



HCS™
AWSC Module



USER GUIDE

Contents

Introduction	1
License Agreement	1
Acknowledgements	6
Trademarks and Copyrights	6
Getting Started	7
System Requirements	7
Getting Started	7
General Controls	8
Menu Items	8
All-Way Stop-Controlled Intersections	10
HCM Chapter 21	10
Operational Data	10
AWSC Report	11
How To	12
Create a New File	12
Open an Existing File	15
Save a File	19
Close a File	20
Exit the Program	21
Edit the Default Settings	22
Change the View	24
Change the Lane Configuration	26
Enable and Edit the Percent Thrus Using Shared Lane Fields	33
View Results of the Analysis	35
Print a Report	40
Glossary of Terms	43
Index	46

Introduction

License Agreement

HIGHWAY CAPACITY SOFTWARE™ (HCS™)
END-USER LICENSE AGREEMENT (EULA)

Effective Date: 9/1/2025

Copyright © 2025 University of Florida. All rights reserved.

This End User License Agreement (“Agreement”) is a legal agreement between you (“End User”, “you”) and the University of Florida Board of Trustees for the benefit of the McTrans Center (“McTrans”, “we”) regarding the use of the Highway Capacity Software (“Software”). By accessing or using the Software programs within the electronically transmitted package or direct download, you agree to be bound by the terms and conditions of this Agreement.

1. INTEGRATION:

This License Agreement is the complete and exclusive statement of the agreement between End User and McTrans and supersedes any previous End User License Agreements distributed by older versions of the software proposal or prior agreement, oral or written, and any other communications between End User and McTrans relating to the subject matter of this License Agreement. This EULA will supersede the End User License Agreement contained in the HCS Version 5, 6, and 7 modules disseminated as part of the Software. This License Agreement may only be modified by a written agreement made subsequent to the date hereof and signed by both parties.

2. LICENSE GRANT:

2.1 Subscription-Based License:

McTrans grants you a non-exclusive, non-transferable license to access and use the Software, subject to the terms of your active subscription. The license is valid only for the duration of your subscription and is contingent upon full payment of all applicable fees.

2.2 Access to Software Versions:

Your subscription grants access to versions 5 (selected modules), 6 (selected modules), 7 and 8 series and beyond (2022 onward) of the Software. When a new version of the Software is released, the End User with an active subscription can download and access the latest version at no additional cost for the remainder of their subscription term.

3. TYPES OF SUBSCRIPTIONS:

The type of subscription determines the permitted use of the Software. Once a subscription type is selected, it cannot be changed or exchanged for a different type.

3.1 Office-Based Subscription:

This subscription grants access to the Software for a predetermined number of computers within a physical office. An "office" refers exclusively to a fixed geographical location, typically a single physical address, where an organization conducts its business or operational activities. This location must consist of one or more contiguous rooms or spaces within a single building. Virtual offices or any non-physical locations are excluded from this definition.

The Software may be installed on multiple devices within the office, and access is restricted to end users officially assigned to that licensed office. End Users may also use the Software on portable computers, such as laptops, while on official travel, provided that all (100%) such use is exclusively on behalf of the office for which this Software license was purchased. Additional offices must obtain proper licensing prior to accessing the Software. The Software may only be installed on devices owned or controlled by the licensed office.

This subscription is intended exclusively for commercial use.

Virtualization Restriction:

The Software under an office-based subscription is prohibited from being used in a virtualized environment. All installations of the Software must be conducted on a physical computer, such as a desktop or laptop. Remote access technologies, such as remote desktop, are strictly prohibited under this subscription type.

3.2 Computer-Based Subscription:

This subscription permits the installation and use of the Software on a specified number of individual devices. An "individual device" refers to a single, standalone computing unit, such as a desktop or laptop, intended for use by a single user at a time. Concurrent or simultaneous access by multiple users on the same computer or through any means of remote connection is strictly prohibited. The Software may only be accessed directly from the device(s) on which it is installed, regardless of whether the device is located in a physical office or used in a virtual office. End users working remotely or in virtual offices must ensure that the device remains dedicated to their use and fully complies with the terms of this subscription.

Virtualization Restriction:

The Software under a computer-based subscription is prohibited from being used in a virtualized environment. All installations must be conducted on a physical computer, such as a desktop, PC, or laptop. Remote access to the Software via any technology, including but not limited to remote desktop, is strictly prohibited under this subscription type.

3.3 Volume-Based Subscription:

This subscription permits the installation and use of the Software on a specified number of individual devices. An "individual device" refers to a single, standalone computing unit, such as a desktop or laptop, intended for use by a single user at a time. Concurrent or simultaneous access by multiple users on the same computer or through any means of remote connection is strictly prohibited. The Software may only be accessed directly from the device(s) on which it is installed, regardless of whether the device is located in a physical office or used in a virtual office. End users working remotely or in virtual offices must ensure that the device remains dedicated to their use and fully complies with the terms of this subscription.

Virtualization Restriction:

The Software under a Volume-based subscription is prohibited from being used in a virtualized environment. All installations must be conducted on a physical computer, such as a desktop, PC, or

laptop. Remote access to the Software via any technology, including but not limited to remote desktop, is strictly prohibited under this subscription type.

3.4 Academic Subscription:

The academic subscription is available exclusively to academic institutions and grants access to a specified number of seats (copies) across the entire academic institution. This subscription is intended solely for use in a classroom setting for teaching or a lab for research purposes under the direct supervision of faculty or other authorized personnel. The Software may only be installed on devices owned or controlled by the academic institution.

The End User is required to implement appropriate protection measures to prevent students or any other individuals from copying the Software and removing it from the lab or classroom environment. The responsibility for safeguarding the Software and preventing unauthorized copying or distribution rests entirely with the End User.

Virtualization for Virtual Classrooms:

Under the academic license, the End User may request permission to utilize a virtual environment for the installation and use of the Software. Such virtualization is only permitted with prior written consent from McTrans. If such permission is granted, the virtual environment must adhere to all protections and restrictions outlined in this Agreement, ensuring that the Software is used exclusively for its intended educational purposes and its access is limited to the institution's faculty and actively enrolled students only. Additionally, the number of seats purchased must be sufficient to cover the number of students and faculty accessing the virtual classroom.

4. SUBSCRIPTION TERM:

4.1 Duration:

The subscription term begins on the date of purchase and continues for the period specified at the time of purchase ("Subscription Term"). The license granted under this Agreement is valid only for the duration of the Subscription Term.

4.2 Renewal:

Subscriptions may be renewed upon payment of applicable fees before the end of the Subscription Term. If the subscription is not renewed, access to the Software and all related services, including technical support, will be terminated.

5. TECHNICAL SUPPORT:

5.1 Support Services:

During the active Subscription Term, the End User is entitled to reasonable telephone or email support provided during the normal business hours of McTrans. McTrans reserves the right to determine the extent of the support provided.

5.2 Revisions and Enhancements:

McTrans reserves the right to make substantial revisions and enhancements to the Software and to market such substantially revised versions as separate products. The End User shall not be entitled to receive such separate products without additional charge. Upon the release of any such revised version of the Software, the obligation to provide the above-described technical support services to the End User shall cease unless the End User chooses to pay to license the enhanced version of the Software, regardless of whether the End User has previously requested or received support on the prior version.

6. NETWORK USE:

The End User is strictly prohibited from using the Software on any network. This prohibition includes but is not limited to the use of the Software either directly or indirectly through commands, data, or instructions transmitted to or from a computer that is not licensed or is not part of the licensed internal network. This

also includes any use for Internet or web hosting services or by any user who does not hold a valid license for the Software from McTrans.

The Software is not designed for network use, and such use is unsupported. McTrans will not provide technical support for any issues resulting from network incompatibilities or unauthorized network use.

7. RESTRICTIONS ON USE:

The End User agrees that they shall not, nor shall they permit any third party to:

- **Software Modification:** Modify, adapt, translate, or create derivative works based on the Software, in whole or in part, without the express prior written consent of McTrans.
- **Reverse Engineering:** Reverse engineer, decompile, disassemble, or otherwise attempt to derive the source code of the Software, except to the extent expressly permitted by applicable law.
- **Unauthorized Use:** Use the Software for any purpose other than as expressly permitted under this Agreement, including unauthorized copying, distribution, or dissemination of the Software.
- **Intellectual Property Infringement:** Engage in any activity that infringes on the intellectual property rights of McTrans, including any unauthorized copying or distribution of the Software or associated documentation.
- **Copying and Distribution:** Copy, reproduce, or distribute the Software or associated printed documentation for sale, distribution, or dissemination, except as expressly provided under the terms of this Agreement or with the express prior written consent of McTrans.
- **Documentation Use:** Reproduce the associated documentation only as necessary for use within the permitted scope of the subscription type as outlined in this Agreement.
- **AI Training and LLMS Restriction:** The End User agrees not to use the Software to train or develop any artificial intelligence (AI) model or large language model system (LLMS) without the express prior written consent of McTrans. This includes, but is not limited to, using the Software to generate or fine-tune AI models, create or modify LLMS, or use the Software as a data source for AI or LLMS training. Any attempts to do so will be considered a material breach of this Agreement and may result in termination of the license.

Ownership of Software Modifications:

Any modifications, adaptations, translations, derivative works, or any other products or materials resulting from any prohibited actions shall become the exclusive property of McTrans, regardless of whether such actions were performed with or without McTrans' consent.

8. INTELLECTUAL PROPERTY RIGHTS:

The Software and all associated intellectual property rights are owned by McTrans. No rights are granted to the End User other than the limited license expressly set forth in this Agreement.

9. USE OF RESULTS IN RESEARCH AND COMMERCIAL PUBLICATIONS:

McTrans grants the End User legal permission to use the results generated by the Software in academic, research, or commercial publications, provided that such use complies with the terms of this agreement. The End User may publish or present findings derived from the Software as part of their research or commercial work as long as the Software is properly cited and all applicable license terms and restrictions are adhered to. Unauthorized reproduction or distribution of the Software itself remains strictly prohibited.

10. TRANSFER OF LICENSE AND DEACTIVATION RESTRICTIONS:

The Software is licensed only to the End User, and this License Agreement may not be assigned or transferred to anyone without McTrans' prior written consent. Any authorized transferee of this License Agreement shall be bound by the terms of this License Agreement. The End User may not transfer,

assign, rent, lease, sell, or otherwise dispose of the Software except as expressly provided in this License Agreement.

Deactivation requests are granted on a limited basis, such as hardware failure, device replacement or upgrade, reassignment of equipment, etc. To request deactivation, please email mctrans@ce.ufl.edu with a brief reason for your request and include the name of the computer or the machine you wish to deactivate. McTrans will then provide you with instructions on how to deactivate a license so you can use it on a different machine.

11. LIMITED WARRANTY AND LIMITATIONS OF REMEDIES:

End User acknowledges and agrees that it is the sole responsibility of End User to fully understand the limitations and assumptions underlying the Software and to refrain from using the Software without the assistance of personnel with appropriate expertise. The End User accepts full responsibility for reviewing, interpreting, applying, and utilizing the output of the Software and for ensuring that such output complies with any applicable design codes, standards, or project specifications.

