

Office of Financial and Program Audit

# Draft Report

June 2022

Jim Shelton MBA, CRP  
Auditor of the Board

**Draft**  
**Fairfax County**  
**Office of Financial and Program Audit**



**Jim L. Shelton, Jr., MBA, CRP (Auditor of the Board)**

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**Draft**  
**Fairfax County**  
**Office of Financial and Program Audit**

**Audit Committee Meeting**  
**Agenda**

**June 14, 2022 (5:00 PM)**  
**12000 Government Center Pkwy / Board Auditorium**

- I. Review and Approval of the Meeting Minutes from the prior (15<sup>th</sup> March 2022) Quarterly Audit Committee Meeting.
  - a. *Allowance for Vote by Audit Committee to Adopt*
- II. Review the **June 2022 Draft Quarterly Report**:
  - a. *Special Revenue and Enterprise Funds Review*
  - b. *Fuel Cost Review*
    - i. *Allowance for Vote by Audit Committee to Adopt*
- III. Consideration of the **FY2023** Annual Proposed Work Plan.
  - a. *Allowance for Vote by Audit Committee to Adopt*
- IV. Next Audit Committee Meeting:
  - a. Tuesday (20<sup>th</sup> September 2022) @ 5:00pm
  - b. Location: **TBD**

**Draft**  
**Fairfax County**  
**Office of Financial and Program Audit**

**Meeting Minutes for the March 15, 2022**  
**Audit Committee Meeting**

**Audit Committee Members:**

- Dan Storck, Audit Committee Chairman, Mount Vernon District Supervisor (Present)
- Dalia Palchik, Audit Committee Vice-Chairman, Providence District Supervisor (Not Present)
- Rodney Lusk, Audit Committee Member, Lee District Supervisor (Present)
- Pat Herrity, Audit Committee Member, Springfield District Supervisor (Present)
- Les Myers, Audit Committee Citizen Member (Present)
- Paul Svab, Audit Committee Citizen Member (Not Present)

**Attendees:**

<b>Jim Shelton, Auditor of the Board</b>	<b>Gregory Scott, DIT Director</b>
<b>Mathew Geiser, Fin. &amp; Prog. Auditor</b>	<b>George Coulter, DIT Deputy Director</b>
<b>Christina Jackson, CFO</b>	<b>Christopher Pietsch, DOF Director</b>
<b>Elizabeth Teare, County Attorney</b>	<b>Jerry Wilhelm, DOF Deputy Director</b>
<b>OTHER: DEPARTMENT HEADS / MANAGERS / STAFF - NOT LISTED</b>	

**Summary:**

- 1) Committee’s review and approval of **Tuesday (23<sup>rd</sup> November 2021)** Audit Committee Meeting Minutes.
- 2) Committee discussed the **March 2022** Draft Report presented by staff:
  - a. External Systems Integration to FOCUS Review
  - b. Miscellaneous G/L Accounts Revenue & Expenditure Analysis Study
    - All recommendations were accepted by management.
- 3) Committee discussed and approved **June 2022** AC Work Plan
  - a. Special Revenue and Enterprise Funds Review
  - b. Fuel Cost Review
    - This Report and AC Work Plan were approved by the full Board of Supervisors (BOS) on Tuesday (**22<sup>nd</sup> March 2022**).
- 4) DIT to present processes for external systems management/oversight including system recovery updates at the September 2022 Audit Committee Meeting.



**Allowance for Vote by Audit Committee to Adopt**  
***March 2022 Meeting Minutes***



# **Special Revenue and Enterprise Funds**

## ***REVIEW***

# Study Introduction

We performed a review of the Department of Public Works and Environmental Services (DPWES) Special Revenue and Enterprise Funds. The Special Revenue Funds are managed by the Solid Waste Management Program (SW). The Enterprise Funds are managed by the Wastewater Management Program (WW). This review was performed to identify if opportunities exist for revenue enhancement or adjustments to the General Fund Offsets.



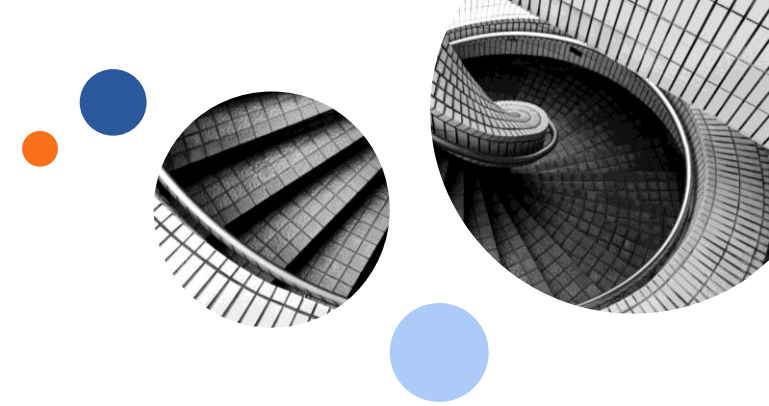
# Study Objectives

## Work Plan Review Areas:

- State Approved Fees vs Actual Fees
- Use of Fee for Service Revenues
- Methodology of General Fund Offset

## Additional Review Areas Covered:

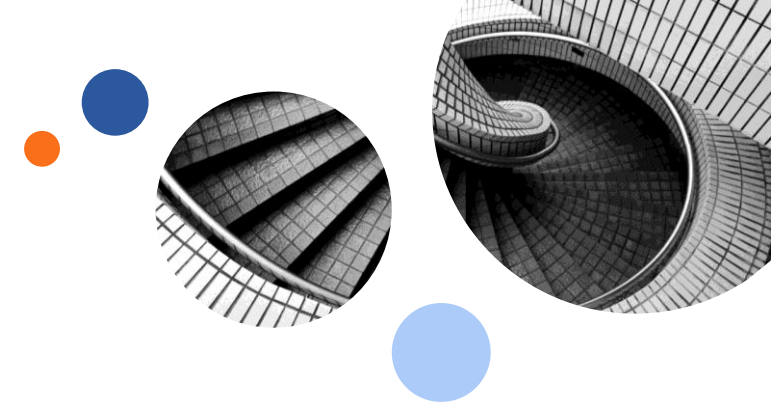
- Revenue Enhancement Opportunities
- Disposal Route Performance





# Study Highlights

## Review Results:



- **Leaf Collection (40130):** funds at each year-end are carried over between 106% and 92%.
- **Refuse Collection & Recycling (40140):** opportunity to perform approved rate to effective rate analysis keeping in view the need for rate adjustments.
- **Refuse Disposal (40150):** funds at each year-end are carried over between 301% and 88%
- **Landfill Ash Disposal (40170):** funds at each year-end are carried over between 114% and 83%.
- **49 out of 198 (or 25%)** WW vehicles exceeding useful life and mileage
- **120 out of 303 (or 40%)** SW vehicles exceeding useful life and mileage.
- **31 out of 54 (or 57%)** trash routes under collected ranging from **10.06 to 315.66** tons
- **25 out of 38 (or 66%)** recycle routes under collected ranging from **5.83 to 193.61** tons



Special Revenue  
and Enterprise Fund  
Overview Data

*(as of April 20, 2022)*

# Special Revenue Funds Summary

Special Revenue Fund Summary FY22 Revised Budget				
Fund	Leaf Collection (40130)	Refuse (40140)	Refuse Disposal (40150)	Landfill Ash (40170)
<b>Revenue:</b>	\$2,367,104	\$19,659,767	\$52,383,100	\$11,063,444
<b>Expenditures:</b>	\$2,634,001	\$21,795,213	\$59,299,086	\$18,082,618
<b>Unit of Measure:</b>	~\$19B sum of Sanitary District Home Values	42,965 Homes	809,974 refuse tons	361,000 ash tons
<b>Fee:</b>	\$0.012 fee per \$100 of Home Value	\$400 per Unit	\$66 per Ton	\$28.44 per ton

# Enterprise Fund Summary

Enterprise Fund Summary					
Fiscal Year	FY18 Actuals	FY19 Actuals	FY20 Actuals	FY21 Actuals	FY22 Revised Budget
<b>Total Revenues:</b>	\$101,440,000	\$100,470,000	\$109,220,000	\$109,250,000	\$116,713,000
<b>Total Expenses:</b>	\$97,498,466	\$99,233,045	\$104,645,960	\$105,517,872	\$120,126,915
<b>General Fund Offsets:</b>	\$2,850,000	\$2,850,000	\$2,850,000	\$2,850,000	\$2,850,000



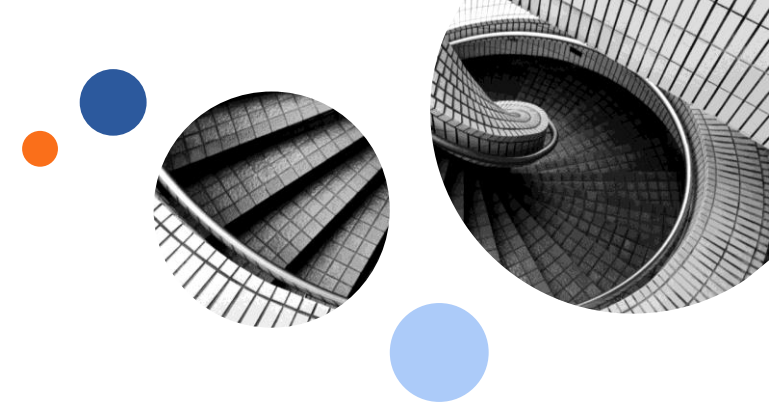
## The Following Slides Detail:

- Observations
- Recommendations
- Supporting Graphs
- Management Responses
- Target Implementation Dates

# **WORK PLAN REVIEW AREA #1**

STATE APPROVED FEE AMOUNTS VS ACTUAL FEES

# 1. State Approved Fee Amounts vs Actual Fees

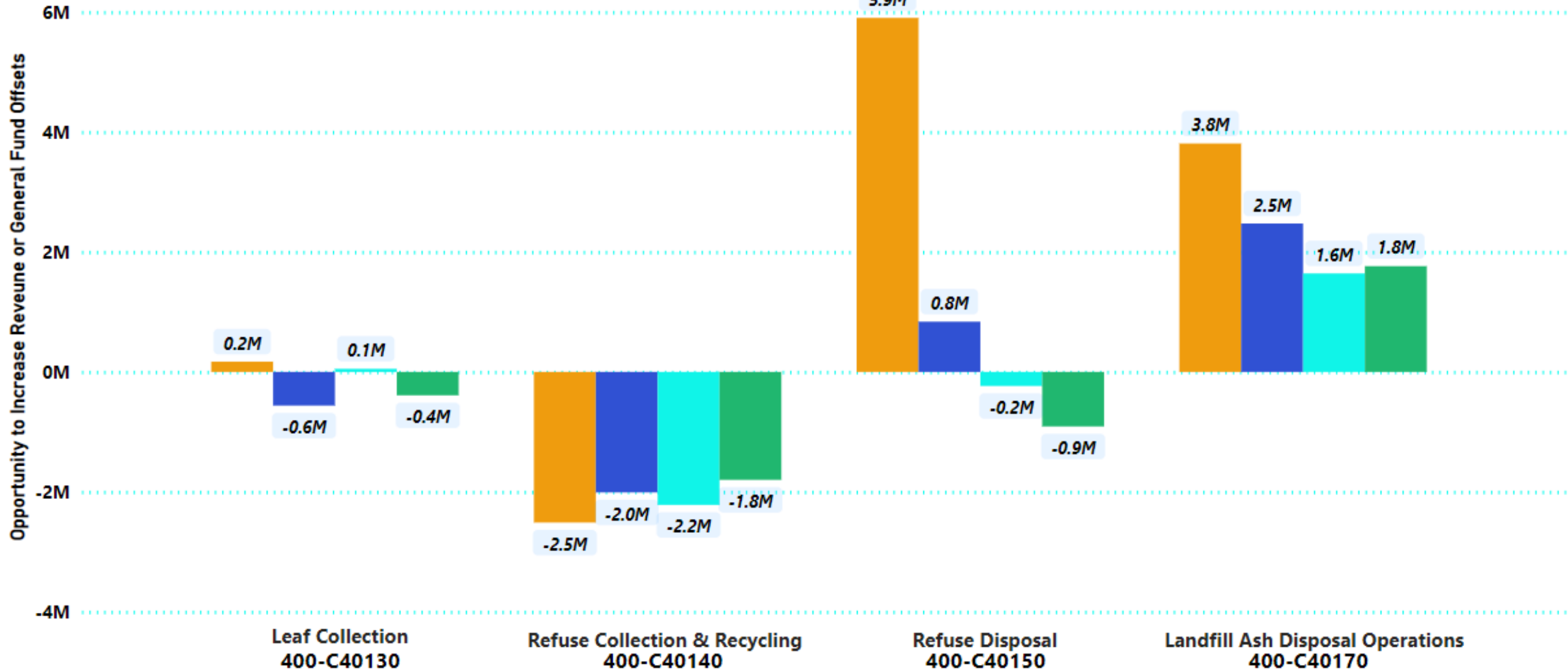


## For Your Situational Awareness:

- Included in this study was a review of State Approved Fees vs Actual Fees charged by the County for SW and WW services. SW and WW management purported that no State Approved fees exist. The rates used by SW and WW are presented to and approved by the Board of Supervisors. A comparative analysis was performed on the Board approved rates to OFPA's calculated effective rates which yielded results that are being presented to management in the graph below.
- This analysis was performed in lieu of a comparative analysis of State approved rates (which do not exist) to actual fees to accomplish this study area. ***Pass Further Audit Work (PFAW)***

# SW Operating Revenue vs Expense Analysis FY19-FY22

Fiscal Year: ● 2019 ● 2020 ● 2021 ● 2022

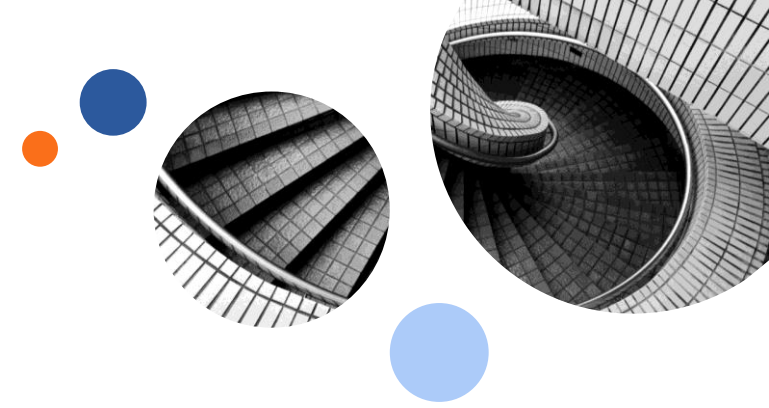




# **WORK PLAN REVIEW AREA #2**

USE OF FEE FOR SERVICE REVENUES

## 2. Leaf Collection Fund 40130 (Special Revenue)



### Observation:

- Areas of review included: revenues, expenses, carryover, and service rates for FY18 – FY22
- The FY18-FY22 revenues ranged between *~\$2.2M* to *~\$2.4M*.
- These year-end funds have been reserved by the agency as contingencies.
- The funds at each year-end are carried over between *106%* and *92%*

