2023 Work Plan Survey Results

The Center for Technology & Training (CTT) offers Roadsoft users the opportunity to provide feedback and guidance on future software enhancements and development through participation in a yearly Roadsoft Work Plan Survey.

2023 Work Plan Survey Results

The *2023 Roadsoft Work Plan Survey* was opened to responses in August and received fifty-five submissions. Survey participants rated proposed features and enhancements to Roadsoft and were asked to submit additional comments, ideas, or suggestions for future Roadsoft development.

Survey responses involved rating and ranking development ideas for Roadsoft. Some potential ideas are more time consuming to implement than others, while others involve different devices and operating systems. With this in mind, the survey is categorized into three major groups: major tasks, which are the biggest developments like creating new modules and tools and occupy the most time and effort from our programming team; maintenance tasks, which are smaller tweaks and improvements to existing features that are implemented when programmers have time between larger projects; and mobile tasks involving the team developing the Roadsoft Mobile app for Android and iOs devices. For major and maintenance tasks, participants voted on the five tasks most relevant to their agencies and then ranked the five selections from most to least relevant. Mobile tasks that were rated more important are given a higher rating in the graph.

Proposed Major Tasks

Twenty-two major tasks were included in the survey. These proposed tasks were compiled from staff ideas, customer suggestions, and items left over from previous years that haven't been added to Roadsoft. The list of ideas included:

- Module Standardization (enhancements (multi-edit, work orders, archive, dashboards, calendars for activities, better filtering targeting more than just shapes ...) – Make the names, layouts, and icons used throughout Roadsoft more consistent between modules. Make features like the Multi-Edit Tool, Custom Fields, Work Orders, etc, available for all applicable modules. Potentially add an activity calendar and improve filters, legends, and data mining.)

- Custom Report Builder (ability to define which fields, layouts and other formatting) – Design a feature that lets users choose the fields they want to include, and do things like add logos and other headers to their report layouts.

- Continued Project Planning & Selection Tool enhancements (enhanced reports, maps, inclusion of types) – Further develop the Project Planning & Selection Tool (PPST). Some aspects that could be enhanced are the colors for Good/Fair/Poor, the reporting formats, and the map used in the printouts.

- Road Grouping - Allow user to define groups of roads similar to the Project Builder, but with the option to view all segments as a single combined entity showing average PASER rating and to allow applying projects year over year on the group.

- Trail Module (including those not along roadway) – Create a line module for hiking trails and associated data, including trail segments that do not follow roadways.

- Right of Way Module – Create a module to record the areas agencies control adjacent to their roads.

- Crash Location Editing - For crashes that have been incorrectly located, add the ability to relocate a crash using GPS coordinates or manually.

- Web-Based Roadsoft – Create a web-based version of Roadsoft that runs via a browser with data stored in the cloud.

- Intersection Module – Expand module to be a fully functional management module. Add surface type, traffic count, lane count, maintenance, ratings, etc.

- Bicycle Facility Tracking – Create a line module for bicycle paths and associated data.

- Sign Inventory Tracking (stock/materials/etc) – Create a way to keep track of the sign materials an agency has on hand, such as sheets and posts.
- Map Annotations/Geo Notes (addable during data collection) – Make a way to mark locations on the map and add notes. Likely not a full module, but a useful way to mark potholes and other noteworthy spots.
- Point Pavement Marking Schematic – Make a diagram feature for the Point Pavement Marking Module that illustrates where point pavement marks are located on the road.
- Capital Plan Tool (encompassing multiple modules and assets) – Expand the Capital Plan Tool to include more asset modules in projects.
- Efficient Driving Route Builder - for PASER collection, Pavement marking reviews, etc.
- Railroad Crossing Module – Create a point module for railroad crossings and associated data.
- More tools and controls for Roadsoft Administrator (permissions to update only certain fields, ability to review LDC files before import, more tracking of updates by name) – Create new features for Roadsoft database administrators, such as locking certain fields for general users, reviewing LDC information before importing them into Roadsoft, and being able to track database changes by user.
- Utilities Network Module – Create a module similar to the Drainage Network Module that relates to utilities-related assets (points, lines, and polygons related to electric, telephone, cable, and other utilities) that are relevant to the road transportation network.
- Cloud Document Storage – Add option to store attached

Figure 1 - The major tasks that survey participants voted for. Item ranking is based on the number of responses received in the survey

documents/images in cloud-based storage rather than in the Roadsoft database.

