

# CTDOT Midas Vehicle Library Import

---

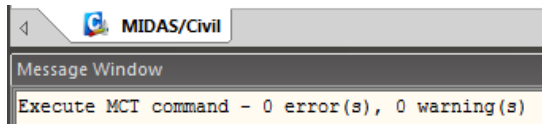
## Purpose

The purpose of this document is to provide instructions for importing the CTDOT Midas Vehicle Library, available for download on the [CTDOT Bridge Load Rating Website](#), into Midas Civil 2016.

## Importing MCT Command Shell

Midas Civil Text (MCT) files are formatted commands used to import and/or export model data. The CTDOT developed an MCT Command Shell, which contains a library of vehicles typically required during a load rating analysis. Follow the steps below to import the Midas Vehicle Library.mct file into a Midas model.

1. In the Midas Project file, click the **MCT Shell Command** button under the Tools tab on the Midas window ribbon.
2. In the MCT Command Shell window, click the **Open** button and set the file path to the Midas Vehicle Library file. The MCT Command Shell window should populate with the input data provided in the file.
3. In the MCT Command Shell window, select the **Run** button and confirm the import was successful, via the Message Window. The figure below shows the message confirming a successful import for MCT Command Shells. After importing, select the **Close** button in the MCT Command Shell window.



## Midas Vehicle Library

This section discusses settings and vehicles, which were imported via the CTDOT Midas Vehicle Library MCT Shell.

## Unit System

During the import, the 'Unit System' for the Midas Project file was set to the following base units: kips, ft, BTU, and °F.

## Moving Load Code

During the import, the 'Moving Load Code' for the Midas Project file was set to AASHTO LRFD.

## Vehicles

During the import, 27 Vehicles were added to the Midas Project File, 10 Midas Standard Vehicles and 17 User Defined Vehicles.

### Midas Standard Vehicles

The 10 Midas Standard Vehicles are vehicles, which are available in the Standard Vehicular Load Library within Midas. The Midas Standard Vehicles, imported via the CTDOT Midas Vehicle Library MCT Shell, include a Dynamic Load Allowance of 33%, except for the Fatigue Truck, which includes a Dynamic Load Allowance of 15%.

Refer to the table below for the Midas Standard Vehicles provided:

<u>VEHICLE NAME</u>	<u>PLATE ID</u>
HL-93 Truck	LL-D.1a
HL-93 Tandem	LL-D.1b
Fatigue Truck	LL-D.1d
Type 3	LL-AL.1
Type 3-3	LL-AL.3
Type 3S2	LL-AL.2
SU4	LL-AL.4
SU5	LL-AL.5
SU6	LL-AL.6
SU7	LL-AL.7

## User Defined Vehicles

The 17 User Defined Vehicles contain the standard axle loads and axle configurations for additional CTDOT specific vehicles for load rating analysis, including the Emergency Vehicles, which are not yet available in the Midas Standard Vehicular Load Library.

The User Defined Vehicles, imported via the CTDOT Midas Vehicle Library MCT Shell, do not include additional vehicles, truck pairs, or vehicles with lane loads, which may be required for analysis on certain structures. The load rating engineer may add additional vehicles to the Midas Project File, as needed, by copying and modifying the User Defined Vehicles.

The User Defined Vehicles, imported via the CTDOT Midas Vehicle Library MCT Shell, do not include Dynamic Load Allowance. Refer to BLRM for guidance on applying Dynamic Load Allowance for User Defined Vehicles within Midas.

Refer to the table below for the User Defined Vehicles provided:

<u>VEHICLE NAME</u>	<u>PLATE ID</u>
CT-L73.0	LL-CL.1
CT-L3S2	LL-CL.2a
CT-HS20	LL-CL.3
CT-H20	LL-CL.4
CT-P76.5	LL-P.1
CT-P120(6)	LL-P.2
CT-P140(7)a	LL-P.3
CT-P140(7)b	LL-P.4
CT-P160(8)a	LL-P.5
CT-P160(8)b	LL-P.6
CT-P180(9)	LL-P.7
CT-P200(10)	LL-P.8
CT-P380	LL-P.9
CT-P204	LL-P.10
CT-TLC	LL-P.11
Type EV2	LL-E.1
Type EV3	LL-E.2