Item 5D

Asset Management & GIS Update

Saving Money **Maximizing Useful Life** **Minimizing Risk** **Provide High Quality Infrastructure**

Tyler Jesse
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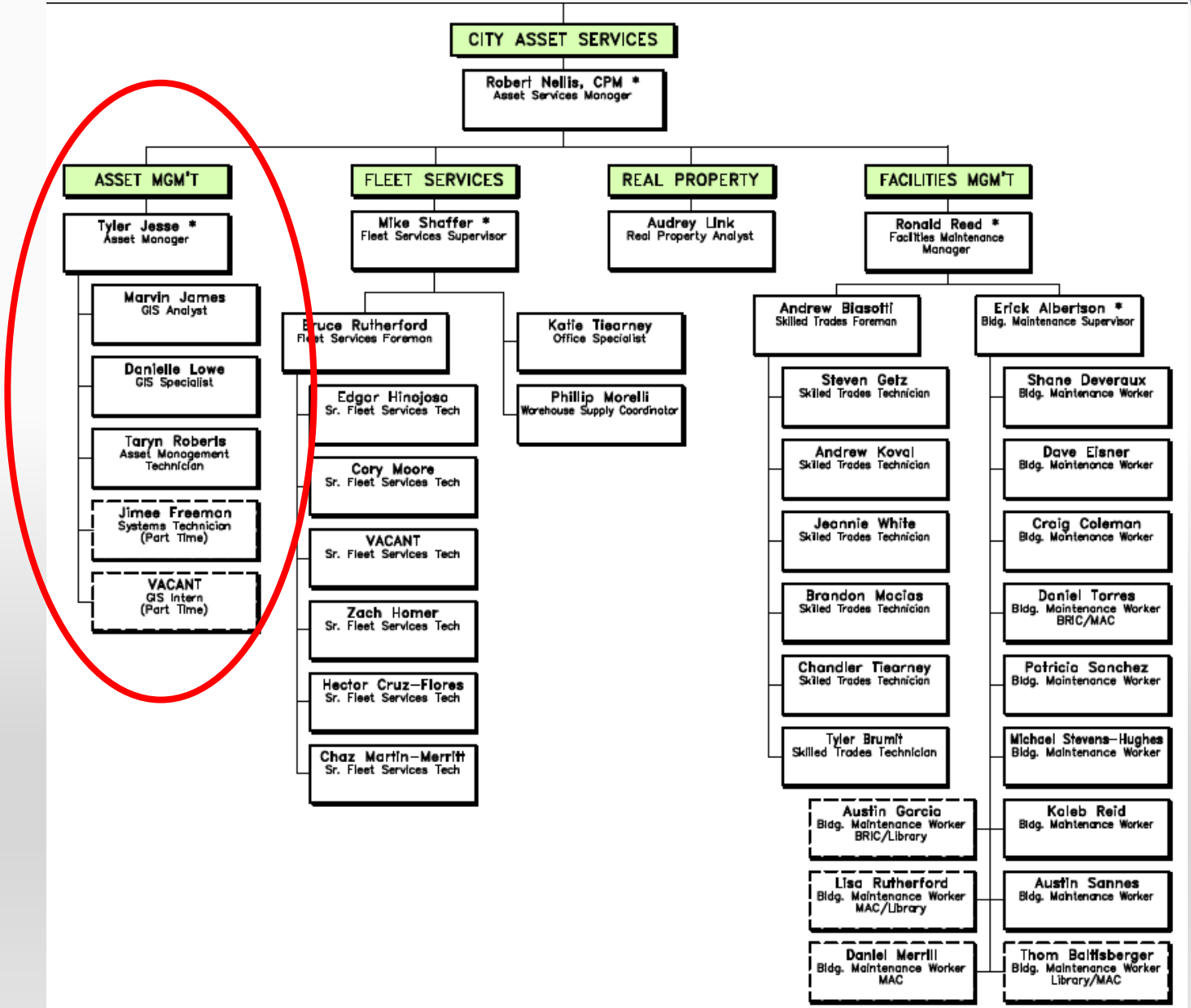
Board of Supervisors Retreat
February 29, 2024

