ANALYTICS + DATA WRANGLING + _____

_____

= REAL WORLD SUCCESS

181,630 customers

180 square miles

municipally owned

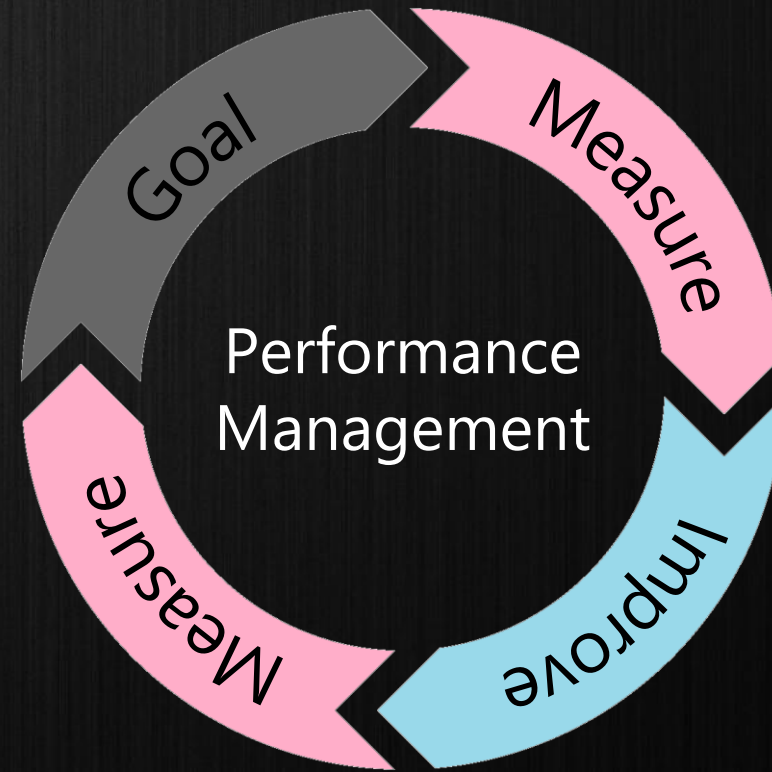# Data Services Program Manager

> Data Engineering

> Advanced Analytics + Data Science

> Data Governance + Data Management

Ice Breaker

Go meet 3 new people!

Introduce yourself

Tell them your utility/ company

Tell them your favorite sports team

Can you remember?