## Leaf Collection (40130) Operating Expenses and Rate

Fiscal Years	FY18 Actuals	FY19 Actuals	FY20 Actuals	FY21 Actuals	FY22 Revised Budget
<b><i>Total Operating Revenues:</i></b>	\$2,123,367	\$2,193,300	\$2,103,104	\$2,189,885	\$2,279,513
<b><i>Total Operating Expenses:</i></b>	\$1,857,212	\$1,981,341	\$2,238,098	\$2,004,246	\$2,259,001
<b><i>Operating Balance:</i></b>	\$266,155	\$211,959	(\$134,994)	\$185,639	\$20,512
<b><i>General Fund Offsets:</i></b>	\$0	\$0	\$54,000	\$54,000	\$54,000
<b><i>Operating Balance minus Offsets:</i></b>	\$266,155	\$211,959	(\$188,994)	\$131,639	(\$33,488)
<b><i>Other Non Operating Revenue:</i></b>	\$48,741	\$86,030	\$72,084	\$14,839	\$87,591
<b><i>Other Non Operating Expenses:</i></b>	\$0	\$0	\$354,504	\$12,986	\$375,000
<b><i>Non Operating Balance:</i></b>	\$48,741	\$86,030	(\$282,420)	\$1,853	(\$287,409)
<b><i>Sub-Total Ending Balance:</i></b>	\$314,896	\$297,989	(\$471,414)	\$133,492	(\$320,897)
<b><i>Prior Year Carryover:</i></b>	\$5,019,757	\$5,334,653	\$5,632,642	\$5,161,228	\$5,294,720
<b><i>Total Ending Balance + Carryover:</i></b>	\$5,334,653	\$5,632,642	\$5,161,228	\$5,294,720	\$4,973,823

## SW FY18 to FY22 Reserves

Leaf Collection (40130)					
Fiscal Years	FY18 Actuals	FY19 Actuals	FY20 Actuals	FY21 Actuals	FY22 Revised Budget
<i>Percentage of Carryover:</i>	106%	106%	92%	103%	94%
<i>Ending Balance:</i>	\$5,334,653	\$5,632,642	\$5,161,228	\$5,294,720	\$4,973,823
<i>Operating Reserve 20%:</i>	\$1,094,214	\$1,094,214	\$929,021	\$1,058,944	\$994,765
<i>Capital Equipment Reserve 20%:</i>	\$874,606	\$1,151,645	\$877,409	\$1,058,944	\$994,764
<i>Rate Stabilization Reserve 60%:</i>	\$3,365,833	\$3,386,783	\$3,354,798	\$3,176,832	\$2,984,294
<i>Total Ending Balance:</i>	\$0	\$0	\$0	\$0	\$0

## SW FY19 to FY22 Rate Evaluations

Leaf Collection (40130)				
Fiscal Years	FY19 Actuals	FY20 Actuals	FY21 Actuals	FY22 Agency Data
<i>Actual Rate:</i>	\$0.013	\$0.012	\$0.012	\$0.012
<i>Effective Rate:</i>	\$0.012	\$0.015	\$0.012	\$0.014
<i>Rate Over/Under:</i>	\$0.0010	(\$0.0032)	\$0.0003	(\$0.0021)
<i>Opportunity:</i>	\$171,555	(\$560,989)	\$51,715	(\$390,022)

## 2. Action Plan

### OFPA Conclusion/Recommendation:

**Conclusion:** The budget approved rate and the effective rate (calculated by OFPA) comparative analysis revealed no pattern that would lead to a conclusion which could assist in recommendations on rate adjustments or further analysis. *PFAW*

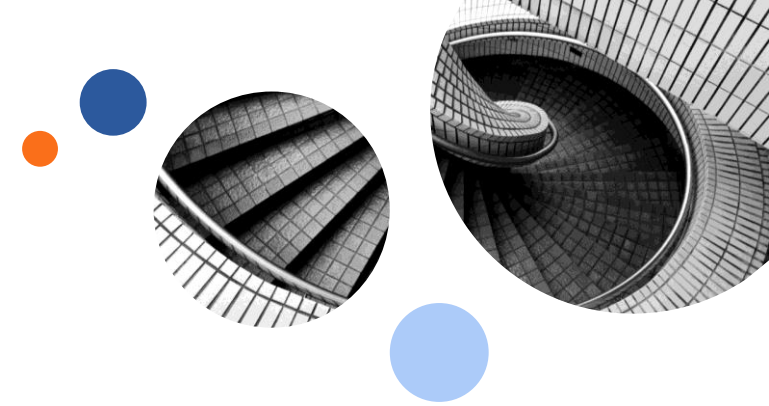
**Recommendation:** There does appear to be an opportunity to increase the general fund offset; these year-end funds have been reserved by the agency as contingencies. The funds at each year-end are carried over between **106%** and **92%**. We recommend staff review the carryover allocation with DMB to assess opportunities to increase the agency's general fund offset.

# 2. Action Plan

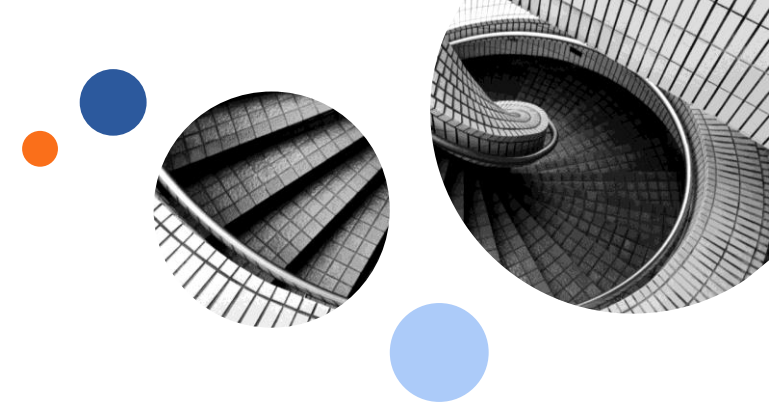
## Management Response:

SWM in collaboration with DMB reviews the general fund offset/general fund transfer annually in order to determine opportunities for adjustment. The review as part of the FY23 budget did not warrant an increase as the fund balances have been slightly declining over the past few years based on the rate of \$0.012 per \$100 assessment value.

- **Target Implementation Date:**
  - Will review again as part of the FY24 Annual budget process
- **Agency Process Owners:**
  - Christopher Herrington (Director, DPWES)
  - John Kellas (Deputy Director, DPWES SW)
  - Julie Wang (FS III, DPWES SW)



# 3. Refuse Collection & Recycling Fund 40140 (Special Revenue)



## Observation:

- Areas of review included: revenues, expenses, carryover, and service rates for FY18 – FY22
- The FY18-FY22 revenues ranged between *~\$17.2M to ~\$19.7M*.
- These year-end funds have been reserved by the agency as contingencies.
- The reserved year-end funds have been increasingly used over the past five years.

## Refuse Collection (40140) Operating Expenses and Rate

Financial Activity	FY18 Actuals	FY19 Actuals	FY20 Actuals	FY21 Actuals	FY22 Revised Budget
<b><i>Total Operating Revenues:</i></b>	\$16,593,599	\$16,892,636	\$18,549,632	\$17,882,243	\$19,150,745
<b><i>Total Operating Expenses:</i></b>	\$17,502,396	\$18,411,073	\$17,928,482	\$17,781,595	\$19,326,823
<b><i>Operating Balance:</i></b>	(\$908,797)	(\$1,518,437)	\$621,150	\$100,648	(\$176,078)
<b><i>General Fund Offsets:</i></b>	\$548,000	\$548,000	\$494,000	\$494,000	\$494,000
<b><i>Operating Balance minus Offsets:</i></b>	(\$1,456,797)	(\$2,066,437)	\$127,150	(\$393,352)	(\$670,078)
<b><i>Other Non Operating Revenue:</i></b>	\$558,318	\$648,428	\$877,291	\$623,069	\$509,022
<b><i>Other Non Operating Expenses:</i></b>	\$383,172	\$220,349	\$2,337,555	\$1,551,316	\$2,468,390
<b><i>Non Operating Balance:</i></b>	\$175,146	\$428,079	(\$1,460,264)	(\$928,247)	(\$1,959,368)
<b><i>Sub-Total Ending Balance:</i></b>	(\$1,281,651)	(\$1,638,358)	(\$1,333,114)	(\$1,321,599)	(\$2,629,446)
<b><i>Prior Year Carryover:</i></b>	\$9,069,970	\$7,788,319	\$6,149,961	\$4,816,847	\$3,495,248
<b><i>Total Ending Balance + Carryover:</i></b>	\$7,788,319	\$6,149,961	\$4,816,847	\$3,495,248	\$865,802



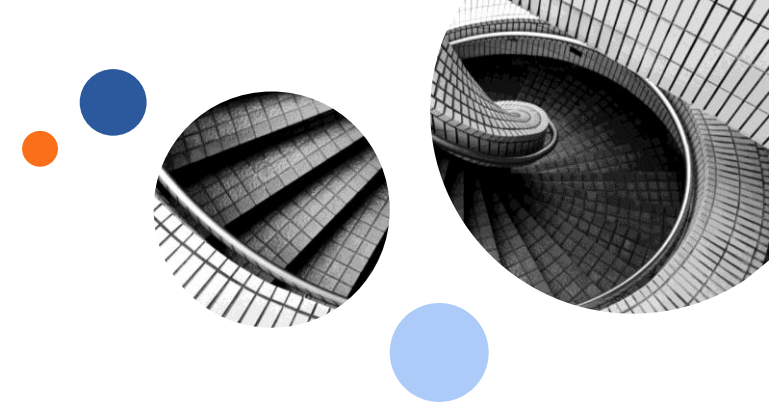
# SW FY18 to FY22 Reserves

Refuse Collection (40140)					
Financial Activity	FY18 Actuals	FY19 Actuals	FY20 Actuals	FY21 Actuals	FY22 Revised Budget
<i>Percentage of Carryover:</i>	86%	79%	78%	73%	25%
<i>Ending Balance:</i>	\$7,788,319	\$6,149,961	\$4,816,847	\$3,495,248	\$865,802
<i>Rate Stabilization Reserve 25%:</i>	\$1,989,425	\$687,473	\$1,204,211	\$873,812	\$216,451
<i>Capital Equipment Reserve 50%:</i>	\$3,758,083	\$3,921,677	\$2,408,424	\$1,747,624	\$432,901
<i>Operating Reserve 25%:</i>	\$2,040,811	\$1,540,811	\$1,204,212	\$873,812	\$216,450
<i>Total Ending Balance:</i>	\$0	\$0	\$0	\$0	\$0

# SW FY18 to FY22 Rate Evaluations

Refuse Collection & Recycling (40140)					
Fiscal Years	FY18 Actuals	FY19 Actuals	FY20 Actuals	FY21 Actuals	FY22 Agency Data
<i>Actual Rate:</i>	\$345	\$350	\$385	\$370	\$400
<i>Effective Rate</i>	\$394	\$409	\$432	\$422	\$442
<i>Rate Over/Under:</i>	(\$49)	(\$59)	(\$47)	(\$52)	(\$42)
<i>Opportunity:</i>	(\$2,087,217)	(\$2,511,038)	(\$2,008,994)	(\$2,217,362)	(\$1,799,669)

# 3. Action Plan



## OFPA Conclusion/Recommendation:

**Conclusion:** There does not appear to be an opportunity to increase the general fund offset; the reserved year-end funds have been increasingly used over the past five years. *PFAW*

**Recommendation:** The budget approved rate and the effective rate (calculated by OFPA) comparative analysis revealed that revenue generation using the approved rates have not been sufficient to cover costs; thus, there has been consistent reliance on the agency's reserves. We recommend staff review the established rates for Board consideration for adjustments.

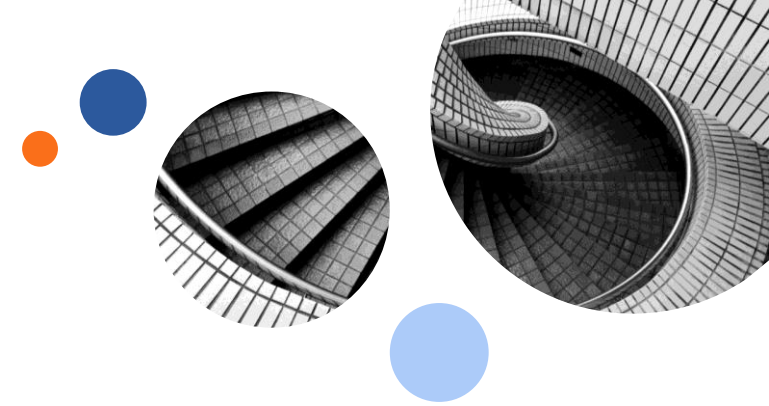
# 3. Action Plan

## Management Response:

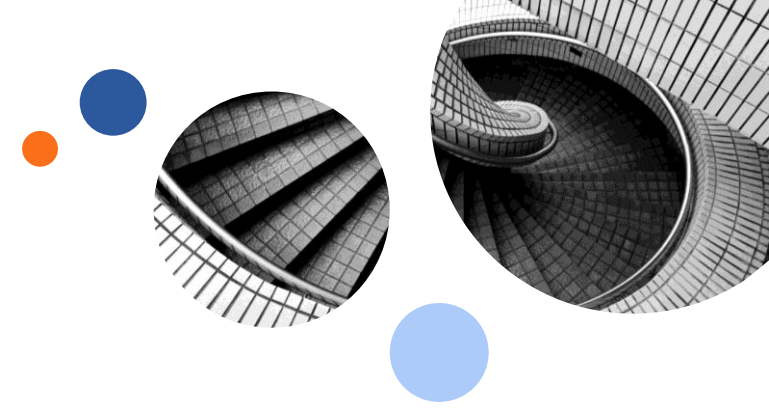
Concur with the recommendation to adjust established rates; the rates for 40140 will increase from \$400/unit to \$475/unit as part of the FY23 Budget.

This increase is necessary to keep pace with increased program cost, inflation, and market conditions. This rate will be reviewed annually during the FY budget review process to determine opportunities for adjustment and to keep the program sustainable.

- Target Implementation Date:
  - 07/01/2022
- Agency Process Owners:
  - Christopher Herrington (Director, DPWES)
  - John Kellas (Deputy Director, DPWES SW)
  - Julie Wang (FS III, DPWES SW)



# 4. Refuse Disposal Fund 40150 (Special Revenue)



## Observation:

- Areas of review included: revenues, expenses, carryover, and service rates for FY18 – FY22.
- The FY18-FY22 revenues ranged between *~\$49.4M to ~\$52.4M*.
- These year-end funds have been reserved by the agency as contingencies.
- The funds at each year-end are carried over between *302% and 88%*.