City Asset Services



Asset Management Refresher

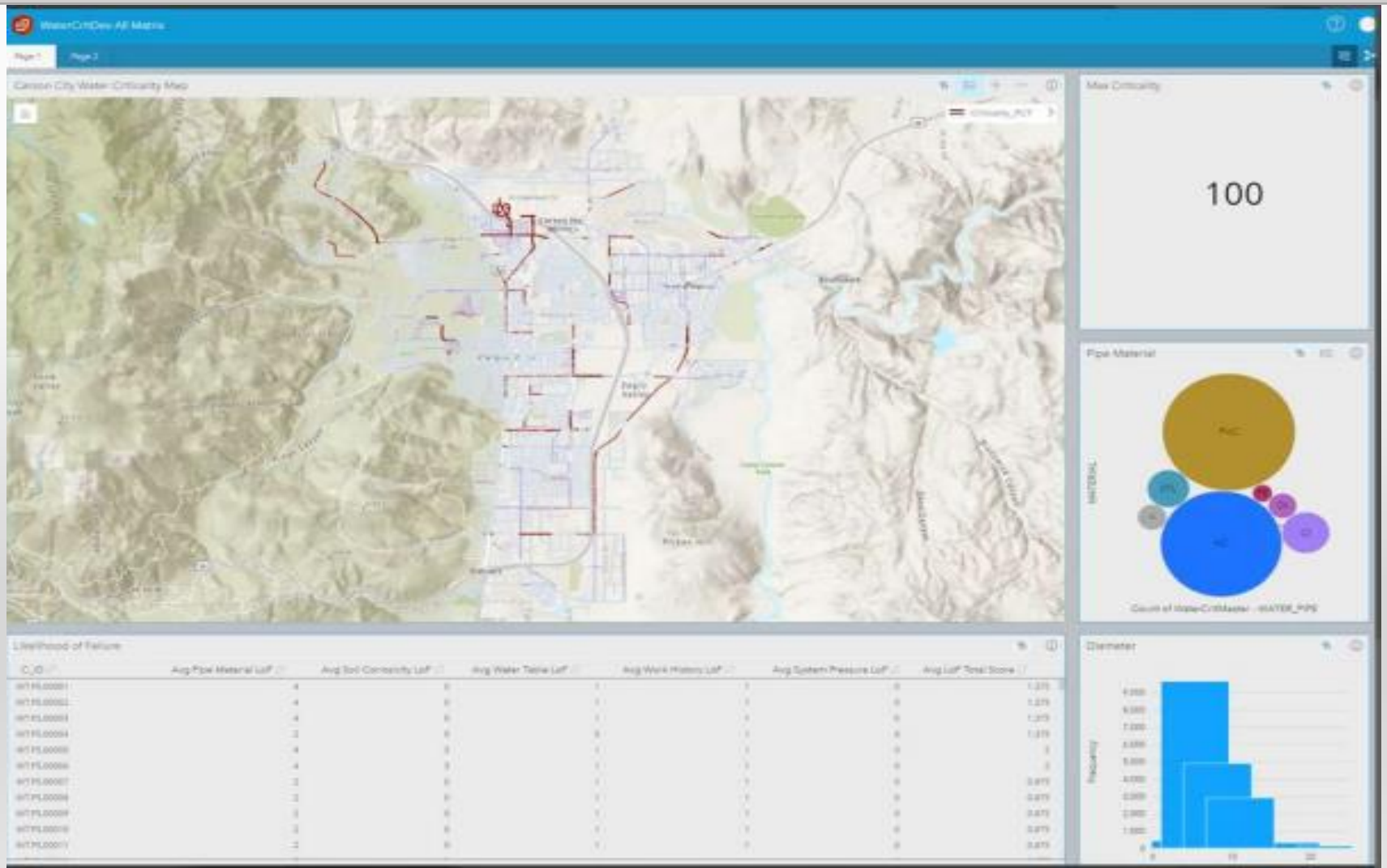
What is Asset Management?

- **ISO 55000 Definition: Ensuring that the assets deliver maximum value.**
- **This means that an asset:**
  - **Delivers its functional requirements in line with the business objectives and**
  - **Does so in the most economical, safe, sustainable and reliable manner.**

Goals of Asset Management

- Minimize risk and maximize the effective useful life of City assets
- Optimize customer service
- Improve succession planning and the transfer of institutional knowledge
- Develop a proactive maintenance and planning strategy
- Promote data driven decisions and increase transparency

GIS Asset Management



2022 BOS Recap

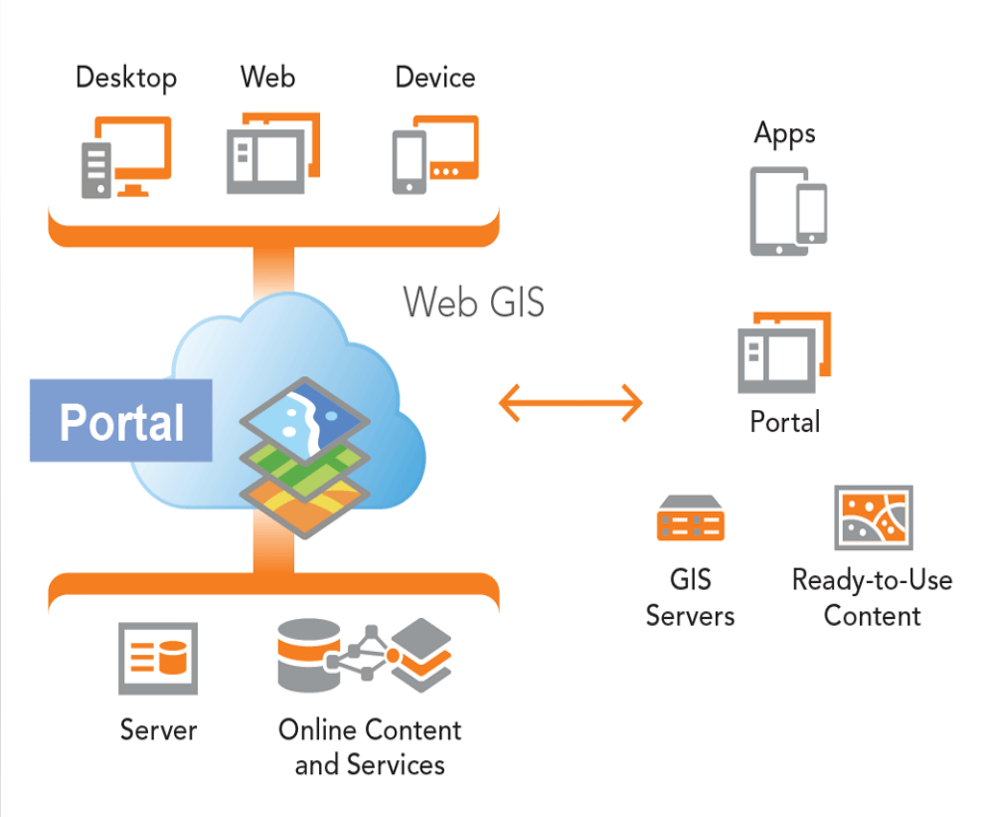
Major themes of last presentation:

A. **GIS:**
   - **GIS architecture upgrade**
   - **GIS Assessor migration**
   - **Covered important apps: CityView, Lead and copper**

B. **AssetMGMT:**
   - **ISO55000 SAMP**

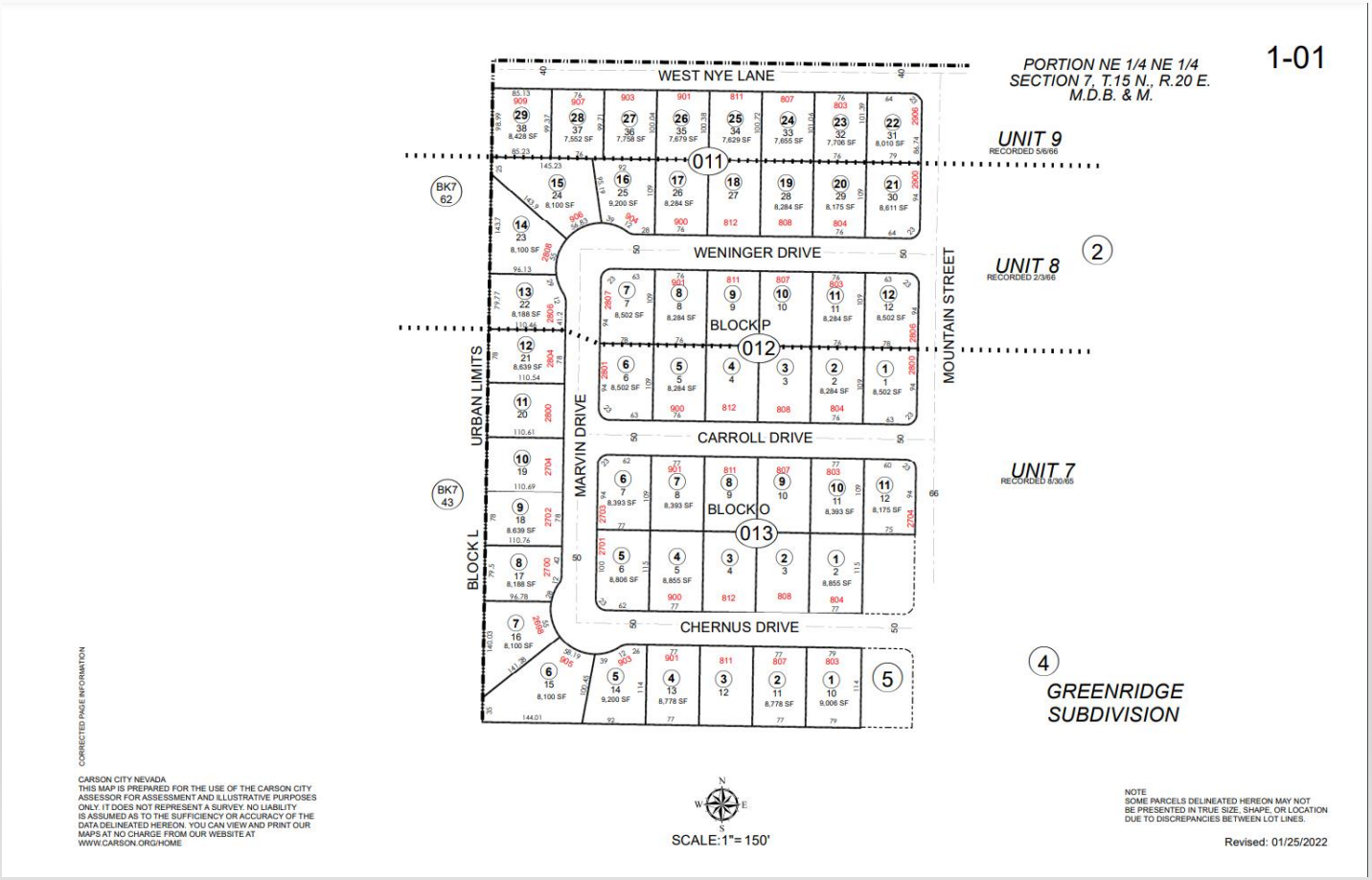
C. **Next Steps were:**
   - **Attain Forecasting CIP Software**
   - **Update GIS Strategic Plan**
   - **Parks onboarded into EAM**