Except as expressly provided herein, the Software is provided “AS IS” without warranty of any kind, whether expressed or implied, including, but not limited to, implied warranties of merchantability and fitness for a particular purpose. McTrans does not warrant that the functions contained in the Software will meet the End User’s requirements or that the operation of the Software will be uninterrupted or error-free. The entire risk as to the quality and performance of the product is with the End User.

In no event will McTrans be liable to the End User for any damages, including any lost profits, lost savings, or other incidental or consequential damages arising out of the use of or inability to use the Software, even if McTrans has been advised of the possibility of such damages, or for any claim by any other party. The above warranty gives the End User specific legal rights, and the End User may also have other rights in the United States, which vary from state to state.

Use of the Software where the End User believes or has reason to believe that damage may occur constitutes a violation of any and all warranties. McTrans has no knowledge of the hardware or Software configurations of the End User and assumes no liability for their damage.

12. TERMINATION:

12.1 Termination by McTrans:

McTrans may terminate this Agreement immediately upon notice if you fail to comply with any term or condition of this Agreement. Upon termination, you must cease all use of the Software and destroy all copies of the Software in your possession.

12.2 Termination by End User:

You may terminate this Agreement at any time by discontinuing the use of the Software and notifying McTrans. No refunds will be provided for any remaining portion of the Subscription Term.

13. GOVERNING LAW:

This License Agreement shall be governed by the laws of the State of Florida, U.S.A. Venue for all disputes related to this License Agreement shall be in the United States District Court of the Northern District of Florida, Gainesville Division, or in the Circuit Court of the Eighth Judicial Circuit for Alachua County, Florida.

14. U.S. GOVERNMENT RESTRICTED RIGHTS:

The Software and associated documentation are provided with RESTRICTED RIGHTS. Use, duplication, or disclosure by the U.S. Government is subject to restrictions as set forth in subdivision (c)(1)(ii) of The Rights in Technical Data and Computer Software clause at 52.227-7013 or subparagraphs (c)(1) and (2)

of the Commercial Computer Software - Restricted Rights at 48CFR52.227-19. The contractor is McTrans, University of Florida, PO Box 116585, Gainesville, FL 32611-6585.

15. EXPORT REGULATION:

The Software may be subject to U.S. export control laws and regulations, including the U.S. Export Control Reform Act and its associated regulations. End User will not directly or indirectly export, re-export, transfer, or release the Software to, or make the Software accessible from, any country, jurisdiction, or person to which export, re-export, transfer, or release is prohibited by applicable U.S. laws and regulations. End User will comply with all applicable laws and regulations and complete all required undertakings (including obtaining any necessary export license or other governmental approval) prior to exporting, re-exporting, transferring, or releasing, or otherwise making the Software available, outside the U.S. End User shall not export, re-export, transfer, or release the software or software source code to any country which is comprehensively sanctioned by the U.S. Department of the Treasury, Office of Foreign Assets Control (OFAC).

16. SEVERABILITY:

If any portion of this License Agreement shall be declared void or a nullity by a court of competent jurisdiction, then the remainder shall survive and remain in full force. Should you have any questions concerning this license, you may contact the McTrans Center, University of Florida, PO Box 116585, Gainesville, FL 32611-6585, U.S.A., [1] (800) 226-1013.

Acknowledgements

McTrans Center, University of Florida Transportation Institute
PO Box 116585, Gainesville FL 32611-6585
Telephone: 1-800-226-1013 Fax: 352-392-6629
Web: mctrans.ce.ufl.edu Email: mctrans@ce.ufl.edu

We acknowledge the Transportation Research Board (TRB), the USDOT's Federal Highway Administration (FHWA), the American Traffic Safety Services Association (ATSSA), the Institute of Transportation Engineers (ITE), and the American Association of State Highway and Transportation Officials (AASHTO) for all text, figures, and references included in HCS and express our sincere appreciation for permission to include this information.

Trademarks and Copyrights

- Microsoft(R), MS-DOS(R), and Windows(TM) are registered trademarks of Microsoft Corporation.
- McTrans(TM), HCS(TM), HSS(TM), TSIS-CORSIM(TM), and TRANSYT-7F(TM) are trademarks of the University of Florida.
- HCS, HCS2026, HCS2025, HCS2024, HCS2023, HCS2022, HCS7, HCS 2010, HCS+, HSS, HSS2026, HSS2025, HSS2024, TRANSYT-7F, and T7F are copyright University of Florida.
- TSIS-CORSIM, TSIS-CORSIM2026, TSIS-CORSIM2025, TSIS-CORSIM2024, TSIS-CORSIM2023, TSIS-CORSIM2022, TSIS, CORSIM, NETSIM, FRESIM, TRAFED, TRAFVU, and TShell are copyright University of Florida, with portions copyright ITT Industries, Inc., Systems Division.

Getting Started

System Requirements

HCS is designed for standard Windows installations. For optimal performance, the system should be Windows 10 or newer. While HCS may be compatible with older versions of Windows, any installation and operational issues arising from using these older versions will be the sole responsibility of the end user.

Getting Started

To begin, click on New File found on the left side of the screen under the Start header. There are two types of views available in AWSC – Page View (F9) or Full View (F10 and F11). These commands are also accessible through menu items. Normal Windows keyboard and mouse functions are available. In Full View, The PgUp and PgDn keys will scroll the entry screen up and down, respectively. In both views, tabbing, clicking to a new field, or pressing the Enter key will trigger a recalculation and update the Report pane.

All-Way Stop-Controlled (AWSC) Analysis

All-Way Stop-Controlled (AWSC) intersection analyses will estimate Capacity and Level of Service (LOS) for a given set of traffic and geometric conditions. This type of analysis is oriented toward the evaluation of an existing or planned facility. The methodology and procedures of application use the HCM Chapter 21 procedures.

General Controls

Menu Items

New – Creates a new AWSC file (*.xaw) and starts a new analysis project; shortcut is Ctrl+N

Open – Opens an existing AWSC file (*.xhu, *.xaw); shortcut is Ctrl+O

Example Folder – Opens folder with all HCS examples in File Explorer

Save – Saves an open AWSC file (*.xaw) using the current file name; shortcut is Ctrl+S

Save As... – Saves an open AWSC file (*.xaw) using a specified file name; shortcut is F12

Close – Closes an existing AWSC file (*.xaw); shortcut is Ctrl+W

Units

USC Units – Changes the units of the current file to U.S. Customary

Metric Units – Changes the units of the current file to Metric

Print – Brings up printer selection and prints an AWSC report to the printer or specified file type; shortcut is Ctrl+P

Print Preview – Displays preview of current report before printing; shortcut is Ctrl+F2

View

Page View – Changes the view to display inputs and reports by pages; shortcut is F9

Full View

Report -> Right – Changes the view to display both the input screen and report simultaneously; the report is displayed on the right portion of the screen; shortcut is F10

Report -> Bottom – Changes the view to display both the input screen and report simultaneously; the report is displayed on the bottom portion of the screen; shortcut is F11

Report

Formatted Report – Displays formatted report including the most important values; shortcut is F4

Text Report – Displays text report with all input, intermediary, and final results; shortcut is F6

Default Settings – Opens a dialog box for the user to input defaults for Analyst, Agency, and Jurisdiction, which will be applied to all new files; also allows selection of USC or SI units, which will be applied to all new files; shortcut is Alt+F

Help

Contents – Provides access to glossary, acknowledgements, copyrights, and information on the HCM procedure; shortcut is Ctrl+F1

Index – Allows user to search for keywords within the glossary

Search – Allows user to search for any word within the Contents

User Guide – Opens a comprehensive user guide in PDF format; shortcut is Ctrl+G

HCM Reference Guide – Opens the McTrans website in the default web browser to request access to a reference guide for the HCM in PDF format

HCM Volume 4 Website – Opens the Highway Capacity Manual Volume 4 website in the default web browser to access the free online resource

HCS Updates – Sends the HCS version number anonymously without any personally identifiable information to McTrans to check for a newer version

HCM/HCS Training – Opens the McTrans Training Page in the default web browser to view the latest training opportunities

HCQS Website – Opens the TRB Highway Capacity and Quality of Service Committee website in the default web browser

Support

Frequently Asked Questions – Opens the McTrans support page for HCS in the default web browser

HCS Overview – Opens the McTrans HCS Overview page in the default web browser

McTrans Website – Opens the McTrans home page in the default web browser

Email McTrans – Composes a new e-mail addressed to McTrans in the default e-mail client with registration number, serial key, module, and version number already populated in the Subject field

About HCS – Opens an about window with software version information, EULA, general acknowledgements, contact information, and other relevant links

CORSIM

View Animation – Sends data to the TSIS-CORSIM program for simulation and/or animation purposes, TRAFVU can be opened within TSIS-CORSIM to allow user to view animation; shortcut is Ctrl+Shift+A

Generate TRF File – Saves an open AWSC file (*.xaw) as a CORSIM file (*.trf), which is a file that contains the input data used to define a CORSIM network and to drive the CORSIM simulation for a single simulation case; shortcut is Ctrl+Shift+T

Exit – Exits the HCS AWSC module; shortcut is Alt+F4

All-Way Stop-Controlled Intersections

HCM Chapter 21

The procedure in this chapter can be used to analyze the capacity and level of service, lane requirements, and effects of traffic and design features of all-way stop-controlled (AWSC) intersections.

The procedure for AWSC intersections with one or two lane approaches is addressed in Part 3 of this chapter. The procedure for three lane approaches is addressed in Part 4 of this chapter, but also references supplemental material in Part 4 of Chapter 32. Example problems that demonstrate the calculations and results achieved by applying the procedures are found in Part 5 of Chapter 32.

LIMITATIONS OF THE METHODOLOGY

All of the methods are for steady-state conditions (i.e., the demand and capacity conditions are constant during the analysis period); the methods are not designed to evaluate how fast or how often the facility transitions from one demand/capacity state to another. Analysts interested in that kind of information should consider applying simulation models.

Operational Data

First, the user enters the Project Properties into the respective fields: Analyst, Agency or Company, Date Performed, Time Analyzed, Jurisdiction, Analysis Year, and Project Description. Then, the user enters the Intersection Data into the respective fields: Intersection, East/West Street Name, North/South Street Name, Analysis Time Period (normally 15 minutes, to represent the length of time the peak flow is constant), and Peak Hour Factor.

Note: Hovering over numeric input fields will display the allowable range for that input.

Next, the user codes the lane configurations and traffic characteristics. The total number of lanes per approach is limited to three by the HCM methodology.

The Volume for each movement of the intersection is coded in vehicles per hour. An hourly volume is required for any movement to be included in the analysis.

When there is a thru lane(s) coded along-side a shared left-thru or shared thru-right lane, the Percent Thrus Using Shared Lane field is activated. The user must enter this value to provide for the traffic split for the lanes.

Note: The Percent Heavy Vehicles input is coded by lane and should not be entered by movement.