Building Relationships
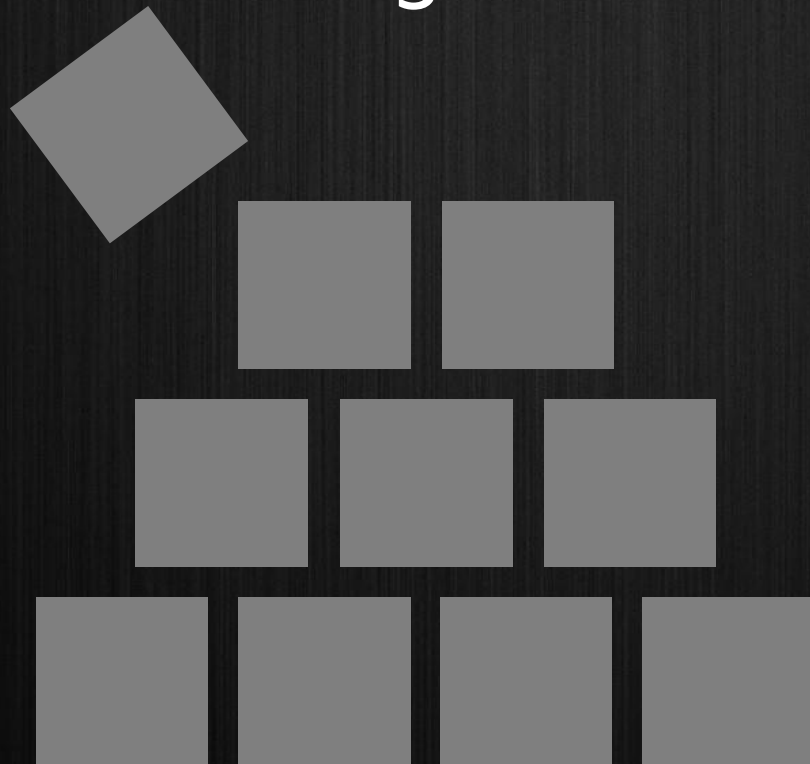
1

Defining Problems

2

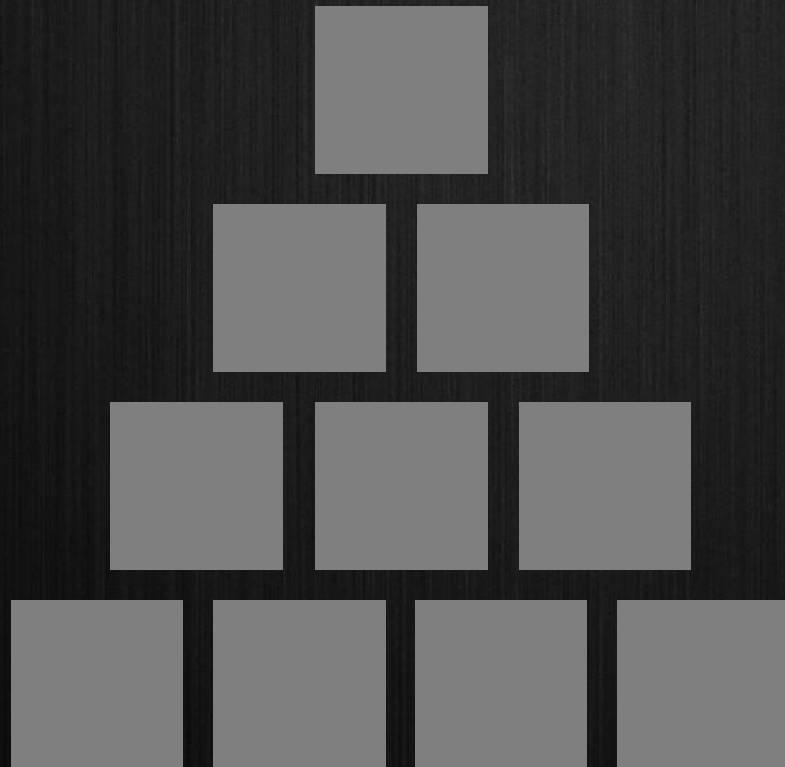# Celebrating Successes

4

ANALYTICS + DATA WRANGLING +

Building Relationships
Defining Problems
Setting Goals
Celebrating

_____

= REAL WORLD SUCCESS

The Story

The Story

1

ANALYTICS + DATA WRANGLING +
RELATIONSHIP BUILDING

_____

= REAL WORLD SUCCESS

Write down the name of a project teammate who is driving you nuts
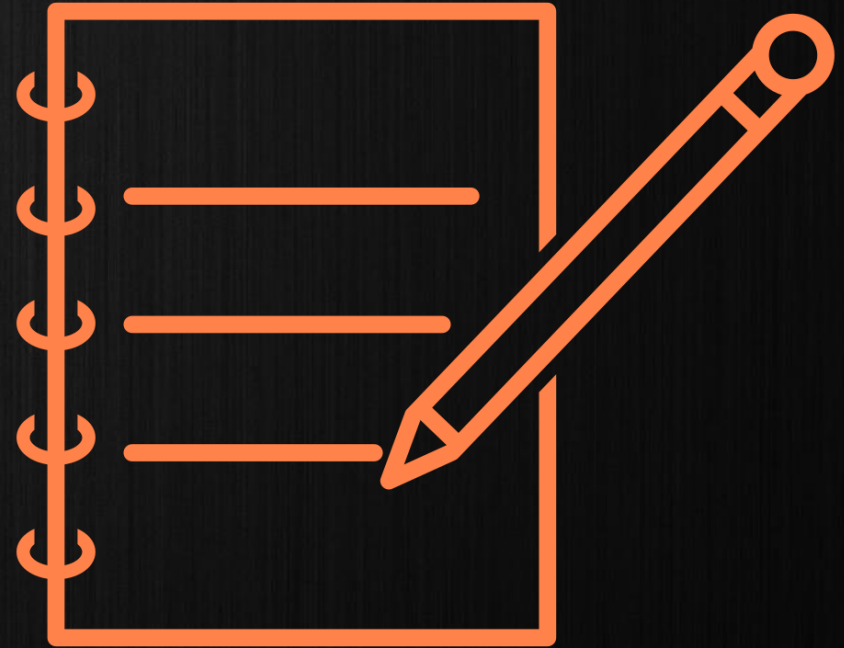
Take a walk
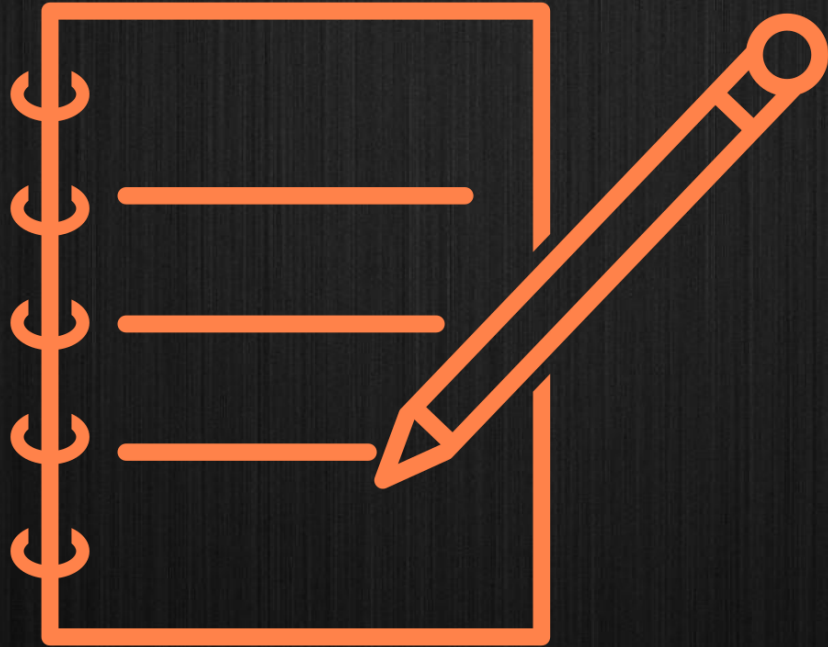
Why might your project teammate be giving you a hard time?

Loyal Friend

Big Teddy Bear

Great Manager

Awesome Leader

Still a little gruff...

Building Relationships

Take a walk

1

2

ANALYTICS + DATA WRANGLING +
DEFINING PROBLEMS

= REAL WORLD SUCCESS

The Problem

The Problem

Why are there so many vehicles in the yard during the day?

- ★ Intermittent pool vehicle usage

- ★ Long surplus "row"

- ★ "Just in case"

The Problem

Why are we keeping equipment "just in case"?

- ★ Equipment breaks down and we NEED it

- ★ Staff likes the equipment

The Problem

Why is equipment breaking down?

