2024 Work Plan Survey Results

The Center for Technology & Training (CTT) values the opinions of our Roadsoft clients. With that in mind, we provide a yearly opportunity for our clients to provide feedback and guidance on future software enhancements and development through an annual *Roadsoft Work Plan Survey.*

2024 Work Plan Survey Results

The *2024 Roadsoft Work Plan Survey* was opened to responses in August and received eighty submissions. Survey participants rated and ranked proposed features and enhancements to Roadsoft and were asked to submit additional comments, ideas, or suggestions for future Roadsoft development.

Development ideas for 2024 were categorized into two major groups: major tasks, which are more involved and time consuming and require the most effort from our programming team; and maintenance tasks, which are typically enhancements to existing features that are implemented when programmers have time between more extensive tasks. Participants voted on the five tasks in each category that are most relevant to their agencies and then ranked those five selections from most to least relevant for their agency.

Proposed Major Tasks

Twenty-one 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.

- 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.

- 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.

- Capital Plan Tool (encompassing multiple modules and assets) – Expand the Capital Plan Tool to include more asset modules in projects.

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

- 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.

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

- Railroad Crossing Module – Create a point module for railroad crossings and associated data.

- 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.

- 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.

- 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.
- 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.
- 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.
- Web-Based Roadsoft – Create a web-based version of Roadsoft that runs via a browser with data stored in the cloud.
- 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.
- Right of Way Module – Create a module to record the areas agencies control adjacent to their roads.
- 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.
- Cloud Document Storage – Add option to store attached 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.
- Efficient Driving Route Builder - for PASER collection, Pavement marking reviews, etc.

Potential 2024 Work Plan Major Task Rankings

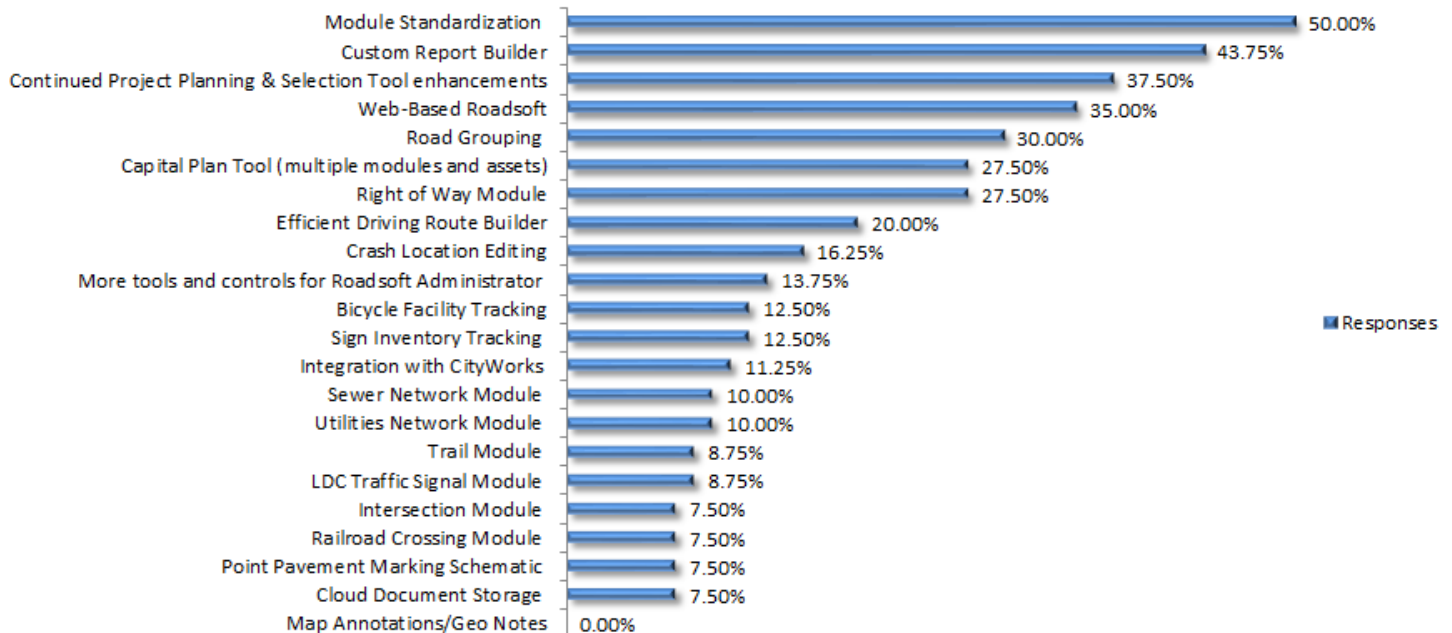| Task	Responses
Module Standardization	50.00%
Custom Report Builder	43.75%
Continued Project Planning & Selection Tool enhancements	37.50%
Web-Based Roadsoft	35.00%
Road Grouping	30.00%
Capital Plan Tool (multiple modules and assets)	27.50%
Right of Way Module	27.50%
Efficient Driving Route Builder	20.00%
Crash Location Editing	16.25%
More tools and controls for Roadsoft Administrator	13.75%
Bicycle Facility Tracking	12.50%
Sign Inventory Tracking	12.50%
Integration with CityWorks	11.25%
Sewer Network Module	10.00%
Utilities Network Module	10.00%
Trail Module	8.75%
LDC Traffic Signal Module	8.75%
Intersection Module	7.50%
Railroad Crossing Module	7.50%
Point Pavement Marking Schematic	7.50%
Cloud Document Storage	7.50%
Map Annotations/Geo Notes	0.00%

