




# City of San Marino

## Memorandum

TO: Mayor Shepherd Romey and members of the City Council

FROM: Michael Throne, PE, Director of Parks and Public Works/City Engineer 

DATE: March 26, 2020

**SUBJECT: SUPPLEMENTAL INFORMATION TO AGENDA ITEM NO. 1 OF THE MARCH 27, 2020 SPECIAL CITY COUNCIL MEETING**

Attached please find supplemental information related to the 2020 vehicle and equipment fleet review and utilization study. There are two tables attached that provides background as to the calculated optimal economic life point grading system used to formulate the recommended vehicle and equipment schedule proposed for next fiscal year.

The criteria used is a simple point system described on page 1-22 of the agenda item. Points are assigned to each vehicle and piece of equipment based on age, miles or hours used, maintenance and repair costs, condition, reliability and downtime. The scoring system sums these factors and based on the resulting score, the item is then classified as being in excellent condition (under 18 points), good condition (18 to 22 points), qualifies for replacement in the future (23 to 27 points) or should be replaced immediately (over 28 points).

Use of this criteria reduces the economic and operational burden on the City by replacing vehicles and equipment before they experience downtime due to excessive repairs, which reduces their ability to be useful and leads to increased operational expenses. It also forces the City to make purchases of vehicles and equipment that will be utilized to its maximum capability and not to have around (in some instances) in case an infrequent need arises.

The first table was prepared by the City Engineer and Fleet Supervisor and updates as of this month the condition status of the patrol vehicles, which are experiencing the most downtime in our fleet and whose reliability is crucial for law enforcement. The second table was prepared in March 2019 by the consultant during their fleet inventory review and represents a snapshot at that time as to the status of our entire fleet.

Six patrol cars are included in the proposed FY 2020-21 capital equipment budget for replacement as they meet or exceed the rating that they should be replaced immediately.

**OPTIMAL ECONOMIC LIFE POINT GRADING  
- POLICE PATROL CARS ONLY -  
UPDATED MARCH 2020**

**TABLE I**

Unit	Description	Age	Miles	Maint/Repair Rating	Condition	Reliability	Downtime	Total Points	Score
6	2011 patrol car	9	106,449	84%					
	Points	9	11	4	3	5	5	37	Replace Immediately
3	2013 patrol car	7	96,929	42%					
	Points	7	10	2	4	5	5	33	Replace Immediately
4	2013 patrol car	7	93,392	39%					
	Points	7	10	2	4	5	5	33	Replace Immediately
7	2014 patrol car	6	96,929	34%					
	Points	6	10	1	2	5	5	29	Replace Immediately
2	2015 patrol car	5	87,862	22%					
	Points	5	9	1	4	4	4	27	Qualifies for Replacement
5	2015 patrol car	5	86,225	30%					
	Points	5	9	1	4	5	4	28	Replace Immediately
1	2017 patrol car	3	43,380	6%					
	Points	3	5	0	2	3	3	16	Excellent Condition
		1 point per year	1 point per 10,000 miles	(repair+maintenance cost) ÷ original purchase price 1 = 20% 5 = 100%	1 = excellent 5 = poor	1 = in shop once per quarter 5 = in shop > 2 x month	1 = little (< 1 work order/mo) 5 = excessive (> 2 work orders/mo)		
This table updates the March 2019 economic life point calculations by Management Partners with data as of March 1, 2020									
This table excludes impacts to reliability and downtime due to electronics failures (mobile data computers and video camera/ recording systems) that makes the vehicle unusable for traffic and other law enforcement activities									
<b>SCORING SYSTEM</b>									
<b>Under 18 points = Excellent Condition</b>									
<b>18 to 22 points = Good Condition</b>									
<b>23 to 27 points = Qualifies for Replacement</b>									
<b>28 or more point = Consider Replacement Immediately</b>									