## Refuse Disposal (40150) Operating Expenses and Rate

Fiscal Years	FY18 Actuals	FY19 Actuals	FY20 Actuals	FY21 Actuals	FY22 Revised Budget
<b><i>Total Operating Revenues:</i></b>	\$47,298,505	\$50,156,310	\$49,457,455	\$49,424,427	\$50,560,780
<b><i>Total Operating Expenses:</i></b>	\$51,996,622	\$47,273,088	\$50,014,214	\$52,255,890	\$53,138,146
<b><i>Operating Balance:</i></b>	(\$4,698,117)	\$2,883,222	(\$556,759)	(\$2,831,463)	(\$2,577,366)
<b><i>General Fund Offsets:</i></b>	\$626,000	\$626,000	\$626,000	\$626,000	\$626,000
<b><i>Operating Balance minus Offsets:</i></b>	(\$5,324,117)	\$2,257,222	(\$1,182,759)	(\$3,457,463)	(\$3,203,366)
<b><i>Other Non Operating Revenue:</i></b>	\$2,053,294	\$1,424,499	\$1,094,626	\$1,024,990	\$1,822,320
<b><i>Other Non Operating Expenses:</i></b>	\$369,863	\$2,733,774	\$2,341,650	\$4,129,647	\$6,160,940
<b><i>Non Operating Balance:</i></b>	\$1,683,431	(\$1,309,275)	(\$1,247,024)	(\$3,104,657)	(\$4,338,620)
<b><i>Sub-Total Ending Balance:</i></b>	(\$3,640,686)	\$947,947	(\$2,429,783)	(\$6,562,120)	(\$7,541,986)
<b><i>Prior Year Carryover:</i></b>	\$76,567,190	\$72,926,504	\$73,874,451	\$71,444,668	\$64,882,548
<b><i>Total Ending Balance + Carryover:</i></b>	\$72,926,504	\$73,874,451	\$71,444,668	\$64,882,548	\$57,340,562

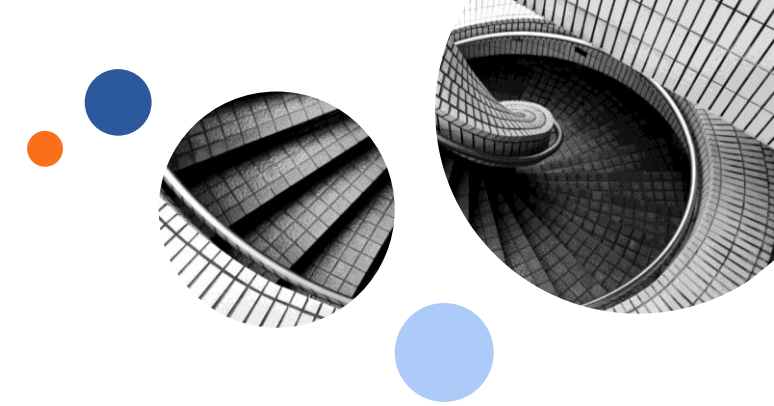
## SW FY18 to FY22 Reserves

Refuse Disposal (40150)					
Fiscal Years	FY18 Actuals	FY19 Actuals	FY20 Actuals	FY21 Actuals	FY22 Revised Budget
<i>Percentage of Carryover:</i>	302%	101%	97%	91%	88%
<i>Ending Balance</i>	\$72,926,504	\$73,874,451	\$71,444,668	\$64,882,548	\$57,340,562
<i>Capital Equipment Reserve 10%:</i>	\$4,983,657	\$10,436,562	\$7,144,467	\$6,488,255	\$5,734,056
<i>Operating Reserve 15%:</i>	\$9,942,847	\$7,086,305	\$10,716,701	\$9,732,382	\$8,601,084
<i>Rate Stabilization Reserve 52%:</i>	\$47,000,000	\$45,351,584	\$37,151,227	\$33,738,925	\$29,817,093
<i>Environmental Reserve 8%:</i>	\$1,000,000	\$1,000,000	\$5,715,573	\$5,190,604	\$4,587,245
<i>Construction and Infrastructure Reserve 15%:</i>	\$10,000,000	\$10,000,000	\$10,716,700	\$9,732,382	\$8,601,084
<i>Total Ending Balance:</i>	\$0	\$0	\$0	\$0	\$0

## SW FY19 to FY22 Rate Evaluations

Refuse Disposal (40150)				
Fiscal Years	FY19 Actuals	FY20 Actuals	FY21 Actuals	FY22 Agency Data
<i>Actual Rate:</i>	\$64.00	\$66.00	\$66.00	\$66.00
<i>Effective Rate:</i>	\$57.15	\$64.96	\$66.28	\$67.12
<i>Rate Over/Under</i>	\$6.85	\$1.04	(\$0.28)	(\$1.12)
<i>Opportunity:</i>	\$5,903,290	\$837,678	(\$233,853)	(\$909,009)

## 4. Action Plan



### **OFPA Conclusion/Recommendation:**

**Conclusion:** The budget approved rate and the effective rate (calculated by OFPA) comparative analysis revealed no pattern that would lead to a conclusion which could assist in recommendations on rate adjustments or further analysis. ***PFAW***

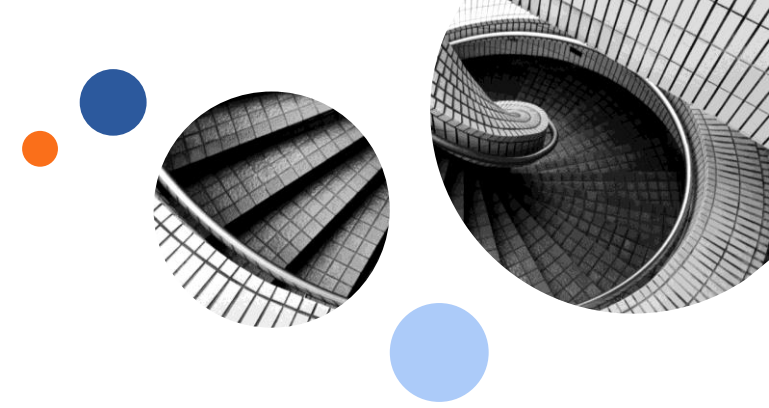
**Recommendation:** There does appear to be an opportunity to increase the general fund offset; these year-end funds have been reserved by the agency as contingencies. The funds at each year-end are carried over between 302% and 88%. We recommend staff review the carryover allocation with DMB to assess opportunities to increase the agency's general fund offset.

# 4. Action Plan

## Management Response:

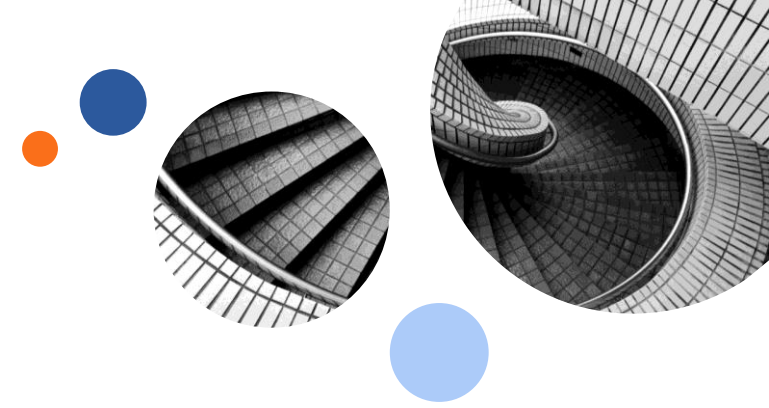
Concur with the recommendation to increase the general fund offset/general fund transfer; this amount will increase from \$626,000 to \$707,000 as part of the FY23 Budget.

- **Target Implementation Date:**
  - 07/01/2022
- **Agency Process Owners:**
  - Christopher Herrington (Director, DPWES)
  - John Kellas (Deputy Director, DPWES SW)
  - Julie Wang (FS III, DPWES SW)





# 5. Landfill Ash Disposal Operations Fund 40170 (Special Revenue)



## Observation:

- Areas of review included: revenues, expenses, carryover, and service rates for FY18 – FY22.
- The FY18-FY22 revenues ranged between *~\$6.4M to ~\$11.1M*.
- These year-end funds have been reserved by the agency as contingencies.
- The funds at each year-end are carried over between *114% and 83%*.

## Landfill Ash Disposal Operations (40170) Operating Expenses and Rate

Fiscal Years	FY18 Actuals	FY19 Actuals	FY20 Actuals	FY21 Actuals	FY22 Revised Budget
<b><i>Total Operating Revenues:</i></b>	\$5,901,520.00	\$9,664,252.00	\$10,150,962.00	\$9,901,355.00	\$10,405,200.00
<b><i>Total Operating Expenses:</i></b>	\$5,603,522.00	\$4,546,350.00	\$6,567,989.00	\$6,141,078.00	\$7,050,843.00
<b><i>Operating Balance:</i></b>	\$297,998.00	\$5,117,902.00	\$3,582,973.00	\$3,760,277.00	\$3,354,357.00
<b><i>General Fund Offsets:</i></b>	\$186,000.00	\$186,000.00	\$186,000.00	\$186,000.00	\$186,000.00
<b><i>Operating Balance minus Offsets:</i></b>	\$111,998.00	\$4,931,902.00	\$3,396,973.00	\$3,574,277.00	\$3,168,357.00
<b><i>Other Non Operating Revenue:</i></b>	\$501,475.00	\$882,859.00	\$665,250.00	\$324,979.00	\$658,244.00
<b><i>Other Non Operating Expenses:</i></b>	\$643,421.00	\$1,258,640.00	\$878,370.00	\$2,349,787.00	\$11,031,775.00
<b><i>Non Operating Balance:</i></b>	(\$141,946.00)	(\$375,781.00)	(\$213,120.00)	(\$2,024,808.00)	(\$10,373,531.00)
<b><i>Sub-Total Ending Balance:</i></b>	(\$29,948.00)	\$4,556,121.00	\$3,183,853.00	\$1,549,469.00	(\$7,205,174.00)
<b><i>Prior Year Carryover:</i></b>	\$33,050,773.00	\$33,020,825.00	\$37,576,946.00	\$40,760,799.00	\$42,310,268.00
<b><i>Sub-Total + Carryover Balance:</i></b>	<b>\$33,020,825.00</b>	<b>\$37,576,946.00</b>	<b>\$40,760,799.00</b>	<b>\$42,310,268.00</b>	<b>\$35,105,094.00</b>

# SW FY18 to FY22 Reserves

Landfill Ash Disposal Operations (40170)					
Fiscal Years	FY18 Actuals	FY19 Actuals	FY20 Actuals	FY21 Actuals	FY22 Revised Budget
<i>Percentage of Carryover:</i>	100%	114%	108%	104%	83%
<i>Beginning Balance</i>	\$33,020,825	\$37,576,946	\$40,760,799	\$42,310,268	\$35,105,094
<i>Active Cell Closure Liability Reserve:</i>	\$10,002,713	\$0	\$0	\$0	\$0
<i>Environmental Reserve 1.8%:</i>	\$0	\$0	\$3,261,532	\$3,384,821	\$2,808,408
<i>Capital Equipment Reserve 4%:</i>	\$0	\$13,054,194	\$4,068,560	\$4,231,027	\$3,510,509
<i>Post-Closure Reserve 78%:</i>	\$23,018,112	\$24,522,752	\$33,430,707	\$34,694,420	\$28,786,177
<i>Total Ending Balance:</i>	\$0	\$0	\$0	\$0	\$0

# SW FY18 to FY22 Rate Evaluations

Landfill Ash Disposal Operations (40170)					
Fiscal Years	FY18 Actuals	FY19 Actuals	FY20 Actuals	FY21 Actuals	FY22 Agency Data
<i>Actual Rate:</i>	\$25.5	\$26.5	\$26.5	\$27.50	\$28.44
<i>Effective Rate:</i>	\$30.50	\$15.77	\$19.67	\$22.74	\$23.55
<i>Rate Over/Under:</i>	(\$5)	\$11	\$7	\$5	\$5
<i>Opportunity:</i>	(\$1,018,288)	\$3,808,812	\$2,475,092	\$1,642,580	\$1,763,624

## 5. Action Plan

### OFPA Conclusion/Recommendation:

**Conclusion:** The budget approved rate and the effective rate (calculated by OFPA) comparative analysis revealed, revenue generation using the approved rates has been sufficient to cover costs; thus, there has not been consistent reliance on the agency's reserves. *PFAW*

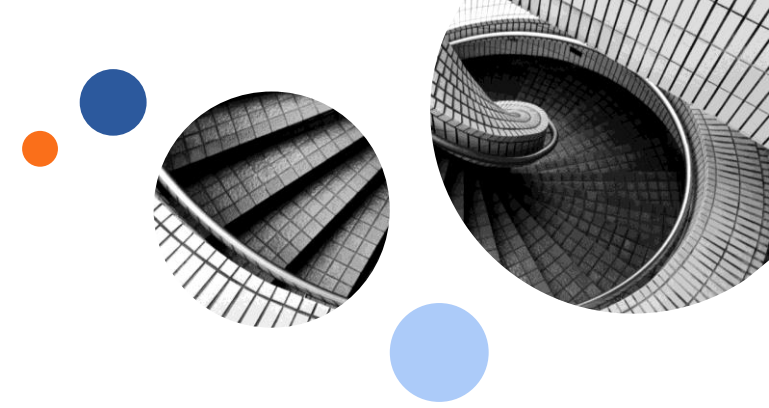
**Recommendation:** There does appear to be an opportunity to increase the general fund offset; these year-end funds have been reserved by the agency as contingencies. The funds at each year-end are carried over between **114% and 83%**. We recommend staff review the carryover allocation with DMB to assess opportunities to increase the agency's general fund offset.

# 5. Action Plan

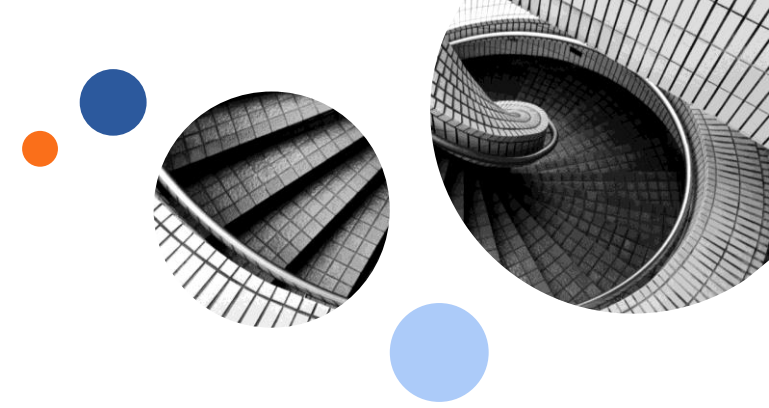
## Management Response:

Concur with the recommendation to increase the general fund offset/general fund transfer; this amount will increase from \$186,000 to \$209,000 as part of the FY23 Budget.

- **Target Implementation Date:**
  - 07/01/2022
- **Agency Process Owners:**
  - Christopher Herrington (Director, DPWES)
  - John Kellas (Deputy Director, DPWES SW)
  - Julie Wang (FS III, DPWES SW)



# 6. Sewer Operations And Maintenance Fund 69010 (Enterprise)



## For Your Situational Awareness:

- Areas of review included: revenues, expenses, carryover, and service rates for FY18 – FY22.
- The FY18-FY22 revenues ranged between *~\$100.47M to ~\$116.40M*.
- These year-end funds have been reserved by the agency as contingencies.
- The reserved year-end funds have been increasingly used over the past five years.

