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<https://roadsoft.org/help>

2022 Work Plan Review

The staff at the Center for Technology & Training (CTT) often receive questions about the status of Roadsoft development and individual work item tasks. One of the primary means of providing these updates to Roadsoft clients is through the fall Roadsoft User Group (RUG) meeting. In an effort to provide an update to a broader audience, we're providing a detailed work plan update in this issue of the *Roadsoft Roundup*.

2022 Roadsoft User Group Meeting

CTT staff hosted the latest RUG webinar on September 1, 2022. The RUG meeting included a review of the progress on the 2022 Roadsoft work plan and presented options and opened the floor for discussion of new ideas for the 2023 work plan.

Senior Project Manager Nick Koszykowski and Technical Specialist Scott Bershing hosted the meeting. Koszykowski gave an overview and status update on major items in the 2022 work plan that have been completed and are still being worked on. Bershing gave an overview of the Roadsoft training sessions that were offered in the spring, as well as upcoming training offered in the fall of 2022. Koszykowski then provided some other general updates, including an overview of the new Model Inventory Roadway Elements (MIRE) Fundamental Data Elements data sharing options available in Roadsoft.

2022 Work Plan Progress

During the RUG meeting, some of the major tasks in the 2022 work plan were discussed, but many of these items weren't specifically covered. This a list of enhancements and development tasks from the 2022 work plan (as of September 15, 2022) that CTT staff have completed so far this year:

- New Features: Complete overhaul/redesign of the Bridge Module to simplify the data to better reflect the MiBridge data source.

- New Features: Added LDC Export/Import from Cloud.
- Bridge Module: Bridge Maintenance will allow more than 1 unique project per day on a bridge.
- Bridge Module: "Added editable Memo field to the module. This field is importable/exportable, filterable, and searchable."
- Bridge Module: Fixed 'Input string was not in a correct format' exception loading the module for certain bridges with null value for Truck Pct.
- Bridge Reports: "Bridge reports overhauled, redesigned and modernized, including the Print Bridge report."
- Bridge Reports: Added 'Bridge Condition by Material' and 'Bridge Condition by Design' reports.
- Crash Filters: Fixed exception adding Intersection Maintained By field to filter criteria.
- Culvert Data Interface: Fixed exception running Latest Stream Crossing Data Sheet from the Culvert Data Interface
- Culvert Legends: Added 'SAMPLE: Inspection Rating' sample legend to display Good/Fair/Poor/Severe legend for Inspection Barrel Rating.
- Culvert Module: Added a mini-map to the Culvert module.
- Culvert Module: Fixed bug which was causing extreme slowdown or lockup when saving data for a single culvert with a large (1000+ shapes) selection on the map.
- Culvert Module: Added multi-edit for Culvert Custom Fields via the Asset Management->Culvert Management menu.
- Culvert Module: Added multi-edit for some Culvert fields.
- Culvert Module: Fixed Print Work Order to display the correct Culvert Shape.
- Custom Fields: Added function to edit custom field Label, Abbreviation, and/or Description. Applies to Culvert, Sign/Support, Drainage Network, and Road.
- Drainage Network Module: Fixed issue on initial load of module with Drainage Structures selected on multiple PRs

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where the full list wasn't loading.