★ Our fleet is old

★ We don't have enough staff to replace equipment AND do all of the necessary maintenance

How old is our fleet?

How many staff do we need?

How many replacements per year?

How far behind are we?
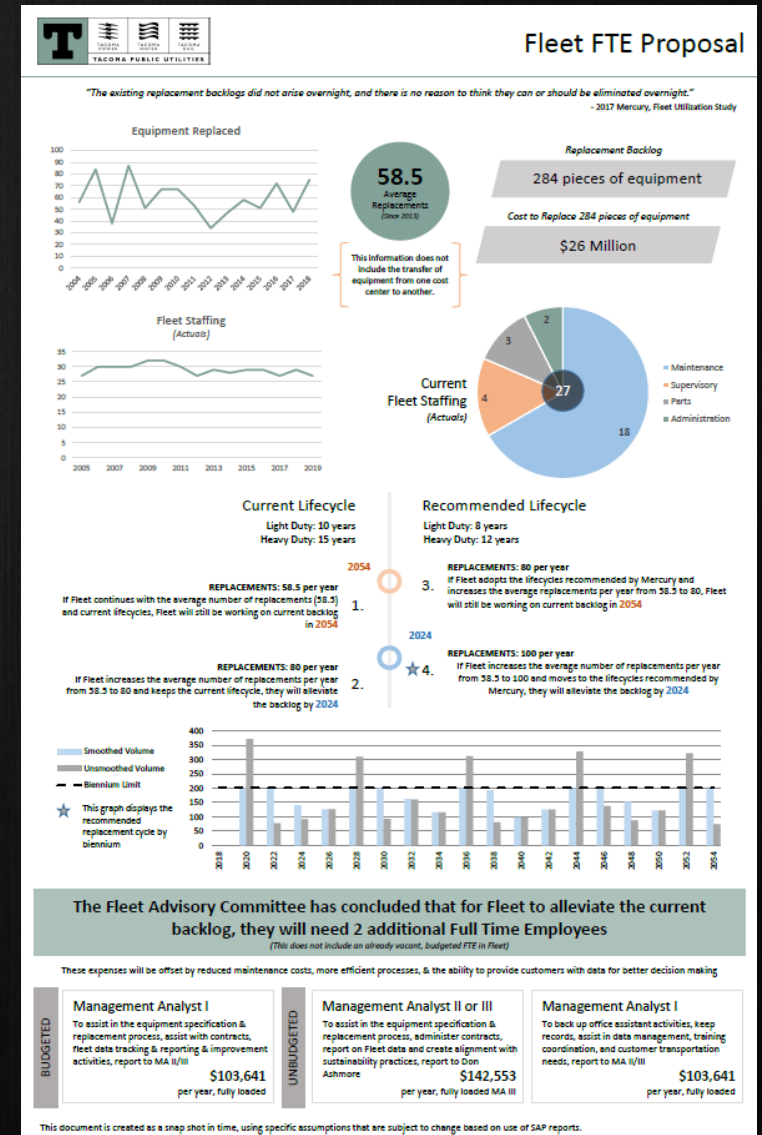
...arise overnight, and there is no reason to think they can or should be eliminated overnight."

58.5
Average Replacements
(Since 2013)

This information does not include the transfer of equipment from one cost center to another.

2017   2018

Replacement Backlog

284 pieces of equipment

Cost to Replace 284 pieces of equipment

$26 Million
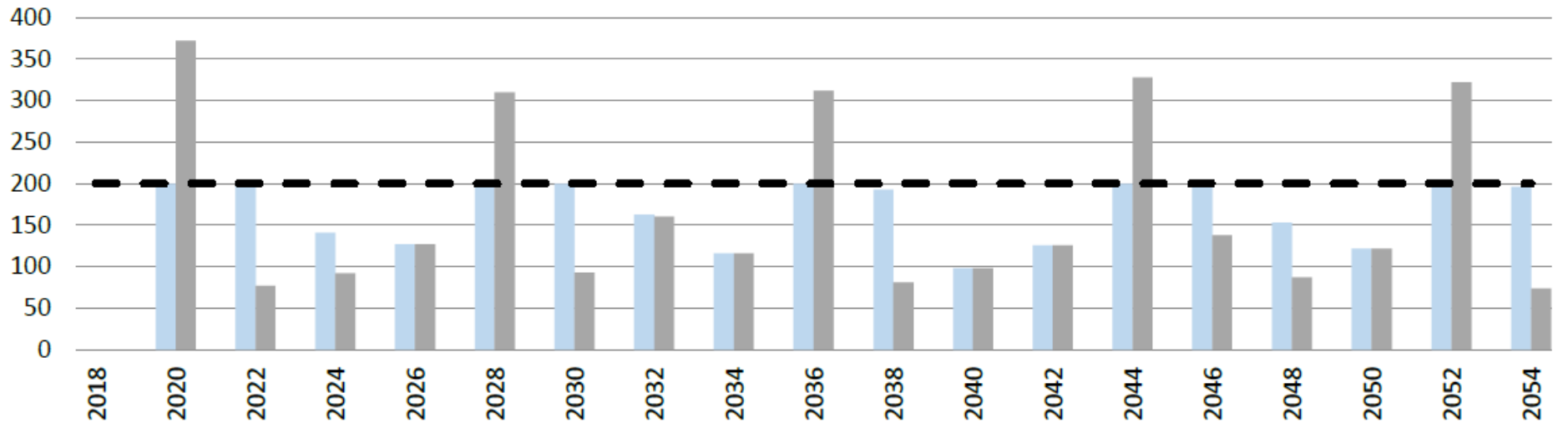
REPLACEMENTS: 58.5 per year

If Fleet continues with the average number of replacements (58.5) and current lifecycles, Fleet will still be working on current backlog in **2054**