## Sewer Operations & Maintenance (69010) Operating Expenses and Rate

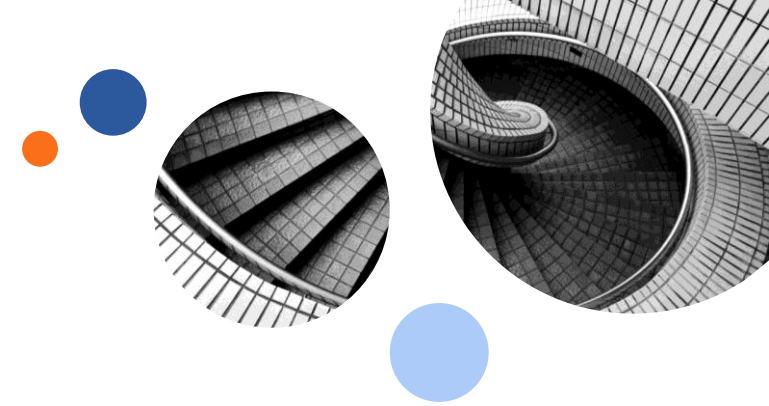
Fiscal Years	FY18 Actuals	FY19 Actuals	FY20 Actuals	FY21 Actuals	FY22 Revised Budget
<b><i>Total Operating Revenues:</i></b>	\$101,440,000.00	\$100,470,000.00	\$109,220,000.00	\$109,250,000.00	\$116,713,000.00
<b><i>Total Operating Expenses:</i></b>	\$97,548,872.00	\$99,222,202.00	\$102,889,306.00	\$104,951,307.00	\$117,935,379.00
<b><i>Operating Balance:</i></b>	\$3,891,128.00	\$1,247,798.00	\$6,330,694.00	\$4,298,693.00	(\$1,222,379.00)
<b><i>General Fund Offsets:</i></b>	\$2,850,000.00	\$2,850,000.00	\$2,850,000.00	\$2,850,000.00	\$2,850,000.00
<b><i>Operating Balance minus Offsets:</i></b>	\$1,041,128.00	(\$1,602,202.00)	\$3,480,694.00	\$1,448,693.00	(\$4,072,379.00)
<b><i>Other Non Operating Revenue:</i></b>	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b><i>Other Non Operating Expenses:</i></b>	(\$50,406.00)	\$10,843.00	\$1,756,654.00	\$566,565.00	\$2,191,536.00
<b><i>Non Operating Balance:</i></b>	\$50,406.00	(\$10,843.00)	(\$1,756,654.00)	(\$566,565.00)	(\$2,191,536.00)
<b><i>Sub-Total Ending Balance:</i></b>	\$1,091,534.00	(\$1,613,045.00)	\$1,724,040.00	\$882,128.00	(\$6,263,915.00)
<b><i>Prior Year Carryover:</i></b>	\$4,520,581.00	\$5,612,115.00	\$3,999,070.00	\$5,723,110.00	\$6,605,238.00
<b><i>Total Ending Balance + Carryover:</i></b>	<b>\$5,612,115.00</b>	<b>\$3,999,070.00</b>	<b>\$5,723,110.00</b>	<b>\$6,605,238.00</b>	<b>\$341,323.00</b>
<b><i>Percentage of Carryover:</i></b>	<b>124%</b>	<b>71%</b>	<b>143%</b>	<b>115%</b>	<b>5%</b>

# 6. Action Plan

## OFPA Conclusions:

**Conclusion 1:** There does not appear to be an opportunity to increase the general fund offset; the reserved year-end funds have been increasingly used over the past five years. *PFAW*

**Conclusion 2:** The budget approved rate and the effective rate (calculated by OFPA) comparative analysis could not be performed. This agency has many variable rates and multipliers. This analysis required fiscal and cumulative testing that could not be performed under our process. *PFAW*

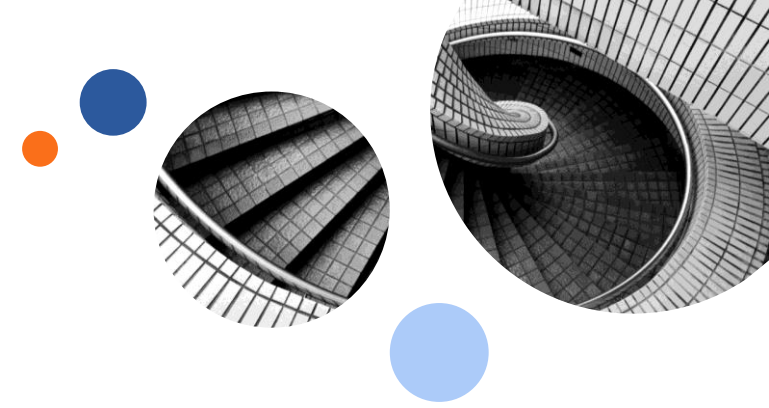




# **WORK PLAN REVIEW AREA #3**

METHODOLOGY OF GENERAL FUND OFFSET

# 7. General Fund Offset Methodology



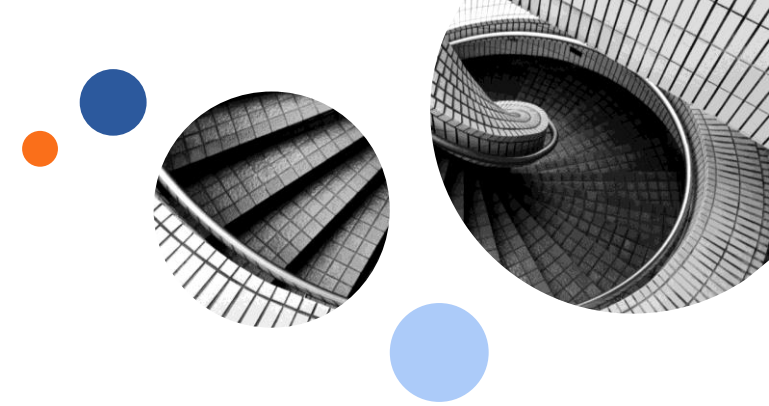
## Observation:

- Purported by the Department of Management and Budget (DMB), no formalized and documented General Fund methodology exists.
- Offset amounts are discussed between DMB and the respective agencies to determine offset amounts based on support service costs provided by the General Fund.
- The support services from the General Fund include Human Resources, Purchasing, Budget, and other administrative services.
- Based on our review of the Special Revenue and Enterprise Funds Approved Budgets, the offset amounts have changed over time, but there still appears to be bandwidth for adjustments.

# 7. Action Plan

## OFPA Recommendation:

**Recommendation:** We recommend DMB develop and document a formalized General Fund Offset methodology to be used during the annual budgeting process. Offset methodology provides a consistent approach to identifying opportunities to generate General Fund support.

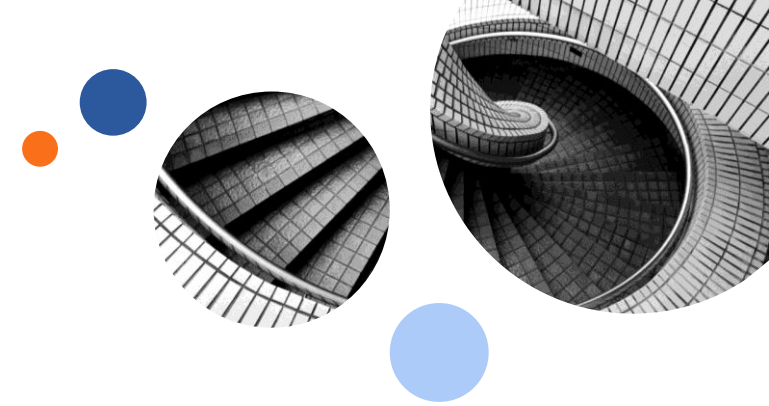


# 7. Action Plan

## Management Response:

Indirect costs are county-wide, general management costs and consist of administrative activities for the general operation of the County such as finance, budgeting, payroll, personnel services, purchasing and information technology support. The indirect cost rate is a method of charging individual funds for their share of the indirect costs. All Solid Waste funds pay indirect costs through a general fund transfer, or offset, as referred to in this report. When initially established, the indirect cost rate established for each fund was significantly impacted by affordability. Currently, these rates range from 5% to 13.5% for Solid Waste funds. The transfer amounts have been reviewed periodically, and adjusted at times, with the latest adjustments included in the FY 2023 budget. As a result of this audit, DMB will formalize the Indirect Cost Rate review in order to provide a more consistent approach through incorporating the review into the annual budget process beginning with the FY 2024 budget. It should be noted that rates established for each fund will continue to be impacted by other factors, including affordability and other pressures facing each fund.

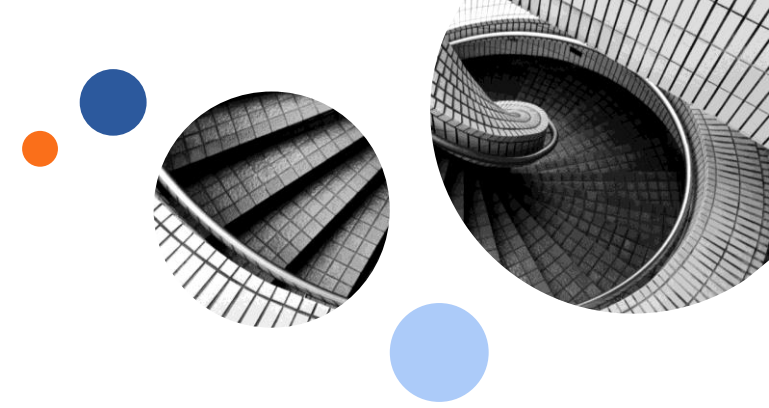
- Target Implementation Date:
  - 07/01/2023 – FY24 Budget
- Agency Process Owners:
  - Kimberly Panzer (COO, DMB)



# **WORK PLAN REVIEW AREA**

Additional Areas Reviewed

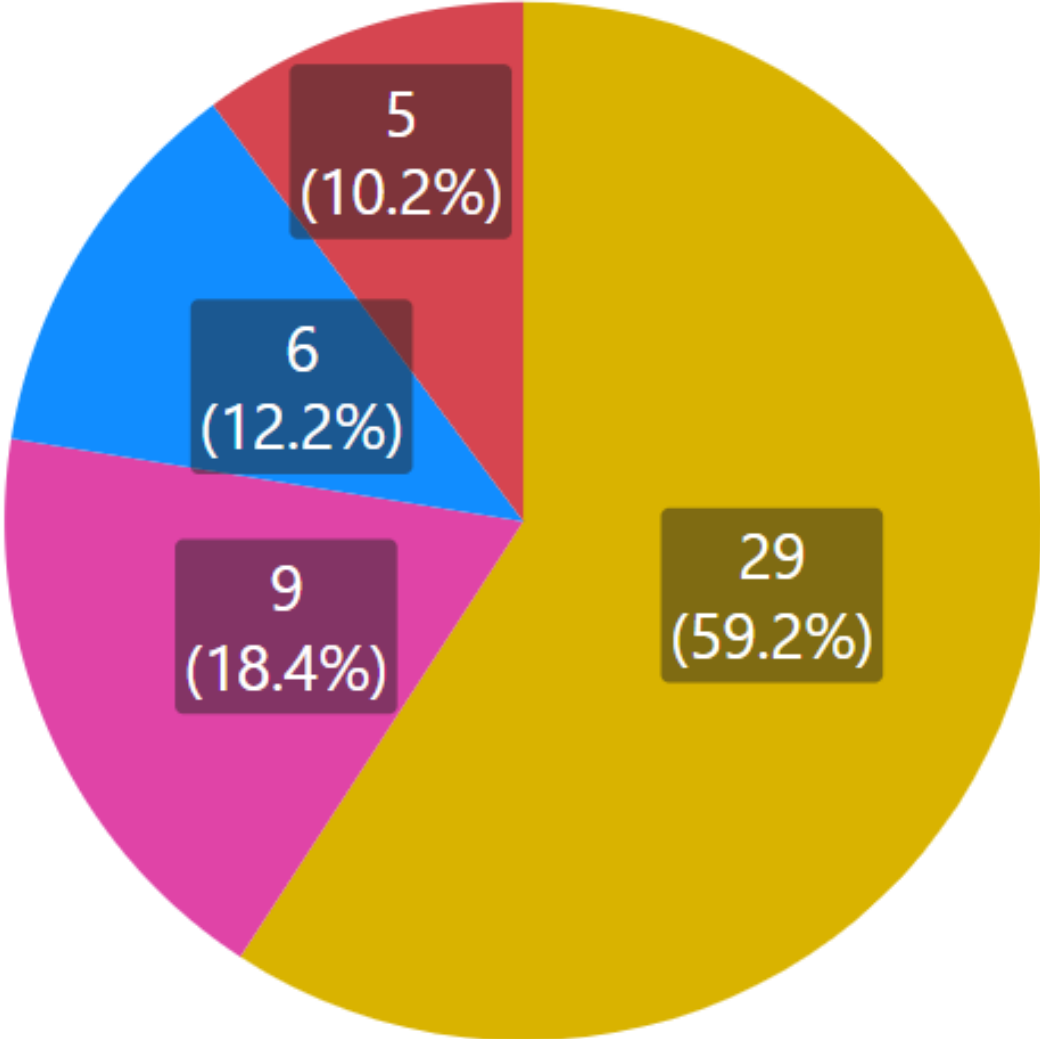
# 8. Wastewater Rolling Stock/Equipment Due For Replacement



## Observation:

- Areas of review included: rolling stock exceeding useful life and mileage (*or useful life for equipment*), potential to replace these with hybrid and electric versions.
- **49 out of 198 (or 25%)** WW rolling stock/equipment are identified to be exceeding useful life and mileage.
- The continued use of rolling stock/equipment meeting these criteria will result in increased maintenance costs.

# WW Equipment Past Replacement Date and Expected Usage (Mileage), by Class

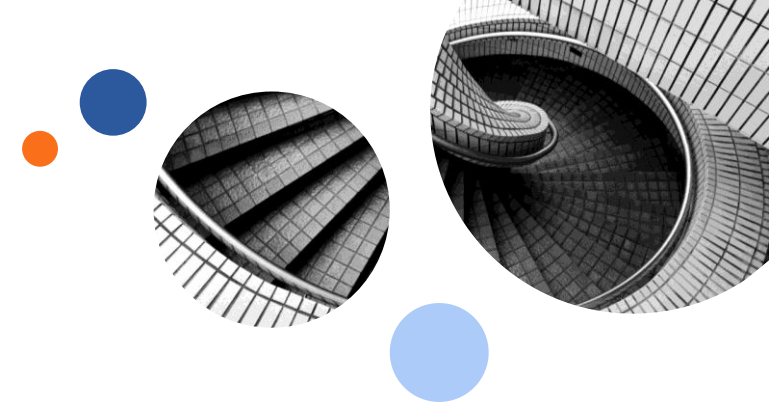


- Class**
- Maintenance Equip.
  - Heavy Equip.
  - Trailer
  - Truck

# 8. Action Plan

## OFPA Recommendation:

**Recommendation:** We recommend WW review the rolling stock/equipment identified in this analysis as these exceed the criteria (useful life and mileage) for replacement. The continued use of rolling stock/equipment meeting these criteria will result in increased maintenance costs. Abated costs garnered from implementing these processes could be used to support costs associated with fleet replacement (including adding EVs/Hybrids to the fleet). Implementing this process would also reduce maintenance and fuel costs over the life of the fleet.



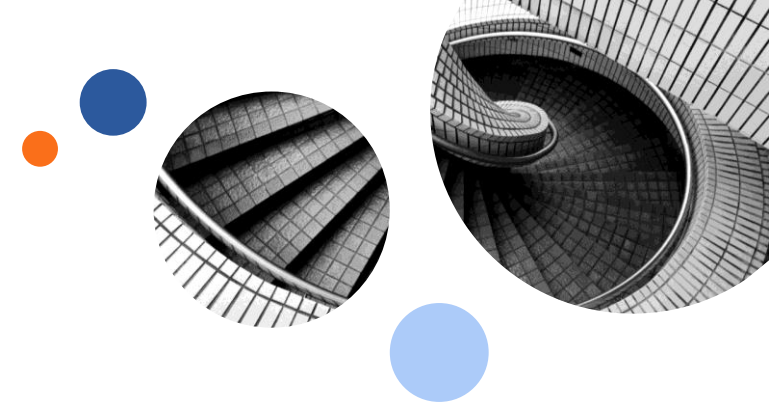


# 8. Action Plan

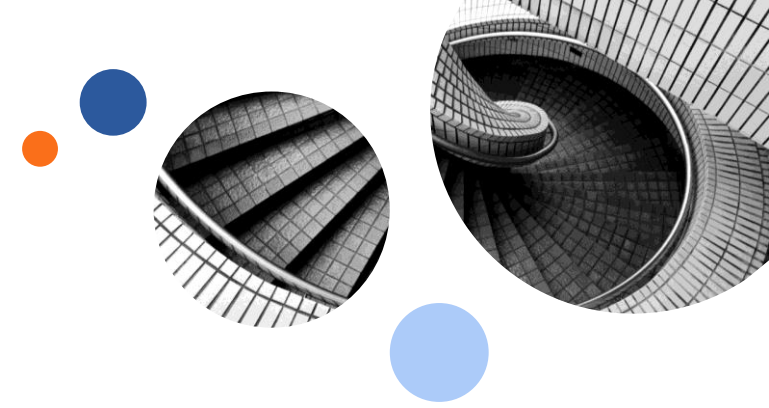
## Management Response:

At the beginning of each budget cycle, Wastewater Management uses several criteria including age, mileage, condition, department usage, maintenance cost, and replacement cost to determine when it is necessary to replace a vehicle and/or equipment. Due to limited annual budgetary resources, the replacement cost must be balanced with other departmental needs. The WW Inventory list of 49 items contains five vehicles and 44 equipment. Two of the vehicles are on order and scheduled to be replaced in FY2022 while the other 3 are slated for replacement in the FY2023 budget. Five of the 44 equipment will be replaced in FY2022, FY2023 and/or FY2024. The remaining 39 are in good condition and we will continue to analyze them each year to determine when appropriate for replacement.