GIS Architecture Upgrade

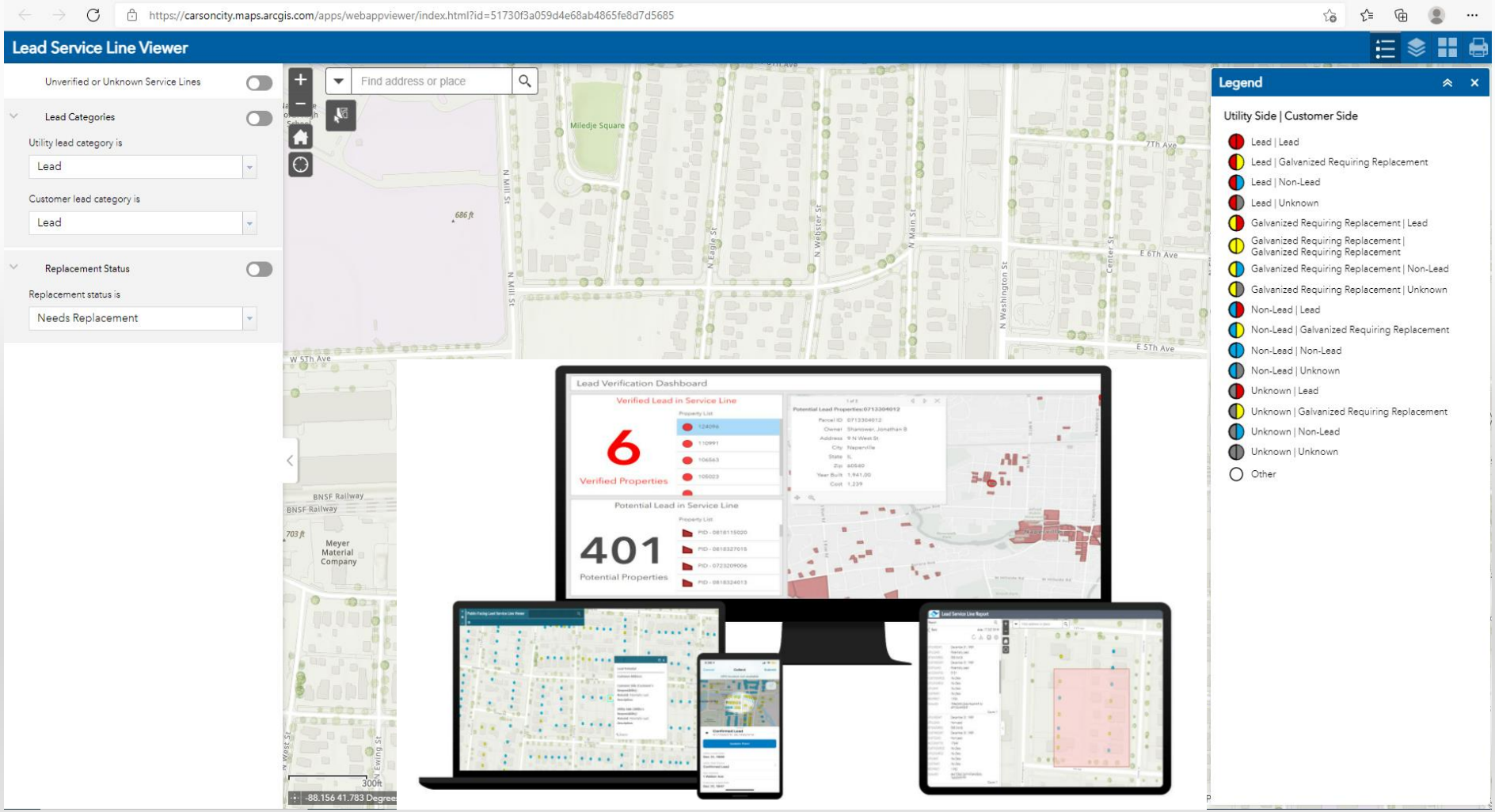


- Maximize ArcGIS value
  - Deploying new mobile apps is easier
  - Internet facing capability
  - Splits user load for more throughput
  - Enables use of all licenses
  - High availability

