

WisTransPortal Crash Data – Advanced CSV Download

UW TOPS Lab, June 1, 2024

Starting June 2024, the WisTransPortal Crash Data Retrieval Facility will provide two options to download the results of a crash data query. The standard option, which is suitable for most crash data analysis purposes, corresponds to the traditional comma-separated-value (CSV) download file containing one crash record per row. Each record combines crash and unit level data elements, where a unit is any vehicle, bicycle, pedestrian, or equipment involved in a crash. This format includes unit details for the first two units listed on the crash report with one person per unit (typically the driver, pedestrian, or bicyclist). The standard CSV download file may be customized to include additional crash data elements, however the basic record structure of one crash per row is fixed.

A new “Advanced CSV Download” option, available from the Query Results page, provides an expanded set of crash data files in Zip archive format. These files contain a comprehensive set of data elements for each crash organized into separate CSV files per *crash level*, *vehicle level*, *person level*, and *fixed objects*. The Advanced Download option was developed to support advanced crash analysis through external database applications and other software packages.

To access the Advanced Download option, set the **CSV Download** selection to “Advanced” at the right-hand side of the Query Results page, and then click the [Download Result Set \(Text/CSV\)](#) link as you would normally to export data from the Retrieval Facility (Figure 1).

The Total Number of Records for this Query is 9024. Data Source: DT4000

Refine Location Summarize Data Show CMAA Crash Map Edit Query New Query Exit CSV Download:

View additional crash detail View the crash report Crash report is not available Crash report is restricted [DT4000 Crash Data User Guide](#)

First Previous Next Last Rows Per Page: 50 Order By: DOCTNMBR Column List: CUSTOM LIST [Customize](#) [Download Result Set \(Text/CSV\)](#)

#	DOCTNMBR	CRSHDATE	CNTYNAME	MUNINAME	MUNITYPE	ONHWY	ONHWYSYS	ONHWYDIR	ONHWYTYP	ONSTR	LATDECDG	LONDECDG	TOTVEH	TOTMOT	TOTNMT
1	01L006553W	02/07/2023	DANE	MADISON	C					MOORLAND RD	43.03341913	-89.36616362	1	1	0
2	01L006553X	02/11/2023	DANE	MADISON	C					RIMROCK RD	43.04687261	-89.37402859	2	2	0
3	01L006553Z	12/14/2023	DANE	MADISON	C					W BELTLINE FRONTAGE RD S	43.034979228	-89.42687246	2	3	0
4	01L00655KO	12/29/2023	DANE	MADISON	C	012	USH	EB		HIGHWAY 12/18	43.035344687	-89.42166904	2	3	0
5	01L007D6NB	04/05/2023	DANE	MADISON	C					MINERAL POINT RD	43.060618245	-89.51268321	2	3	0
6	01L00LHJND	01/12/2023	DANE	MADISON	C	018	USH	EB		VERONA RD	43.032307482	-89.45878423	2	2	0
7	01L00LHJNF	03/10/2023	DANE	MADISON	C					S WHITNEY WAY	43.049362958	-89.47351895	2	2	0
8	01L00LHJNG	06/14/2023	DANE	MADISON	C	012	USH	EB			43.043616204	-89.36274401	2	2	0
9	01L00LHJNH	06/17/2023	DANE	MADISON	C					REGENT ST	43.067780904	-89.41159121	1	1	0
10	01L00LHJNK	07/23/2023	DANE	MADISON	C					ALLIED DR	43.029640427	-89.45929617	1	2	0
11	01L00LHJNL	08/20/2023	DANE	MADISON	C					S ORCHARD ST	43.066863883	-89.40727789	1	1	1
12	01L00LHJNM	09/16/2023	DANE	MADISON	C					S WHITNEY WAY	43.041701896	-89.47745563	1	1	0
13	01L00LHJNN	09/15/2023	DANE	MADISON	C					HIGHLAND AVE	43.067962068	-89.4286658	2	2	0
14	01L00LHJNP	10/13/2023	DANE	MADISON	C					S MIDVALE BLVD	43.044250687	-89.45114895	1	1	0
15	01L00LHJNQ	10/15/2023	DANE	MADISON	C					S MIDVALE BLVD	43.037921935	-89.45149073	1	1	0

Figure 1. Query Results Page with CSV Download option set to Advanced.