REPLACEMENTS: 100 per year

If Fleet increases the average number of replacements per year from 58.5 to 100 and moves to the lifecycles recommended by Mercury, they will alleviate the backlog by **2024**
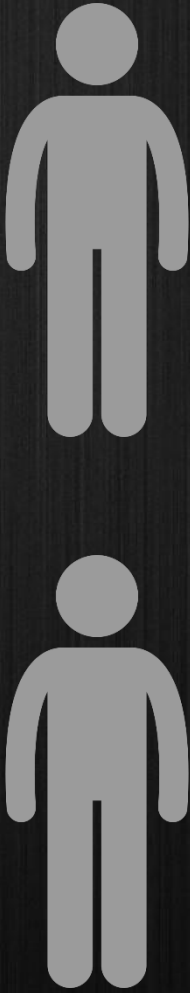
Replacements   Analysis

Write down why!

WHY:
WHY:
WHY:
WHY:
WHY:

Defining Problems

Ask why
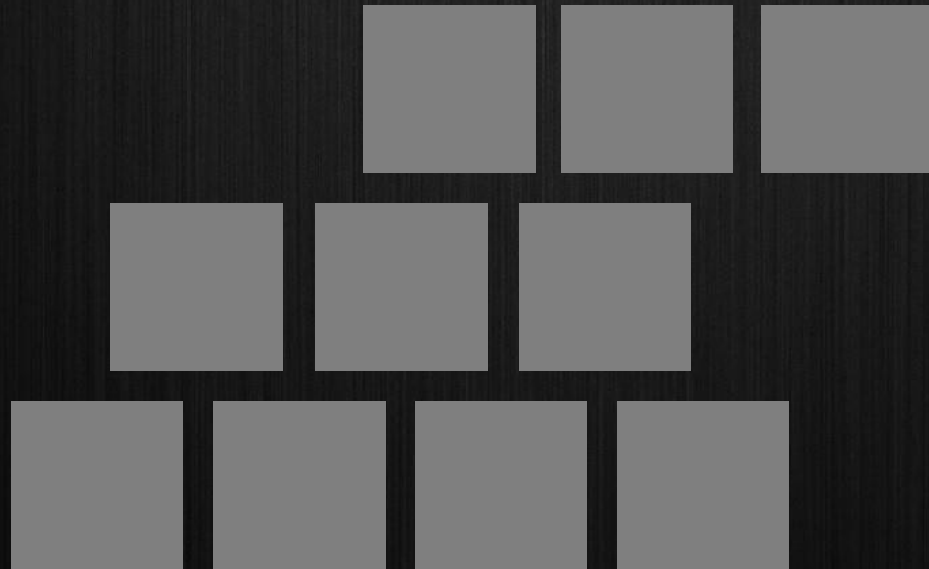
2

3

ANALYTICS + DATA WRANGLING + **SETTING GOALS**

= REAL WORLD SUCCESS
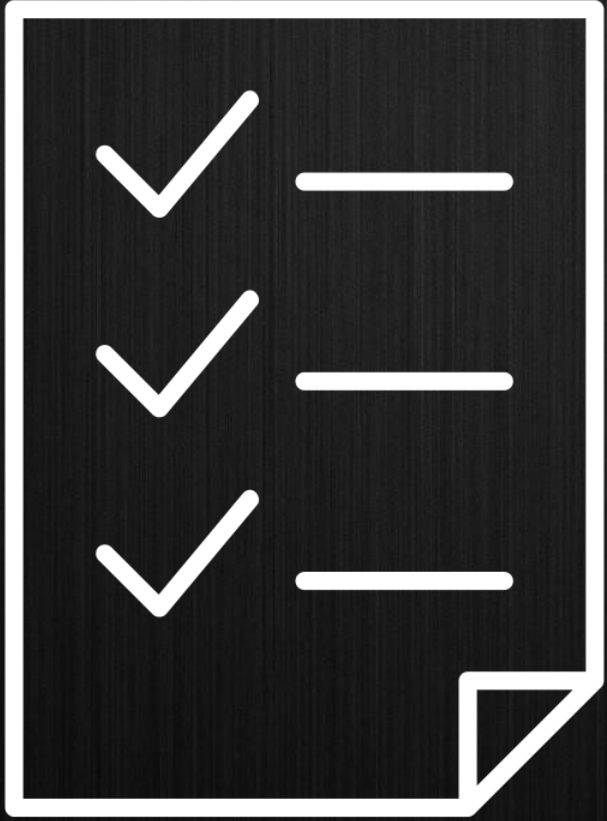
Write down your most important goal RIGHT NOW.