**OPTIMAL ECONOMIC LIFE POINT GRADING BY DEPARTMENT  
AS OF MARCH 29, 2019**

**TABLE 2**

<b>SCORING SYSTEM</b>											
Under 18 points-Excellent condition											
18 to 22 points-Good condition											
23 to 27 points-Qualifies for replacement											
or more points-Consider replacement immediat											
CITY OF SAN MARINO 3/29/19											
CITY VEHICLES/EQUIPMENT											
POLICE DEPARTMENT											
1-Excel, 5-Poor											
1-in shop less than 3 times/mo											
3-in shop 1-2 times/mo											
5-in shop 2-3 times/mo											
1-Less than one work order/mo											
3-one to two work orders/mo											
5-two or more work orders/mo											
Patrol Cars	Miles	Hours	Miles/Yr	Hrs/Yr	Comments	AGE	UTILIZATION	CONDITION	RELIABILTY	DOWNTIME	TOTAL POINTS
2011 Ford Crown Vic	100,308		12,539			8	10	4	5	3	30
2013 Ford Taurus	88,158		14,693			6	9	4	5	3	27
2013 Ford Taurus	83,250		13,875			6	9	4	5	3	27
2014 Ford Explorer	72,602	8,924	14,520			5	7	3	5	5	25
2015 Ford Explorer	74,940	5,540	18,735			4	7.5	3	3	3	20.5
2015 Ford Explorer	72,711	8,110	18,178			4	7	3	2	3	19
2017 Ford Explorer	25,380		12,690			2	2.5	1	1	1	7.5
<b>Parking Enforcement</b>											
2014 Smart Car	38,671		7,734			5	4	5			14
<b>Set Truck</b>											
2006 Chevy 2500	89,368		6,874		Special forces truck	13	9	5			27
<b>Personnel Vehicles</b>											
2017 Ford Explorer	9,800		4,900			2	1	2			5
2017 Ford Explorer	19,000		9,500			2	2	2			6
2017 Ford Explorer	15,671		7,836			2	1.5	2			5.5
<b>Detective Bureau</b>											
2010 Chevy Tahoe	113,476		12,608			9	11	4	5	5	34
2011 Ford Crown Vic	91,377		11,422			8	9	5	5	2	29
2014 Nissan Altima	48,920		9,784			5	5	2			12
2016 Ford Explorer	37,873					3	4	2			9
<b>Equipment</b>											
1915 Ford Model T					Parade Vehicle						
2000 Radar Trailer					Speed tracker						
2000 Command Trailer		131			Station Trailer (4th of July, Equip/Radios)			1			1

**OPTIMAL ECONOMIC LIFE POINT GRADING BY DEPARTMENT  
AS OF MARCH 29, 2019**

**TABLE 2**

<b>FIRE DEPARTMENT</b>											
<b>Ambulance</b>	<b>Miles</b>	<b>Hours</b>	<b>Miles/Yr</b>	<b>Hrs/Yr</b>		<b>AGE</b>	<b>UTILIZATION</b>	<b>CONDITION</b>	<b>RELIABILTY</b>	<b>DOWNTIME</b>	<b>TOTAL POINTS</b>
2008 Ford E450	57,205		5,200		Back up ambulance	11	5.7	2	5	5	28.7
2015 Ram	38,426	1,091	4,803		Front line ambulance	4	4	1			9
<b>Fire Trucks</b>											
2008 Pierce	55,546		5,050		Back up Fire Truck	11	5.5	1			17.5
2018 Pierce	5,991		5,991		Front line Fire Truck	1	0.6				1.6
<b>Vehicle</b>											
2008 Nissan Altima	143,924		13,084		Arson Investigator car	11	14	3	4	4	36
<b>Battalion Chief</b>											
2007 Chevy Silverado	110,731		9,228		Back up	12	11	2			25
2018 Chevy Suburban					Front line	1					
<b>Personnel Vehicles</b>											
2016 Ford Explorer	43,585		12,624			3	4				7
2016 Ford Explorer	48,752		16,251			3	5				8
<b>PUBLIC WORKS DEPARTMENT</b>											
<b>Street and Sewers</b>											
<b>Equipment</b>	<b>Miles</b>	<b>Hours</b>	<b>Miles/Yr</b>	<b>Hrs/Yr</b>		<b>AGE</b>	<b>UTILIZATION</b>	<b>CONDITION</b>	<b>RELIABILTY</b>	<b>DOWNTIME</b>	<b>TOTAL POINTS</b>
1994 Cement Mixer						25		5			30
1999 Bobcat		683	0	27.32	Loads all sand/dirt (tractor)	20	1	2			23
2001 Hazmat Trailer			0		Contains HAZMAT gear			3			3
2003 JCB backhoe		3,942		246.38	concrete/asphalt break	16	4	3			23
2004 Arrow Board						15		3			18
2007 Message Board					Unreliable	12		3	4	4	23
2008 Caterpillar Forklift		410		37.27		11	0.75	3			14.75
2009 Ingersoll Rand		101		10.10	Air compressor	10	0.13	3			13.13
2016 Multiquip Roller		48		16.00	Asphalt rolling	3	0.06	2			5.06
<b>Vehicles</b>											
2000 GMC Jimmy	50,135		2,639		Dump truck	19	5	2	1	1	28
2005 Chevy 2500	70,196		5,014		Pick up	14	7	4	2	2	29
2006 Ford 450	7,865	2,152	605		Paint truck	13	0.7	4			17.7
2011 Ford 550	27,925		3,491		Dump truck	8	3	3			14
2013 Ford 150	43,803		7,301		Pick up	6	4	3			13
2013 Ford 150	35,852		5,975		Pick up	6	3.5	2			11.5
2014 Ford 150	36,153		7,231		Pick up	5	3.6	2			10.6
2017 Ford 250	2,662		1,331		Pick up	2	0.3	1			3.3
2017 Ford 550	6,814	100	3,407		Light/boom truck	2	0.7	2			4.7