- LDC Traffic Signal Module - Add a module to the Laptop Data Collector to work with traffic signals and supports.
- Sewer Network Module – Create a module similar to the Drainage Network Module that relates to sewer-related assets (points, lines, and polygons) that are relevant to the road transportation network.
- Integration with CityWorks - Allow for the importing of data from CityWorks

As *Figure 1* shows, module standardization, a custom report builder, Project Planning & Selection Tool (PPST) enhancements, and road grouping received significantly more votes than some of the other proposed major tasks. Continued module standardization, custom report builder, and PPST enhancements will be priorities, and other tasks will be addressed as time, resources, and development time are factored in.

Proposed Maintenance Tasks

Nineteen maintenance tasks were included in the survey. The list of potential maintenance tasks in the survey included:

- Enhanced Map Printing - Add features and functionality with regards to creating maps from Roadsoft. This could include allowing for adjustments of size/location, being able to select by township/jurisdiction, etc.
- Search by Memo Field (all modules) –Create a search function to look for entries in the memo field of asset modules.
- Ability to add/remove/re-order Selection Information – Design ways for users to manage the layout of fields in Roadsoft.
- Multi-Edit of Status for Projects/Routine Maintenance – Add the ability to multi-edit the status of multiple projects and/or routine maintenance items.
- Routine Maintenance Filtering (from main reporting tab by township or legal system) – Make a way to filter Routine Maintenance reports by specific townships or legal systems.
- Culvert Photo Attachments - Revise the way the Culvert module handles photo attachments and how it works with attachments in conjunction with Stream Crossing Surveys.
- LDC Import Preview - Preview stats for LDC data that will be imported before it is applied to Roadsoft.

- Link to Project Builder from Road Module – Create a shortcut from the Road Module to the Project Builder, such as a link or a button.
- Ability to Archive Culverts – Add ability to archive culverts that are no longer in use.
- Date Stamp on Project Memo – Put date stamps on the memo fields of projects to show when they were last edited.
- Ability to Copy/Paste Sign & Maintenance data between posts – Make a feature to copy data like sign conditions or maintenance information and apply it to multiple supports.
- LDC Point Pavement Marking Enhancements - Legend color changes based on condition assessment, offsets on map so multiples aren't stacked.
- Ability to Reorder Routine Maintenance Activity Types (by job numbers & delete/archive option when activity is associated with a record) – Create ways for users to manage the layout of routine maintenance fields, and ways to delete or archive activities maintenance as well.
- Archived Signs/Support changes (add filter ability, archive date, memo field, remove map labels) – Update archived sign settings. Add the ability to filter them out, record the dates signs were archived, add a memo field, and remove labels for archived signs.
- Auto-Logout- Automatically log out/exit from Roadsoft or LDC after 12 hours of inactivity.
- Night Mode – Add an option to make the LDC's background dark colored and roads light to help see things at night and maintain night vision.
- Ability to Archive Guardrails – Add ability to archive guardrails that are no longer in use.
- Agency level help comments associated with fields – Allow agency to edit field descriptions/context-sensitive help for module fields in Roadsoft and LDC.
- Carry Offsets forward (last entered Liner Pavement Marks) – Have the LDC remember the last offset settings used for a linear pavement mark and automatically enter them in the next linear pavements mark if the fields are empty.

Figure 2 shows the proposed maintenance tasks that participants found most important. The top five proposed tasks that participants found most important included: enhanced map

Potential 2023 Work Plan Maintenance Task Items Rankings

Figure 2 - Survey participants also voted for proposed maintenance tasks. Item ranking based on the number of responses received in the survey

printing; the ability to search by the Memo field; the ability to add/remove/re-order selection information; multi-edit of status for projects/routine maintenance items; and routine maintenance filtering . These will be given priority when maintenance tasks are completed, though there is flexibility in what maintenance tasks are done in what order, based on other development efforts.