- **Target Implementation Date:**
  - End of FY22, FY23, and FY24
- **Agency Process Owners:**
  - Christopher Herrington (Director, DPWES)
  - Ellie Coddington (Deputy Director, DPWES WW)
  - Anand Goutam (Financial Manager, DPWES WW)



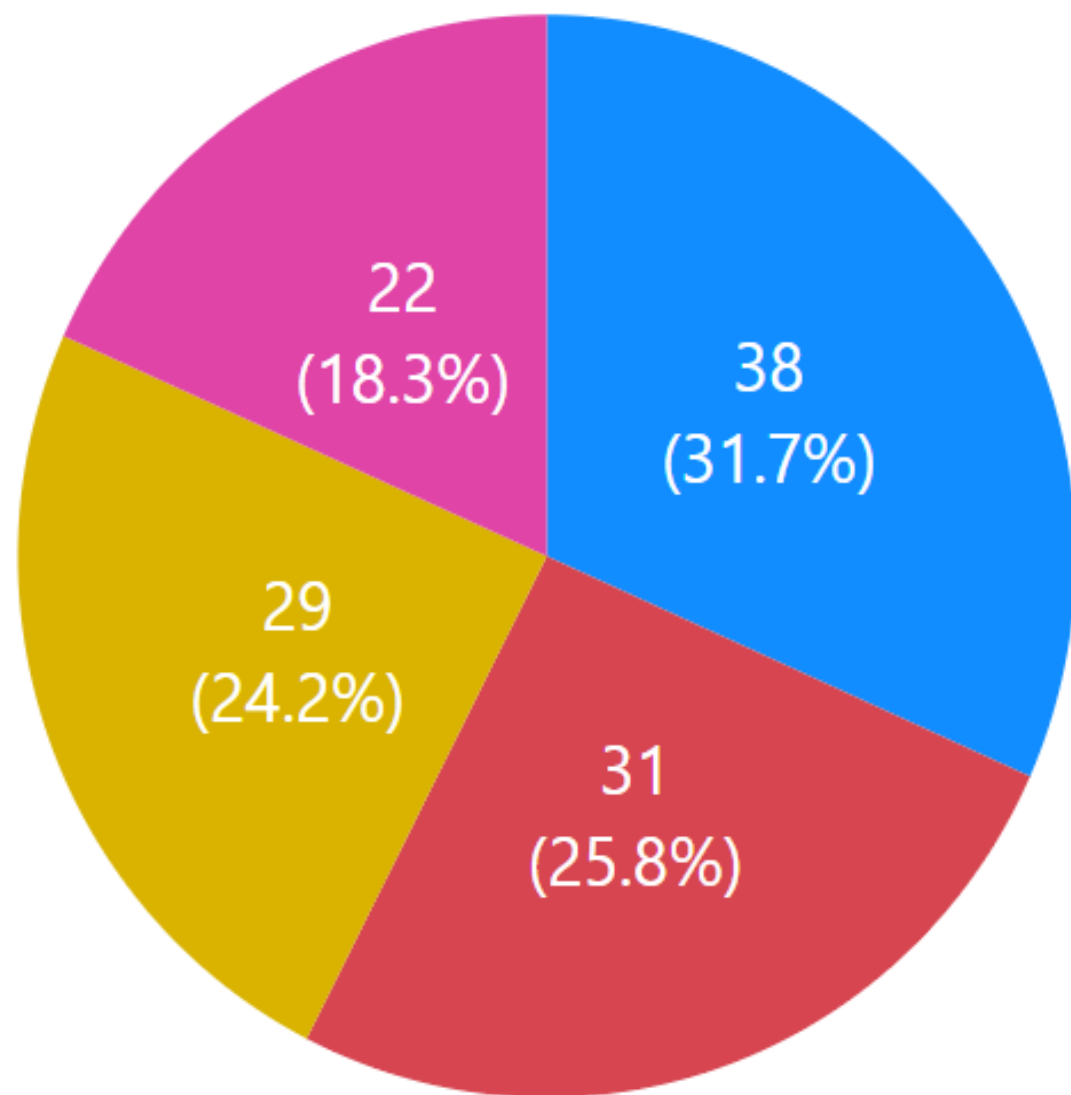
# 9. Solid Waste Rolling Stock/Equipment Due for Replacement



## Observation:

- Areas of review included: rolling stock/equipment exceeding useful life and mileage (*or useful life for equipment*), potential replacement with hybrid and electric models.
- **120 out of 303 (or 40%)** SW rolling stock/equipment exceed useful life and mileage.
- The continued use of rolling stock/equipment meeting these criteria will result in increased maintenance costs.

## SW Equipment Past Replacement Date and Exceed Usage (Mileage), by Class



### Class

● Trailer

● Truck

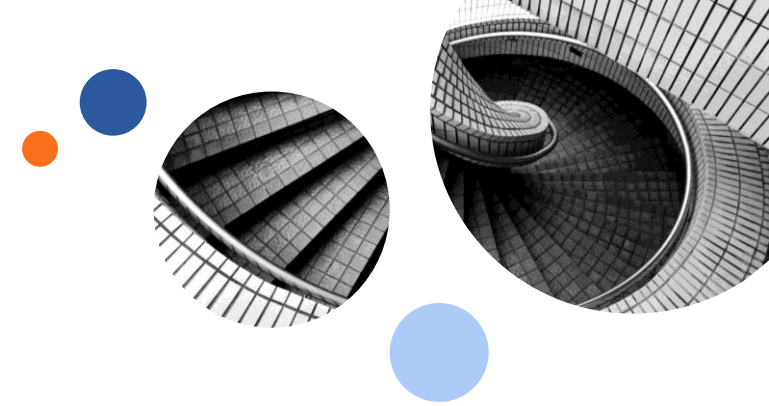
● Maintenance Equip.

● Heavy Equip.

# 9. Action Plan

## OFPA Recommendation:

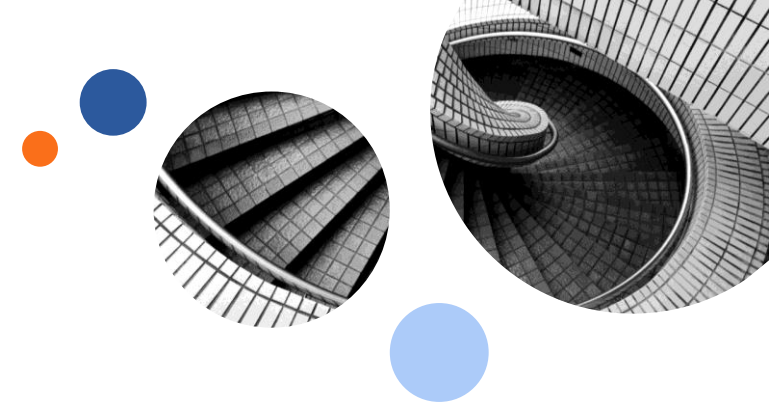
**Recommendation:** We recommend SW review the rolling stock/equipment identified in this analysis as these exceed the criteria (useful life and mileage) for replacement. The continued use of rolling stock/equipment meeting these criteria will result in increased maintenance costs. Abated costs garnered from implementing these processes could be used to support costs associated with fleet replacement (including adding EVs/Hybrids to the fleet). Implementing this process would also reduce maintenance and fuel costs over the life of the fleet.



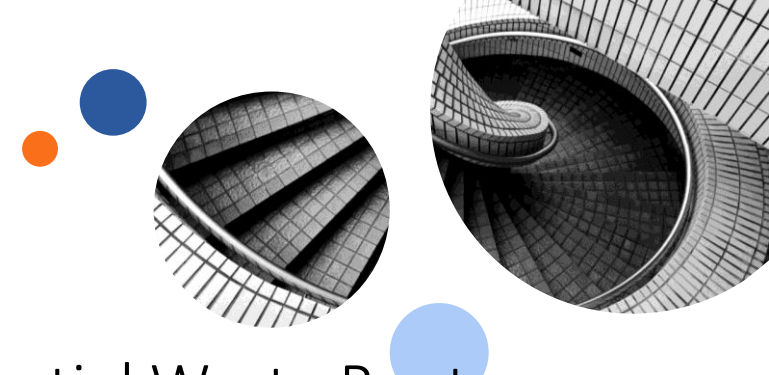
# 9. Action Plan

## Management Response:

SWMP replaces 10 to 12 vehicles, three trailers and 2 to 4 pieces of heavy equipment per year. Over the past 3 budget cycles the availability and delivery of equipment has been significantly impacted, causing delays of up to 12 to 18 months. Moving forward management will review equipment age and mileage to identify and replace those units exceeding the standards, with particular emphasis on equipment with higher average overall maintenance costs.

- 
- **Target Implementation Date:**
    - Budget Review - Partial FY23 / Remainder FY24
  - **Agency Process Owners:**
    - Christopher Herrington (Director, DPWES)
    - John Kellas (Deputy Director, DPWES SW)
    - Julie Wang (FS III, DPWES SW)

# 10. Disposal Route Performance



## Observation:

Included in this section of the study was a review of the Residential Waste Route Performance for FY21. SW provides trash and recycling services to **42,915** homes in the County's Sanitary District.

### *SW Trash Pick-up:*

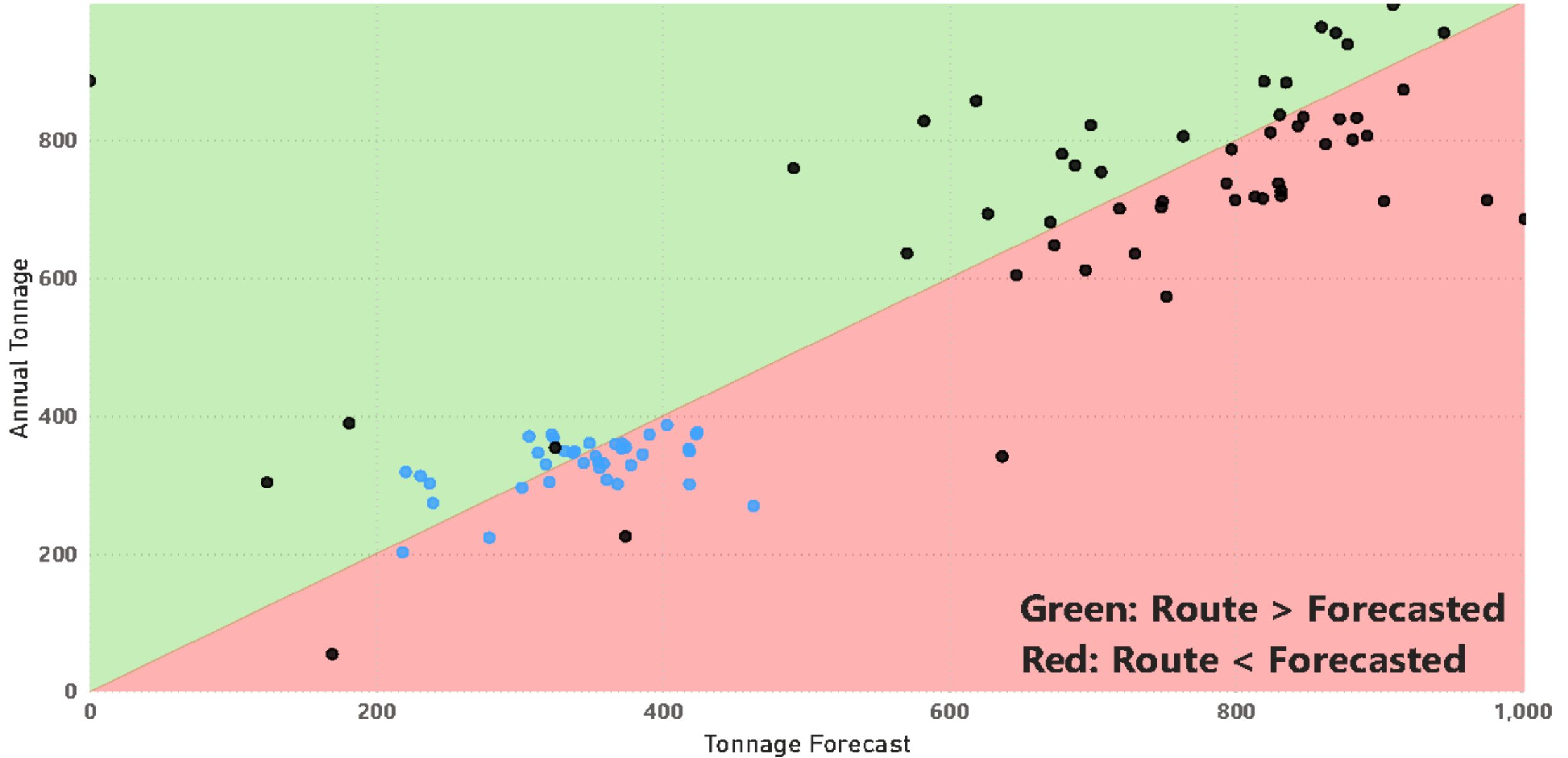
- *31 out of 54* trash pickup routes (*or 57%*) collected less than forecasted, ranging from *10.06 to 315.66 tons*.
- *23 out of 54* trash pickup routes (*or 43%*) collected greater than forecasted, ranging from *6.24 to 268.30 tons*.

### *SW Recycling Pick-up:*

- *25 out of 38* recycling pickup routes (*or 66%*) collected less than forecasted, ranging from *5.83 to 193.61 tons*.
- *13 out of 38* recycling pickup routes (*or 34%*) collected greater than forecasted, ranging from *9.19 to 98.24 tons*.

# Route Utilization-FY2021

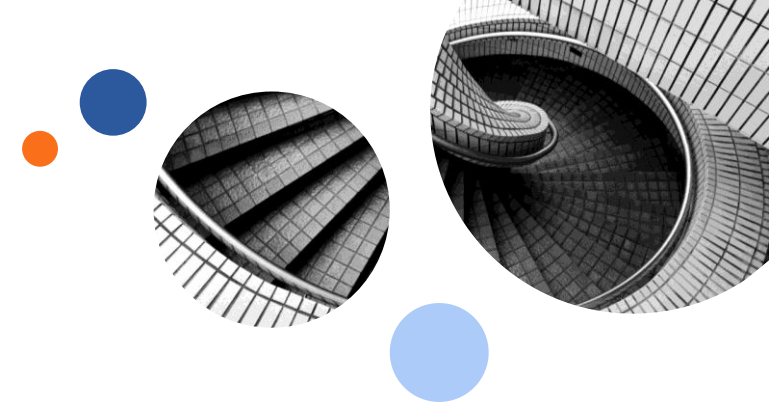
Type ● Recycling ● Trash



# 10. Action Plan

## OFPA Recommendation:

**Recommendation:** We recommend SW assess the trash and recycling routes identified as greater/less than forecasted in this review to identify if routes can be consolidated, removed, or if an assessment of alternative approaches is needed. This analysis should be performed at a time or frequency deemed appropriate by management with existing staff. We also recommend that this type of analysis is used to perform management oversight on an annual basis. These efforts could assist in decreasing operating costs for trash and recycling services.





# 10. Action Plan

## Management Response:

SWMP is currently planning for the addition of 1100 customers effective July 1, 2022. With the addition of these customers the entire route system has been reviewed, balanced, and optimized for greater efficiency and cost effectiveness. Routes were balanced primarily based on the number of homes, with projected tonnage used as a secondary measure. The resulting route structure will create five additional routes per week and provide a more equal demand for equipment on a daily basis. This will not require additional staffing as FTE demand will be approximately the same each day. Routes will be stored in a GIS database that will allow for updates as necessary to insure efficiency.