For queue length calculations, the Stored Passenger Car Length and Stored Heavy Vehicle Length are provided.

Results

Level of Service (LOS) criteria for AWSC intersections in control delay (s/veh):

Control Delay (s/veh)	LOS by Volume-to-Capacity Ratio ^a	
	$v/c \leq 1.0$	$v/c > 1.0$
0–10	A	F
>10–15	B	F
>15–25	C	F
>25–35	D	F
>35–50	E	F
>50	F	F

Note: ^a For approaches and intersectionwide assessment, LOS is defined solely by control delay.

Note: For individual lane evaluation, if any v/c ratio exceeds 1.0, the LOS assigned is F. However, for evaluation at the approach and intersection level, v/c ratio is not considered and LOS is defined only by control delay values.

AWSC Report

The formatted version of the AWSC report is the default report view. The user may easily view the text report instead by clicking the Switch to Formatted Report button found at the bottom of the formatted report. The report updates dynamically based on changes to input values.

Note: In the formatted report, only the first two fields in Vehicle Volumes and Adjustments (Volume and % Thrus in Shared Lane) pertain to movements, as denoted by L, T or R. All subsequent fields pertain to the lane being analyzed, as denoted by L1, L2 or L3. LOS is also reported per lane. Similarly in the text report, only the fields in Vehicle Volumes and Adjustments pertain to movements, as denoted by L, T, or R. All other fields refer to the lane being analyzed, as denoted by L1, L2 or L3.

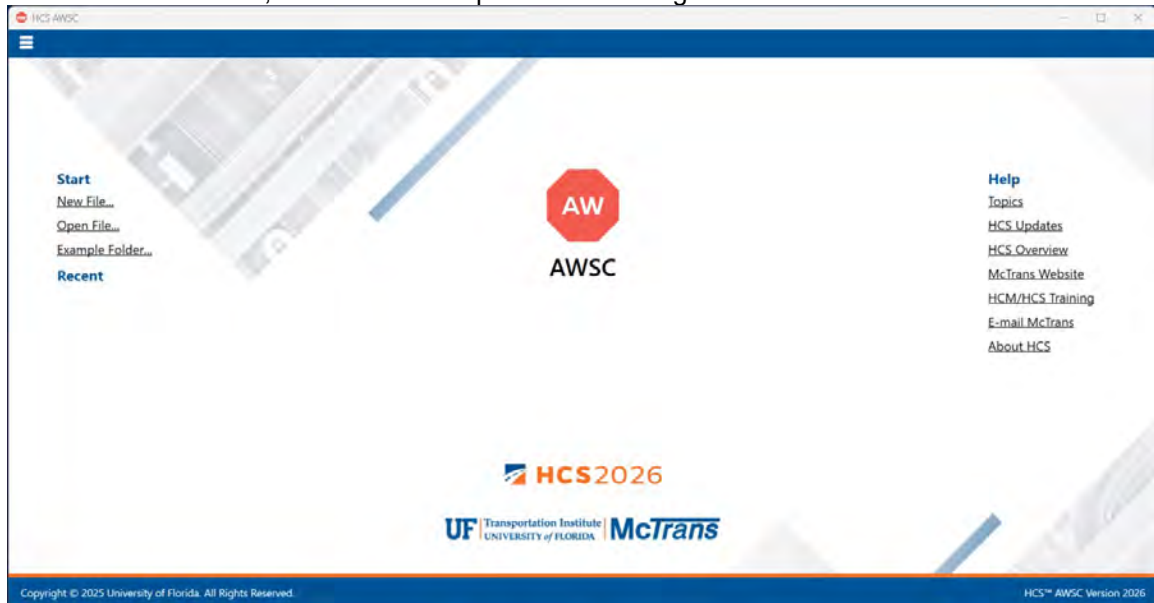
All or a portion of the report can be copied to the Windows clipboard for insertion into other files by right-clicking into the Report pane and selecting Copy or by using keyboard shortcuts Ctrl+C or Ctrl+A to select all. The Report pane can also be printed or saved to a PDF or XPS by using menu items to access Print or by using keyboard shortcut Ctrl+P.

Note: Due to the iterative nature of the AWSC procedure, it is recommended to stay in Page View if the user is making multiple edits to the input fields.

How To

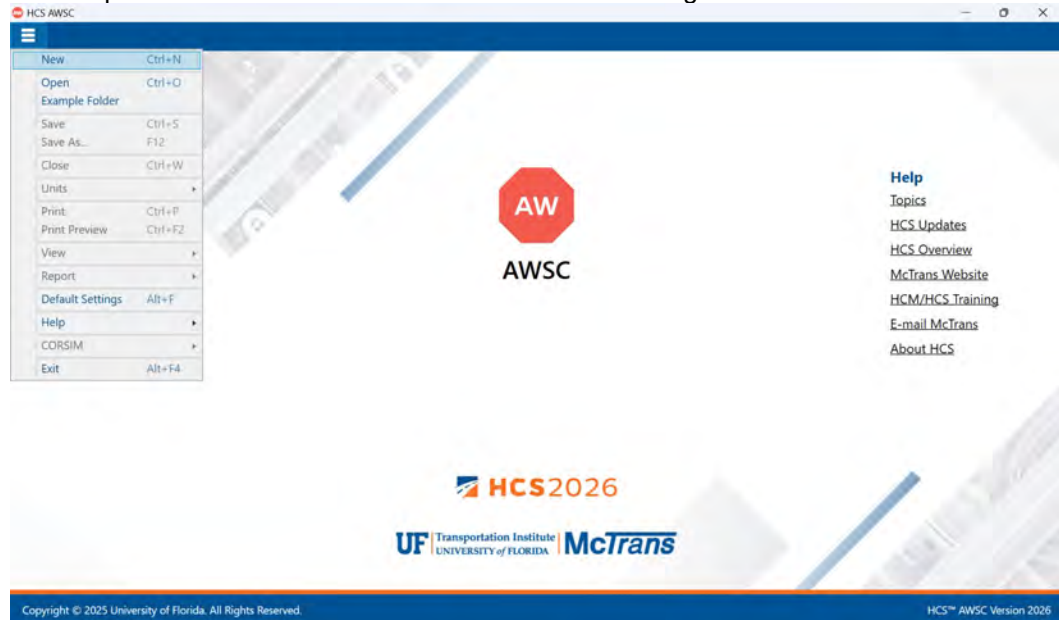
Create a New File

1. From the Start screen, there are three options for creating a new file:



Note: A new file can be created if an existing file is already open; you do not need to start from the Start screen.

- a. Selecting *File > New* from the main menu; this can be found by selecting the three lines in the top left-hand corner of the screen and then selecting “New”



- b. Selecting “New File...” from the Start screen; this can be found below in the red box



- c. Using the keyboard shortcut “Ctrl+N”
2. Once a new file is created, you will be brought to the General page if in Page View or the input screen split with the report either on the right or the bottom of the screen if in Full View

a. Page View

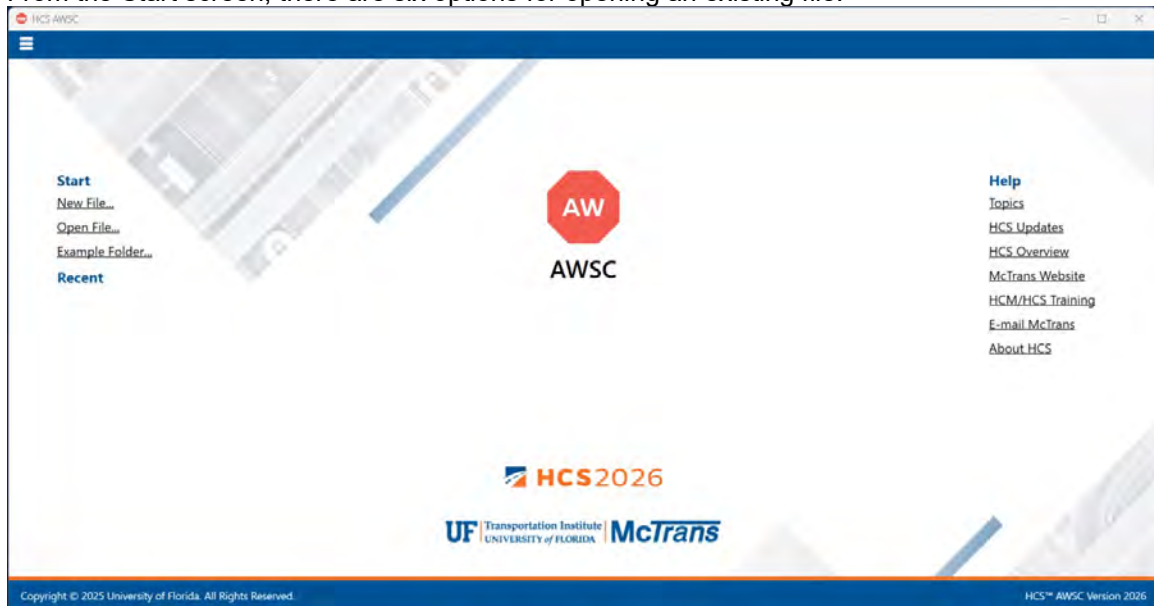
The screenshot shows the 'Page View' of the HCS AWSC software. The interface is divided into two main sections: 'Project Properties' and 'Intersection Data'. The 'Project Properties' section includes fields for Analyst, Agency, Date (8/26/2025), Time Analyzed, Jurisdiction, Analysis Year (2025), Project Description, and Units (U.S. Customary). The 'Intersection Data' section includes fields for Intersection, East/West Street Name, North/South Street Name, Analysis Time Period (0.25 hours), and Peak Hour Factor (0.92). Navigation buttons 'Back' and 'Next' are located on the left and right sides of the form, respectively. The footer contains the copyright notice 'Copyright © 2025 University of Florida. All Rights Reserved.' and the version 'HCS™ AWSC Version 2026 (USC)'.

b. Full View

The screenshot shows the 'Full View' of the HCS AWSC software. The interface is divided into three main sections: 'Project Properties', 'Intersection Data', and 'Vehicle Volume and Adjustments'. The 'Project Properties' and 'Intersection Data' sections are identical to the 'Page View'. The 'Vehicle Volume and Adjustments' section contains a diagram of the intersection and a table for 'Vehicle Volume and Adjustments'. The table has columns for 'Volume (gph)' and 'Percent Thru Using Shared Lane (%)' for each approach (Eastbound, Westbound, Northbound, Southbound) and movement (Left, Thru, Right). The right side of the screen displays the 'HCS All-Way Stop Control Report' with sections for 'General and Site Information', 'Turning Movement Demand Volumes', 'Lane Flow Rate and Adjustments', and 'Capacity, Delay and Level of Service'. The report includes various tables and a diagram of the intersection layout.

