City Council Study Session
February 20, 2024
AB 6413

CITY GIS PRODUCTS

TONIGHT'S PRESENTATION

1 MEET THE TEAM

2 CITY GIS HISTORY

3 GIS SERVICES

4 INTERNAL PRODUCTS

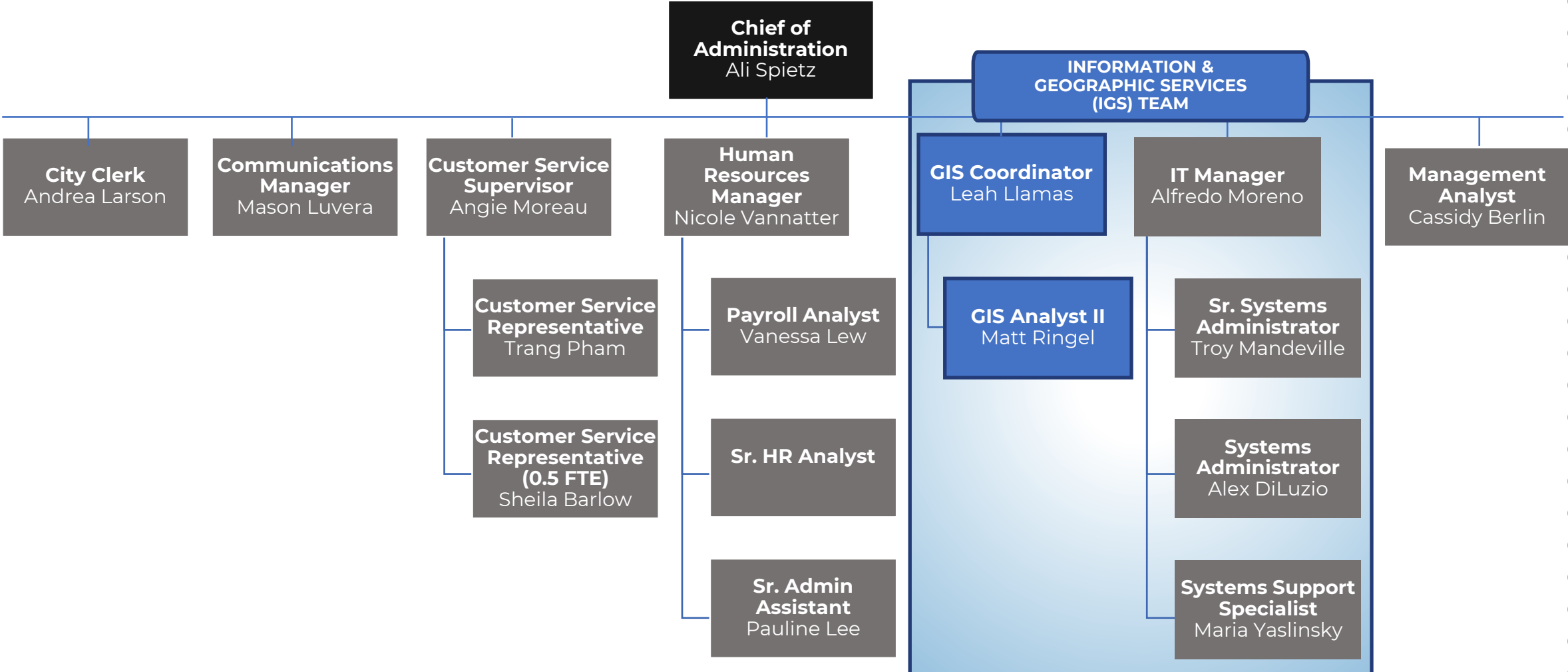**5** EXTERNAL PRODUCTS

6 KEY PROJECTS

7 SUMMARY

8 QUESTIONS

PRODUCT DEMOS:

- Internal Web GIS
- Pavement Sensor Dashboard
- Public GIS Data & Map Archive
- Permit & Land Use Web Map

MEET THE TEAM

ADMINISTRATIVE SERVICES DEPARTMENT

Chief of Administration
Ali Spietz

INFORMATION & GEOGRAPHIC SERVICES (IGS) TEAM

City Clerk
Andrea Larson

Communications Manager
Mason Luvera

Customer Service Supervisor
Angie Moreau

Human Resources Manager
Nicole Vannatter

GIS Coordinator
Leah Llamas

IT Manager
Alfredo Moreno

Management Analyst
Cassidy Berlin

Customer Service Representative
Trang Pham

Payroll Analyst
Vanessa Lew

GIS Analyst II
Matt Ringel

Sr. Systems Administrator
Troy Mandeville

Customer Service Representative (0.5 FTE)
Sheila Barlow

Sr. HR Analyst

Systems Administrator
Alex DiLuzio

Sr. Admin Assistant
Pauline Lee

Systems Support Specialist
Maria Yaslinsky

AB 6413 | Exhibit 1 | Page 5

GIS HISTORY IN THE CITY

COUNCIL PRESENTATION DATES

1. **1991, AB2617: Acquire GIS for the City**
   - Planning Department

2. **1997, AB3174: GIS Update & Discussion**
   - Storm Water Data

3. **1998, AB3319: Status of the GIS Program**
   - Summary & Accomplishments to date

4. **2000, AB3530: GIS Demonstration**
   - Water & Sewer Data

5. **2021, AB5854: GIS Services**
   - Summary of GIS services

6. **2024, AB6413: City GIS Products**
   - Internal & External GIS Products

Business of the City Council

City of Mercer Island, WA

PRESENTATION OF GIS/PDA

	Bill No. 2617
	Dept Origin DEV. SERVICES
	Date Submitted 11/07/91
	For Agenda of 11/11/91
	Class: PRESENTATION
	Exhibits: NONE

Proceeding:
Adjourn to the DSG Work area for presentation/discussion

Clearance: DSG Mgr

Approved by City Manger
Submittal

Council Liaison: N/A

Expenditure Required: N/A	Amount Budgeted: N/A	Appropriation Required: N/A

SUMMARY STATEMENT

The Development Services Group will present, for Council's information, the status of the development of the Geographic Information System (GIS) and the Planning and Data Acquisition System (PDA). This presentation will be held in the Departmental work area. Staff will present information outlining the department's "paperless" review system, electronic mapping, integrated data base management, and system integration with existing and potential users.
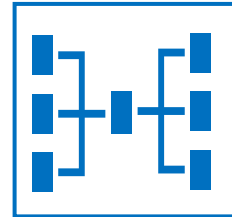
GIS SERVICES