The system will return a Zip file of the form “DT4000-advanced-crash-download.zip” containing four crash level files (Figure 2).

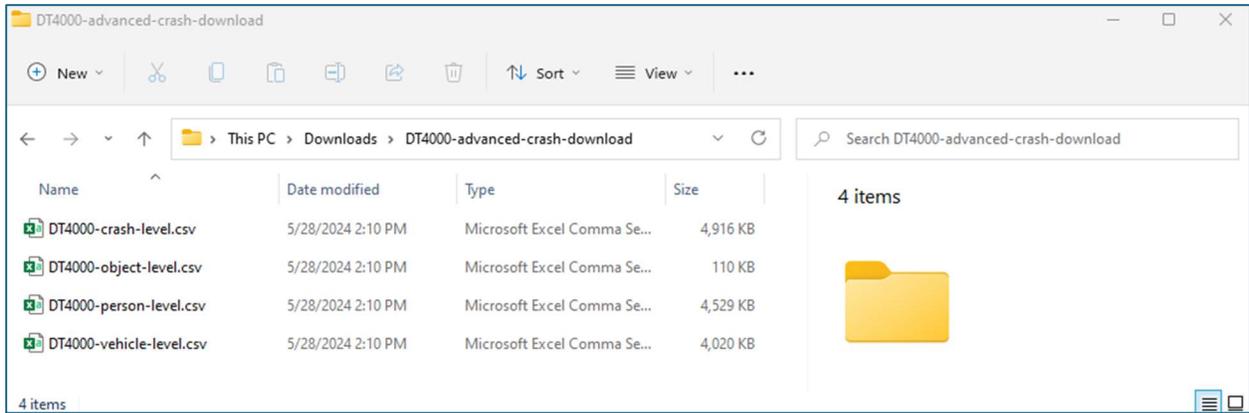


Figure 2. Microsoft Windows folder view of an expanded Advanced Download Zip file.

All crash records in the Advanced Download files are referenced by a unique crash number (CRSHNMBR) which may be used to join records across files. Each unit within a crash is further assigned a unit number (UNITNMBR) that is unique to that crash. Vehicles and occupants are therefore related by the composite key (CRSHNMBR, UNITNMBR). Since a crash may involve more than one unit, and each unit in turn may have more than one occupant, join operations are typically “one-to-many,” meaning one crash level record may be joined to many vehicle, person, or object records.

A list of unique composite key record identifiers for the crash, vehicle, and person level files is provided below. The fixed objects file does not have a unique key, although it includes CRSHNMBR and UNITNMBR fields for referential joins.

File	Composite Key
DT4000-crash-level.csv	CRSHNMBR
DT4000-vehicle-level.csv	CRSHNMBR, UNITNMBR
DT4000-person-level.csv	CRSHNMBR, UNITNMBR, UNITPRSN

For the MV4000 data source, the Zip file will be named “MV4000-advanced-crash-download.zip” with the corresponding record identifiers.

File	Composite Key
MV4000-crash-level.csv	ACCDNMBR
MV4000-vehicle-level.csv	ACCDNMBR, UNITNMBR
MV4000-person-level.csv	ACCDNMBR, UNITNMBR, OCCPNMBR

A complete set of Advanced Download data dictionary documents is available from the [Crash Database Documentation](#) page linked from the WisTransPortal Crash Data Retrieval Facility. For additional information, contact TOPS Lab Crash Data support: crash-data@topslab.wisc.edu.