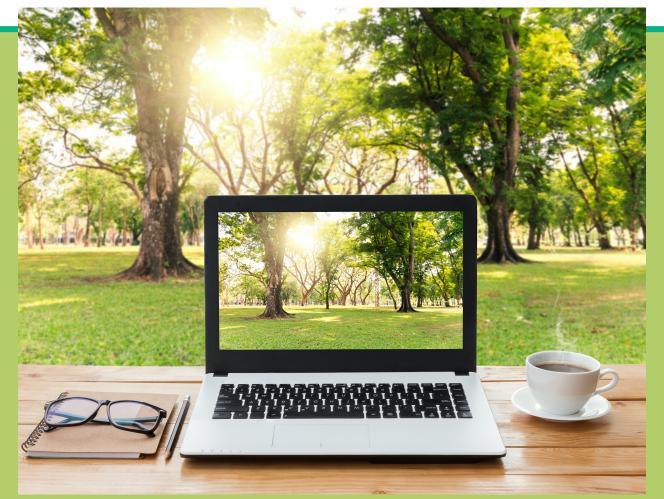




WELCOME TO THE 2020 FRPA CONFERENCE!

# Parks Asset Management and the Role of GIS

A parks and urban forestry session that explores the use of GIS and asset management software to manage trees and park hardscapes





## LEARNING OBJECTIVES

- Understand the difference between asset tracking and asset management
- Understand the role of GIS in asset management
- Understand how asset management aligns with master planning and agency goals



**Phil Christman** is the Parks Superintendent for the City of Largo. He has 20 years experience in parks maintenance, public works and urban forestry. He is a CPRP, CPSI and a Certified Arborist. Phil currently serves as FRPA's representative on the Southwest Florida Water Management District's Agriculture and Green Industry Advisory Committee. He is involved with various City of Largo infrastructure projects and is the Chairman of Largo's GIS Steering Committee. Phil is a key member of the implementation team for VUEWorks, Largo's new enterprise asset management system.





### The Path Ahead





## Asset Tracking vs. Asset Management

#### **Asset Tracking**

Refers to technical and operational aspects of assets. What assets do I have? Where are my assets located? What are the characteristics of those assets?

#### **Asset Management**

Refers to the fiscal and business view of assets.

How much does it cost to maintain your assets?

Should you replace, rehab or repair an asset?

How can you lower the Total Cost of Ownership (TCO)?



"If you can't measure it, you can't improve it."

- Peter Drucker



#### What assets do I have?

Trees – Monocots (e.g. palm trees) and Dicots (e.g. oaks, maples, sycamore trees)

**Hardscapes** – playgrounds, shelters, benches, drinking fountains, fencing, trashcans

Irrigation - main shut off valves, controllers,
zone valves

**Equipment** – mowers, power tools

Fertilizer and pesticides

More importantly, know what not to track!

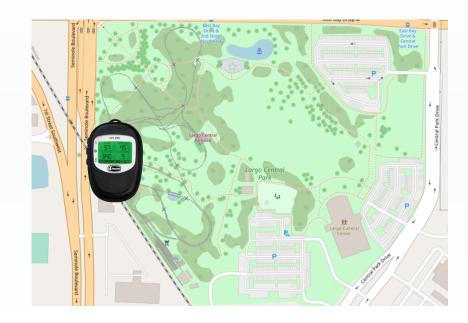




## Where are my assets?

- **1. Do your research** What are best practices and lessons learned from other cities and counties?
- **2. Ask the right questions** What questions about your assets do you need answered?
- **3. Define your data model** Decide which attributes to collect
- **4. Use industry leading GIS** Where are you going to store this data? ESRI ArcGIS Enterprise
- **5. Data Collection** Who is going to collect the data? What tools are they going to use?

Tip: Use Survey Grade Tools for GPS Coordinates





#### When is the best time to start?

"Without the right leadership, culture and behaviors, an organization cannot produce its desired outcomes, just as without the right soil, nutrients, environment and gardeners a tree cannot produce its fruit."