INTERNAL & EXTERNAL CUSTOMERS

MAPS **DATA** **INTEGRATION** **APPLICATIONS**

INTERNAL CUSTOMERS

ANALYSIS **PROJECTS** **SUPPORT** **TRAINING**

INTERNAL CUSTOMERS

CITY ATTORNEY'S OFFICE

CITY MANAGER'S OFFICE

COMMUNITY PLANNING & DEVELOPMENT

COMMUNITY & EVENT CENTER

FINANCE

PARKS & RECREATION

PUBLIC SAFETY

PUBLIC WORKS

CITY DEPARTMENTS HAVE MADE GIS A CENTRAL PART OF THEIR DAILY OPERATIONS

INTERNAL PRODUCTS

STATIC MAPS

- Atlas
- Decision-Making
- Agenda Bill
- Analysis
- Projects
- Wall Maps

INTERACTIVE MAPS

- Web GIS
- Enterprise-Asset Management
- Permit & Land Use
- Field Collection

REAL-TIME TRACKING

- Snow Events
- Street Sweeping
- Pavement Sensor Dashboard

DAY-TO-DAY

- Work Order Updates
- CIP Updates
- Data Processing

REFERENCE MAPS Atlas & Decision-Making

MAP ATLAS

- Water, Sewer, Storm & Fire
- Variety of sizes
- Digital copies available
- Public Works staff & trucks
- Public Safety
- Emergency Operations Center

ELEVATION & ZONING MAP
Mercer Island, WA

AERIAL PHOTO MAP
Mercer Island, WA
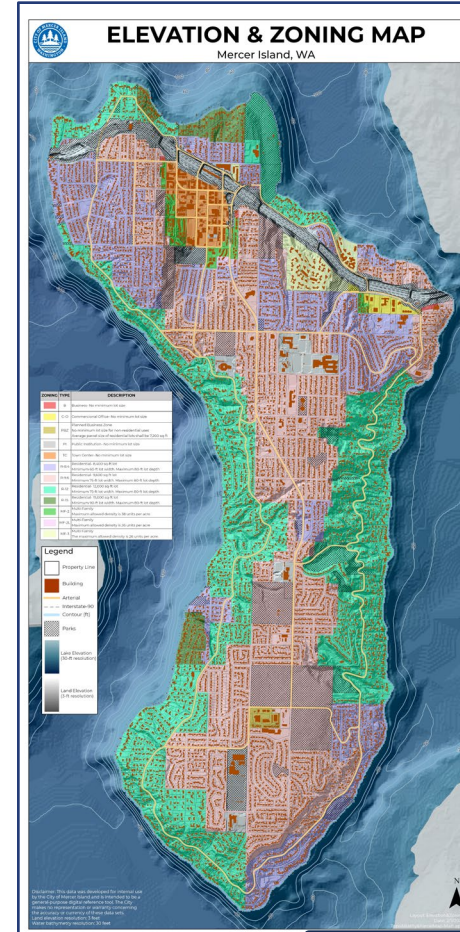
DECISION-MAKING

- Legislative meeting maps
- Visual maps to assist navigate talking points
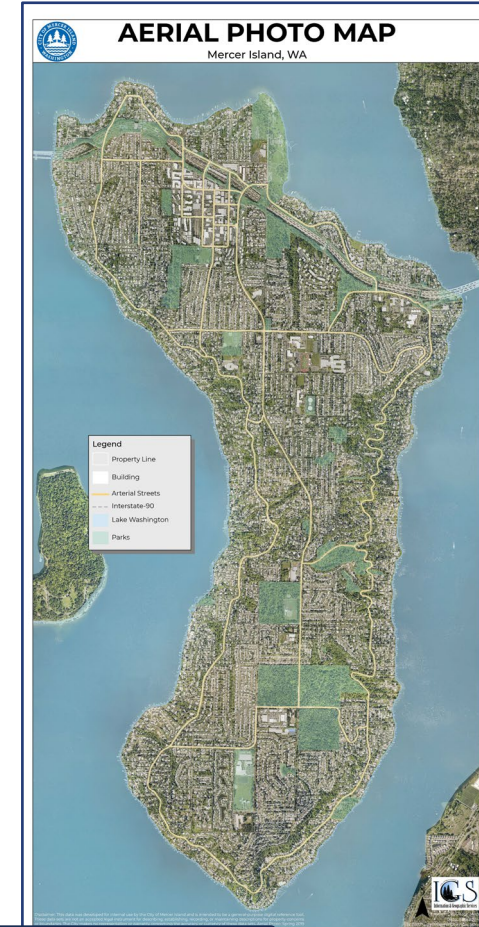
REFERENCE MAPS
Agenda Bill, Project, Analysis, Wall Maps