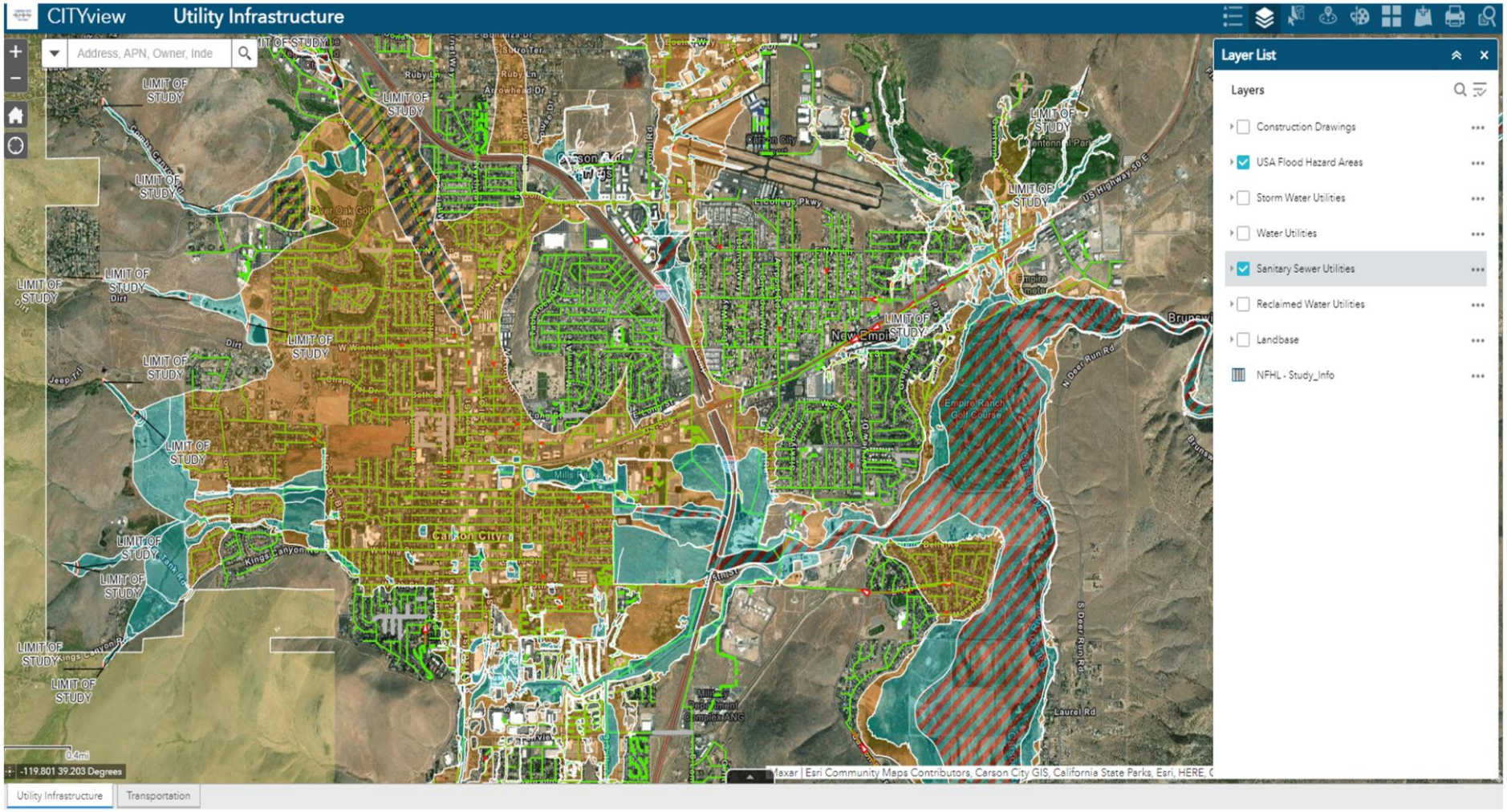
2022: GIS Assessor Migration



GIS Lead and Copper



GIS CityView App



Strategic Asset Management (SAMP)