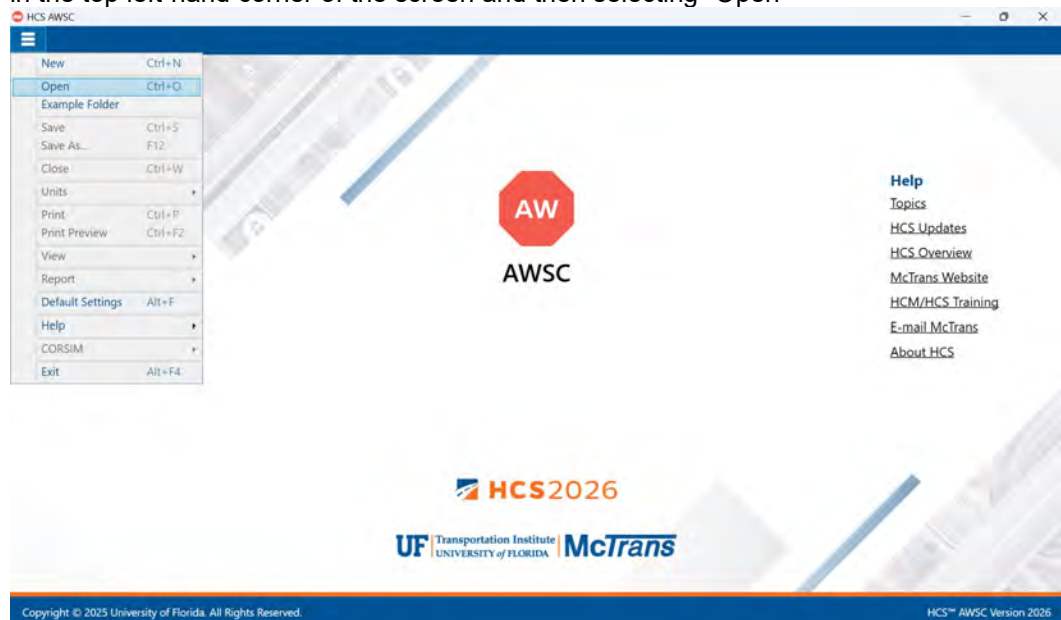
Open an Existing File

1. From the Start screen, there are six options for opening an existing file:



Note: A file can be opened even if another file is currently open; you do not need to start from the Start screen.

- a. Selecting *File > Open* from the main menu; this can be found by selecting the three lines in the top left-hand corner of the screen and then selecting "Open"



- b. Selecting “Open File...” from the Start screen; this can be found below in the red box



- c. Using the keyboard shortcut “Ctrl+O”
- d. Selecting a file under the Recent files list from the Start screen; this can be found below in the red box



- e. Selecting *File > Example Folder* from the main menu; this can be found by selecting the three lines in the top left-hand corner of the screen and then selecting “Example Folder”. Opening the example folder will open the path of the HCS example files in File Explorer. The desired example file can be double-clicked or right-clicked and selecting ‘Open’, which will open the example file in the AWSC program.



- f. Selecting “Example Folder...” from the Start screen; this can be found below in the red box. Opening the example folder will open the path of the HCS example files in File Explorer. The desired example file can be double-clicked or right-clicked and selecting ‘Open’, which will open the example file in the AWSC program.



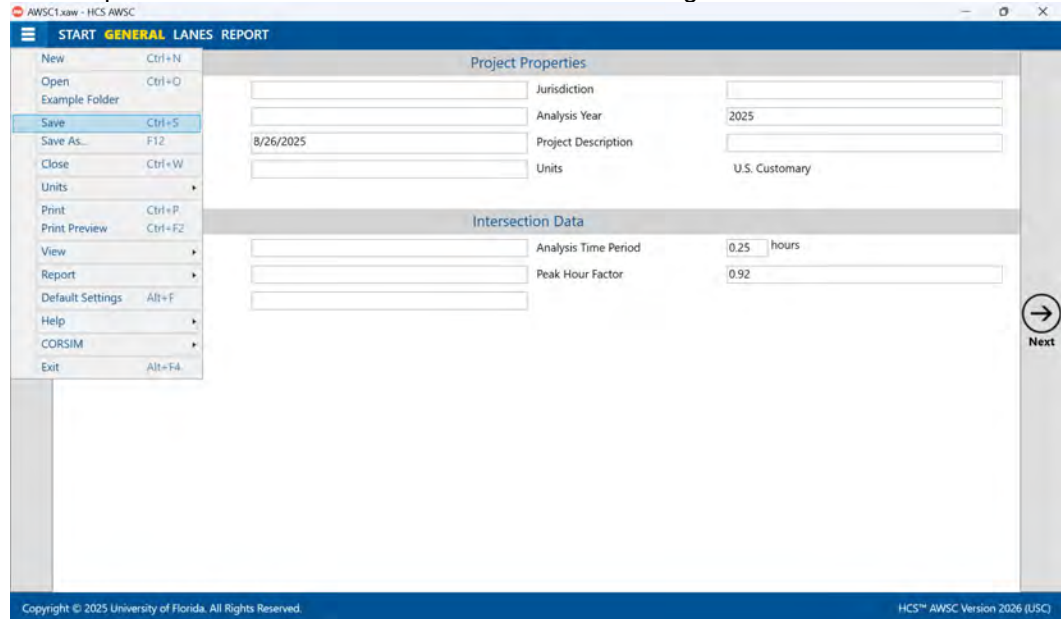
2. Once an existing file is opened, you will be brought to the General page if in Page View or the input screen split with the report either on the right or the bottom of the screen if in Full View

a. Page View

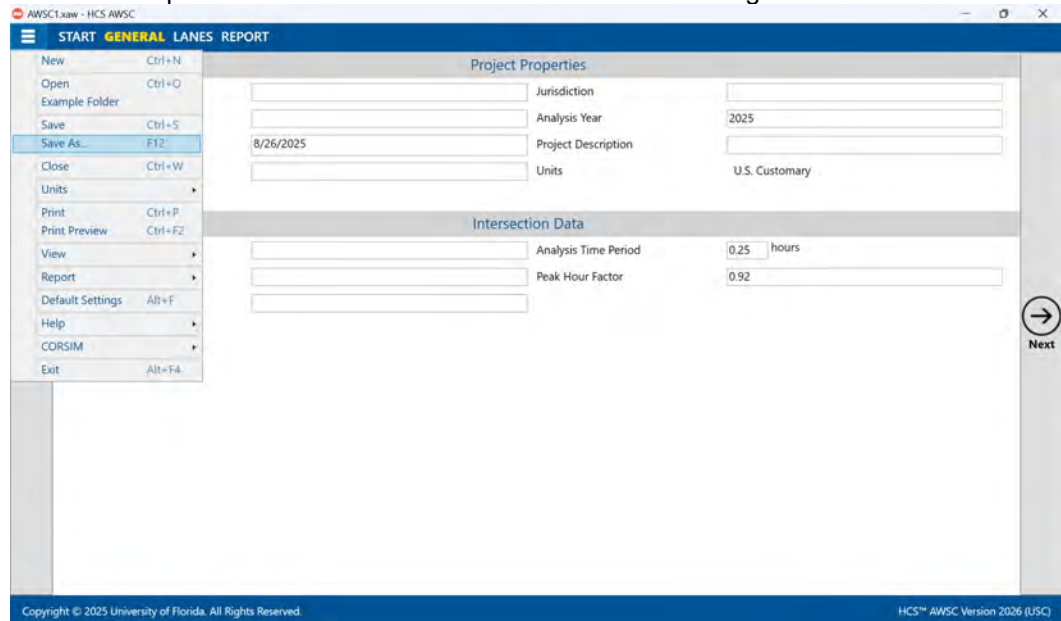
b. Full View

Save a File

1. There are five options for saving an open file:
 - a. Selecting *File* > *Save* from the main menu; this can be found by selecting the three lines in the top left-hand corner of the screen and then selecting “Save”

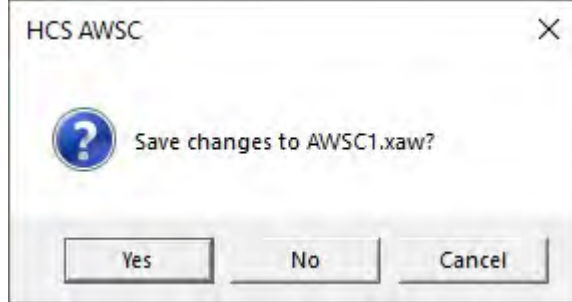


- b. Selecting *File* > *Save As...* from the main menu; this can be found by selecting the three lines in the top left-hand corner of the screen and then selecting “Save As...”



- c. Using the keyboard shortcut “Ctrl+S” for Save
 - d. Using the keyboard shortcut “F12” for Save As

- e. Exiting the program or closing the file without saving changes beforehand; this will prompt you to save changes to the file before anything is closed

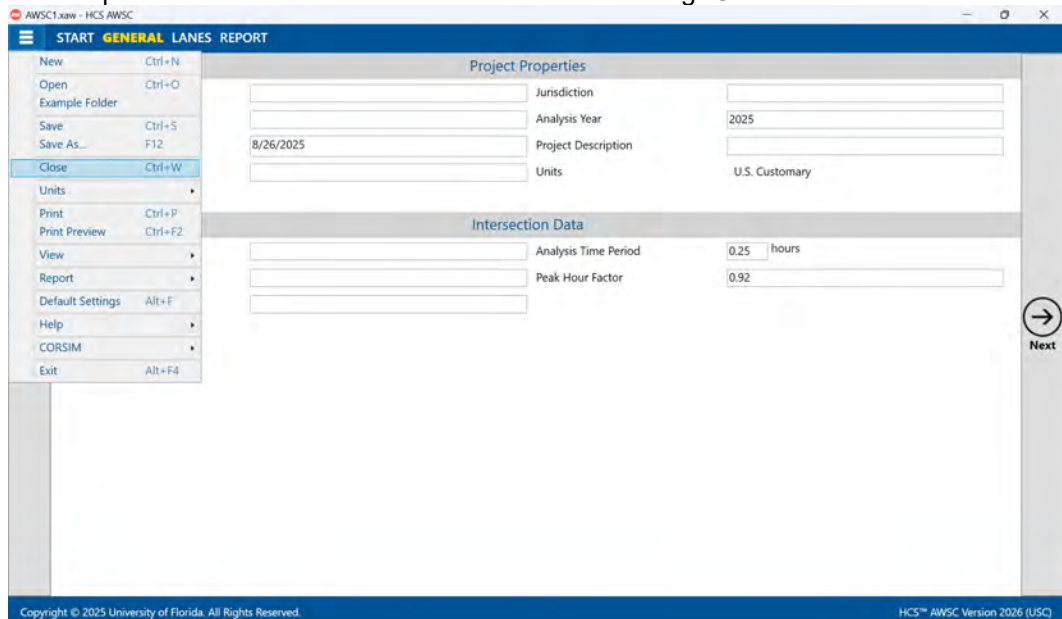


- i. Selecting “Yes” will save the file if it is an existing file. If the file has not been previously saved, the Save As dialog box will pop up allowing you to change the file name and save it.
- ii. Selecting “No” will exit the program or close the file without saving the file
- iii. Selecting “Cancel” will prevent the file from closing

Note: Using Save with an existing file will save a file without prompting you to specify a file name. Using Save with a new file will bring up the Save As dialog box for you to specify a file name for saving. Using Save As will always bring up the Save As dialog box for you to specify a file name for saving.