AB6412
Luther Burbank Aquatic Lands Lease

AGENDA BILL

ANALYSIS

Verizon
Signal Quality
All Bands

SU0108 - CITY OF MERCER ISLAND
BASIN 40 CIPP SEWER LINING PROJECT - PHASE 1
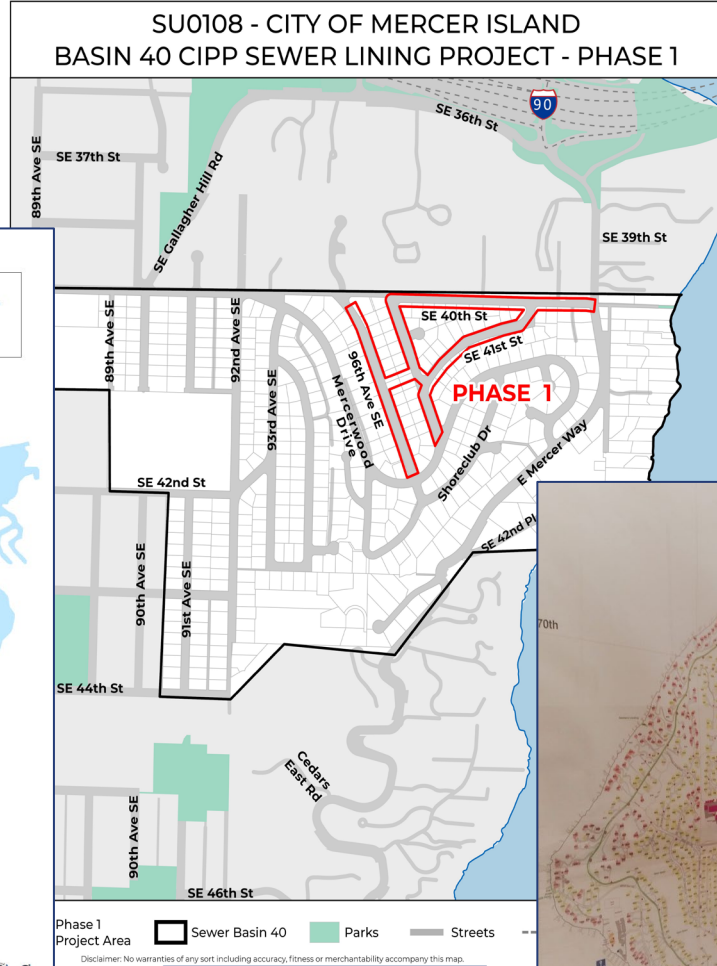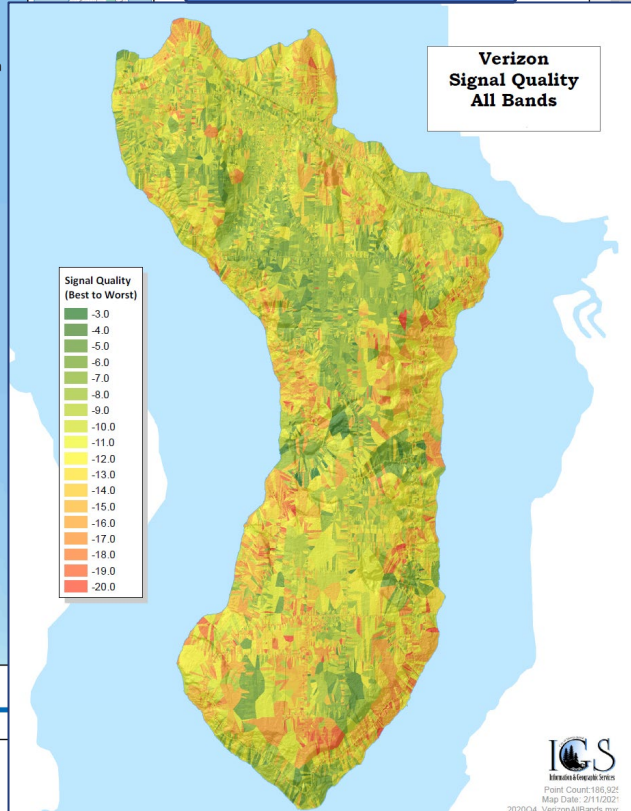
PROJECT AREA

WALL MAPS

INTERACTIVE MAPS- WebGIS & Cityworks
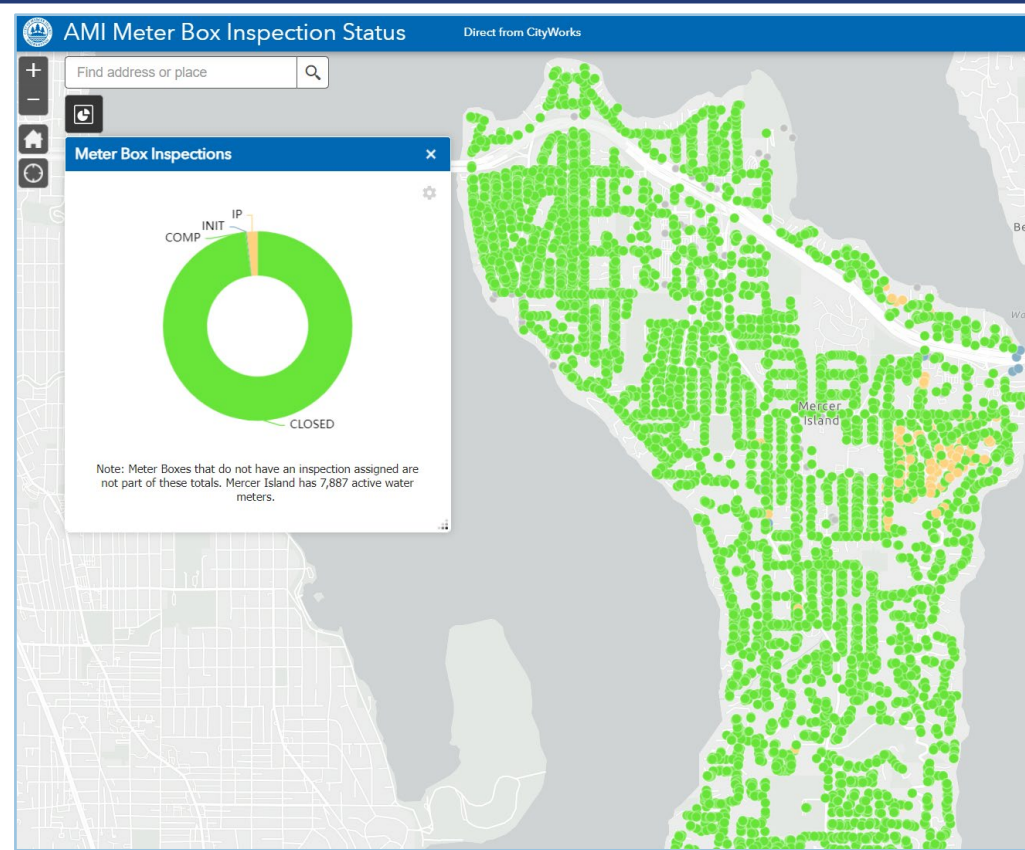
ASSET MANAGEMENT SOFTWARE

- Displays all City assets, active work orders, service requests, inspections, and more

