	2	3	21	
S192	2014	INTERNATIO	7400 SBA 4X2	1HTWCAZR8EH7816	5	5	26129	5	3	5	3	2	3	21	
S77	2015	FORD	F550	1FDUF5HT0FEA77261	4	5	36098	4	4	5	3	2	3	21	
S104	2012	INTERNATIO	7400 SBA 4X2	1HTWXAZR6CJ562916	5	5	28012	7	3	5	2	2	3	22	
S105	2013	INTERNATIO	7400 SFA 4X2	1HTWDAZR4DJ175814	5	5	37234	6	4	5	2	2	3	22	
S141	2013	INTERNATIO	7400 SFA 6 X 4	1HTWHAZT6DJ321629	5	5	30695	6	3	5	3	2	3	22	
S75	2014	INTERNATIO	TERRA STAR SFA	1HTJSSKK1EH781647	4	5	33405	5	3	5	3	2	4	22	
E21A	2017	FORD	EXPLORER	1FM5K8AR8HGC87212	2	1	120349	2	12	1	3	2	3	23	Replaced with van- 2020 Budget
E7	2012	FORD	FOCUS	1FAHP3F21CL132041	1	4	87297	7	9	1	2	2	2	23	
CA2	2011	FORD	FUSION	3FADP0L36BR298615	1	1	89209	8	9	1	3	1	2	24	
E4	2013	FORD	ESCAPE	1FMCU0GX1DUC632	1	2	102584	6	10	1	2	3	2	24	
S54	2012	GMC	K3500	1GD322CLICF206627	3	5	56710	7	6	3	2	2	4	24	Replaced - 2019 Budget with TBD
PZ2	2010	FORD	ESCAPE	1FMCU9DG1AKC046	1	1	94505	9	9	1	2	2	2	25	Replaced 2020 Budget
E14	2007	CHEVROLET	K1500	1GCEK19057Z591361	2	2	76330	12	8	3	2	3	3	31	Core Truck
S60	2006	GMC	C5500	1GDE5C1206F406015	4	5	63861	13	6	4	2	2	4	31	Orignally in 2020 Budget - Defer
S71	2009	GMC	C5500	1GDE5C1969F411012	4	5	48737	10	5	5	3	3	5	31	Replaced - 2018 Budget with S81
S72	2009	GMC	C5500	1GDE5C1909F411393	4	5	48983	10	5	5	3	3	5	31	Replaced - 2018 Budget with S82
S76	2009	GMC	C5500	1GDE5C1949F408397	4	5	67835	10	7	5	3	2	4	31	Replaced - 2018 Budget with S83