- 
- **Target Implementation Date:**
    - 07/01/2022
  - **Agency Process Owners:**
    - Christopher Herrington (Director, DPWES)
    - John Kellas (Deputy Director, DPWES SW)
    - Julie Wang (FS III, DPWES SW)



# **Fuel Cost**

## *Review*

# Study Introduction

This fuel cost study was performed to assess average fuel prices vs County costs, fuel credit card purchases, County fuel pump transactions, hybrid or electric vehicle replacement status, and other areas identified during the review.



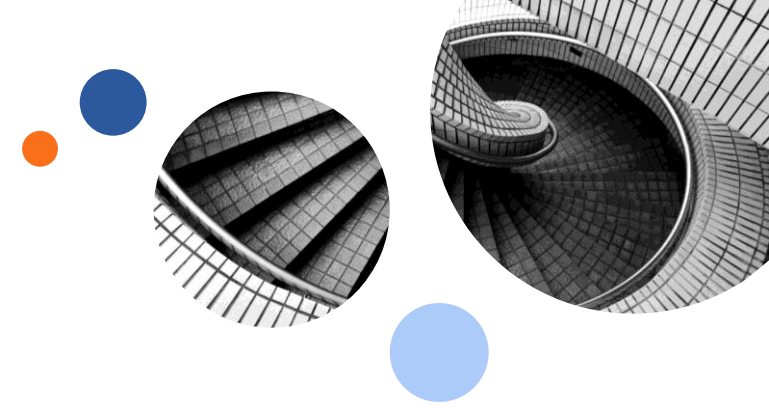
# Study Objectives

## Work Plan Review Areas:

- Average Fuel Prices vs Costs
- Fuel Credit Card Purchases
- Hybrid or Electric Vehicle Replacement Status

## Additional Review Areas Covered:

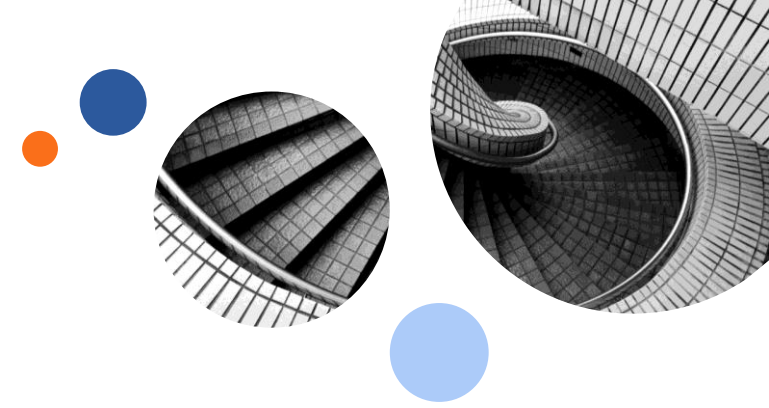
- Vehicle Replacement Status
- Vehicle Maintenance Costs vs Current Value
- Incomplete Vehicle and Fuel Data



# Study Highlights

## Review Results:

- **5,239** In-County Voyager Credit Card Purchases Totaling **~\$173k** within 5 Miles of a County Fuel Pump
- **511** County Vehicles Exceeding Useful Life and Mileage
- **130** County Vehicles Exceeding Useful Life, Mileage, and Maintenance Costs Greater than Purchase Cost
- **3,760** Data Fields with Missing Information
- **1,097** Data Fields with Incomplete Information





# Fuel Cost Review Overview Data

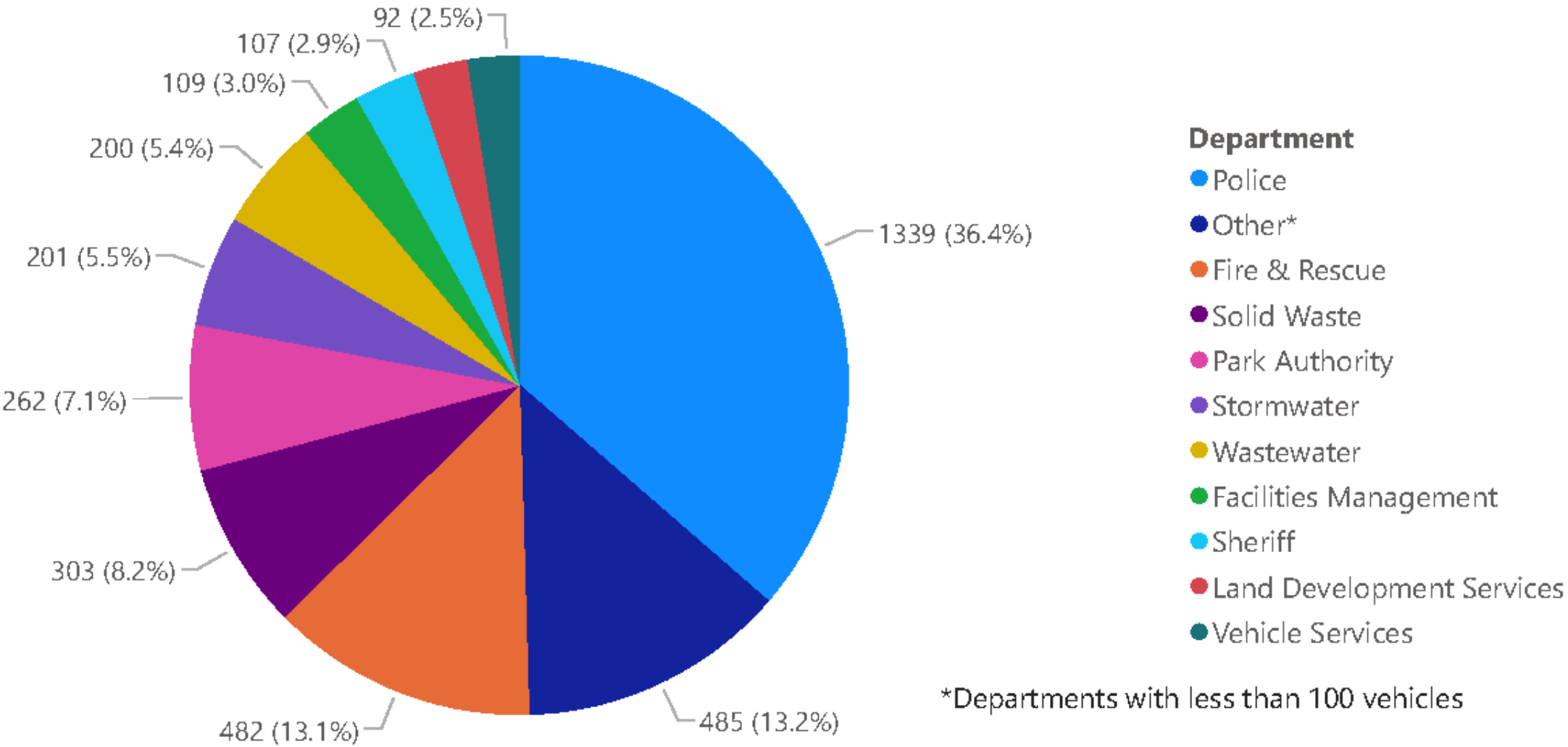
*(as of April 20, 2022)*



## FUEL COSTS OVER THE LAST FIVE YEARS

Fairfax County Fuel Expenses					
Fuel Type	FY2018	FY2019	FY2020	FY2021	FY2022
<i>Commercial:</i>	\$144,356	\$165,183	\$211,851	\$156,378	\$111,028
<i>Diesel:</i>	\$12,336,128	\$15,659,717	\$16,008,496	\$11,707,118	\$7,044,537
<i>Unleaded:</i>	\$3,758,912	\$4,808,317	\$4,400,724	\$3,623,681	\$3,369,265
<i>Total:</i>	\$16,239,396	\$20,633,218	\$20,621,071	\$15,487,177	\$10,524,830

# Fairfax County Fleet Summary



\*Departments with less than 100 vehicles





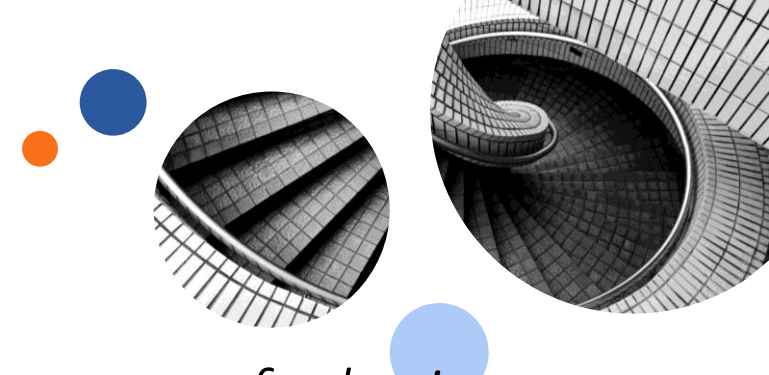
## The Following Slides Detail:

- Observations
- Recommendations
- Supporting Graphs
- Management Responses
- Target Implementation Dates

# **WORK PLAN REVIEW AREA #1**

Average Fuel Prices vs Costs

# 1. Average Fuel Prices vs Costs



## For Your Situational Awareness:

- Included in the work plan for this study was an assessment of average fuel prices vs costs paid by the County. The County participates in an agreement with the Metropolitan Washington Council of Governments to obtain fuel prices below market rates. Based on the fuel price log provided by the Department of Vehicle Services (DVS), the County's average fuel prices have been consistently lower than retail fuel prices. The table below represents a comparative analysis of the average fuel prices for FY17 – FY21:*

County vs Federal <sup>1</sup> EIA Retail Fuel Costs w/o Taxes					
Entity	FY17	FY18	FY19	FY20	FY21
<sup>2</sup> County	\$1.53	\$1.89	\$1.86	\$1.69	\$1.79
<sup>3</sup> Retail	\$1.74	\$2.28	\$2.03	\$1.77	\$1.94
Diff	(\$0.21)	(\$0.39)	(\$0.18)	(\$0.08)	(\$0.15)

**Footnote Legend:**

- <sup>1</sup>U.S. Energy Information Administration (EIA)
- <sup>2</sup>Weighted DVS Average (Including \$0.125 Markup)
- <sup>3</sup>EIA Avg Retail

- Given the County fuel costs are consistently lower than retail, we **PFAW** on this section.*

# **WORK PLAN REVIEW AREA #2**

Fuel Credit Card Purchases

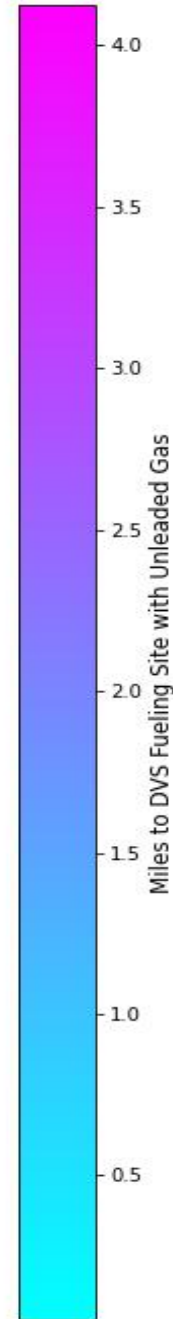
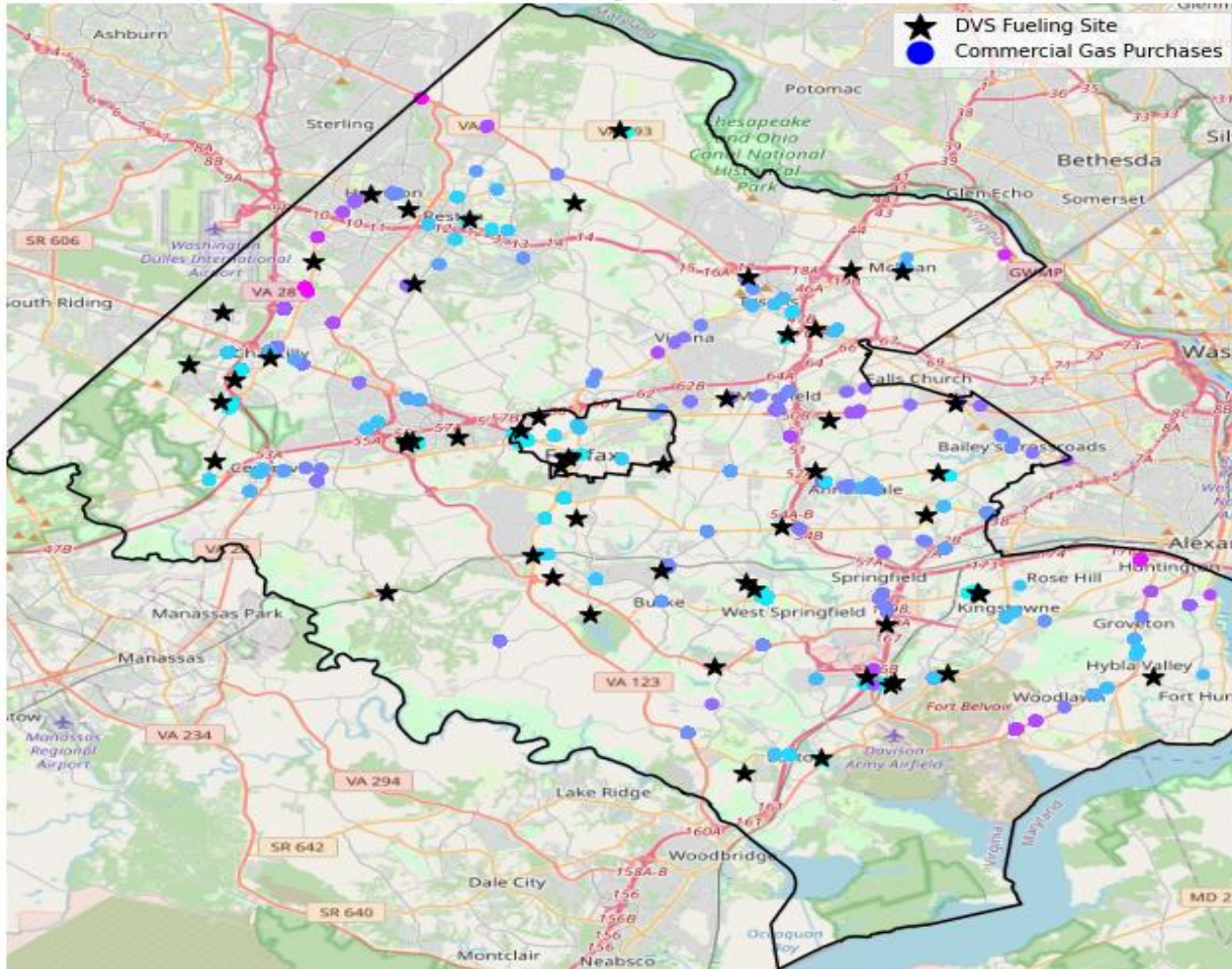
## 2. In-County Voyager Fleet Credit Card.