- Extract data to create more maps (ex: meter inspections)
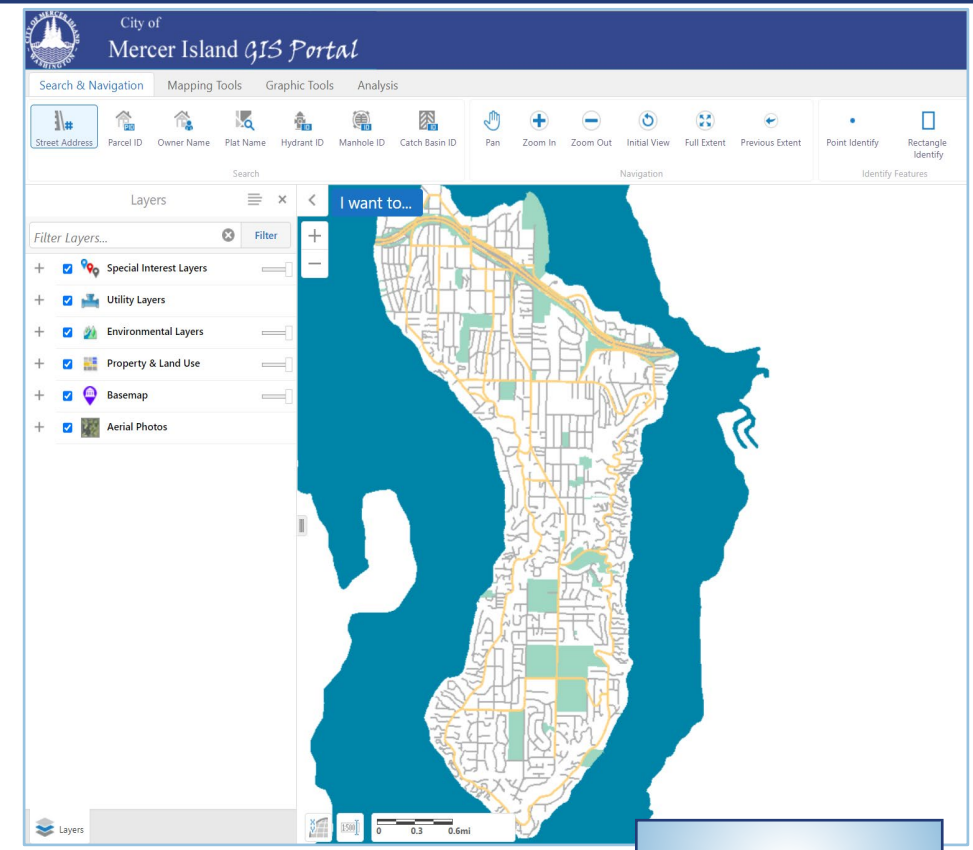
CITY WEB GIS

DEMO

- Over 100 dynamic layers
- Link to documents
- Custom tools (Mailing Labels, Hazard Summary)
- Imagery from 1946-2023

INTERACTIVE MAPS- Permits & Field Inventory

PERMIT & LAND USE

- o Search for active Permits & Land Use
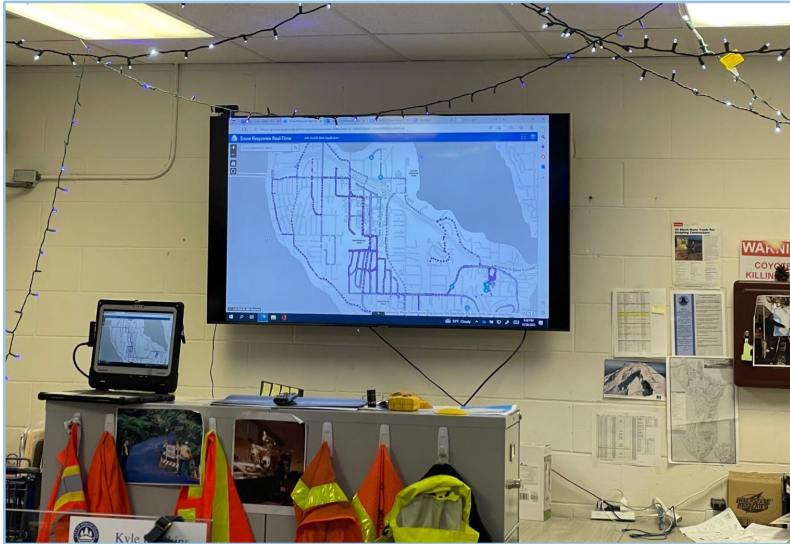- o Filter by various timeframes
- o Link to permit document

FIELD INVENTORY APPLICATIONS

- o Noxious (Invasive) Weeds/Species
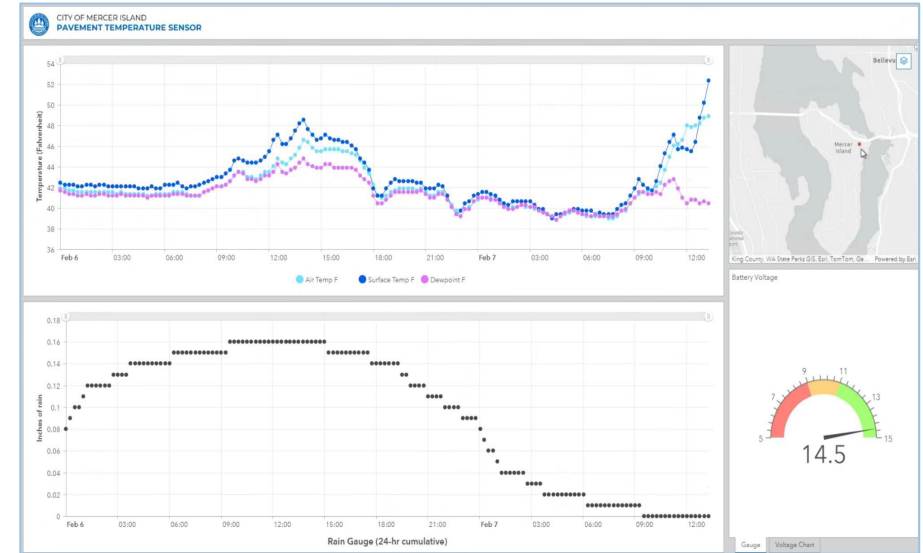- o ROW & Park Tree Inspections
- o Park Trail Defects **(NEW!)**