- Living Asset Management, Lafria and Hardwick, Engineers Media (2013)

The best time to start was years ago.



The second best time is now.



## Why asset management?

#### **Better Management of Urban Forests**

**Revenue** – Not usually a factor in local government software projects

**Cost Reduction** – Lower ongoing maintenance costs

Cost Avoidance – Time saved (increased productivity), time saved from reduced number of customer service calls, faster repair (and, therefore, less liability) from damaged assets

**Risk Avoidance** – Reducing the hazards of trees in poor condition through proactive maintenance

Non-Financial Benefits – Increased citizen satisfaction, better forecasting





#### Who is going to do all this work?

#### **Better Together**

- Parks
- Environmental Services
  - Wastewater Collection System
  - Wastewater Reclamation Facility
  - Reclaimed Water
  - Environmental Control
- Streets & Stormwater
- Facilities
- Engineering
- IT Department, Fire Department, Fleet, and more!





#### **Increasing Decision Making Effectiveness**

Objective: Tie Assets to Costs (Fixed and Expense Costs)

Objective: Tie TCO to Prioritization Criteria

## Asset Management Maturity Model

Reactive



Disparate Data **Lack of Process** and Tools

Point in Time • List of Assets

- Managed and Well **Defined Assets**
- Asset Data Transfer **Processes Established**
- Manual Data Transfer•

Single Planning Portfolio for Assets

**Scheduled Condition** 

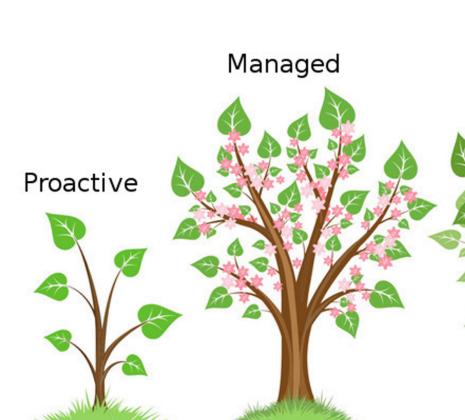
Assessments

Asset Data Transfer **Processes Refined** 

Well Established **Prioritization Criteria** 

Optimized

- **Cross Asset Portfolio** Planning
- Maximized Asset Life
- **Minimized Costs**