Figure 1 - Survey participants were asked to vote for Major Development Tasks. Item ranking is based on the number of responses received in the survey.

- Integration with CityWorks - Allow for the importing of data from CityWorks

As shown in *Figure 1*, module standardization, custom report builder, Project Planning & Selection Tool (PPST) enhancements, and web-based Roadsoft received considerably more votes than the rest of the other proposed major tasks. Continued module standardization and overall pavement management/ PPST improvements and enhancements will be priorities, and other tasks will be addressed as time, resources, and other potential complementary or related development efforts are factored in.

Proposed Maintenance Tasks

Nineteen maintenance tasks were included in theis year's survey. The list of potential maintenance tasks in the survey included:

- 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.
- 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.
- Multi-Edit of Status for Projects/Routine Maintenance – Add the ability to multi-edit the status of multiple projects and/or routine maintenance items.
- Ability to Add/Remove/Re-order Selection Information – Design ways for users to manage the layout of fields in Roadsoft.
- Agency Level Help Comments Associated with Fields – Allow agency to edit field descriptions/context-sensitive help for module fields in Roadsoft and LDC.
- Search by Memo Field (all modules) –Create a search function to look for entries in the memo field of asset modules.
- 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.
- Date Stamp on Project Memo – Put date stamps on the memo fields of projects to show when they were last edited.
- 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.

- 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.
- 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.
- Ability to Archive Culverts – Add ability to archive culverts that are no longer in use.
- Ability to Archive Guardrails – Add ability to archive guardrails that are no longer in use.
- 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.
- 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.
- LDC Import Preview - Preview stats for LDC data that will be imported before it is applied to Roadsoft.
- LDC Point Pavement Marking Enhancements - Legend color changes based on condition assessment, offsets on map so multiples aren't stacked.
- Culvert Photo Attachments - Revise the way the Culvert module handles photo attachments and how it works with attachments in conjunction with Stream Crossing Surveys.
- Auto-Logout - Automatically log out/exit from Roadsoft or LDC after 12 hours of inactivity.

Figure 2 shows how participants ranked the proposed maintenance tasks. The top five proposed maintenance tasks that survey participants voted as most important include: enhanced map printing; multi-edit of status for projects/routine maintenance items; the ability to search by the Memo field; routine maintenance filtering; and preview of LDC data prior to importing into Roadsoft. These maintenance tasks will be given priority, though there is flexibility in what maintenance tasks are completed, as well as the order they're completed, based on other development efforts.