- Drainage Network Module: Fixed issue with map full extents caused by the pipe direction shape drawing.
- Drainage Network Module: Implemented import from shapefile to populate Drainage Pipes.
- Drainage Network Module: Fixed bug editing Drainage Structure location if module was opened via Drainage Pipe or Basin.
- Drainage Structure Reports: Added External ID field to Drainage Structure Work Order History report.
- Drainage Structure Reports: Added option to Drainage Structure Work Order History report to filter work orders by status.
- Driveway Module: Added a mini-map to the Driveway module.
- Export to File: Fixed export to ESRI File Geodatabase which was not outputting the coordinate system or projection.
- Export to File: Fixed bug exporting to file for Road when the FCC (removed) or ThruLanes columns were included in the export.
- Export to File: Fixed bug exporting to Shapefile, KML, dbf, or File Geodatabase for a layer that had no Custom Fields setup (Road, Sign, Culvert, Sidewalk)
- Export to File: Added TAMC Project Classification field to Road export field list.
- Export to File: Fixed bug in export to LDC for Drainage Pipe data that was filtered.
- Filter Builder: Added option to main form Settings menu to change the default setting for whether new filters are shared.
- Framework Migration: Added option to the Asset Management menu to view 'Unmigrated Segments'. Displays a grid of segments that did not migrate from the previous FW Version. User can zoom/select shapes on the map.
- Framework Migration: Fixed exception migrating Drainage Pipes.
- Guardrail Module: Fixed exception editing location of a guardrail where the intersection point for the segment is non-numeric.
- Guardrail Module: Added Guardrail Type lookup field to the module.
- Guardrail Module: Fixed bug which was causing extreme slowdown or lockup when saving data for a single guardrail with a large (500+ shapes) selection on the map.
- Guardrail Module: Added multi-edit for Guardrail Custom Fields via the Asset Management->Guardrail Management menu.
- LDC: Fixed issue setting Cloud Key from the Login Form (to download database) which would not save the cloud key to settings.
- LDC : Fixed exception 'no such table: zlkFW_FIPS' opening an LDC database for a Township jurisdiction.
- LDC Culvert: Fixed bug where deleted culvert would still be selected and editable in the module.
- LDC Culvert: Fixed bug which would not export Culvert if an inspection were added but the Culvert was not edited or added.
- LDC Culvert: Added Owner and Custodian lookup fields to the module.
- LDC Culvert: Fixed bug adding a Culvert which could leave Owner and Custodian empty.
- LDC Export: Fixed exception importing Culvert data from LDC because of null value in OwnerCode.
- LDC Guardrail: Added Guardrail Type lookup field to the module.
- LDC Guardrail: Added option to apply defaults to the current guardrail.
- LDC Import: Fixed bug importing Road data for older map version which would appear to import but data was never updated.
- LDC Import: Fixed exception importing Culvert data from LDC because of null value in OwnerCode.
- LDC Linear Pavement Marking: Fixed bug adjusting a split point after splitting a segment.
- LDC New Features: Added LDC Export/Import from Cloud.
- LDC Road: Added option to Settings->Road menu to Auto Populate Rating History when selecting a segment. This option is off by default for better performance.
- LDC Road: Fixed bug in Unrated Segments Form which could show a segment that appeared to be rated but wasn't--usually caused by a rating that was undone.

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- Linear Pavement Mark Module: Fixed bug selection info on the map which would display the incorrect material or '[Not Entered]'.
- Linear Pavement Mark Module: Fixed bug with the Has Pavement Marks legend which would not update after adding a mark to a segment that had none, until restart of Roadsoft.
- Linear Pavement Mark Module: Fixed timeout error saving linear mark segment data.
- Map: Fixed bug making a layer visible/invisible via the Manage Layer Visibility form if the layer has an apostrophe in the name.
- Map: Fixed bug saving map as image which would sometimes throw an exception and other times not save the current map.
- MIRE Update: Simplified the process of pushing local MIRE data into MDOT data and exporting to a zipped file geodatabase.
- Pavement Management: Fixed bug running Project Planner reports which would indicate no data available when there actually was data.
- Pavement Management: Fixed bug calculating Current Rating which would use the last rating value even if the rating date was years ago.
- Pavement Management: Moved Pavement Management menu items from under Asset Management menu to top-level menu.
- Pavement Management: Fixed intermittent app lockup after rebuilding RSL or running Strategy/Optimization.
- Point Pavement Mark Module: Added a mini-map to the Point Pavement Mark module.
- Point Pavement Mark Module: Updated Lane Direction lookup to include Northeast, Northwest, Southeast, Southwest, and All Lanes.
- Point Pavement Mark Module: Fixed bug which was causing extreme slowdown or lockup when saving data for a single Pavement Mark with a large (500+ shapes) selection on the map.
- Project Builder: Changed default trigger for unpaved surface treatments to not change the rating (can be overridden by user)
- Road Data Interface: Fixed exception running 'Detailed Road and Segment', 'Current PASER Rating', and 'Last Rating Entered' reports from the data interface form.
- Road Filters: Fixed IBR Year, Historical filter so values show up in descending order in combo box.
- Road Legends: When changing a lookup value for a User-Defined Field, any legend that uses the field value will now be updated after reapplying the legend.
- Road Module: Fixed bug in curve deterioration when inferring treatments which could incorrectly identify an unchanged rating as a treatment.
- Road Module: Fixed exception applying a filter as selection while the module is open.
- Road Module: Changed default trigger for unpaved surface treatments to not change the rating (can be overridden by user)
- Road Module: Fixed bug which was causing extreme slowdown or lockup when saving data for a single segment with a large (1000+ shapes) selection on the map.
- Road Module: Added multi-edit for Road Custom Fields via the Pavement Management menu.
- Road Module: Added NFC, Legal System, and City/Twp to 'Segments on...' grid.
- Road Reports: Added option to report on Right Of Way for Road Detailed Road and Segment report.
- Road Reports: Added Road Ownership Report showing road segments with Ownership (city/twp), Legal System, Restriction, and Surface Type.
- Road Reports: Fixed exception which prevented the Good/Fair/Poor Summary w/Chart from running.
- Road Reports: Added 'Legal System Mileage by County', 'Surface Type Mileage by County' and 'Miles Rated (Paved) By County' reports
- Road Reports: Added option to group the following reports by County (for Regions): 'Surface Rating Mileage Summary For A Given Year' and 'Surface Rating Mileage Summary For A Range of Years'
- Roadsoft Export: Fixed bug when exporting Traffic Signal data with work orders where the work order data would be empty.
- Roadsoft Import: Fixed exception importing export file that contains Drainage Structures.
- Safety Analysis: Fixed bug running reports from Crash Ranking forms (Intersection, Segment, Curve, Interchange) which would not include all results from the grid.