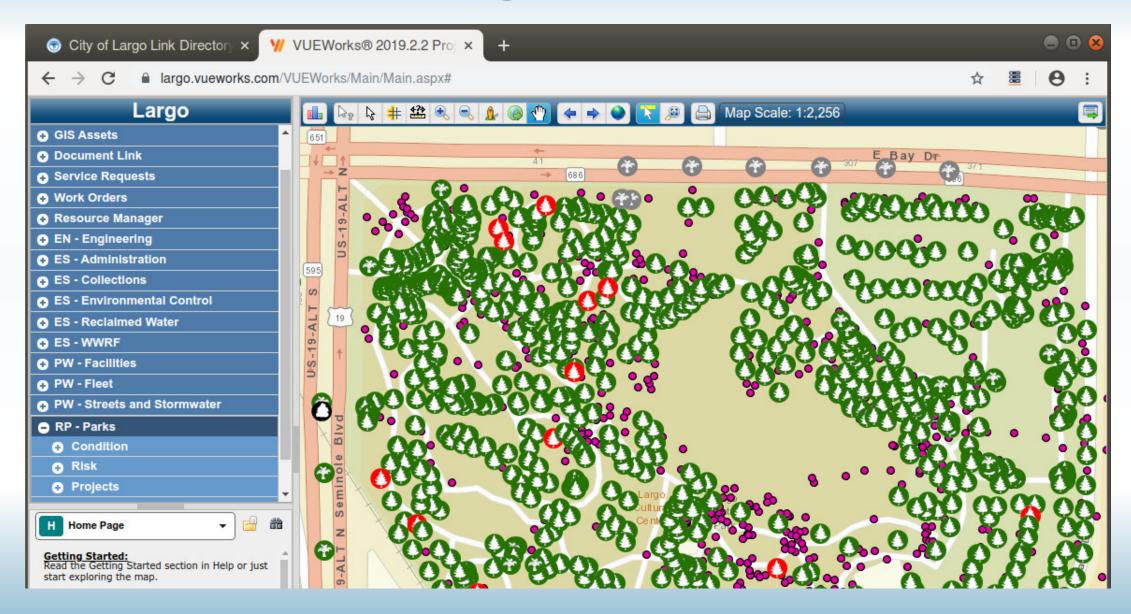


## DTS VUEWorks Asset Management System

DTS VUEWorks Features		
Service Requests	Valuation (GASB34)	
Work Orders	Budget Forecasting	
ESRI GIS Integration	Projects	
Request Portal Website	Facilities Management	
Resource Manager	MobileVUE Work Order Mobile App	
Condition Assessment	FieldVUE Mobile App	
Risk Assessment	FacilityVUE Facilities Management Mobile App	



### Asset Management Software



## How Asset Management Aligns with Largo Master Planning

Mission 1: Increase Tree Canopy and Associated Services	Mission 2: Progress Through Outreach and Collaboration	Mission 3: Improve Public Tree Management
Strategy 1: Set a Canopy Goal Strategy 2: Work to Achieve Canopy Goal through Preservation Strategy 3: Work to Achieve Canopy Goal through Planting Strategy 4: Work to Achieve Canopy Goal through Support Strategy 5: Regularly Measure and Assess Canopy Progress	Strategy 6: Build a Support Structure and Team for Outreach Strategy 7: Define City Neighborhoods Strategy 8: Develop a Campaign Brand and Messaging Strategy 9: Develop an Outreach Plan	Strategy 10: Complete Missing Inventory Data Strategy 11: Develop a 3-5 Year Management Plan Strategy 12: Improve and Streamline Tree Selection Process Strategy 13: Institute Policy Improvements Strategy 14: Develop a Disaster Management Plan

## How Asset Management Aligns with Agency Goals: City of Largo



### Largo Strategic Plan

INITATIVE

Renew our Natural Environment to Ensure Sustainability for Future Generations

Advance a Flexible and Resilient Organization That Delivers Superior City Services

Foster a Community Where Opportunities Exsist for Residents and Businesses to Realize Their Full Potential

Invest in Quality Public Infrastructure

Build a Community of Safe & Healthy Neighborhoods

Ensure the Health, Safety, and Economic Viability of the Community Through Effective Emergency Management

Develop an Active & Interconnected Downtown

Cultivate and Support a Vibrant Intergenerational Community That Attracts Residents & Businesses

FOCUS AREA

SUSTAINABILITY

PUBLIC HEALTH & SAFFTY

COMMUNITY PRIDE

JOIN THE CONVERSATION ON LOVELARGOFL.COM

## How Asset Management Aligns with Agency Goals: RPA Department

#### **VISION**

To be the number one reason people want to visit and live in Largo.

#### **MISSION**

To strengthen the community by creating memorable experiences through education, recreation, parks and arts.

#### **VALUES**

**Passion** 

**Professionalism** 

Creativity

Teamwork



### How Asset Management Aligns with FRPA

#### **VISION**

An empowered and engaged network of members, advocates, and partners equipped to advance parks and recreation.

#### **MISSION**

To establish parks and recreation as a cornerstone of health, economic development, environmental sustainability, and community throughout the State of Florida.



Competence

Leadership

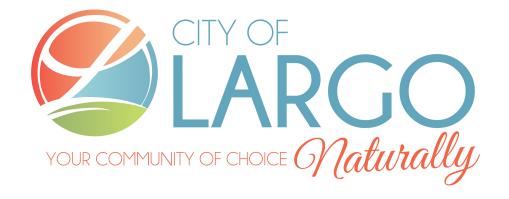
**Innovation** 

Performance Excellence

Stewardship







## Phil Christman

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