Close a File

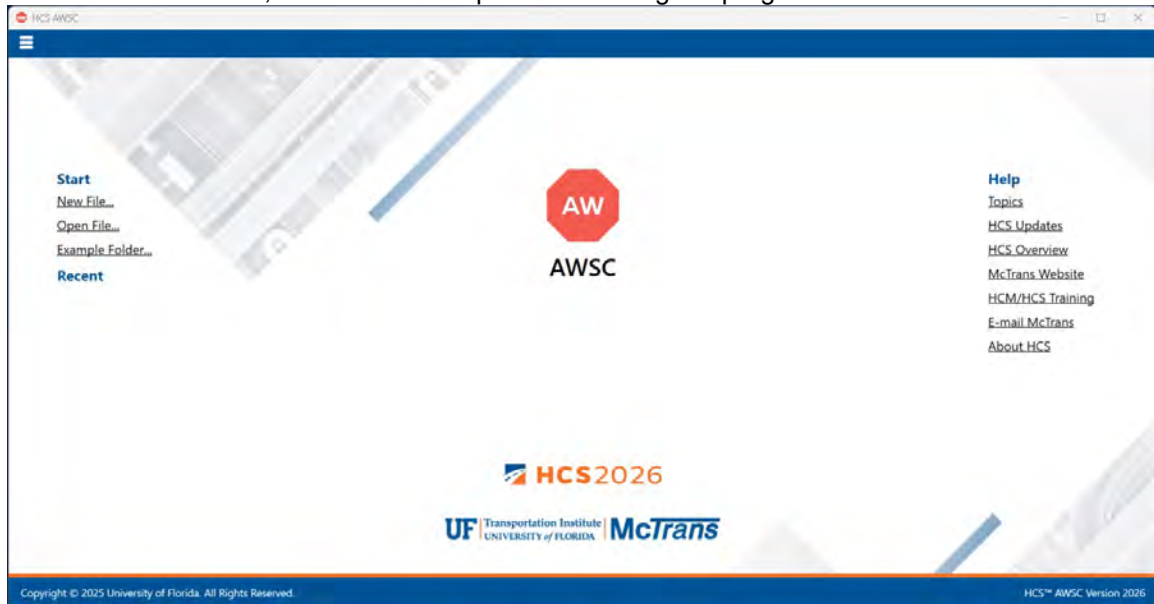
1. There are three options for closing an open file:
 - a. Selecting *File > Close* from the main menu; this can be found by selecting the three lines in the top left-hand corner of the screen and then selecting “Close”



- b. Using the keyboard shortcut “Ctrl+W”
- c. Exiting the program itself; please see *How To: Exit the Program*

Exit the Program

1. From the Start screen, there are three options for exiting the program:



Note: The program can be exited even if a file is still open; you do not need to start from the Start screen.

- a. Selecting *File > Exit* from the main menu; this can be found by selecting the three lines in the top left-hand corner of the screen and then selecting "Exit"



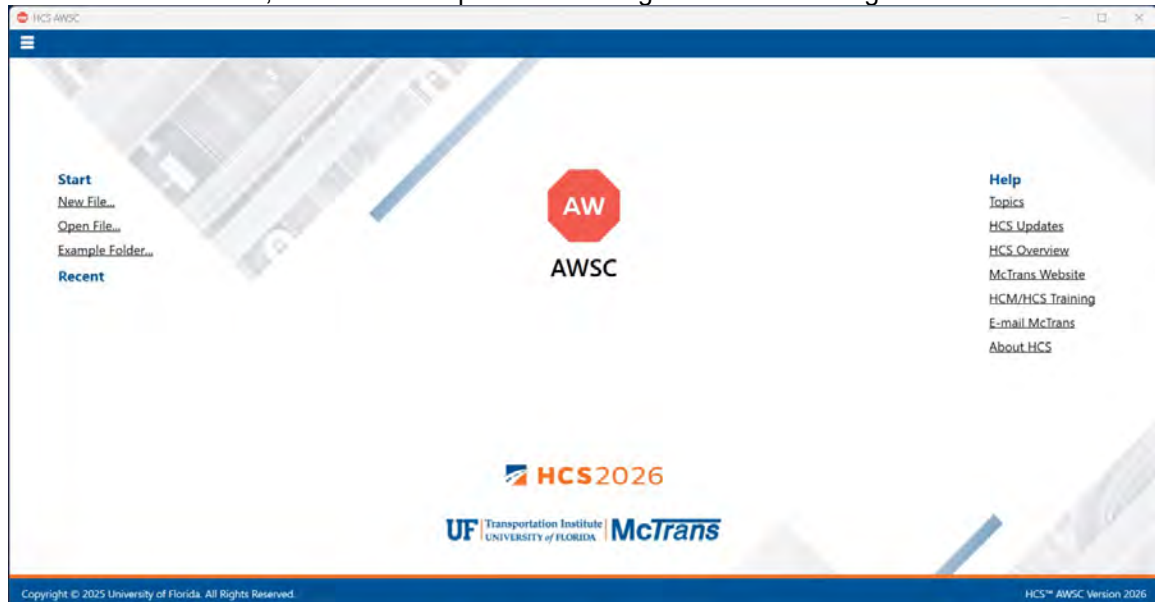
- b. Using the keyboard shortcut "Alt+F4"

- c. Selecting “X” in the top right-hand corner of the screen; this can be found below in the red box



Edit the Default Settings

1. From the Start screen, there are two options for editing the Default Settings:



Note: The Default Settings can be changed even if an existing file is already open; you do not need to start from the Start screen.

- a. Selecting **File > Default Settings** from the main menu; this can be found by selecting the three lines in the top left-hand corner of the screen and then selecting “Default Settings”



- b. Using the keyboard shortcut “Alt+F”
2. Opening the Default Settings will cause a Default Settings window to pop up:

The screenshot shows the "Default Settings" dialog box. It has a title bar with the "AW" logo and a close button. The dialog contains four text input fields labeled "Analyst", "Agency", and "Jurisdiction". Below these is a "Units" section with two radio buttons: "USC" (selected) and "Metric". At the bottom are "OK" and "Cancel" buttons.

3. You can specify Analyst, Agency, and Jurisdiction by clicking in the corresponding text boxes and typing the desired text.
4. Under 'Units', you are given the option of running the analysis in either *U.S. Customary (USC)* or *SI (Metric)* units.
5. Clicking “OK” will save the changes made and close the Default Settings window; clicking “Cancel” will close the Default Settings window without saving any changes.
6. When a new file is created, the Analyst, Agency, and Jurisdiction fields will automatically be populated with the text specified in the Default Settings.
7. When starting a new file, the input and results will display according to the units specified in the Default Settings.

Change the View

1. When a file is open, there are three main options for the view of the program:
 - a. Page View: the inputs and results reports are separated into pages as seen below. You can navigate between pages using the “Back” and “Next” buttons or by clicking the page names found at the top of the screen.

- b. Full View with the report on the right of the screen: the screen is split with all inputs on the left side and the results reports on the right side. You can access all inputs and view all of the current report by using the corresponding scroll bars. There is also a screen splitter that can be moved to adjust the views of the input screen and results report.

- c. Full View with the report on the bottom of the screen: the screen is split with all inputs on the top of the screen and the results reports on the bottom of the screen. You can access all inputs and view all of the current report by using the corresponding scroll bars. There is also a screen splitter that can be moved to adjust the views of the input screen and results report.

Project Properties

Analyst		Intersection	
Agency		Analysis Year	2025
Date	8/17/2025	Project Description	Chapter 32: Example Problem 1
Time Analyzed		Units	U.S. Customary

Intersection Data

Intersection		Analysis Time Period	0.25 hours
East/West Street Name		Peak Hour Factor	0.95
North/South Street Name			

HCS All-Way Stop Control Report

General and Site Information		Lanes	
Agency			
Date Performed	8/17/2025		
Analyst	AWSC		
Analysis Year	2025		
Project Description	Chapter 32: Example Problem 1		
Intersection			
Location			
East/West Street			
North/South Street			
Peak Hour Factor	0.95		

Turning Movement Demand Volumes

	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Volume (V)	1	1	1	1	1	1	1	1	1
Volume (V)	10	10	10	10	10	10	10	10	10
% of Total Demand									

Lane Flow Rate and Adjustments

	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane	1	1	1	1	1	1	1	1	1
Configuration	1	1	1	1	1	1	1	1	1

Copyright © 2025 University of Florida. All Rights Reserved. HCS™ AWSC Version 2025.0.0.0

2. Views can be changed by using the main menu items or the keyboard shortcuts.

- a. Main Menu Items

- i. To switch to Page View, select *File > View > Page View* from the main menu; this can be found by selecting the three lines in the top left-hand corner of the screen, hovering over “View”, and then selecting “Page View”.

START HCS ALL-WAY STOP CONTROL REPORT

Project Properties

Analyst		Intersection	
Agency		Analysis Year	2025
Date	8/17/2025	Project Description	Chapter 32: Example Problem 1
Time Analyzed		Units	U.S. Customary

Intersection Data

Intersection		Analysis Time Period	0.25 hours
East/West Street Name		Peak Hour Factor	0.95
North/South Street Name			

HCS All-Way Stop Control Report

General and Site Information

General and Site Information		Lanes	
Agency			
Date Performed	8/17/2025		
Analyst	AWSC		
Analysis Year	2025		
Project Description	Chapter 32: Example Problem 1		
Intersection			
Location			
East/West Street			
North/South Street			
Peak Hour Factor	0.95		

Turning Movement Demand Volumes

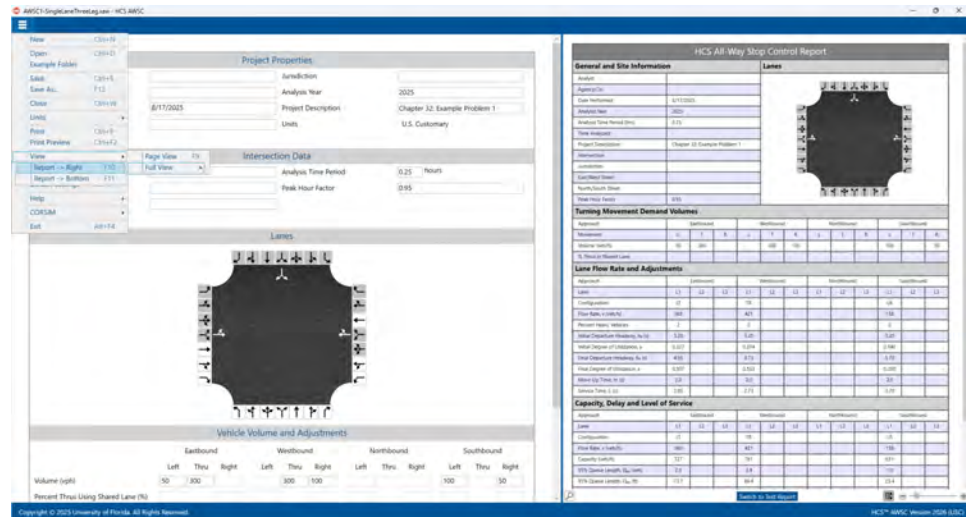
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Volume (V)	1	1	1	1	1	1	1	1	1
Volume (V)	10	10	10	10	10	10	10	10	10
% of Total Demand									