Proposed Mobile Tasks

There were five mobile tasks included in the survey, including:

- Traffic Signal Collection - Add the ability to collect traffic signal data.
- Driveway Collection – Add the Driveway module and driveway data collection to Mobile.
- Mobile Sign Filtering - Add filtering within mobile device to turn off certain sign types.

- Linear Pavement Marking Collection/Inspection – Add the Linear Pavement Marking module and linear data collection to Mobile.
- Drainage Structure Lines Collection - Add the ability to collect drainage structure features and store them as lines.

As *Figure 3* shows, participants rated them in the following order: drainage structure lines collection, linear pavement marking data collection, mobile sign filtering, driveway data collection, and finally, traffic signal collection. Based on our resources, point drainage structure lines collection will be a part of the 2023 work plan, with other enhancements, modules, and features added as time and budget allow.

Comments and Conclusions

There were nine additional comments and suggestions sub-

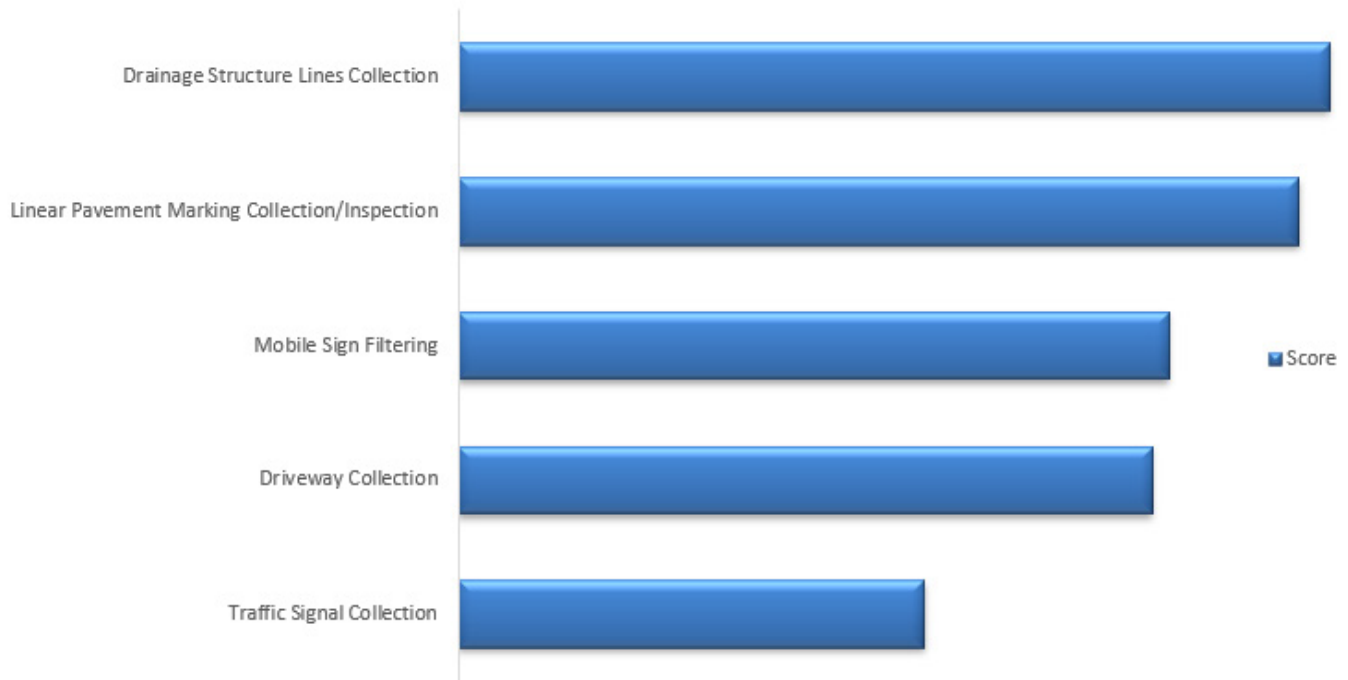## Potential 2023 Work Plan Mobile Task Rankings

Figure 3 - The six proposed mobile tasks that survey participants ranked - based on the number of responses received in the survey.

mitted by participants on the final question of the survey. The final question serves as a general input where participants can submit questions, comments, suggestions, and concerns. These comments are taken into consideration when planning other development activities and will be added to the appropriate major, maintenance, and mobile task lists.