WHAT IS A SAMP

MISSION, GOALS, OBJECTIVES

WHY YOU EXIST

SAMP

TRANSLATES

MNPB CORPORATE GOALS

INTO

ASSET MANAGEMENT GOALS

HOW ASSETS CONTRIBUTE TO MNPB'S OBJECTIVES

HOW PORTFOLIO OBJECTIVES CASCADE TO INDIVIDUAL ASSETS

DECISION CRITERIA

LEVELS OF SERVICE

RISK

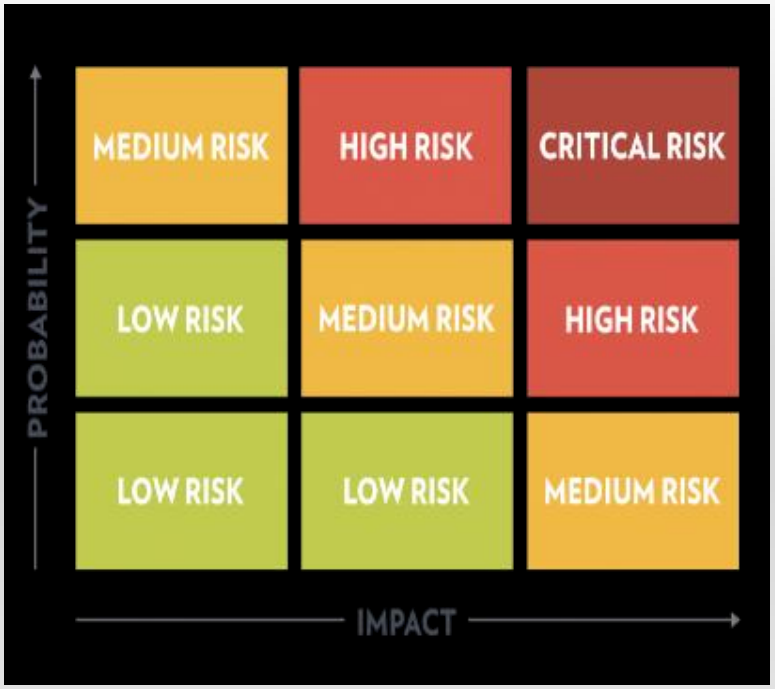
SCOPE OF ASSET MGT. SYSTEM

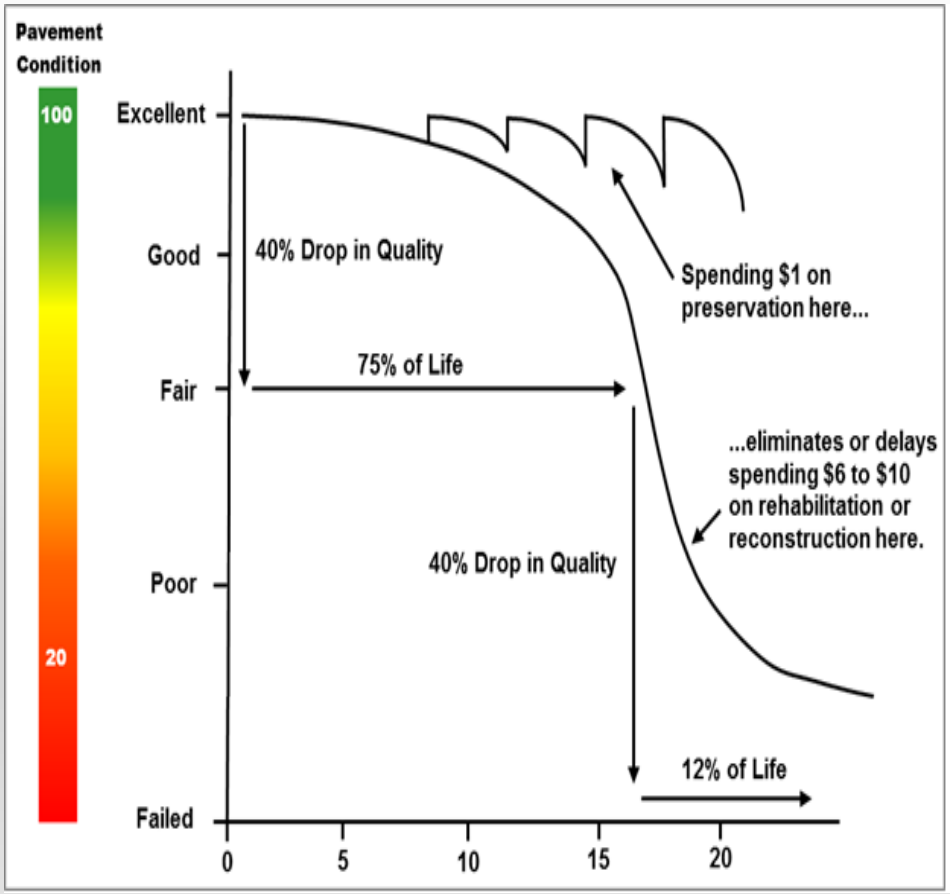
CAPITAL IMPROVEMENT PLANS

ASSET MGT. PLANS

2022 Next Steps

- **Acquire and Implement CIP Forecasting Software**
- **Update GIS Strategic Plan**
- **Parks Asset Framework**



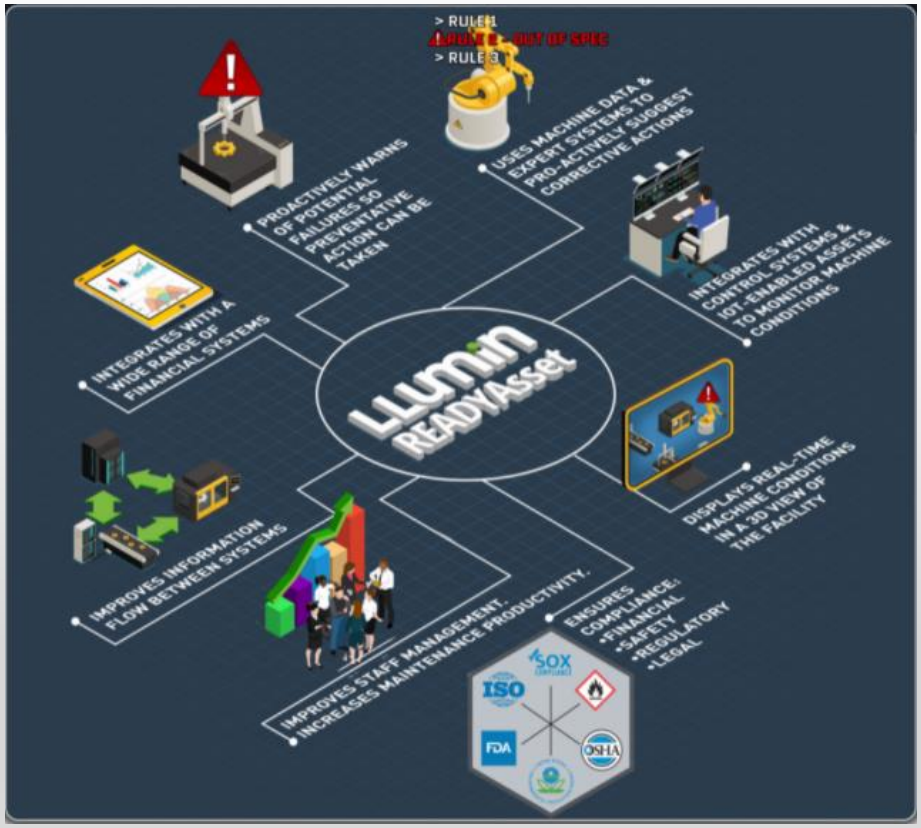


Asset Management Today

1. Asset Management Initiatives
2. GIS:
   a) Small Government Enterprise Agreement
   b) GIS initiatives
3. Data Optimization Technology (DOT)