Lane Flow Rate and Adjustments

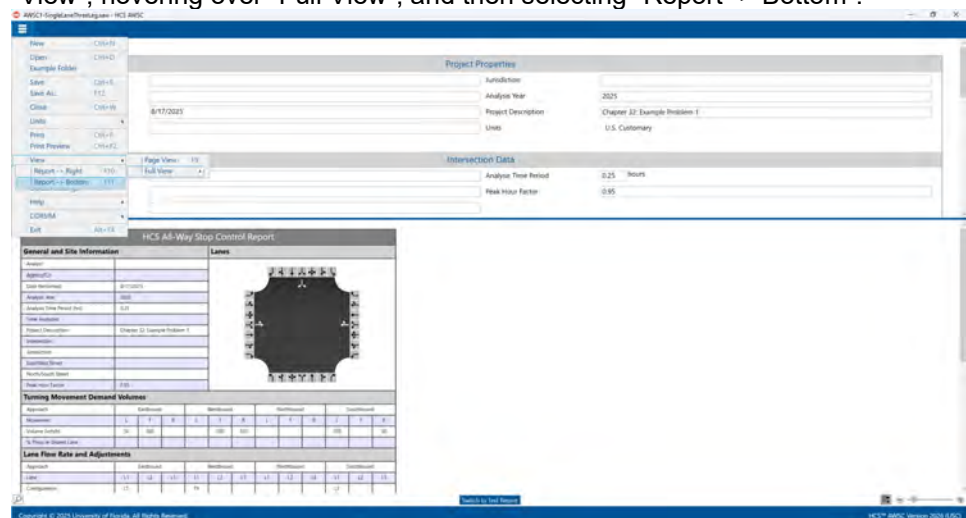
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane	1	1	1	1	1	1	1	1	1
Configuration	1	1	1	1	1	1	1	1	1

Copyright © 2025 University of Florida. All Rights Reserved. HCS™ AWSC Version 2025.0.0.0

- ii. To switch to Full View with the report on the right of the screen, select *File > View > Full View > Report -> Right* from the main menu; this can be found by selecting the three lines in the top left-hand corner of the screen, hovering over “View”, hovering over “Full View”, and then selecting “Report -> Right”.



- iii. To switch to Full View with the report on the bottom of the screen, select *File > View > Full View > Report -> Bottom* from the main menu; this can be found by selecting the three lines in the top left-hand corner of the screen, hovering over “View”, hovering over “Full View”, and then selecting “Report -> Bottom”.



- b. Keyboard Shortcuts
 - i. Page View: keyboard shortcut is “F9”
 - ii. Full View with report on the right of the screen: keyboard shortcut is “F10”
 - iii. Full View with report on the bottom of the screen: keyboard shortcut is “F11”

Change the Lane Configuration

1. When a new file is created or an existing file is opened, the lane configuration can be changed under the Lanes sections. This can be found on the Lanes page if using Page View or the input portion of the split screen if using Full View

a. Page View

Vehicle Volume and Adjustments

	Eastbound			Westbound			Northbound			Southbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Volume (vph)	50	500		300	700				100		30	
Percent Thru Using Shared Lane (%)												
Percent Heavy Vehicles (%)	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3

Vehicle Length Calculations

Shared Passenger Car Length (ft)	25
Shared Heavy Vehicle Length (ft)	45

Copyright © 2025 University of Florida. All Rights Reserved. PCS™ All-Way Stop Control Report

b. Full View

Project Properties

Analyst: _____
 Agency: _____
 Date: 8/17/2025
 Time Analyzed: _____

Automatic: _____
 Analysis Year: 2025
 Project Description: Chapter 22 Example Problem 1
 Units: U.S. Customary

Intersection Data

Intersection: _____
 East/West Street Name: _____
 North/South Street Name: _____

Analysis Time Period: 0.25 Hours
 Peak Hour Factor: 0.95

Vehicle Volume and Adjustments

	Eastbound			Westbound			Northbound			Southbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Volume (vph)	50	500		300	700				100		30	
Percent Thru Using Shared Lane (%)												

PCS All-Way Stop Control Report

General and Site Information

Project: _____
 Date: 8/17/2025
 Project Year: 2025
 Project Description: Chapter 22 Example Problem 1
 Units: U.S. Customary

Lanes

Turning Movement Demand Volumes

	Eastbound			Westbound			Northbound			Southbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Volume (vph)	50	500		300	700				100		30	
Percent Thru Using Shared Lane (%)												

Lane Flow Rate and Adjustments

	Eastbound			Westbound			Northbound			Southbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Flow Rate (vph/sf)	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Configuration	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Flow Rate (vph/sf)	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Vehicle Heavy Vehicle	2	2	2	2	2	2	2	2	2	2	2	2
Shared Lane Heavy Vehicle	2	2	2	2	2	2	2	2	2	2	2	2
Shared Lane Heavy Vehicle	2	2	2	2	2	2	2	2	2	2	2	2
Flow Capacity (vph/sf)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Flow Capacity (vph/sf)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Midblock Stop (ft)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Service Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0

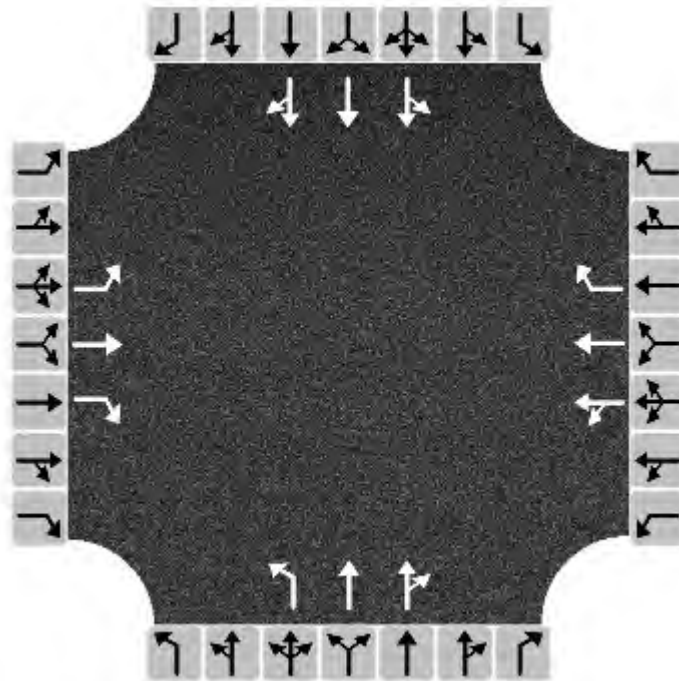
Capacity, Delay and Level of Service

	Eastbound			Westbound			Northbound			Southbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Flow Rate (vph/sf)	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Configuration	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Flow Rate (vph/sf)	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Vehicle Heavy Vehicle	2	2	2	2	2	2	2	2	2	2	2	2
Shared Lane Heavy Vehicle	2	2	2	2	2	2	2	2	2	2	2	2
Flow Capacity (vph/sf)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Flow Capacity (vph/sf)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Midblock Stop (ft)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Service Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0

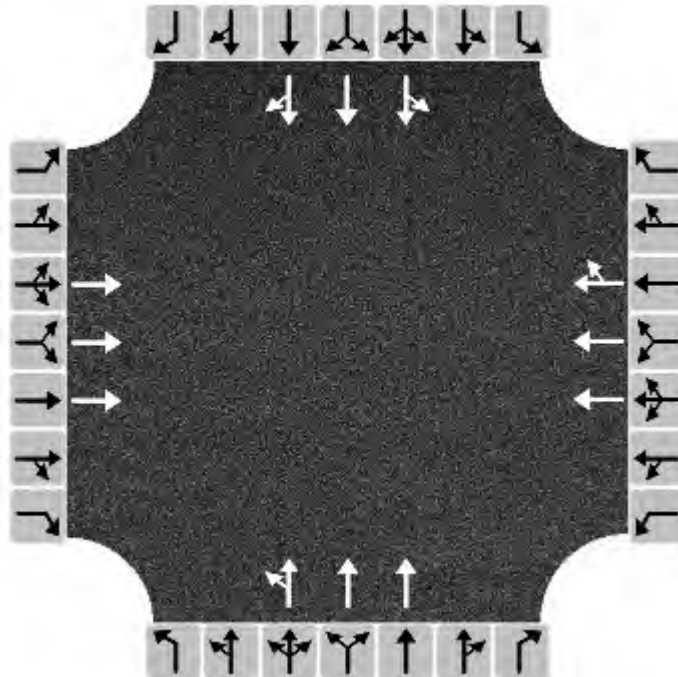
Copyright © 2025 University of Florida. All Rights Reserved. PCS™ All-Way Stop Control Report

- To add lanes, click on the lane buttons (black arrows) on the edges of the lanes graphic. If the background of a lane button is white, the lane is available to add to the corresponding approach. If the background of a lane button is gray, it is disabled and cannot be added to the corresponding approach based on the current lane configuration.