Potential 2024 Work Plan Maintenance Task Items Rankings

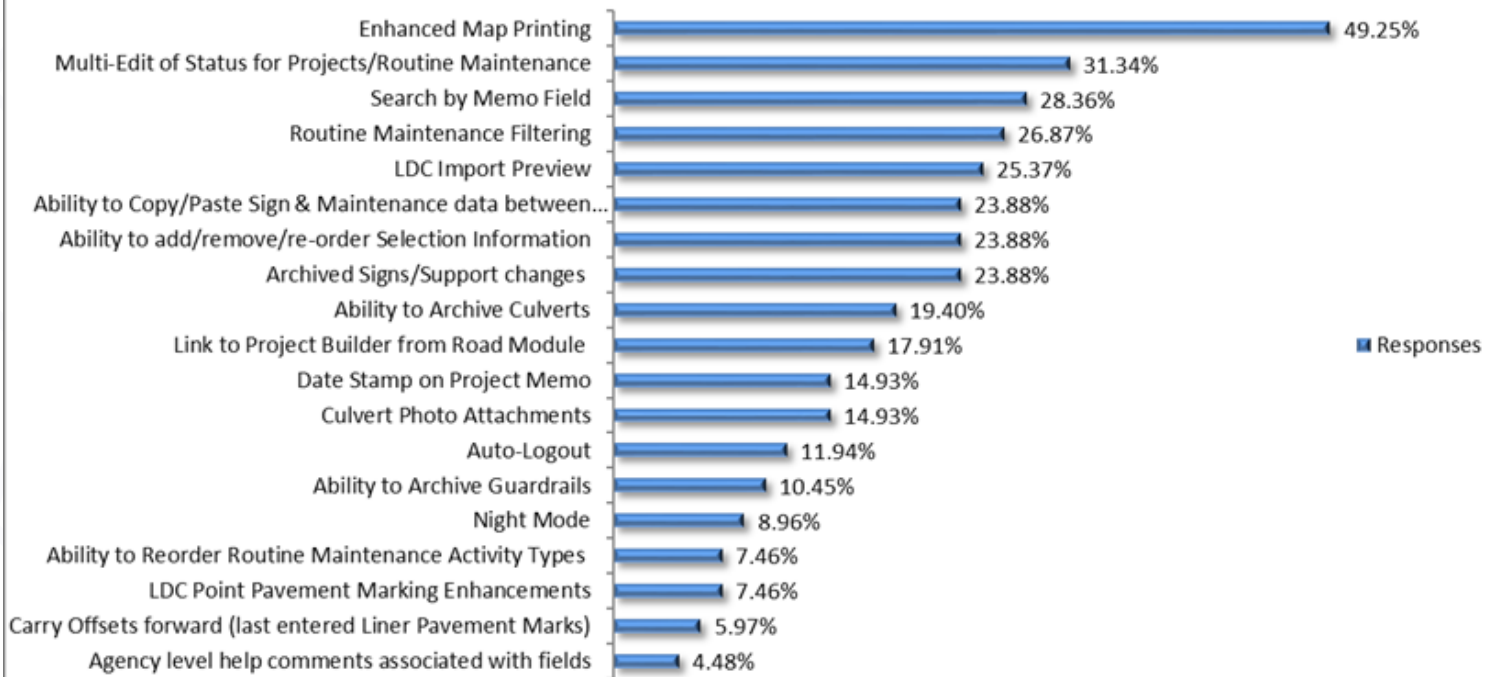| Task Item	Responses
Enhanced Map Printing	49.25%
Multi-Edit of Status for Projects/Routine Maintenance	31.34%
Search by Memo Field	28.36%
Routine Maintenance Filtering	26.87%
LDC Import Preview	25.37%
Ability to Copy/Paste Sign & Maintenance data between...	23.88%
Ability to add/remove/re-order Selection Information	23.88%
Archived Signs/Support changes	23.88%
Ability to Archive Culverts	19.40%
Link to Project Builder from Road Module	17.91%
Date Stamp on Project Memo	14.93%
Culvert Photo Attachments	14.93%
Auto-Logout	11.94%
Ability to Archive Guardrails	10.45%
Night Mode	8.96%
Ability to Reorder Routine Maintenance Activity Types	7.46%
LDC Point Pavement Marking Enhancements	7.46%
Carry Offsets forward (last entered Liner Pavement Marks)	5.97%
Agency level help comments associated with fields	4.48%

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

Comments and Conclusions

The final question of the survey is a general question asking for comments, suggestions, and feedback regarding future Roadsoft development, potential training topics, concerns with the software, etc. There were fourteen additional comments and suggestions submitted by participants. These comments are taken into consideration when planning other development activities and will be added to the appropriate major and maintenance task lists. Any suggestions for possible training topics are also considered as we plan the 2024 training schedule.

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 On the Road/Tech Assist Tuesdays

Roadsoft On The Road is a customized in-person technical assistance session. You provide a list of topics, and we'll work through your list in person, using your data on your system. Send an email to roadsoft@mtu.edu to request a visit.

If you're not able to meet in person, the CTT also 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-tuesdays 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.