CTT staff would like to thank everyone who participated in the survey and encourage everyone to feel free to contact us if you have further suggestions or feedback by sending an email to roadsoft@mtu.edu.

Roadsoft Tech Assist Tuesdays

This is a reminder that the CTT offers online technical assistance with our virtual *Tech Assist Tuesdays* sessions. Sessions are available on Tuesdays with one hour slots at 9, 10, and 11 a.m.

Visit https://www.roadsoft.org/articles/roadsoft-tech-assist-tues-days to request a Tech Assist Tuesday session. If another day or time would work better, send an email to roadsoft@mtu.edu and we'll find a time that fits your schedule.

Microsoft Ends Support for SQL Server 2012

Microsoft recently announced that SQL Server 2012 reached the end of it's extended support lifecycle on July 12, 2022.

In response to Microsoft's announcement, the CTT has determined that our support of SQL Server 2012 for Roadsoft and MERL will end as of January 1, 2023.

Starting with the first software update after January 1, 2023, agencies will no longer be able to connect to an SQL 2012

instance. The decision to discontinue support on SQL Server 2012 is a necessary step to ensure the safety of the systems that operate our software, and to retain the integrity of agency Roadsoft and MERL data.

Customers with existing databases on SQL Server 2012 (including full SQL Server and SQL Server Express) are encouraged to begin discussions with appropriate parties in their organization as soon as possible, particularly if an update or purchase of a newer version of SQL Server is necessary.

SUPPORTED VERSIONS

The CTT is continuing support for SQL Server versions 2014, 2016, 2017, and 2019. We recommend that agencies consider updating to SQL Server 2019 to maximize the available life of the product and reduce the frequency of future SQL server updates. We also recommend that agencies install our version of SQL Express, even if they have their own standalone SQL server license. Installing our SQL Express instance is straightforward and it makes it easier to create and restore Roadsoft backups, create new databases, and share databases. SQL Express installers are available at http://roadsoft.org/downloads/sql-downloads. There is help documentation available on upgrading SQL Server at Update SQL Server Express.

DETERMINING SQL SERVER VERSION

Help documentation for locating the SQL Server version is available in the Roadsoft Manual at Locate SQL Server Version.

For questions or assistance with determining the SQL Server version, or with updating SQL Server, email roadsoft@mtu.edu.

Microsoft Ending Support for Windows 8.1

Microsoft announced that they will no longer provide security updates or support for Windows 8.1 after January 10, 2023. Even though Windows 8.1 will still function after the deadline, continued use may increase an organization's exposure to security risks.

In response to Microsoft's announcement, the CTT will also no longer support or allow new software installations on PCs running Windows 8.1 starting January, 2023.

Depending on the age and specifications of the computer running Windows 8.1, hardware upgrades or computer replacement may be required to upgrade to Windows 11. Roadsoft and MERL customers still running Windows 8.1 should investigate upgrading to at least Windows 10 - sooner rather than later.

Roadsoft system requirements can be found online at https://roadsoft.org/about/system-requirements. Contact Roadsoft technical support at roadsoft@mtu.edu for more information.

Upcoming Training

2022 Roadsoft Special Topics: Utilizing the Improved Work Order Manager
December 8, 2022
http://ctt.nonprofitsoapbox.com/2022rs-workorder-dec

2022 Introduction to Roadsoft: Just the Basics
December 13-14, 2022
http://ctt.nonprofitsoapbox.com/2022intrors-fall

2023 Roadsoft Special Topics: Getting Started with the Roadsoft Mobile App
February 23, 2023

2023 Roadsoft Special Topics: Getting Started with the Laptop Data Collector
February 28, 2023

Questions? Email roadsoft@mtu.edu

Visit https://roadsoft.org/training to see all upcoming Roadsoft training events.

Visit http://ctt.nonprofitsoapbox.com/upcoming-events to see all upcoming CTT training events.

Agencies that have specific technical support questions or issues, or those that would like personalized training, can send a request to roadsoft@mtu.edu.