



What's New with T.O.M. GIS

Routing 1.6

Geocoding

- **T.O.M. now offers Parcel based Geocoding and Reverse-Geocoding.** Many districts are 'map challenged' that is all or part of their street map has little to no address ranges in areas where they are needed. Yes ArcView allows you to enter / change your address ranges but if you need to change more than a few streets this process quickly becomes overwhelming (not to mention the research time to gather the address ranges). Gecko's research has found that many county Assessor's offices have very accurate GIS maps of all the property parcels. This makes sense because the Assessor has an incentive to have this map as up to date as possible because each property represents revenue to the office. These parcels most times contain address information for each of the properties and, therefore, can be used in the Geocoding process to locate your students and your stops. The software can then use this information to perform its routing tasks.
- **T.O.M. now offers the user the ability to modify the Geocoding sensitivity settings used by ArcView when geocoding the Students, Stops and / or Schools.** In the past the T.O.M. GIS Software has used the standard ArcView geocoding sensitivity settings. Many customers have requested the ability to modify these settings when working with difficult to geocode sections of their map.
- **T.O.M. now uses a larger offset when geocoding students / stops and schools.** In the past the T.O.M. software has basically positioned the location of the student, stop or school to be just a foot or two of the middle of the street where the address was located. This caused problems if a boundary for two schools was down the middle of a street. If the boundary wasn't drawn to neatly run up against the street the students could either be considered in the wrong schools boundary or perhaps in a "no man's land" of no boundary and would be considered out of the district. Now the T.O.M. Software uses a distance of 55 feet from the center of the street. This more closely reflects the reality of where students actually are located on the map. With this new offset our customers are reporting fewer problems when a street is used as a boundary divider.
- **Get address from map for both school and student.** In the past users could 'Reverse Geocode' a stop by simply clicking on a point on their map and the T.O.M. Software would return the coordinates of that stop and an approximation of the stop's address. This tool proved to be very helpful when the streets on a map had no address ranges or if the stop was not at a particular address. Our customers have asked for this same feature in schools and students. Ask and ye shall receive this handy feature is now in both the Schools and Students routine!

Gecko Microsolutions, Inc.

3420 E. Shea Blvd.

Suite 200

Phoenix, AZ 85028

(602) 867-4004





Reports

- **T.O.M. now offers a new customize reports feature.** T.O.M. now allows you to modify and customize almost any of its reports with its power and easy report writer tool. As good as our reports are we new that you would like to be able to 'tweak' them here and there. With our new Report Customization feature you can do so easily! You can also create new reports of your own by 'copying' an existing report and modifying to your liking. Your new report will then be available to run in the T.O.M. GIS Routing software!
- **New report, the Run Miles report.** T.O.M. offers a new report, called the Run Miles report, that shows the run a description, the school and the run's total miles and total miles plus dead head miles. The report will then show a grand total of both mileage figures at the end of the report. This report is useful for state reports. The layout is called RunMiles.rpx. The TOMRPT.MDB will need to be modified to add this report

Routes and Runs

- **The Run Search Screen has been enhanced to have greatly increased search capabilities.** Gecko has now added the ability to search your runs by selecting multiple trip types and multiple schools and the same time. Gecko also added a new School Type search which allows you to search for all runs assigned to a school that is of a school type (for example, you could ask T.O.M. to find all runs that are for high schools). Many of you have said that your bus runs service more than one school and that you want to be able to search your bus runs by schools they service as opposed to schools they are assigned to. Gecko thought this was a great idea so this feature was also added to your T.O.M. GIS Routing software. Now you have a check box that indicates that you want the School, Trip Type, and School Type search to use the schools that are serviced as opposed to the school the run is assigned to.
- **The Run Search Screen has been enhanced to allow a user to modify a group of runs.** Specifically, you may modify the run's run family, trip type, school, location code and expected vehicle type. The Run Search Screen allows you to select multiple runs to change within the search results screen. Many times you may realize a great way to code your bus runs AFTER you have entered them all in! Now you are faced with either going back and changing all of your bus runs one at a time or living without your great idea. Well relax, T.O.M. now makes it easy to go back and change a group of bus runs in one easy step using the Group Run Change feature.
- **T.O.M. now allows you to specify if you want a run path to be solved based on shortest driving distance vs. shortest driving time.** Many times our customers have needed to change how the ArcView software finds the optimum driving path for a bus run. In some cases the shortest driving time is needed in other cases it is the shortest driving distance. T.O.M. now allows you to dynamically change this setting in your Routing Options.
- **The Route Search Screen has been enhanced to have greatly increased search capabilities.** Gecko has added all the advanced searching capabilities it added in the Run Search Screen to the Route Search Screen as well. This means, for example, if you wanted to find all Routes that had runs

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that serviced high schools – it is as easy as a few clicks! For more details see the description above for the enhancements to the Run Search Screen.

- **T.O.M. now automatically calculates the Dead Head time for runs and will automatically recalculate that time when a run changes Routes or changes order in a Route.** Many of our customers have asked for this feature. The T.O.M. GIS Routing software now automatically calculates: 1. The time it takes to go from the bus garage to the first stop of a run. 2. The time it takes to go from the last stop of a bus run to the first stop of the next bus run in a route. 3. The time it takes to go from the last stop in a bus run back to the bus garage. Knowing this amount of time is a key component to scheduling your bus routes. Now T.O.M. does it all for you automatically!
- **T.O.M. now has a new Bell Time Change Feature.** Several of our customers have had to face complicated analysis tasks when their district is weighing the affects of changing district bell times. For the Transportation Department this is a nightmare job! You must look at how this changes every bus run on every route. Normally, this meant modifying every bus run one at a time to see what the affect would be. No more! T.O.M.'s new Bell Time Change feature allows you to change your various bell times in mass. This feature will then automatically change all affected bus runs start times, all stop times, and end times to honor these new bell times in a few seconds! Then you can immediately begin to study the impact on these new times on your overall dispatching mission. Don't think that T.O.M. left that job for you to do by hand, check out the new Time Line feature below for a GREAT tool to help you analyze your overall bus routes.
- **T.O.M. now has a powerful new Time Line feature.** This powerful new feature allows you to see your bus routes and bus runs visually using a colorful time line view. This view will show the bus run's start and end time as color bar, the bus run's dead head time, and the school's bell time that the bus run is trying to obey. But wait there's more, you can also use the Time Line feature to change a bus run's start time by 'dragging' it back and forth along the time line. As you do so T.O.M. automatically recalculates all the bus run's stop times. You can also change the route of the bus run by 'dragging' it to a different route. T.O.M. will automatically recalculate the bus run's dead head time as well as its bus stop times. The Time Line can be printed as well. You will find the Time Line feature is powerful new tool to assist your job!
- **T.O.M. now allows users to create School Types, assign these school types to schools and then search and report the bus runs by these school types.**
- **T.O.M. now allows users to create Time Zones and use these Time Zones when analyzing the bus runs in the T.O.M. Time Line feature.**

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