Set Goals

FLEET ADVISORY COMMITTEE ROADMAP

REPLACEMENT PROCEDURES
- Develop guidelines and procedures to follow when replacing vehicles

LONG-TERM REPLACEMENT PLAN
- Processes and procedures for replacing assets
- Identify Long-term replacement plan for all assets

REMOVE VEHICLES **IDENTIFIED IN STUDY**
- Work with vehicle owners to remove vehicles identified for elimination

- Identify processes and procedures to be followed for preventative maintenance

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ATIVE MAINTENANCE
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39

DEVELOP REPAIR VS REPLACE CALCULATOR
- Develop tool and instructions to guide replacement decisions

16

TAKE-HOME VEHICLES
- Create THV Policies and Procedures

14

PROCEDURES FOR COST CENTERS TO MANAGE FLEET ASSETS
- How and when to review assets in each cost center

REVIE
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10

ASSET UTILIZATION STRATEGY
- Identify asset management strategy for all asset classes

15

HOW TO MANAGE ASSETS AT OUTLYING PROJECTS
- Develop strategy for fleet assets at outlying projects

7

DEVELOP FLEET BUSINESS PLAN
- Determine components for successful operation of fleet services

18

IMPROVE USE OF SAP
- Review available SAP reports
- Determine how to better use SAP to manage fleet

SSIONING
PROCEDURES
olicies and procedures
mmissioning vehicles
uction fees

44

17

38

QA STANDARDS
- Develop Quality Assurance Standards and
Reporting

SAP Easy Access - User Menu for Haley Saul

- ▼ 📁 Favorites
  - ▶ 📁 Management Reports
  - ▶ 📁 Purchase Requisitions
  - ▶ 📁 Purchase Orders
  - ▶ 📁 Department Receiving
  - ▶ 📁 Training
  - ▶ 📁 Time Keeping
  - ▶ 📁 Financial Reporting
  - ▶ 📁 Human Resources
  - ▶ 📁 Capital Projects
  - ▶ 📁 Role Requests
  - ▶ 📁 Fleet
  - ▶ 📁 Revenues
  - • ⭐ MK03 - Display vendor (Purchasing)
  - • ⭐ ME33K - Display Contract
  - • ⭐ TRIP - Travel Manager
  - • ⭐ KSBT - Cost centers: Activity prices
  - • ⭐ SP02 - Display Spool Requests
  - • ⭐ FK10N - Vendor Balance Display
  - • ⭐ ME3L - Outline Agreements per Vendor
  - • ⭐ /PAYMETRC/BMENU - XiBuy Menu
- ▼ 📁 User Menu for Haley Saul
  - • 🔲 SQ01 - SAP Query: Maintain queries
  - • 🔲 SQVI - QuickViewer
  - • 🔲 KO88 - Actual Settlement: Order
  - • 🔲 KO8G - Act. Settlment: Int.-/Maint. Orders
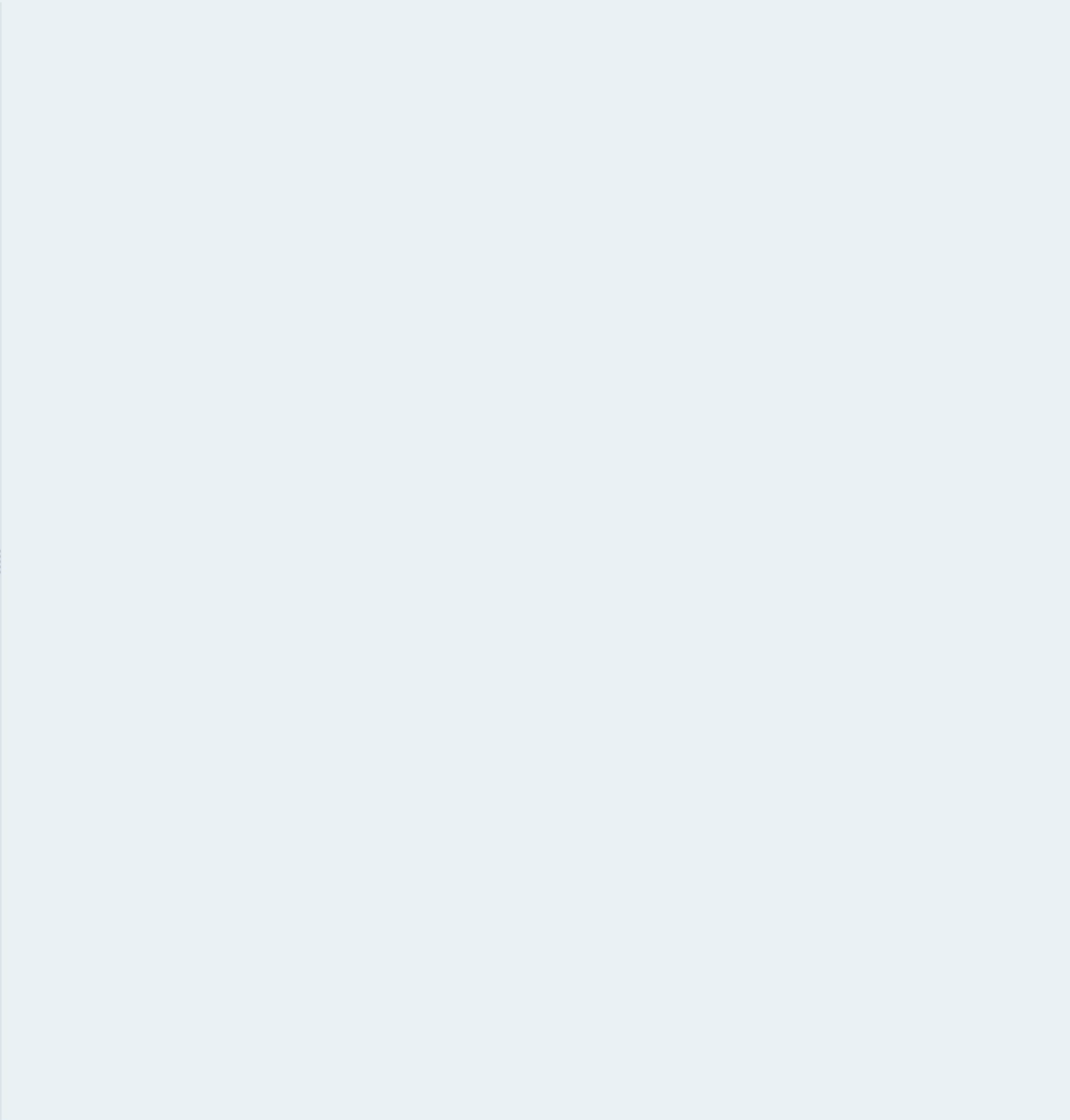 - ▶ 📁 Budget Reports - O&M
  - ▶ 📁 Project Financial Specialist
  - ▶ 📁 Update WBSE's with CAPT FERC
  - ▶ 📁 TPU Project Reports
  - ▶ 📁 YGENERAL2_A
  - ▶ 📁 Department Time Keeper
  - ▶ 📁 Employee ESS User
  - • 🔲 CJ13 - Display WBS Element
  - • 🔲 CAT2 - Time Sheet: Maintain Times
  - • 🔲 TRIP - Travel Manager
  - • 🔲 TRIP_EWT - Travel Manager
  - ▶ 📁 Human Resources
  - ▶ 📁 HR Training Department User
  - ▶ 📁 Work Group Supervisor
  - ▶ 📁 Employee Reimbursement and Trip Creator
  - • 🔲 SP02 - Display Spool Requests
  - • 🔲 Y_DV1_81000112 - 3533 for Billables - Includes Revenu
  - ▶ 📁 CCS Reports
  - ▶ 📁 Financial Reports
  - ▶ 📁 Work Management Reports
  - ▶ 📁 ------ Other Reports
  - ▶ 📁 QuickView Reports