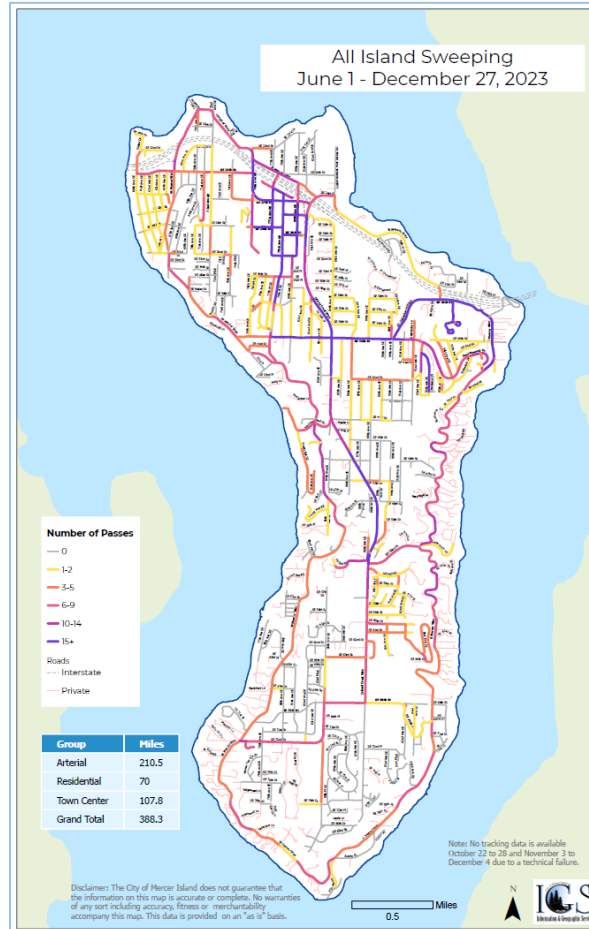AB 6413 | Exhibit 1 | Page 13

REAL-TIME TRACKING

STREET SWEEPING
- Street sweeping
- Cumulative mileage

SNOW EVENTS
- Live map to visualize streets cleared during a snow event (internal use only)
- Post-event data summary used to improve future snow-events

PAVEMENT SENSOR

DEMO

- Real-time weather pavement conditions
  - Temperature
  - Rainfall
  - Battery life gauge

DAY-TO-DAY

Open ⌄	Print	Expand	Configure	Map ⌄	
☐	Wo	Description		Proj Start Date ▼	
☐	46655	Water Meter - GIS Update		07/5/2023 1:05 PM	
☐	46595	Sewer Main - GIS Update		06/30/2023 2:51 PM	
☐	46557	Water Service - GIS Update		06/29/2023 9:57 AM	
☐	46519	Sign Post - GIS Update		06/27/2023 9:37 AM	
☐	46439	Sign - GIS Update		06/23/2023 12:55 PM	
☐	46428	Sign Post - GIS Update		06/23/2023 10:43 AM	
☐	46372	Water Service - GIS Update		06/22/2023 9:38 AM	
☐	46371	Water Service - GIS Update		06/22/2023 9:33 AM	
☐	46336	Sign Post - GIS Update		06/21/2023 9:52 AM	
☐	46309	Water Meter - GIS Update		06/20/2023 1:04 PM	
☐	46393	Park Art - GIS Update		06/20/2023 12:00 PM	
☐	46186	Water Service - GIS Update		06/15/2023 8:24 AM	
☐	46184	Sign Post - GIS Update		06/15/2023 7:59 AM	
☐	46099	Water Main - GIS Update		06/8/2023 3:00 PM	
☐	46098	Water Service - GIS Update		06/8/2023 2:52 PM	
☐	45803	Water Meter - GIS Update		06/1/2023 1:27 PM	

CIP UPDATES

o Project vicinity updates

o Related asset updates
Ex: New water main will have a new meter, hydrant, and service line connections

AB 6413 | Exhibit 1 | Page 15

TASK	UPDATE	LAST RAN	NEXT RUN
SPU Water Quality Reports	Weekly	2/13/2024	2/20/2024
Sign Photo Links	Weekly	2/8/2024	2/15/2024
Update Workorders	Weekly	2/8/2024	2/15/2024
Update AssetID	Weekly	2/8/2024	2/15/2024
Sweeper Map	Weekly	2/9/2024	2/16/2024
Check Scripts	Weekly	2/9/2024	2/16/2024
Update Land Use	Monthly	2/2/2024	3/3/2024
Process Sewer Video	Monthly	2/8/2024	3/9/2024
Update Assessor Table	Monthly	2/9/2024	3/10/2024
Update Easement	Quarterly	1/12/2024	4/12/2024
Update Geotech Reports	Monthly	2/14/2024	3/15/2024
Process Storm Videos	Monthly	2/8/2024	3/9/2024
Water Meter & Meter Links	Quarterly	1/19/2024	4/19/2024
Update Trak-it tables with County Data	Quarterly	6/16/2023	9/15/2023

WORK ORDERS

o 2000+ GIS work orders processed to date

o Daily updates to City assets

DATA PROCESSING

o Daily, weekly, monthly and quarterly data updates

o Data integrity checks

o Scripting and programming for efficiency

EXTERNAL CUSTOMERS

RESIDENTS/ POTENTIAL RESIDENTS

DEVELOPERS & BUILDERS

CONSULTANTS

REAL ESTATE AGENTS

SURVEYORS

EMERGENCY DISPATCH

KING COUNTY

PUBLIC ENTITIES THAT REQUEST GIS-RELATED INFORMATION/DATA

EXTERNAL PRODUCTS

DATA DOWNLOADS & MAP ARCHIVE

o City Spatial Hub Site

INTERACTIVE APPLICATIONS

o Permit & Land Use Search   o Public Web GIS   o Crime Map   o Public Art

LAND USE

o Addressing   o Land Rights & Ownership

OTHER

o Public Records   o Regional Partnerships   o Data Sharing (E911, King County)

DATA DOWNLOADS & MAP ARCHIVE

Welcome to the City of Mercer Island's maps and spatial data collection. This site provides map-based information designed to help users better understand their community. You can explore, visualize, and download location-based data.