Asset Management Initiatives

- Fleet Software Review
- Parks Equipment Onboarding
- Parks Operations Onboarding
- Bar Coding
- Enterprise Asset Management Tutorials
- Dashboarding and Reports
- Landfill Assets inventoried



Small Government Enterprise Agreement (SGEA)

GIS HUB

- Visibility for Public and Employees
- Centralization
- Access from Granicus
- Content
  - GIS HUB Mission
  - GIS at Carson City video
  - Data portals (Public and Employee)
  - Featured Applications
  - Training Storymaps
- Future Development

Data Optimization Technology

Risk and Forecasting Definitions:

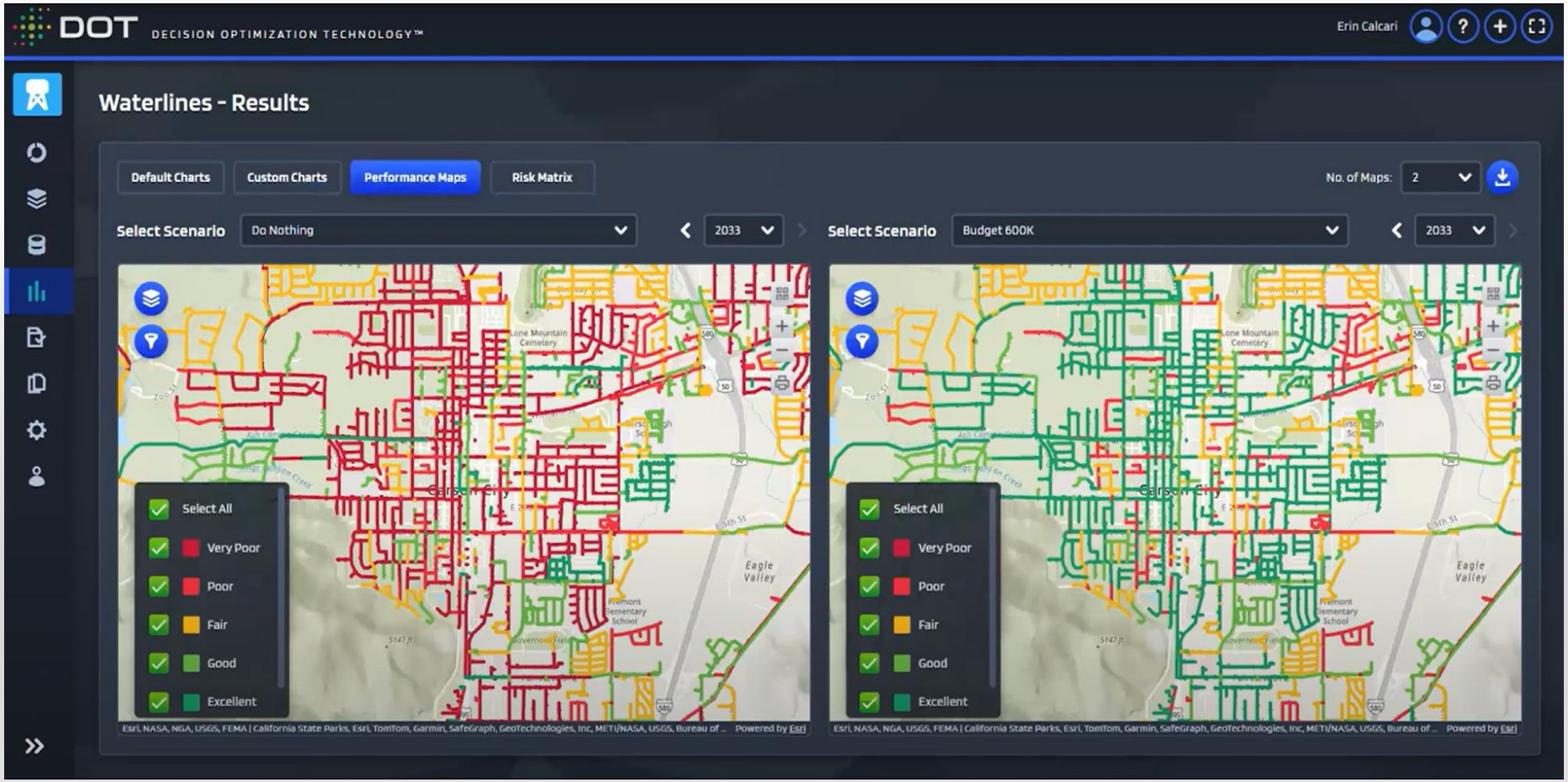
- **<u>Risk:</u>** **is the product of Likelihood of failure and Consequence of failure**
- **<u>Forecasting</u>: in this context is making predictions on the future state of our assets based on current condition and various intervention funding scenarios**