Cost Center | Order_Summary_Trend | Total_Cost_Center_Trend | Equipment_Cost_Trend | Don's Visual

TACOMA POWER   TACOMA WATER   TACOMA RAIL
TACOMA PUBLIC UTILITIES

Data Source(s): Fleet Data Pipeline
Data Updated through: 10/31/2022
Owner: Hannah Ball

Fleet Reporting Suite | Cost Center Detail

Choose Your Fleet ▶   [TPU ▾]
Choose Your Filter ▶   [Cost Center ▾]
Choose Your Cost Center ▶   [562300 - Power Com... ▾]
Filter for Status ▶   [INS ▾]
Select Order Date Range ▶   [Last 13 months ▾]

3
Equipment in Cost Center

$6,252
in Costs for Selected Date Range

Equipment by Replacement Year

2022

0   1   2   3

$4,000
$3,000
$2,000
$1,000
$0

$3,041   FM01 - Corrective..
$662   FM02 - Preventative
$558   FM08 - Fuel
$1,990   FM08 - Fees & Misc

Equipment List

Filter to an Equipment ▶   [(All) ▾]
Or Filter to a Sort Field ▶   [▾]

Fleet Equipment by Cost Center | 562300 - Power Commercial/Indust & Tech Svc
Hover and click the plus sign next to Lifecycle to see spend details.

Select **One** Equipment to See Details Below ▶

| | | | | | | | Lifecyle | | | |
Equipment	Equipment_Description	Sort_Field	License_..	VIN	Functional_Loc	Year of Replace..	FM01 - Corrective Ma..	FM02 - Preventative ..	FM08 - Fuel	FM08 - Fees & Misc
7118019	09 TOYOTA CAMRY HEV		68074D	4T1BB46KX9U..	FM-U-FS-C-PWR -ES -562300	2022	$1,936		$127	$988
7118340	10 FORD FUSION HEV		51798D	3FADP0L32AR..	FM-U-FS-C-PWR -ES -562300	2022	$1,105	$662	$431	$1,003

REPLACEMENT PROCEDURES

* Develop guidelines and procedures to follow when replacing vehicles

LONG-TERM REPLACEMENT PLAN

* Processes and procedures for replacing assets
* Identify Long-term replacement plan for all assets

REMOVE VEHICLES IDENTIFIED IN STUDY

* Work with vehicle owners to remove vehicles identified for elimination

* Identify processes and procedures to be followed for preventative maintenance

39

DEVELOP REPAIR VS REPLACE CALCULATOR

* Develop tool and instructions to guide replacement decisions

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* Create THV Policies and Procedures