18.35294

Appendix 3

Vehicle	Driver	VIN	TYPE	Year	Make	Model	Depar	Odometer
CA1	City Hall Pool	3FA6P0LUXDR311872	1	2013	FORD	FUSION	1	64986
CA2	City Hall Pool	3FADP0L36BR298615	1	2011	FORD	FUSION	1	88430
E7	City Hall Pool	1FAHP3F21CL132041	1	2012	FORD	FOCUS	4	83451
FA1	City Hall Pool	1FAHP3F2XCL132040	1	2012	FORD	FOCUS	1	47091
CA4	Forestry Tech	1FADP3F20FL295802	1	2015	FORD	FOCUS	1	33870
CA5	City Hall Pool	3FA6P0UU7HR113867	1	2017	FORD	FUSION	1	59537
CA7	PT Eng Tech	1FADP3F20GL325558	1	2016	FORD	FOCUS	1	15957
CA6	PW Director	1FMCU9G99HUA25313	1	2017	FORD	ESCAPE	1	76304
E20	City Administrator	1FTEW1E46KKC22488	2	2019	FORD	F-150	1	12687
PZ2	PDS Director	1FMCU9DG1AKC04630	1	2010	FORD	ESCAPE	1	86930
E22	PW Superintendent of Maint	1FTFX1E53KKD76196	2	2019	FORD	F-150	5	4594
E13	Facility Maint Truck	1FTFX1CF8EKD33697	2	2014	FORD	F-150	1	53545
E14	Core Truck	1GCEK19057Z591361	2	2007	CHEVROLET	K1500	2	76201
E15	Eng Inspector	1GTV2TEH2EZ328796	2	2014	GMC	SIERRA 1500	2	49435
E16	Eng Inspector	1FTFX1EF8FKD18163	2	2015	FORD	F-150	1	68965
E17	Project Manager	1FTEX1CF8FKD18162	2	2015	FORD	F-150	2	40424
E4	Project Manager	1FMCU0GX1DUC63239	1	2013	FORD	ESCAPE	2	100902
G1	Fleet Truck	1GB3CZC87DF208684	3	2013	CHEVROLET	K3500	5	17300
S60	Sign Truck	1GDE5C1206F406015	4	2006	GMC	C5500	5	62085
CA3	City Arborist	3FA6P0UU8FR308003	1	2015	FORD	FUSION	1	38149
S54	Street Maint 1 ton	1GD322CUCF206627	3	2012	GMC	K3500	5	54642
S50	Street Maint Sup 1 ton	1GD321C83FF137563	3	2015	GMC	K3500	5	49320
S56	Street Maint Sup 1 ton	1FDRF3H60KEC62666	3	2019	FORD	F350	5	2531
S57	Street Maint Sup 1 ton	1FDRF3H69KEC62665	3	2019	FORD	F350	5	8122
S102	Street Maint 2.5 ton	1HTWCAZR5BJ338048	5	2011	INTERNATIO	7400 SBA 4X2	5	49382
S103	Street Maint 2.5 ton	1HTWCAZR3BJ338047	5	2011	INTERNATIO	7400 SBA 4X2	5	44401
S104	Street Maint 2.5 ton	1HTWXAZR6CJ562916	5	2012	INTERNATIO	7400 SBA 4X2	5	26348
S105	Street Maint 2.5 ton	1HTWDAZR4DJ175814	5	2013	INTERNATIO	7400 SFA 4X2	5	34116
S106	Street Maint 2.5 ton	1HTWDAZR8EH781643	5	2014	INTERNATIO	7400 SBA 4X2	5	25662
S107	Street Maint 2.5 ton	1HTWDAZRXEH781644	5	2014	INTERNATIO	7400 SFA 4X2	5	26218
S113	Street Maint 2.5 ton	1HTWDAZR3FH552711	5	2014	INTERNATIO	7400 SFA 4X2	5	14469
S115	Street Maint 2.5 ton	1FVAG9DX4JHJU2337	5	2018	FREIGHTLIN	114SD	5	12461
S116	Street Maint 2.5 ton	1FVAG9DX6JHJU2338	5	2018	FREIGHTLIN	114SD	5	14426
S117	Street Maint 2.5 ton	1FVAG9DX8JHJU2339	5	2018	FREIGHTLIN	114SD	5	10326
S118	Street Maint 2.5 ton	1FVAG9DX4JHJU2340	5	2018	FREIGHTLIN	114SD	5	6575
S119	Street Maint 2.5 ton	1FVAG9DX7JHJU2333	5	2018	FREIGHTLIN	114SD	5	4939
S120	Street Maint 2.5 ton	1FVAG9DX9JHJU2334	5	2018	FREIGHTLIN	114SD	5	7278
S121	Street Maint 2.5 ton	1FVAG9DX0JHJU2335	5	2018	FREIGHTLIN	114SD	5	5692
S141	Street Maint Tandem	1HTWHAZT6DJ321629	5	2013	INTERNATIO	7400 SFA 6 X 4	5	28792
S142	Street Maint Tandem	1HTWHAZT1FH552867	5	2015	INTERNATIO	7400 SFA 6 X 4	5	19797
E18	Facility Maint Van	1GCWGAFG6H1322163	2	2017	CHEVROLET	EXPRESS	1	4922
E21A	IT	1FM5K8AR8HGC87212	2	2017	FORD	EXPLORER	1	119213
S71	Street Maint 1.5 ton	1GDE5C1969F411012	4	2009	GMC	C5500	5	46314
S72	Street Maint 1.5 ton	1GDE5C1909F411393	4	2009	GMC	C5500	5	47015
S75	Street Maint 1.5 ton	1HTJS5KK1EH781647	4	2014	INTERNATIO	Terra Star SFA 4x2	5	30623
S76	Street Maint 1.5 ton	1GDE5C1949F408397	4	2009	GMC	C5500	5	64965
S77	Street Maint 1.5 ton	1FDUF5HT0FEA77261	4	2015	FORD	F550	5	32104
S78	Street Maint 1.5 ton	1FDUF5HYXFED69690	4	2015	FORD	F550 CNG	5	19208
S192	Street Maint 2.5 ton	1HTWCAZR8EH781645	5	2014	INTERNATIO	7400 SBA 4X2	5	25043
S193	Street Maint 2.5 ton	1FVACXCY0HHHX7207	5	2017	FREIGHTLIN	M2-106	5	19501
S194	Street Maint 2.5 ton	1FVACXCY2HHHX7208	5	2017	FREIGHTLIN	BUSINESS	5	19994