FEATURED CONTENT

Launch the City of Mercer Island's interactive web map, download map layers, and view the map collection

WEB MAP

Interactive City Web Map

Web-map application that allows the community to view data and aerial images in an interactive map display

DOWNLOAD LAYERS

Download Map Layers

Search & download commonly requested City map layers

MAP GALLERY

Mercer Island Map Gallery

Visit the map gallery and download an electronic copy (PDF files)

EXPLORE MORE APPLICATIONS

Applications provide access to information along with tools to interact with the data. View the applications below that align with specific goals and initiatives

ZONING WEB MAP

Zoning Map

Explore the City's land use zones.

CRIME WEB MAP

Crime Map

Crime over the past 6 months days. Data is updated every 24 hours.

TREE PERMIT WEB MAP

Tree Permit Map

Determine if a tree is in a Critical Area

PUBLIC ART COLLECTION

Public Art Collection

Explore the City's public art collection.

CITY'S SPATIAL DATA SITE

DEMO

o Public access to spatial data

o Public-facing interactive map

o Download layers

o Map archive

o Interactive applications

INTERACTIVE MAPS- Permit & Land Use

PERMIT & LAND USE WEB MAP   **DEMO**

- Development project information
  - *Permits*
    - Building, Right of Way, Stormwater, Tree
  - *Land Use*
    - Shoreline, SEPA, Design, ADU, Critical Areas, Deviation, Subdivisions
- Filter by various timeframes
- Link to permit document

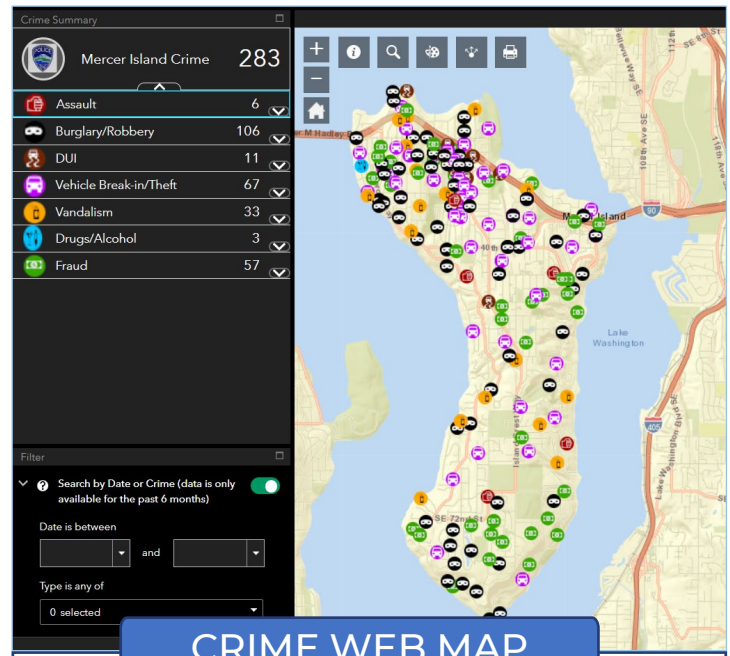# INTERACTIVE APPLICATIONS- Other Web Products

PUBLIC WEBGIS

- o Explore the Island
- o View
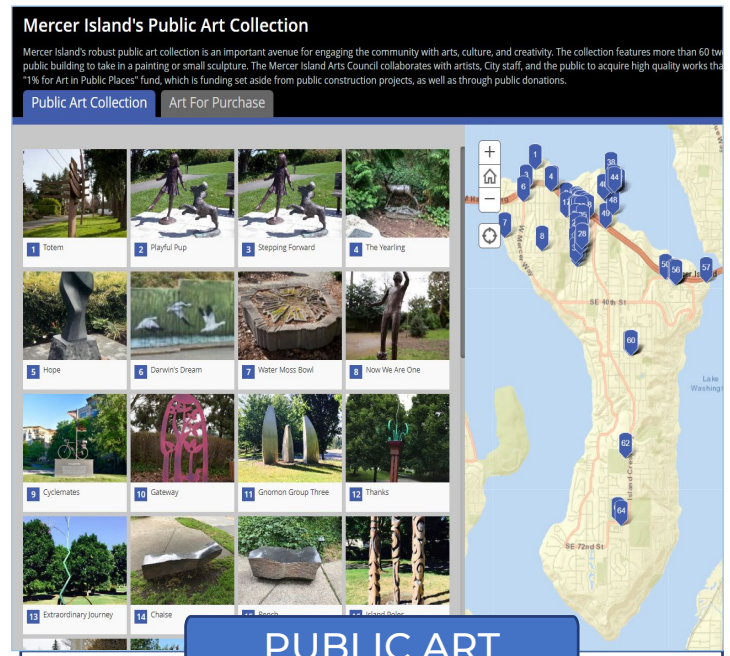 - • Property documents
  - • Aerial Imagery
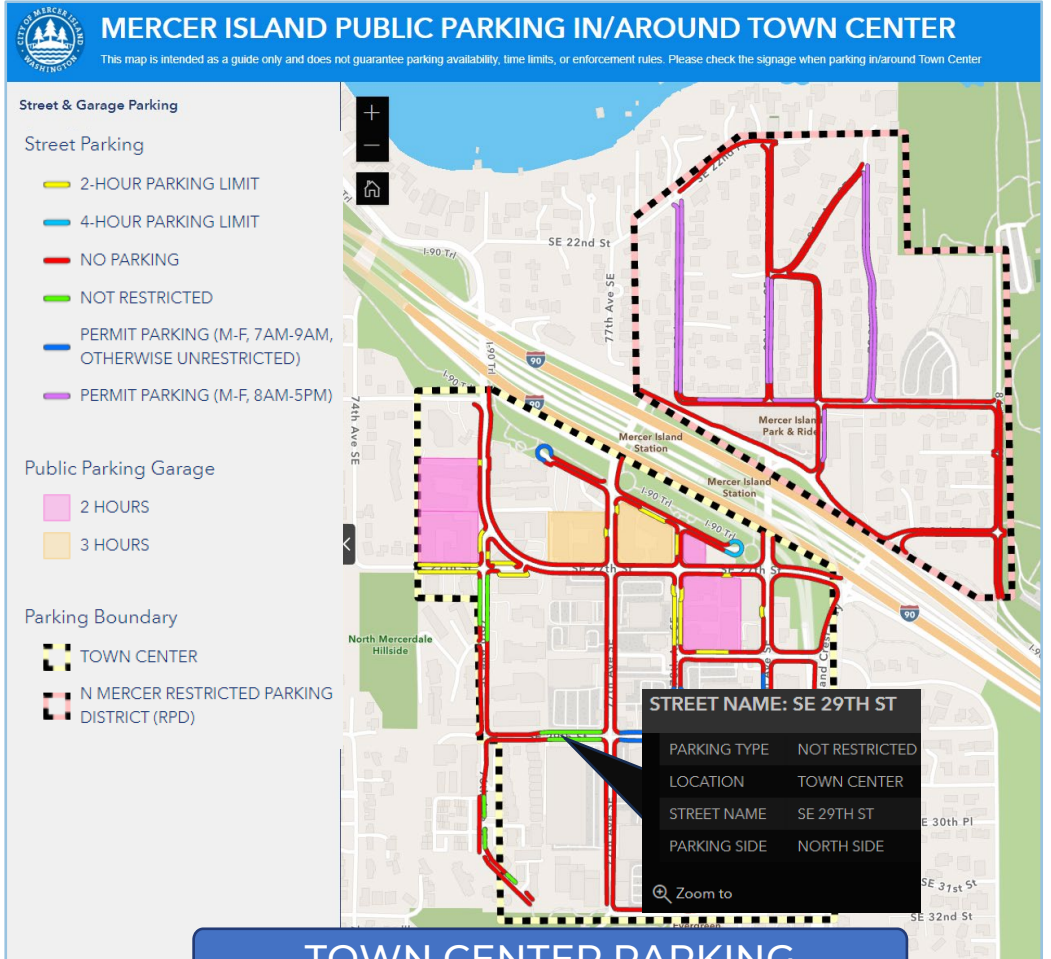
TOWN CENTER PARKING