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PROCEDURES FOR COST CENTERS TO MANAGE FLEET ASSETS

* How and when to review assets in each cost center

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SSIONING

PROCEDURES

olicies and procedures mmissioning vehicles uction fees

44

38

QA STANDARDS

* Develop Quality Assurance Standards and

Device Layouts · Data Sources

Edit · View: Original · Watch · Share

Replacement_explore · Surplus_explore

Fleet Lifecyle Analysis BETA

Start here:
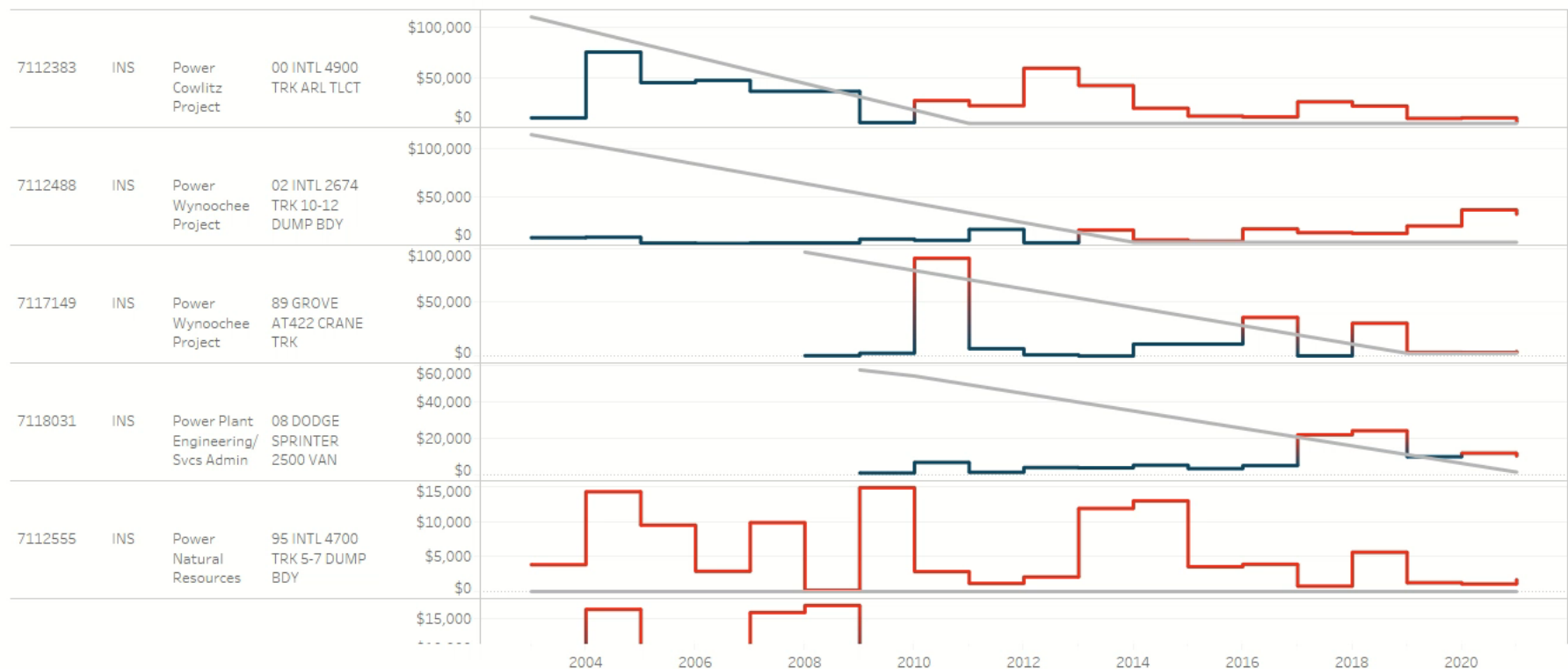Select your Division(s). Click Apply.

PWR -GEN

Select your Cost Center(s)

(All)

This will populate based on NAFA codes in the cost center.

(All)

Narrow down your view by Equipment Typ...

(All)

Choose the statuses you want to see.

(All)

And finally, select any and all equipment to focus on.

(All)

Resale Value vs Annual O+M Costs. O+M costs include Operations (fuel + misc) and Maintenance (corrective, preventive, and accident)

RED indicates O+M costs exceeded resale value in that year. BLUE inidcates O+M costs are below resale value in that year. GREY indicates the resale value in that year. Ideally, we will get rid of the equipment BEFORE the annual costs exceed resale value.

Select an equipment to see the details in the table below.

7112383	INS	Power Cowlitz Project	00 INTL 4900 TRK ARL TLCT
7112488	INS	Power Wynoochee Project	02 INTL 2674 TRK 10-12 DUMP BDY
7117149	INS	Power Wynoochee Project	89 GROVE AT422 CRANE TRK
7118031	INS	Power Plant Engineering/ Svcs Admin	08 DODGE SPRINTER 2500 VAN
7112555	INS	Power Natural Resources	95 INTL 4700 TRK 5-7 DUMP BDY

Prioritize!