**OPTIMAL ECONOMIC LIFE POINT GRADING BY DEPARTMENT  
AS OF MARCH 29, 2019**

**TABLE 2**

PARKS DIVISION											
Equipment	Miles	Hours	Miles/Yr	Hrs/Yr		AGE	UTILIZATION	CONDITION	RELIABILTY	DOWNTIME	TOTAL POINTS
1983 Amida Light Tower						36		2	1	1	40
1986 Ford Tractor		2,220		63.43	Tractor	23	3	4	1	1	32
1995 Stage					should be retired	24		3	1	1	29
2001 Ex Mark Mower		1,709		94.94	Sitting lawn mower	18	2	4	1	1	26
2001 John Deere tractor		1,400		77.78	Tractor	18	3	4	1	1	27
2001 Morback Chipper		459		25.50	Chips trees/brush	18	0.6	2			
2001 Pace American Trailer						18		4			22
2001 Ziemer Trailer					Trailer	18		3			21
2004 Az-tex Trailer					Pulls lawn mower/equip	15					
2004 Tree Sprayer					Chemi to spray tree/shrubs	15		4			19
2006 Ex Mark Mower		2,104		161.85		13	3	3	1	1	21
2009 Pressure Washer						10		3			13
2012 Ex Mark Mower		1,982		283.14	Sitting lawn mower	7	3	3			13
2013 JCB backhoe		856		142.67	Back hoe	6	1	3			10
2015 Carlton Stumper		109		27.25	Stump grinder	4	0.2	3			7.2
2015 John Deere Gator		1,413		353.25	utility task vehicle	4	2	2			8
2015 Water Trailer					Water trees	4		2			6
2016 John Deere Gator		837		279.00	utility task vehicle	3	1				
2016 Lawn Sweep					tow behind grass collector	3		2			5
2017 Ex Mark Mower		208		104.00	Sitting lawn mower	2	0.4	1			3.4
2017 Ex Mark Mower		450		225.00	Sitting lawn mower	2	0.6	1			3.6

**OPTIMAL ECONOMIC LIFE POINT GRADING BY DEPARTMENT  
AS OF MARCH 29, 2019**

**TABLE 2**

Vehicles						AGE	UTILIZATION	CONDITION	RELIABITLIY	DOWNTIME	TOTAL POINTS
1996 Top Kick	11,668		507		Box truck-Chipper truck	23	1	4	1	1	30
2005 Chevy	21,498		1,536		haul the portable stage	14	2	4	1	1	22
2007 Ford 250	41,043		3,420		Pick up	12	4	3			19
2010 Ford 250	37,115		4,124		Pick up	9	3.7				12.7
2010 Ford 550	37,542		4,171		Light/boom truck	9	3.7	3			15.7
2012 Ford 250	37,703		5,386		Pick up	7	3.7	3			13.7
2015 Ford 250	10,980		2,745		Pick up	4	1	3			8
2017 Ford 550	2,074		1,037		Dump truck	2	0.2	1			3.2
<b>RECREATION DEPARTMENT</b>											
Vehicles	Miles	Hours	Miles/Yr	Hrs/Yr		AGE	UTILIZATION	CONDITION	RELIABITLIY	DOWNTIME	TOTAL POINTS
1994 Chevy 1500	111,900		4,476		Pick up	25	11	3	3	3	45
1997 Chevy Suburban 16-passenger van	68,300		3,105		Sent to auction 4-2-2019	22	7	3	2	2	36
<b>PLANNING DEPARTMENT</b>											
Vehicles	Miles	Hours	Miles/Yr	Hrs/Yr		AGE	UTILIZATION	CONDITION	RELIABITLIY	DOWNTIME	TOTAL POINTS
2014 Smart Car	17,220		3,444		code enforcement	5	1.7	4			10.7
2014 Ford Escape	17,000		3,400		pool	5	1.7				6.7
<b>EMERGENCY GENERATOR</b>											
Type	Miles	Hours	Miles/Yr	Hrs/Yr		AGE	UTILIZATION	CONDITION	RELIABITLIY	DOWNTIME	TOTAL POINTS
1994 City Hall/PD		4,648			stationary generator for city hall + police						N/A
2017 Towable		24			portable used for lift stations, library						N/A
<b>SCORING SYSTEM</b>											
Under 18 points-Excellent condition											
18 to 22 points-Good condition											
23 to 27 points-Qualifies for replacement											
or more points-Consider replacement immediat											