- o Street Parking
- o Public Parking Garages

AB 6413 | Exhibit 1 | Page 20

INTERACTIVE APPLICATIONS- Other Web Products

CRIME WEB MAP

- o Explore crime activity
- o Filter by
  - Time frame
  - Type of crime
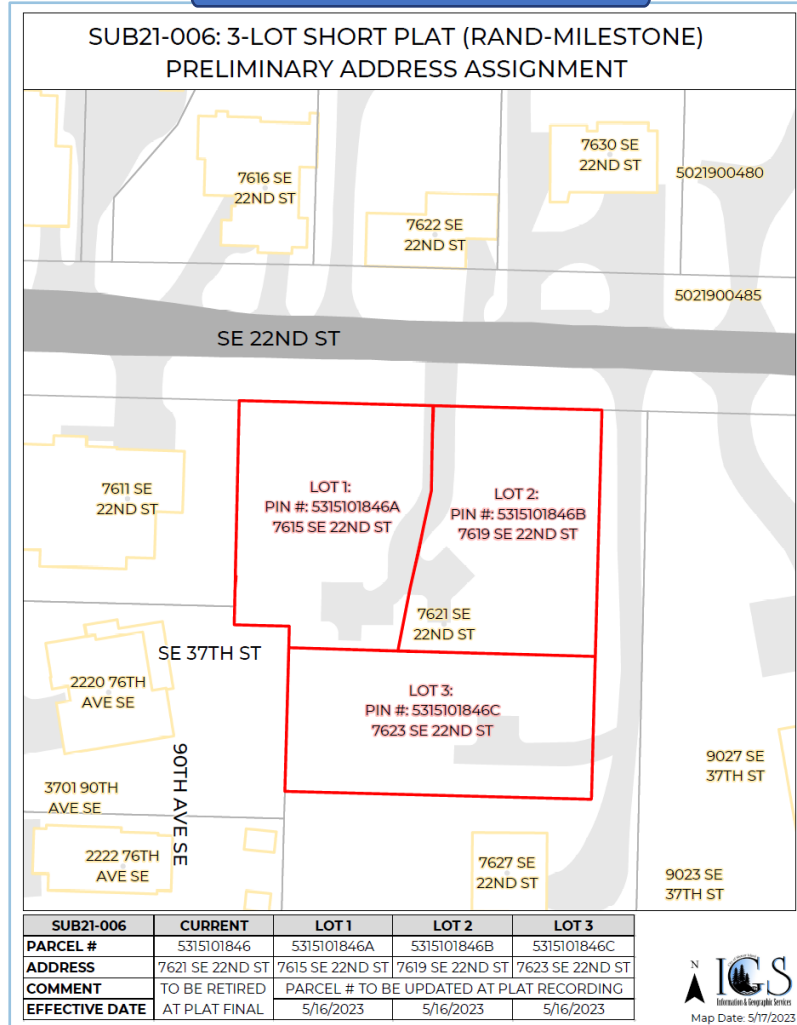
PUBLIC ART

