

## ITS Strategic Roadmap – FY20 Planning

### *Land and Cityworks Systems*

Author: *Amy Neal and Joanna Enoch*

Date last updated: *December 27, 2018*

### Background

Land and Cityworks Systems includes a number of critical systems that Metro Government departments and agencies use to track and coordinate land use within Davidson County.

Cityworks is an application suite consisting of two modules implemented for Metro use: **Cityworks Permits Land and Licensing (PLL)** and **Cityworks Asset Management System (AMS)**.

The Cityworks PLL application manages permits, violations cases, inspections, licenses and other activities on these cases. The system's workflow engine tracks the process from application or request through departmental plan reviews, fee collection, inspections, regulatory meetings and hearings.

The Cityworks AMS application manages public capital infrastructure assets. Capital infrastructure assets include, but not limited to streets, roads, sidewalks, bridges, curbs, parks, street lights and signals. A desktop version of Cityworks AMS application is currently used in Public Works and Storm Water. The updated new web based version of Cityworks AMS uses ArcGIS to allow spatial cataloging and analysis of infrastructure data.

A strategic initiative that is underway for Metro is to elevate Cityworks AMS from a departmentally-based application to an enterprise application service managed by ITS, to allow for better collaboration, centralized data management, increased economy of scale and centralized support. Upon completion of this initiative, Cityworks AMS will be Metro's standard solution for departments that require an asset management and work order system.

The ePermits application is a self-service portal (ePermits) for use by citizens and building contractors. Citizens can apply for permits and research permit information. Building contractors can request inspections, apply for permits and upload electronic plans. Plans reviewers can review and mark up the plans using the Bluebeam (ePlans) module.

The Land Management application is a custom-built GIS based system that tracks land parcel data, including addresses, ownership information, parcel genealogy, land use, tax assessments, and zoning data. The Land Management application is directly connected to the Cityworks PLL, Cityworks AMS, and ePermits applications.



The following departments and agencies are primary stakeholders:

- Assessor of Property
- Codes
- Historical Commission
- Planning
- Fire department
- Public Works
- Water Services
- Fire
- Beer Board
- Health
- Parks and Recreation

Numerous other Metro departments (i.e. MDHA, General Services, Parks, Metro Council, NES, Airport Authority, and Finance) access and make updates to cases within the Cityworks PLL application as part of the permit-review process.

Data is shared and updated from a number of sources through many customized interfaces that are an important part of the Land Cityworks systems. Interfaces currently exist for the following departments or systems:

- Assessor of Property
- Trustee
- Finance/EBS
- Metro Water Services
- Fire department
- Planning/GIS/ESRI
- Document Management/Imaging
- Public Works
- Codes
- Open Data Portal

### Current Strategic Drivers

1. **Customer Demand: Mobile Access** 📱 (Game-changing) – in addition to self-service, today's Metro citizen is increasingly demanding access to Metro services from mobile devices including smartphones, tablets and laptops.
2. **Customer Demand: Automated Departmental Processes** (High) –Numerous departments beyond those included as stakeholders in the initial product release have requested that their business processes be automated into Cityworks.
3. **Growth of Nashville** (High) – Metro Nashville is seeing an unprecedented growth in both commercial and residential development, with over \$3.2 billion in permits granted in 2017.



4. **Citizen’s Demand: Self-Service** (High) – Citizens are increasingly savvy and want to do business on their own time and at their place rather than be subject to Metro hours of operation and potentially long lines at Metro offices. The majority of Codes permitting processes for simple permits are currently completed online.
5. **Mapping Technology** (High) – Increasing expectations from departments and the public for easy to use mapping and visualizing technologies that include routing and directions to locations identified on the map.
6. **Data Transparency, Access and Integration** (High) – Internal and external expectations are increasing for interfaced data systems and for data collaboration between Metro departments, external agencies and private utilities, allowing combined datasets to be easily available for public benefit.
7. **Vendor Support Dependency** (High) – The Land application is supported by a single vendor who has heavily customized the application code. This is unsatisfactory for long term viability.
8. **End of Contracts** (High) – The current Civic Engineering support contract for customized code including ePermits, Land and ePlans expires on 07/24/2019.

### On the Horizon Strategic Drivers

1. **End of Contracts** (High) – The Cityworks Universal Licensing Agreement Licensing contract ends in 2021.

### Short Term Goals (0-6 months) 7/1/19 – 12/31/19

#	Goal/Objective	Est. Start	Est. Duration
1	<b>hubNashville</b> – Define and implement best practices for integrating additional components from CityWorks into hubNashville for ease of use by residents.	7/19	3 months
2	<b>Inspector Inbox</b> – Internal Metro Inspector Use – Addition of a new inbox that will allow inspectors to use a map to route scheduled inspections, select permit, and sign off on inspections	7/19	3 months
3	<b>Public Works Permits</b> – Add Public Works Right Of Way Permits to Cityworks PLL and ePermits	7/19	6 months
4	<b>Public Works</b> – Plan upgrade to Cityworks AMS. Submit plan to stakeholders for review.	7/19	6 months
5	<b>Parks and Recreation</b> – Pending funding, research and plan implementation of Cityworks AMS and submit plan to stakeholders for review.	7/19	6 months
6	<b>Storm Water</b> – Research and plan upgrade of Cityworks AMS and submit to stakeholders for review.	7/19	6 months
7	<b>AssessPro Replacement</b> – Implementation of a new CAMA system for the Assessor of Property will require testing and possible modifications of daily and annual interfaces	7/19	18 months



### Medium Term Goals (6-18 months) 1/1/20 – 12/31/20

#	Goal/Objective	Est. Start	Est. Duration
1	<b>Public Works</b> – Upgrade Cityworks AMS	01/20	12 months
2	<b>Transportation Licensing</b> – Add Transportation Licensing to Cityworks PLL and ePermits	01/20	6 months
3	<b>Parks and Recreation</b> – Implement Cityworks AMS. Capital Funding Required	07/20	12 months
4	<b>Storm Water</b> – Upgrade Cityworks. AMS Capital Funding Required	07/20	3 months

### Long Term Goals (18-36 months) 1/1/21 – 6/30/22

#	Goal/Objective	Est. Start	Est. Duration
1	<b>Expansion</b> – Research additional departments and/or departmental needs for Land Cityworks offerings, document and submit to ELT	01/21	6 months
2	<b>Assessor Reappraisal Year</b> – The next full property reappraisal will occur in 2021 and will require additional file uploads into the Land system from the Assessment Office.	4/21	3 months
3	<b>Cityworks ULA</b> – Contract extension and/or re-evaluation	01/21	6 months

### Related Roadmaps

- Databases
- Document Management and Imaging
- Community Response Management
- Information Security Management
- Open Data

### Related Resources

- CW.nashville.org (internal)
- EPermits.nashville.gov (external)
- Land.nashville.org (internal)