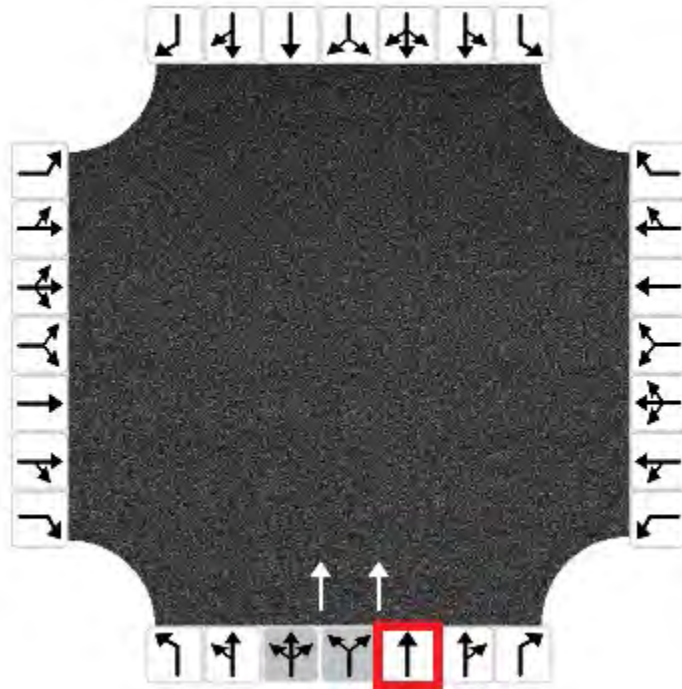
- a. Each approach allows up to three lanes to be added



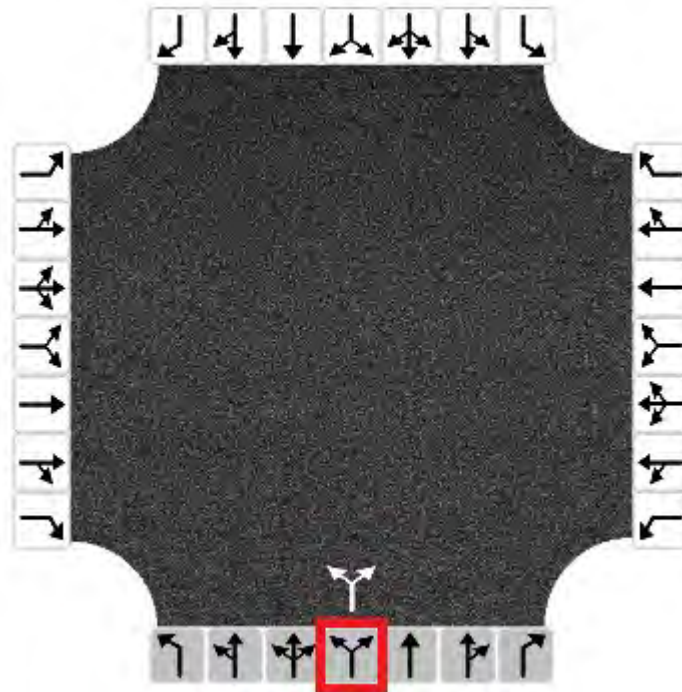
- b. Each approach allows up to three thru (exclusive or shared) lanes to be added



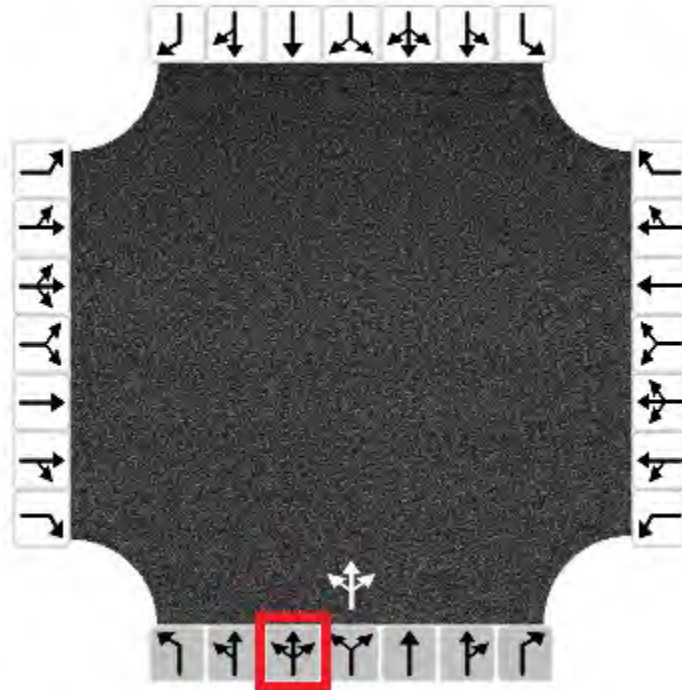
- c. Adding one or two exclusive thru (T) lanes will disable the shared left-thru-right (LTR) and shared left-right (LR) lanes



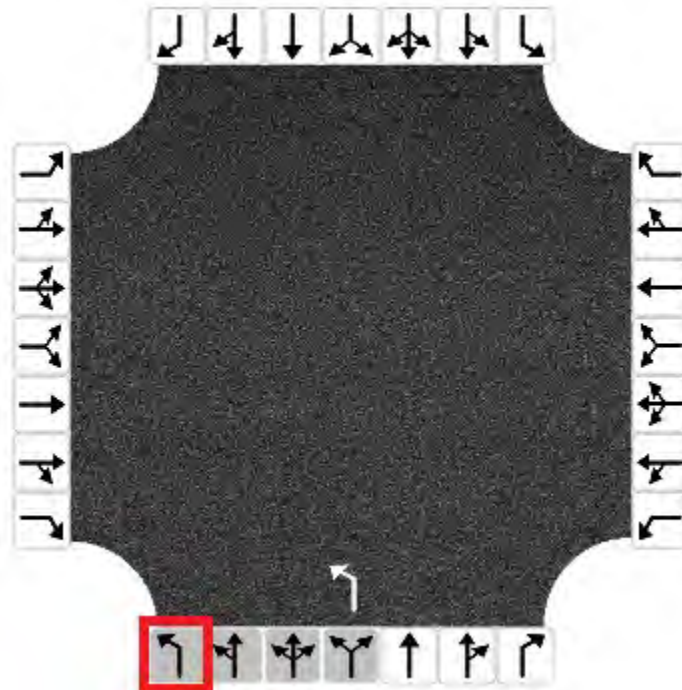
- d. Adding a shared left-right (LR) lane will disable all other lanes



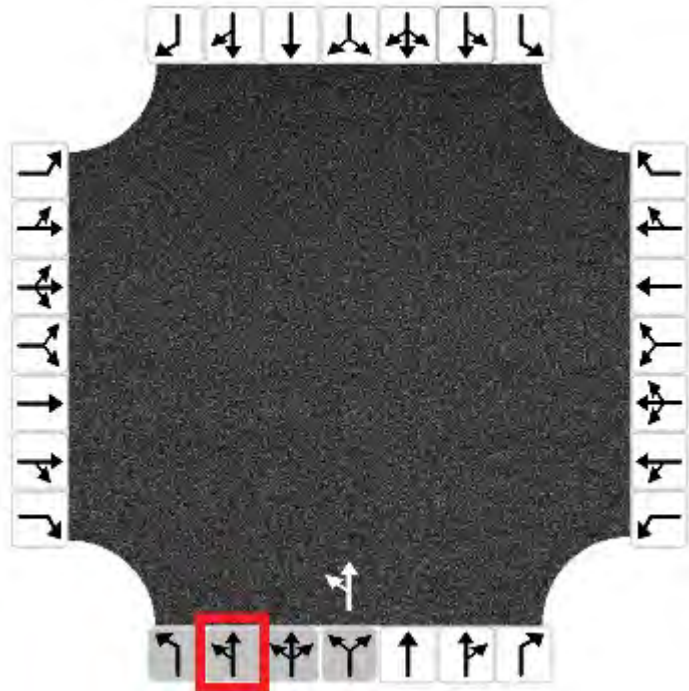
- e. Adding a shared left-thru-right (LTR) lane will disable all other lanes



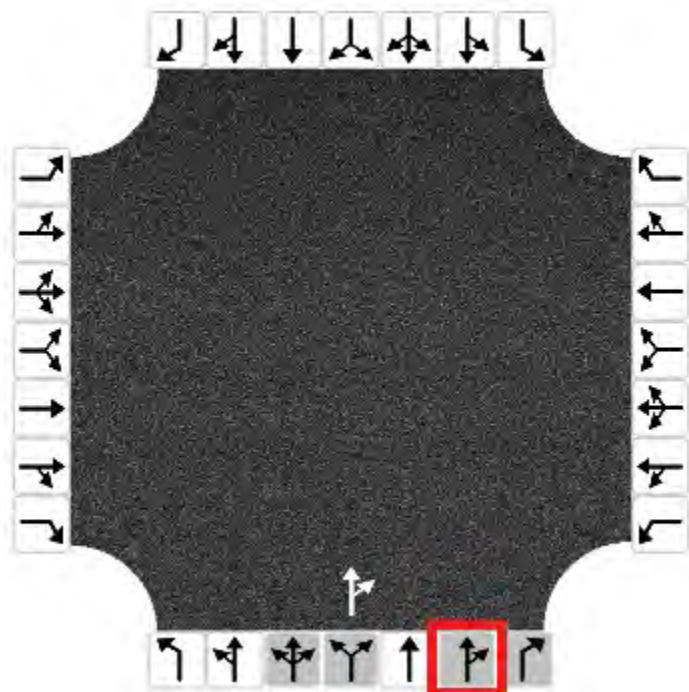
- f. Adding an exclusive left (L) lane will disable the exclusive left (L), shared left-thru (LT), shared left-thru-right (LTR), and shared left-right (LR) lanes



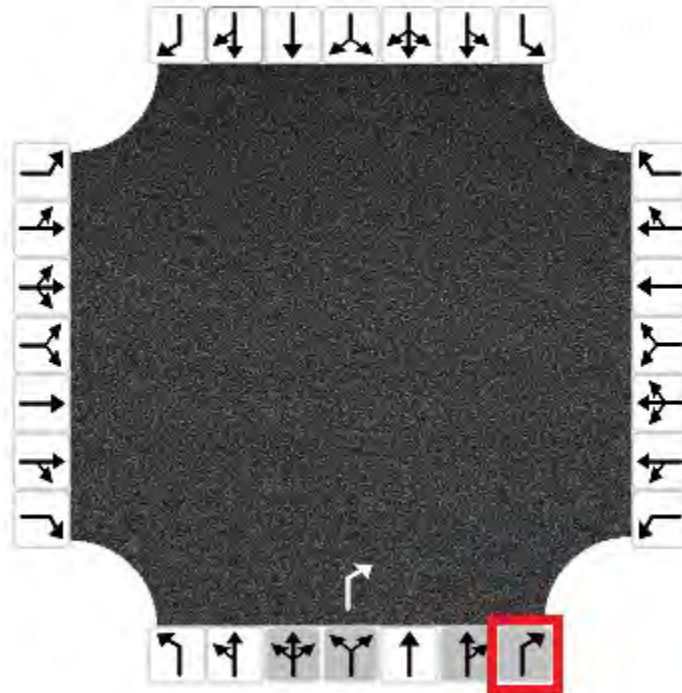
- g. Adding a shared left-thru (LT) lane will disable the exclusive left (L), shared left-thru (LT), shared left-thru-right (LTR), and shared left-right (LR) lanes



- h. Adding a shared thru-right (TR) lane will disable the shared left-thru-right (LTR), shared left-right (LR), shared thru-right (TR), and exclusive right (R) lanes



- i. Adding an exclusive right (R) lane will disable the shared left-thru-right (LTR), shared left-right (LR), shared thru-right, and exclusive right (R) lanes



- 3. To remove lanes, click on the lanes within the center of the lanes graphic (white arrows). Clicking on an arrow will immediately remove the lane and change which lane buttons are enabled/disabled for the corresponding approach.
- 4. Changes to the lane configuration on the lanes graphic in the input screen will be reflected on the lanes graphic in the formatted report and the lane information in both the formatted and text reports.

Enable and Edit the Percent Thrus Using Shared Lane Fields

1. To enable the 'Percent Thrus Using Shared Lane (%)' field(s) for a specific approach, the lane configuration for the approach should have at least two thru lanes and one of the thru lanes must be a shared thru lane.