- o Public art locations
- o View
  - Photo
  - Description
  - Artist Information
- o Art for purchase
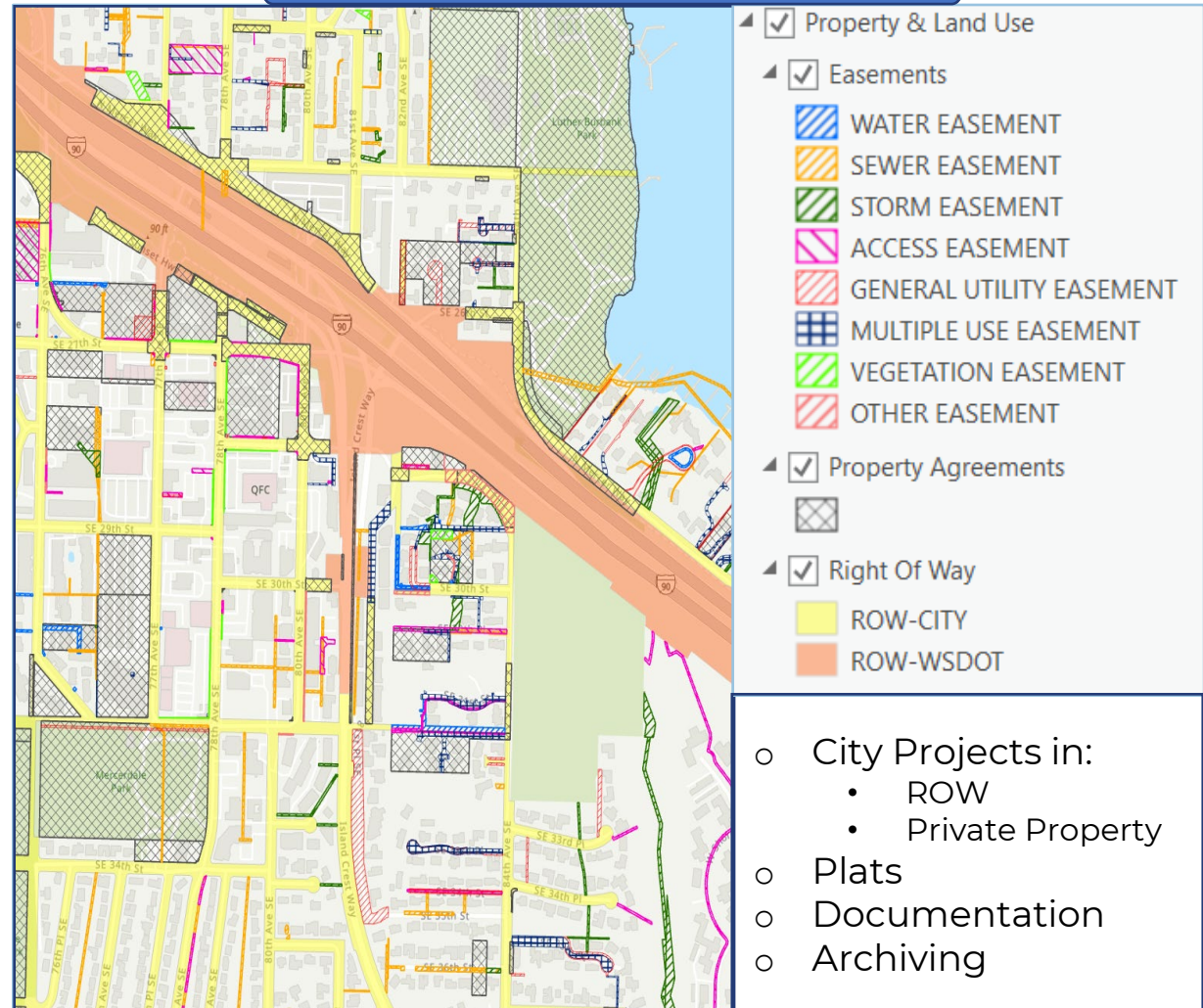
FUTURE APPLICATIONS

- o Upgrade to
  - Crime Map
  - Public Art

- o New
  - Donated Benches
  - Picnic & Event Facilities
  - Capital Improvement Projects

LAND USE

ADDRESSING

SUB21-006: 3-LOT SHORT PLAT (RAND-MILESTONE)
PRELIMINARY ADDRESS ASSIGNMENT

7630 SE 22ND ST
5021900480

7616 SE 22ND ST

7622 SE 22ND ST

5021900485

SE 22ND ST

7611 SE 22ND ST

LOT 1:
PIN #: 5315101846A
7615 SE 22ND ST

LOT 2:
PIN #: 5315101846B
7619 SE 22ND ST

7621 SE 22ND ST

SE 37TH ST

2220 76TH AVE SE

LOT 3:
PIN #: 5315101846C
7623 SE 22ND ST

90TH AVE SE

9027 SE 37TH ST

3701 90TH AVE SE

2222 76TH AVE SE

7627 SE 22ND ST

9023 SE 37TH ST

SUB21-006	CURRENT	LOT 1	LOT 2	LOT 3
PARCEL #	5315101846	5315101846A	5315101846B	5315101846C
ADDRESS	7621 SE 22ND ST	7615 SE 22ND ST	7619 SE 22ND ST	7623 SE 22ND ST
COMMENT	TO BE RETIRED	PARCEL # TO BE UPDATED AT PLAT RECORDING		
EFFECTIVE DATE	AT PLAT FINAL	5/16/2023	5/16/2023	5/16/2023

ICS
Information & Geographic Services
Map Date: 5/17/2023

LAND RIGHTS & OWNERSHIP

Property & Land Use

Easements
- WATER EASEMENT
- SEWER EASEMENT
- STORM EASEMENT
- ACCESS EASEMENT
- GENERAL UTILITY EASEMENT
- MULTIPLE USE EASEMENT
- VEGETATION EASEMENT
- OTHER EASEMENT

Property Agreements

Right Of Way
- ROW-CITY
- ROW-WSDOT

○ City Projects in:
  - ROW
  - Private Property
○ Plats
○ Documentation
○ Archiving

OTHER PRODUCTS

KEY PROJECTS

METER REPLACEMENT

- o Island-wide water meter replacement
- o Coordination with Public Works & Finance

PUBLIC WORKS

- o Utility Network Upgrade
- o Lead Service Line

APPLICATIONS ENHANCEMENTS

- o WebGIS
- o Cityworks
- o Field Collection
- o Story Maps

IMAGERY ACQUISITION

- o High resolution
- o Building & street updates

SUMMARY

EVERY ORGANIZATION IS SPATIAL

- **WHERE** are your assets
- **WHERE** are your customers
- **WHERE** is the incident
- **WHERE** is the property

LOCATION INTELLIGIENCE

- Data has context & meaning
- Visual
- Data sharing

MAKES SENSE OF THE WORLD

- Change over time
- Identify patterns
- Optimizes planning

HISTORY OF MERCER ISLAND

- A century of data
- Data preservation
- Spatial library
- Simplify & distribute

THANK YOU!

QUESTIONS?

Leah Llamas - GIS Coordinator
Matt Ringel - GIS Analyst II