Pool Vehicles - 10 year replacement cycle

Light Duty Trucks - 8 year replacement cycle

Oldest truck - not in replacement cycle

Fleet truck becomes sign truck - not in replacement cycle

Heavy Duty Trucks - 10 year replacement cycle

Specialty truck / vans and 1.5 ton trucks - 10 year replacement cycle

Asphalt Patch Truck
Bucket Truck
Bucket Truck EAB ONLY - not in replacement cycle

City of Chesterfield Fleet Management- Point Replacement Guidelines

Factor	Points
Age	One point for each year of chronological age, based on in-service date.
Miles/Hours	One point for each 10,000 miles.
Type of Service	1, 3 or 5 points are assigned based on the type of service that vehicle receives. For instance, a snow plow truck would be given a 5 because it is in severe duty service. In contrast, an administrative sedan would be given a 1.
Reliability	1 to 5 points are assigned depending on the frequency that a unit was in for repairs last year. A 5 would be assigned to a unit that is in the shop three or more times per month on average, while a 1 would be assigned to a unit in the shop an average of once every three months or less.
Maintenance & Repair Costs (M&R)	1 to 5 points are assigned based on total M&R costs (not including repair of accident damage). A 5 is assigned to a unit with life to date M&R costs equal to or greater than the vehicle's original purchase price, while a 1 is given to a unit with life to date M&R costs equal to 20% or less of its original purchase cost.
Condition	This category takes into consideration body condition, rust, interior condition, accident history, anticipated repairs, etc. A scale of 0 to 5 points is assessed by Fleet Maintenance Staff, with 5 being poor condition.

Point Ranges

Under 18 points	Condition I	Excellent
18 to 22 points	Condition II	Good
23 to 27 points	Condition III	Qualifies for replacement
28 points and above	Condition IV	Needs immediate consideration

Based on each individual Vehicle Number looking at the Closed Repair Order Count for (Last Year)

- 1 for 4 or less
- 2 for 5 to 15
- 3 for 16 to 25
- 4 for 26 to 35
- 5 for 36 or more

Based on each individual Vehicle Number comparing the actual total maintenance costs to the purchase price

- 1 for 20% or less
- 2 for 21% to 48%
- 3 for 49% to 75%
- 4 for 76% to 99%
- 5 for 100% or higher

As an example of the application of the above points system, an eight-year old administrative pool vehicle has 60,000 miles, is in poor condition, has fair reliability, and has repair costs equal to 40% of its purchase price. Points would be assigned as follows:

- Age = 8 points
- Mileage = 6 points
- Type of service (severe) = 1 points
- Reliability = 3 points
- M&R costs = 2 points
- Condition = 5 points
- Total = 25 points

Public Works Fleet Summary

- Condition I – Excellent = 43% (22 of 51)
- Condition II – Good = 35% (18 of 51)
- Condition III – Qualifies for replacement = 12% (6 of 51)
- Condition IV – Needs immediate consideration = 10% (5 of 51) – 4 of 5 scheduled or budgeted to be replaced. Other truck is Core Truck

Total Fleet Average is 18.3, Condition I / II – Excellent / Good