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- Safety Analysis: Fixed bug in Intersection/Segment/Curve/Interchange Ranking which would ignore a filter when printing the report.
- Sign Filters: Added filters for Sign Inspection Memo and Inspectors.
- Sign Module: Added Custom Fields to the Sign Module. User can define an unlimited number of fields of the following types: Date, Decimal, Long Note, Lookup, Short String, Whole Number, or Yes/No Flag.
- Sign Module: Fixed timeout changing Sign Category Weights for databases with a large number of signs.
- Sign Module: Fixed exceptions archiving Support/Sign or opening an archived Support/Sign in the module.
- Sign Module: Fixed bug in sign search which could include archived signs whose support was not archived, even if archived signs was excluded.
- Sign Module: Fixed bug which was causing extreme slow-down or lockup when saving data for a single support/sign with a large (1000+ shapes) selection on the map.
- Sign Module: Added multi-edit for Sign/Support Custom Fields via the Asset Management->Sign Management menu.
- TAMC Export: Added stats message after Region Export of PASER to xml indicating # of segments and total centerline miles output.
- TAMC Export: Fixed bug in region export of PASER xml data that could result in segments with both PASER and IBR ratings.
- Traffic Count Module: Fixed bug where an update to Traffic Count Station percent commercial was not updating the Road Module's percent commercial value for all segments related to the station.
- Traffic Signal Filters: Fixed exception adding Communication Cabinet Location field to filter criteria if one or more Signal Locations has a value greater than 50 characters.
- Traffic Signal Module: Fixed bug in the Has Documents view which would prevent all selected signal locations to be displayed in the selection info window.
- Traffic Signal Module: Fixed bug in the module when changing Maintained By, data would not actually save.
- Traffic Signal Module: Fixed bug in the Work Orders which would not show Completion Date when status was set to Completed.
- Traffic Signal Module: Fixed bug selecting a signal location on the map and opening the module.
- Traffic Signal Reports: Removed duplicate records from Communication Cabinet Report and updated/modernized the report.
- Work Order Manager: Fixed multiple issues with the new Work Order Manager for Sign data.
- Work Order Manager: Fixed bug which would show incorrect number of checked work orders.

2023 Work Plan Survey Results

During the RUG meeting, attendees were invited to participate in the *2023 Roadsoft Work Plan Survey*. The survey received fifty-five submissions. Survey participants selected and rated proposed features and enhancements to Roadsoft and submitted additional comments and ideas for future Roadsoft development. We will provide an overview of the survey results and provide a list of tasks that will be part of the 2023 Roadsoft work plan in *Roadsoft Roundup* Volume 22 Issue 3.

Microsoft Ends Support for SQL Server 2012

Microsoft announced that SQL Server 2012 reached the end of its 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.

After January 1, 2023, the creation of new Roadsoft and MERL databases on SQL Server 2012 instances will cease to function. At some point later in the year (most likely the 2023.3 release), 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.

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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 that need to update should update to SQL Server 2019 to maximize the available life of the product and reduce the frequency of future SQL server updates. 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 Pavement Management
Weekly Mini-Series Webinar
Oct. 13-Nov. 10 , 2022**

<http://ctt.nonprofitsoapbox.com/2022octrspavement>

**2022 Roadsoft Special Topics:
SQL Database Management
October 26, 2022**

<http://ctt.nonprofitsoapbox.com/2022rs-sql-oct>

**2022 Meeting the TAMC Investment Reporting
Requirements using Roadsoft
November 1, 2022**

<http://ctt.nonprofitsoapbox.com/2022tamcreporting-nov>

**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>

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

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