Setting Goals

Be intentional

3

4

ANALYTICS + DATA WRANGLING +
CELEBRATING SUCCESSES

─────────────────────────────────

= REAL WORLD SUCCESS
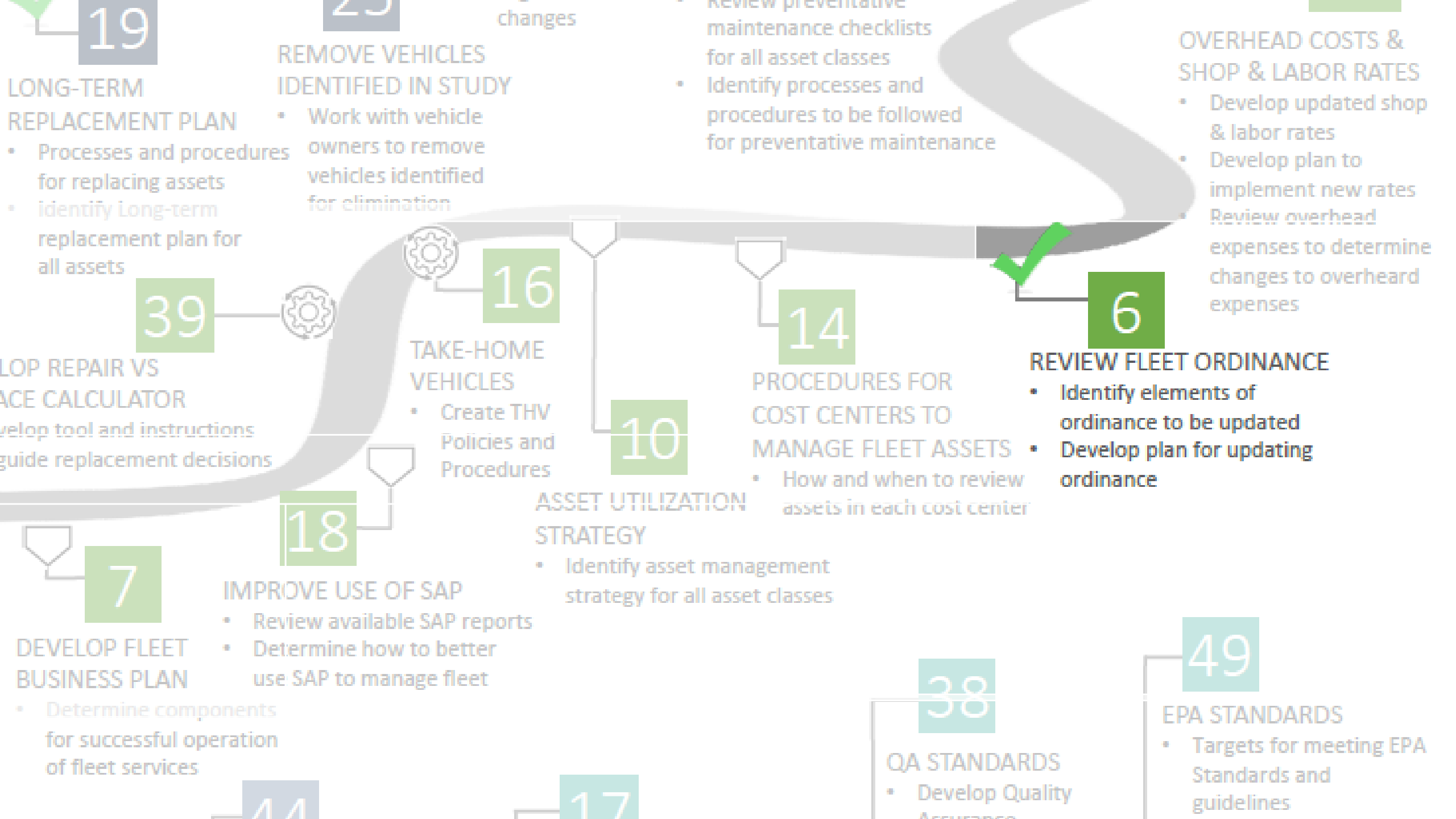
19

LONG-TERM REPLACEMENT PLAN

- Processes and procedures for replacing assets
- Identify Long-term replacement plan for all assets

25

REMOVE VEHICLES IDENTIFIED IN STUDY

- Work with vehicle owners to remove vehicles identified for elimination

changes

- Review preventative maintenance checklists for all asset classes
- Identify processes and procedures to be followed for preventative maintenance

OVERHEAD COSTS & SHOP & LABOR RATES

- Develop updated shop & labor rates
- Develop plan to implement new rates
- Review overhead expenses to determine changes to overheard expenses

39

LOP REPAIR VS ACE CALCULATOR

- Develop tool and instructions guide replacement decisions

16

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PROCEDURES FOR COST CENTERS TO MANAGE FLEET ASSETS

- How and when to review assets in each cost center

6

REVIEW FLEET ORDINANCE

- Identify elements of ordinance to be updated
- Develop plan for updating ordinance

7

DEVELOP FLEET BUSINESS PLAN

- Determine components for successful operation of fleet services

18

IMPROVE USE OF SAP

- Review available SAP reports
- Determine how to better use SAP to manage fleet

38

QA STANDARDS

- Develop Quality Assurance

49

EPA STANDARDS

- Targets for meeting EPA Standards and guidelines

44

17

Celebrating > Do Something Fun
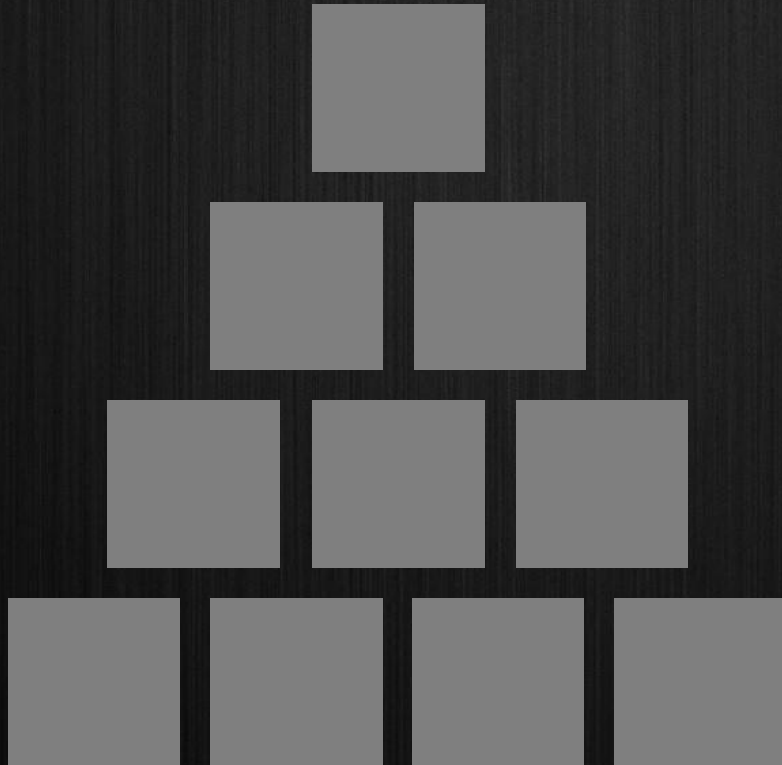
4

ANALYTICS + DATA WRANGLING +

Building Relationships
Defining Problems
Setting Goals
Celebrating

_____

= REAL WORLD SUCCESS

Haley Saul

hsaul@cityoftacoma.org