### Transactions

#### Observation:

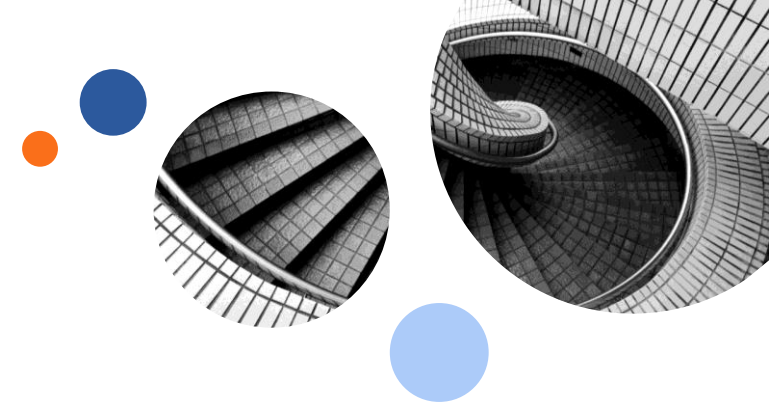
- *In FY17-FY21 there were 16,713 of 32,891 (or 51%) Voyager Credit Card transactions within the County totaling ~\$337k. This included premium gas purchases which is only available at retail pumps. Additionally, all County fuel pumps are not open 24/7 and some are restricted for use by specific personnel which also contributed to some of the retail purchases.*
- *Excluding premium fuel purchases and transactions where County fuel pumps were unavailable, we identified:*
  - *5,239 in-County transactions totaling ~\$173k within **5 miles** of an available County fuel pump*
  - *Of these, 2,243 transactions totaling ~\$72K or (42%) of these purchases were within **1 mile** of a County fuel pump.*

## Unleaded Gas is Commonly Purchased at Commerical Stations Near County Fuel Pumps



In County Credit Card Transactions		
Distance to County Fuel Pump (Miles)	Cost of Gas	No. of Transactions
<i>Within 1</i>	\$72,118.74	2,243
<i>Between 1 and 5</i>	\$101,191.02	2,996
<i>Within 5</i>	\$173,309.76	5,239

## 2. Action Plan



### OFPA Recommendation:

**Recommendation:** We recommend DVS review staff fuel purchases (Voyager financial and location data) and lack of access to county pumps to identify gaps that are driving financial exposure. These processes should be incorporated in the oversight of the Voyager program's management and card issuance.

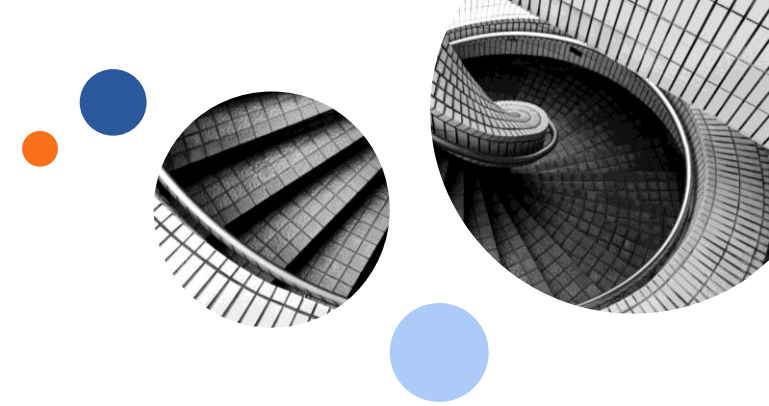
# 2. Action Plan

## Management Response:

DVS will review and update Procedural Memorandum No. 10-05, Control and Use of Fuel Credit Cards, to include guidance for agencies that require premium fuel that is only available at retail pumps.

Also, DVS will meet with all departments that procured fuel with a Voyager card within five miles of an operational County fuel pump. When reviewing the data closer, DVS noted that Public Safety completed 99 percent of the in-county transactions. Meeting with Public Safety agencies will help DVS understand whether the transactions were driven by operational requirements and discuss appropriate levels of oversight that can be included in the Voyager program without impacting operations.

- Target Implementation Date:
  - 11/30/2022
- Agency Process Owners:
  - Mark Moffatt (Director, DVS)
  - Marguerite Guarino (Deputy Director, DVS)
  - Daniel Gonzalez (Deputy Director, DVS)

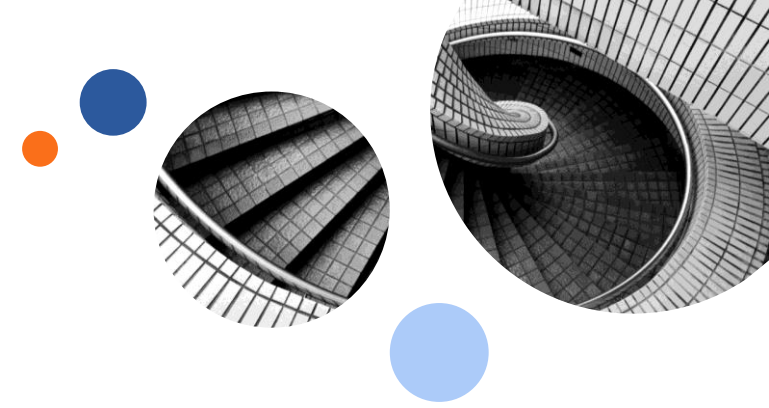




# **WORK PLAN REVIEW AREA #3**

Hybrid or Electric Vehicle Replacement Status

# 3. Hybrid or Electric Vehicle Replacement Status



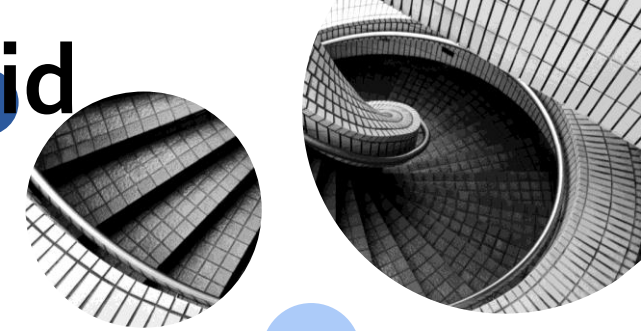
## For Your Situational Awareness:

- *Included in the work plan for this study was an assessment of hybrid and electric vehicle replacement status. The replacement processes were thoroughly reviewed and reported out in this document. Based on the vehicle fleet inventory file provided by DVS, **169 of the 3,852 (or 4%)** vehicles in the fleet are hybrid and electric vehicles. OFPA performed research to identify cost savings if more hybrid vehicles were procured when vehicles are replaced. Given the low hybrid and electric vehicle count and equally low mileage, a linear analysis did not prove valuable for reporting. The **~\$27k** of financial exposure identified for this limited population was deemed di minimis.*
- *For these reasons we **PFAW** on this section. We recommend a commissioned study be given consideration.*

# **WORK PLAN REVIEW AREA #4**

Additional Review Areas

# 4. Current County Vehicles Due for EV/Hybrid Replacement (Excluding SW & WW)



## Observation:

- We identified 511 out of 3,852 (or 13%) County vehicles exceeding useful life and mileage.
  - As purported by DVS management, vehicles are replaced when they meet age and mileage requirements which are reviewed annually during budget development.
  - The past due replacement months and mileage ranged between 1 to 478 months and 1 to 196,914 miles.

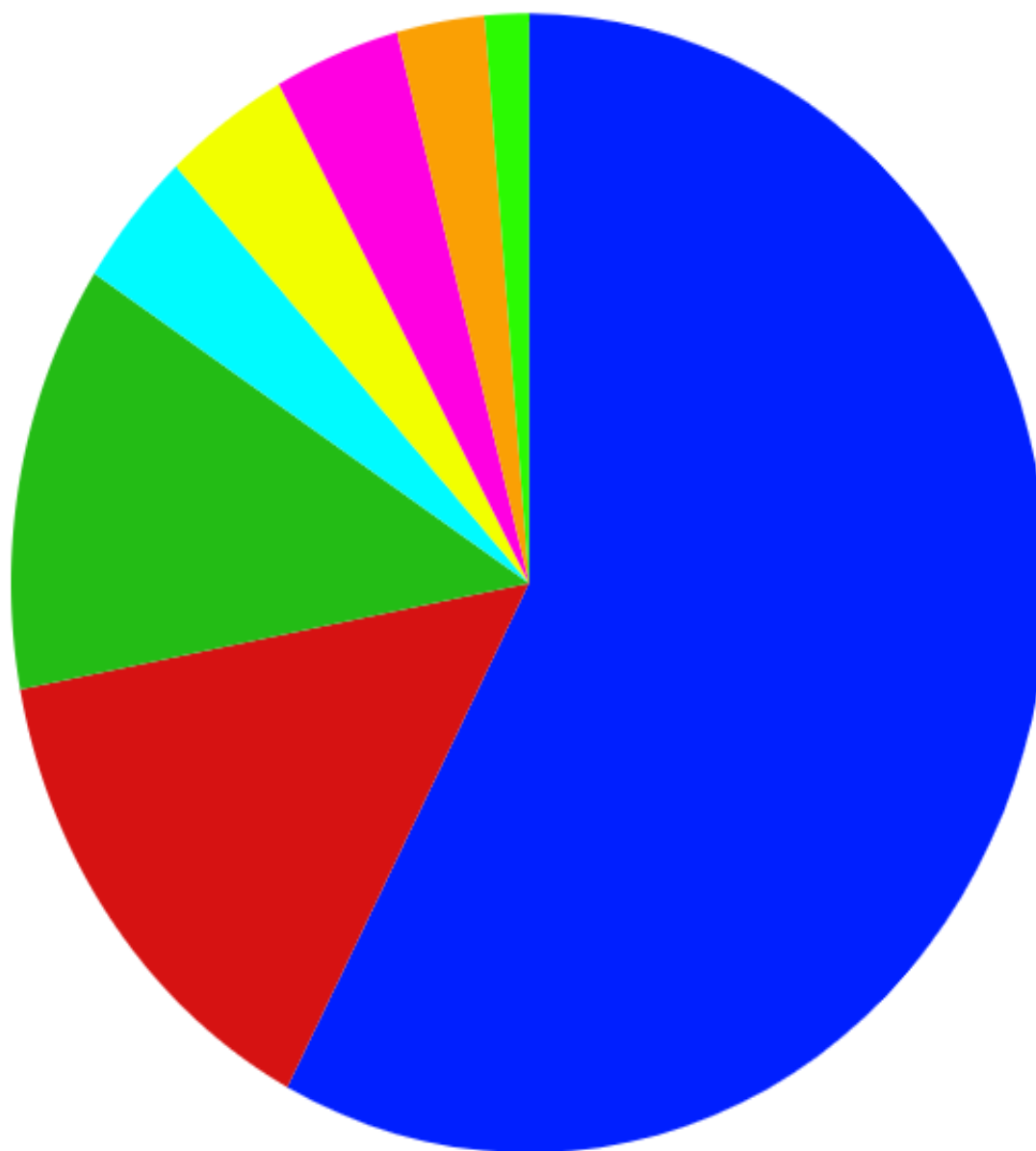
Vehicles Exceeding Usage and Useful Life	
Replacement Schedule	Count
Total Due for Replacement	511
FY22 Purchased Not in Operations	60
FY23 Scheduled for Purchase Not in Operations	141
<b>Replacement Not Purchased/Scheduled/Operations</b>	<b>310</b>
<i>These vehicles did not meet the criteria of our analysis.</i>	160
Additional Fleet Purchased/Scheduled Not in Operations.	
Total Purchased by DVS	361

- Estimated savings applied to the **511** vehicles due for replacement could save the County between ~\$256k - ~\$511k annually in fuel costs per United States Environmental Protection Agency (USEPA):
  - “Switching one of your main cars to an EV could save your household approximately \$500–\$1,000 on fuel costs per year. EVs also tend to have lower maintenance costs than gasoline cars, which also reduces ownership costs”.

# Vehicles Past Replacement Date and Exceeding Expected Mileage, By Department

## Department

- Police 295 (57.73%)
- Fire & Rescue 73 (14.29%)
- Park Authority 62 (12.13%)
- Other 20 (3.91%)
- Sheriff 20 (3.91%)
- Vehicle Services 20 (3.91%)
- Facilities Management 14 (2.74%)
- Transportation 7 (1.37%)



## County Vehicles Exceeding Useful Life & Expected Mileage

Department	Number of Vehicles	Total Mileage vs. Expected Mileage	Total Months Overdue for Replacement
<i>Police</i>	<b>295</b>	4,233,697	8,943
<i>Fire &amp; Rescue</i>	<b>73</b>	3,944,430	4,218
<i>Park Authority</i>	<b>62</b>	98,408	5,439
<i>Other</i>	<b>20</b>	562,509	1,057
<i>Sheriff</i>	<b>20</b>	320,145	504
<i>Vehicle Services</i>	<b>20</b>	159,931	2,386
<i>Facilities Management</i>	<b>14</b>	266,420	439
<i>Transportation</i>	<b>7</b>	177,796	195
<b>Total</b>	<b>511</b>	<b>9,763,336</b>	<b>23,181</b>

## 4. Action Plan

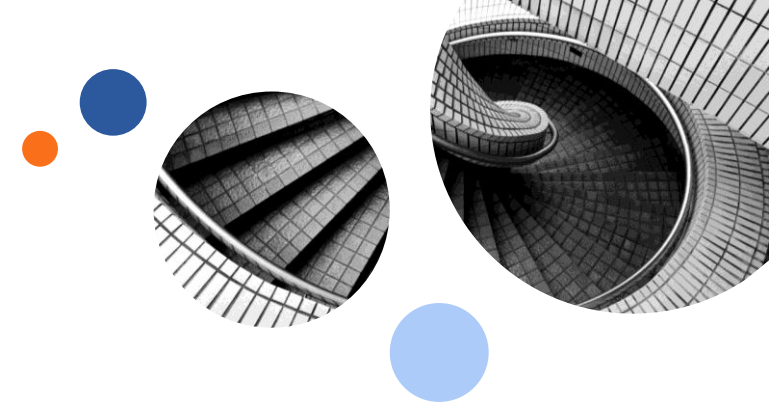
### OFPA Recommendation:

**Recommendation:** We recommend DVS review the vehicles identified in this analysis as they exceed the criteria (useful life and mileage) for replacement. The continued use of these vehicles will result in increased maintenance costs; these abated costs could be used to support costs associated with fleet replacement. Implementing this process would reduce maintenance and fuel costs over the life of the fleet.

# 4. Action Plan

## Management Response:

At the request of the Office of Financial and Program Audit, DVS provided a spreadsheet of the active County fleet. Of the 511 units identified as exceeding the criteria (age and mileage), 201 replacements have been ordered or received, or are scheduled for replacement in FY 2023. Of the remaining balance, 310 units identified in the OFPA analysis, 95 did not meet the requirement for replacement in the FY23 budget package. The remaining 215 units are not included in the vehicle replacement fund. Examples of units that are not in the vehicle replacement fund include equipment (i.e. chipper, crane, yard pusher), trailers, units in specialty replacement funds (i.e. Fire and Rescue Apparatus and Ambulance, Boat, Police Specialty, FASTRAN), and units owned by Volunteer Fire and Rescue. Staff will review the identified vehicles in the analysis provided by OFPA for appropriate action. Staff is also incorporate and distribute processes to partnering agencies re: useful life and maintenance cost analysis to assist in managing the County's fleet.