50% 4 FINAL LIKELIHOOD 2 18

DETECTABILITY						
	Almost certain	M	S	H	H	H
	Likely	M	M	S	H	H
	Possible	L	M	M	S	S
	Unlikely	L	L	M	S	S
	Rare	L	L	L	M	S
	CONSEQUENCE	Insignificant	Minor	Moderate	Major	Extreme

3

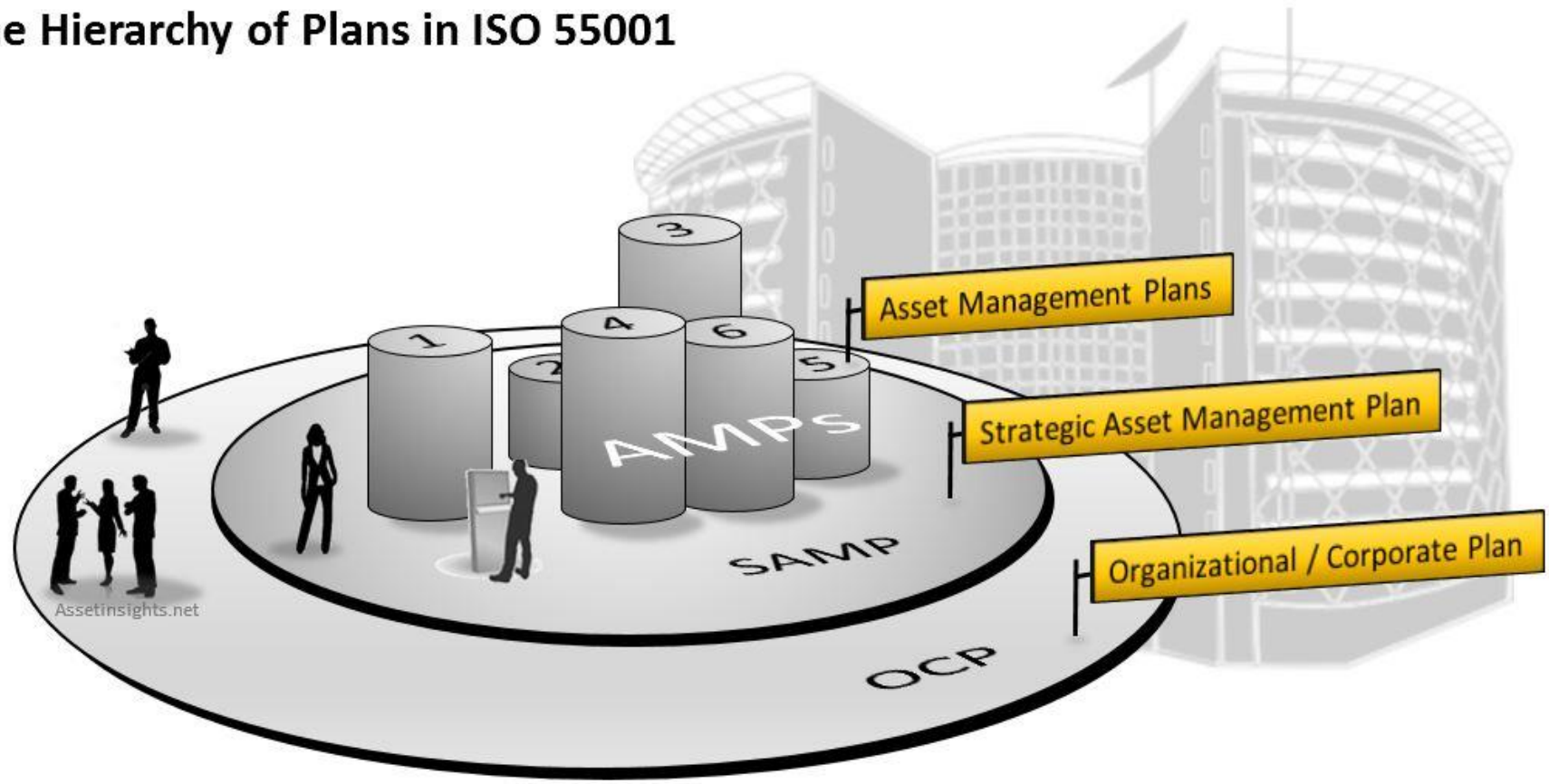
Data Optimization Technology



Strategic Plan Next Steps

Visualizing (and Vision-izing) Asset Management

The Hierarchy of Plans in ISO 55001



Strategic Asset Management Plan (SAMP)

- **Ensure alignment with Board's strategic goals**
- **Identify Stakeholder needs & expectations**
- **State of Asset Management and proposed strategy to meet objectives**

GIS Strategic Plan

Key Initiatives

- Inter-Departmental Collaboration
- Business Process Support
- Mobile GIS Enhancement
- Citizen Engagement

Goals & Objectives

- Visibility
- Mobility
- Reporting
- Asset Management Objectives
- Asset Management Plans
- EAM Process reviews

Questions & Discussion

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