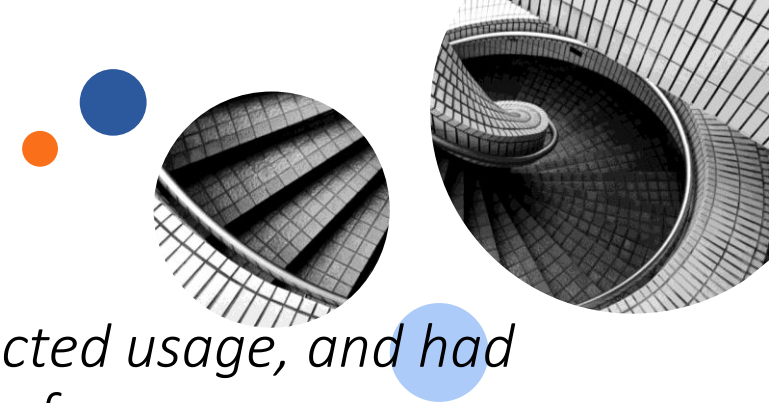
- 
- Target Implementation Date:
    - 06/30/2023
  - Agency Process Owners:
    - Mark Moffatt (Director, DVS)
    - Marguerite Guarino (Deputy Director, DVS)
    - Daniel Gonzalez (Deputy Director, DVS)



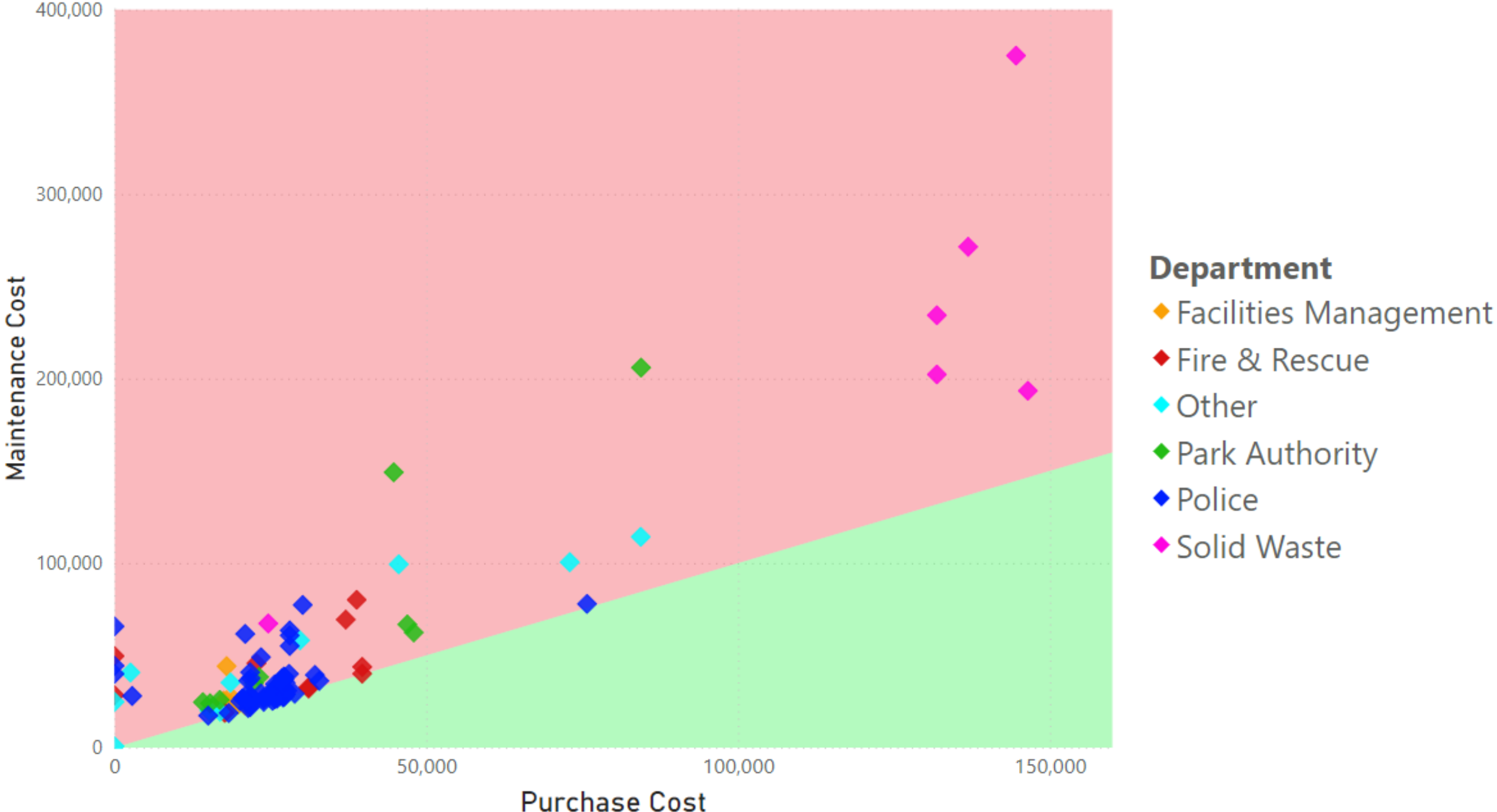
# 5. Vehicles Exceeding Useful Life / Mileage / Maintenance Costs

## Observation:

- We identified 130 out of 3,852 vehicles that exceed useful life, expected usage, and had maintenance costs greater than original purchase cost; the ranges of exposure are:
  - Useful life (1 to 125 months)
  - Usage (516 to 166,235 miles)
  - Maintenance Costs (\$728 to \$375k)
- Total LTD maintenance costs are ~\$6.01M (for the 130 vehicles) of which ~\$2.46M (for the 130 vehicles) were expended on vehicles with maintenance costs greater than the original vehicle purchase costs.
- LTD maintenance costs were more than double original purchase costs for 15 out of 130 vehicles.
- 30 vehicles sampled; the LTD maintenance costs exceeded current value between ~\$15.7k to ~\$320.4k. Total maintenance costs exceeded current values by ~\$2.2M.
  - This section of the review was performed on a sample of vehicles due to the complexity of obtaining vehicle fair market values using VIN numbers from an external database.



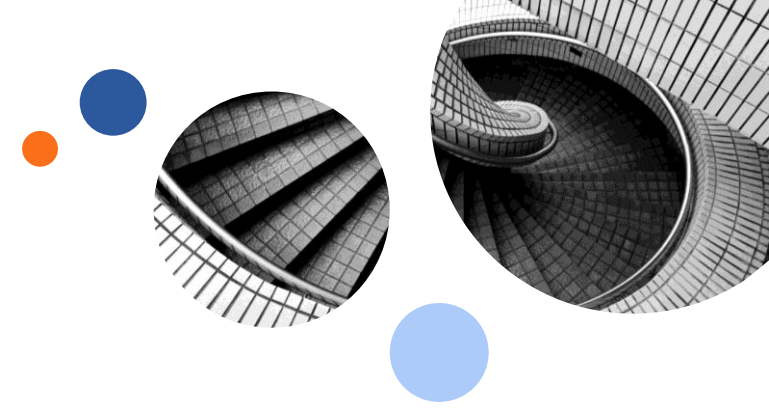
# Maintenance Cost Exceeding Purchase Cost YTD FY2021 (Count: 130)



## Vehicle Maintenance vs Purchase Cost

Department	Number of Vehicles	Maintenance Cost	Purchase Cost	Cost Differential
<i>Police</i>	84	\$2,805,439.49	\$2,093,367.49	\$712,072.00
<i>Other</i>	11	\$540,171.01	\$307,284.82	\$232,886.19
<i>Fire &amp; Rescue</i>	10	\$440,683.68	\$257,984.23	\$182,699.45
<i>Facilities Mngmnt</i>	10	\$250,848.13	\$182,661.90	\$68,186.23
<i>Park Authority</i>	9	\$632,035.63	\$316,025.35	\$316,010.28
<i>Solid Waste</i>	6	\$1,343,884.14	\$716,283.44	\$627,600.70
<i>Total</i>	<i>130</i>	<i>\$6,013,062.08</i>	<i>\$3,873,607.23</i>	<i>\$2,139,454.85</i>

# 5. Action Plan



## OFPA Recommendation:

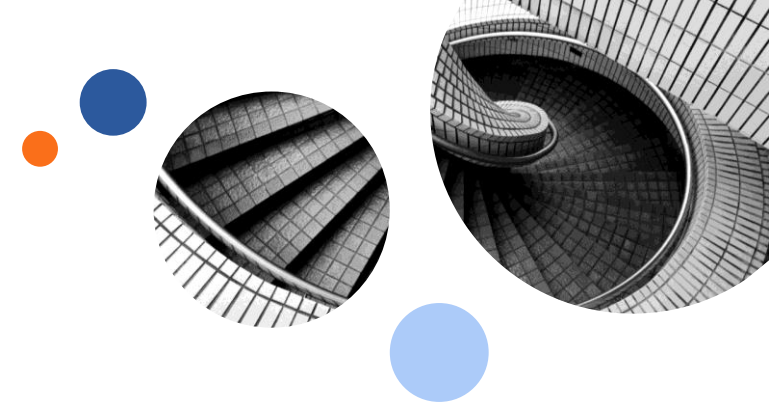
**Recommendation:** We recommend DVS update and document the vehicle replacement criteria to include a maintenance cost evaluation. This enhancement should assist management with oversight of vehicles to be replaced with a focus on those with the highest maintenance costs.

# 5. Action Plan

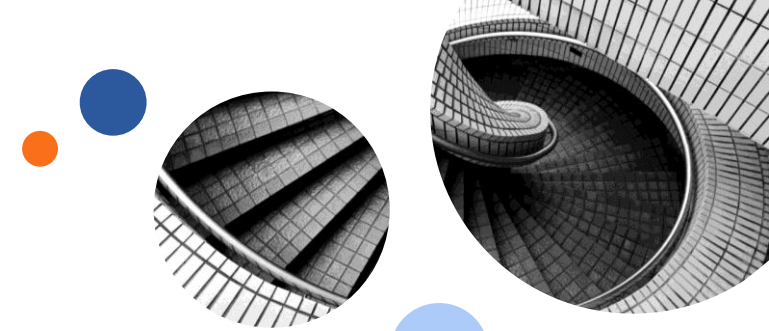
## Management Response:

DVS uses fleet management software for preventative maintenance scheduling, work order and labor tracking, and parts and inventory tracking. The software extends the useful life of vehicles by keeping up with effective maintenance schedules and documentation. Technicians can view assigned work, look-up asset information and maintenance history, which is discussed with management when work exceeds the value of the vehicle. DVS will document the maintenance cost evaluation in the replacement criteria guidance and include in the FY 2024 Budget Review.

- Target Implementation Date:
  - 11/30/2022
- Agency Process Owners:
  - Mark Moffatt (Director, DVS)
  - Marguerite Guarino (Deputy Director, DVS)
  - Daniel Gonzalez (Deputy Director, DVS)



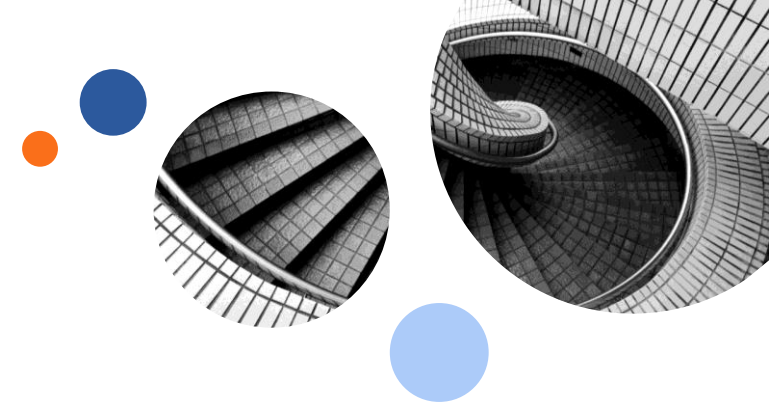
# 6. Missing/Incomplete Vehicle and Fuel Data Observation:



- *A review of the M5 and FuelForce system data files provided by DVS for this study revealed critical data attributes with information left blank or incomplete.*
- *3,760 data fields with missing information*
- *1,097 data fields with incomplete information*
  - *Maintaining complete and accurate information in these systems improves the staff’s ability to track vehicle usage, purchase costs, maintenance costs, expected usage, vehicle replacement and other critical processes needed for oversight.*

Fuel Study Missing Data and Incomplete Data				
File Dataset	% of Missing Data	% of Incomplete Data	Missing Data	Incomplete Data
Fleet Inventory	0.03%	17.02%	1	627
Fleet Replacement Criteria	2.61%	0.03%	96	1
Mansfield Voyager	38.66%	0.00%	2,264	0
County Pump Transaction	0.43%	0.15%	1,399	469

# 6. Action Plan



## OFPA Recommendation:

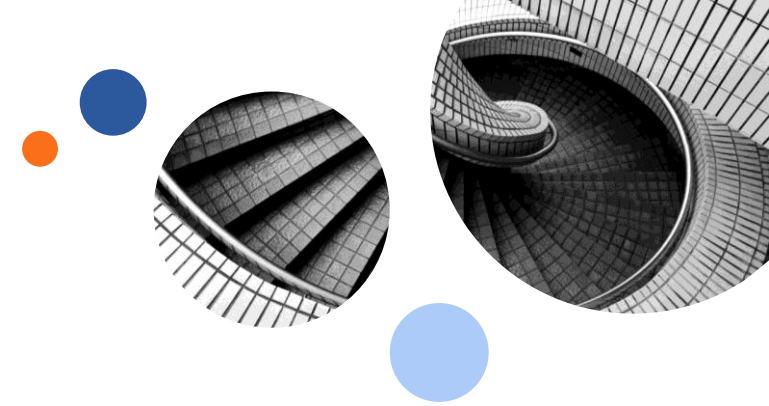
**Recommendation:** We recommend DVS obtain and complete the missing/incomplete information in the M5 and FuelForce systems. This enhancement would assist staff in oversight of the vehicle fleet including fuel related retail purchases and fleet replacements.

# 6. Action Plan

## Management Response:

DVS understands the importance of maintaining complete and accurate data. A high percentage of the missing data was for the Mansfield Voyager File Dataset, which is maintained by Mansfield. DVS will review the database and meet with representatives from Mansfield to update fields with missing data. Incomplete fleet inventory and replacement data will require additional review as fields of importance to some vehicles are not used by other vehicles. For example, public safety units are replaced by age and the mileage field is not populated. Also, fuel systems are not customized to Fairfax County and standard reports often contains fields that are not populated because they are not used/necessary.

- Target Implementation Date:
  - 12/31/2022
- Agency Process Owners:
  - Mark Moffatt (Director, DVS)
  - Marguerite Guarino (Deputy Director, DVS)
  - Daniel Gonzalez (Deputy Director, DVS)





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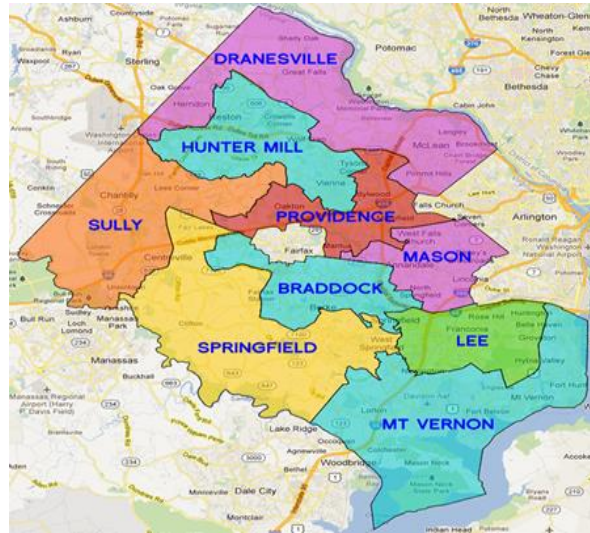
**LIST OF ACRONYMS**

AC	Audit Committee
BOS	Board of Supervisors
DMB	Department of Management and Budget
DPWES	Department of Public Works and Environmental Services
DVS	Department of Vehicle Services
EV	Electric Vehicles
LTD	Life to Date
OFPA	Office of Financial and Program Audit
PFAW	Pass Further Audit Work
SW	Solid Waste Management Program
WW	Wastewater Management Program



**Allowance for Vote by Audit Committee to Adopt**  
***June 2022 Draft Quarterly Report***

**Draft**  
**Fairfax County**  
**Office of Financial and Program Audit**



**FAIRFAX COUNTY BOARD OF SUPERVISORS**  
**AUDITOR OF THE BOARD**

[www.fairfaxcounty.gov/boardauditor](http://www.fairfaxcounty.gov/boardauditor)

**Office of the Financial and Program Audit**  
**12000 Government Center Parkway, Suite 233**  
**Fairfax, Virginia 22035**

# End of Presentation



Office of Financial and Program Audit  
[AuditoroftheBoard@fairfaxcounty.gov](mailto:AuditoroftheBoard@fairfaxcounty.gov)