The screenshot shows the 'LANES REPORT' interface for HCS AWSC. At the top, there's a 'Lanes' diagram showing a four-way intersection. Below it, the 'Vehicle Volume and Adjustments' section displays input fields for four approaches: Eastbound, Westbound, Northbound, and Southbound. Each approach has three lanes (Left, Thru, Right) with fields for Volume (vph) and Percent Thrus Using Shared Lane (%). The 'Percent Thrus Using Shared Lane (%)' field is highlighted in red for all approaches. Below this, the 'Queue Length Calculations' section shows fields for Stored Passenger Car Length (ft) and Stored Heavy Vehicle Length (ft).

	Eastbound			Westbound			Northbound			Southbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Volume (vph)	0	0		0	0	0	0	0	0	0	0	0
Percent Thrus Using Shared Lane (%)	50			50		50	33		33	33		33
Percent Heavy Vehicles (%)	2	2		2	2		2	2	2	2	2	2

Queue Length Calculations:

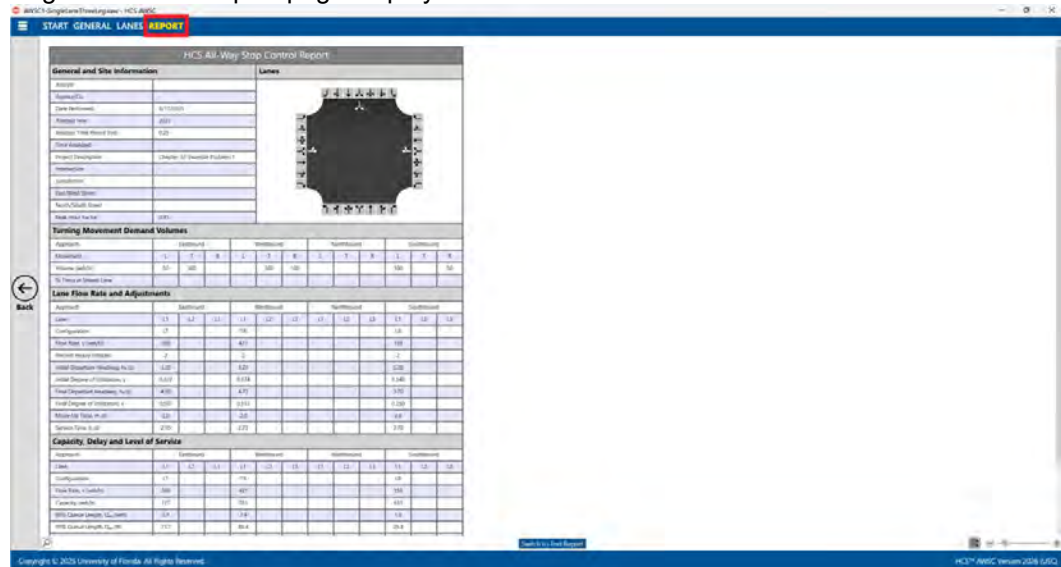
Stored Passenger Car Length (ft)	25
Stored Heavy Vehicle Length (ft)	45

- a. To enable the Left field for 'Percent Thrus Using Shared Lane (%)' field, the lane configuration for the approach should include one of the following:
 - i. LT, T
 - ii. LT, T, T
 - iii. LT, T, TR
 - iv. LT, T, R
 - v. LT, TR
- b. To enable the Right field for 'Percent Thrus Using Shared Lane (%)' field, the lane configuration for the approach should include one of the following:
 - i. T, TR
 - ii. L, T, TR
 - iii. LT, T, TR
 - iv. T, T, TR

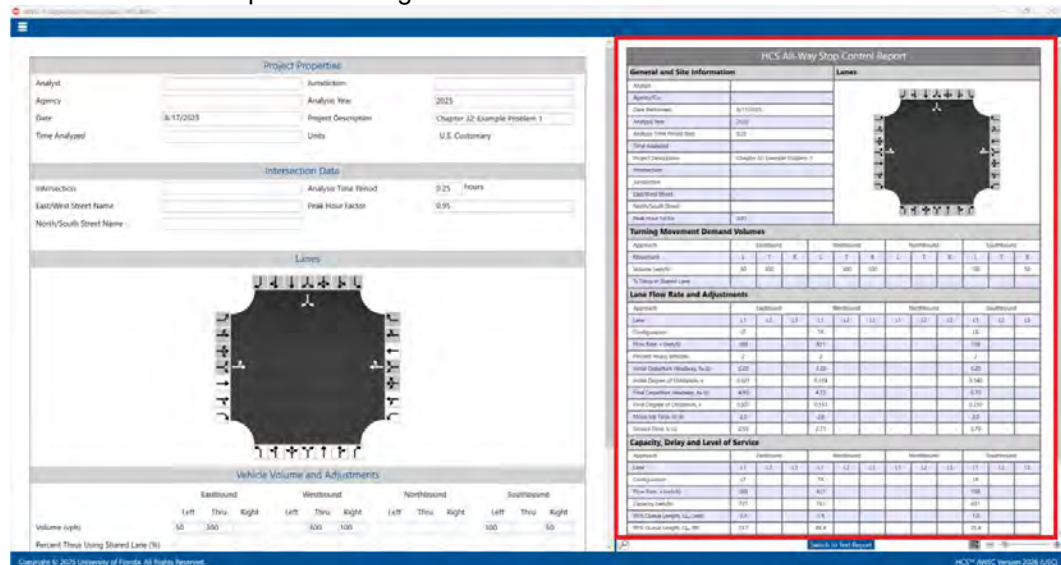
- v. LT, TR
- 2. The percentage defaults populated in the 'Percent Thrus Using Shared Lane (%)' fields is dependent on the number of thru lanes coded.
 - a. If there are two thru lanes coded for an approach, the corresponding percentage would be 50.
 - i. LT, T: Left = enabled, 50; Right = disabled
 - ii. LT, T, TR: Left = enabled, 50; Right = disabled
 - iii. T, TR: Left = disabled; Right = enabled, 50
 - iv. L, T, TR: Left = disabled; Right = enabled, 50
 - v. LT, TR: Left = enabled, 50; Right = enabled, 50
 - b. If there are three thru lanes coded for an approach, the corresponding percentage would be 33.
 - i. LT, T, T: Left = enabled, 33; Right = disabled
 - ii. LT, T, TR: Left = enabled, 33; Right = enabled, 33
 - iii. T, T, TR: Left = disabled; Right = enabled, 33
- 3. The range for the 'Percent Thrus Using Shared Lane (%)' is from 0 to 100.
- 4. The percentages can be edited and will maintain a maximum total of 100% for the approach.
 - a. Lane Configuration: LT, TR (both Left and Right fields are enabled)
 - i. If one field is edited that will cause the total of the two fields to exceed 100, the other field will automatically adjust according to the initial field edited. For example: if both fields are set at 50, one is edited to 70, the other will automatically be set to 30.
 - ii. When there are only two thru lanes, the total of the two fields must equal 100. For example: if both fields are set at 50, one is edited to 25, the other will automatically be set to 75.
 - b. Lane Configuration: LT, T, TR
 - i. The total of the two fields can be less than 100. For example, if both fields are set at 33, one is edited to 20, the other will remain at 33.
 - ii. When there are three thru lanes, the total of the two fields cannot exceed 100. For example, if both fields are set at 33, one is edited to 80, the other will automatically be set to 20.

View Results of the Analysis

1. After editing all the necessary inputs, results of the analysis can be found in the form of reports. Reports can be found on the Report page if using Page View or on the results portion of the split screen if using Full View.
 - a. Page View with Report page displayed



- b. Full View with the report on the right of the screen



- c. Full View with the report on the bottom of the screen

2. There are two options for reports: Formatted and Text
- a. Formatted reports show the most important results in a presentable format

HCS All-Way Stop Control Report

General and Site Information

Analyst	
Agency/Co.	
Date Performed	8/17/2025
Analysis Year	2025
Analysis Time Period (hrs)	0.25
Time Analyzed	
Project Description	Chapter 32: Example Problem 1
Intersection	
Jurisdiction	
East/West Street	
North/South Street	
Peak Hour Factor	0.95

Lanes

Turning Movement Demand Volumes

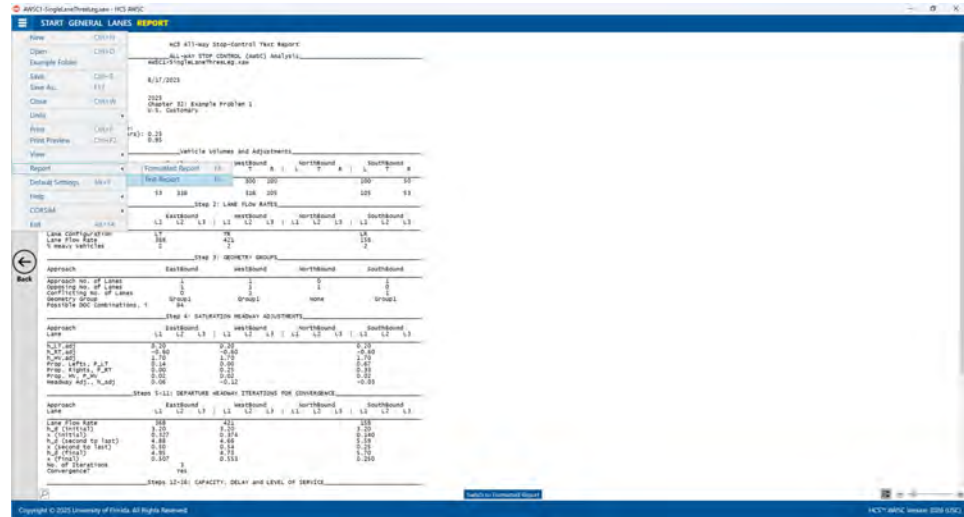
Approach	Eastbound	Westbound	Northbound	Southbound								
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	50	300			300	100				100		50
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound	Westbound	Northbound	Southbound								
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LT			TR						LR		
Flow Rate, v (veh/h)	368			421						158		
Percent Heavy Vehicles	2			2						2		
Initial Departure Headway, h_0 (s)	3.20			3.20						3.20		
Initial Degree of Utilization, x_i	0.327			0.374						0.140		
Final Departure Headway, h_f (s)	4.95			4.73						5.70		
Final Degree of Utilization, x_f	0.507			0.553						0.250		
Move-Up Time, m (s)	2.0			2.0						2.0		
Service Time, t_s (s)	2.95			2.73						3.70		

Capacity, Delay and Level of Service

Approach	Eastbound	Westbound	Northbound	Southbound								
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LT			TR						LR		
Flow Rate, v (veh/h)	368			421						158		
Capacity (veh/h)	727			761						631		
95% Queue Length, Q_{95} (veh)	2.9			3.4						1.0		
95% Queue Length, Q_{95} (ft)	73.7			86.4						25.4		
Control Delay (s/veh)	12.9			13.4						10.6		
Level of Service, LOS	B			B						B		
Approach Delay (s/veh) LOS	12.9			13.4						10.6		
Intersection Delay (s/veh) LOS	12.8									B		

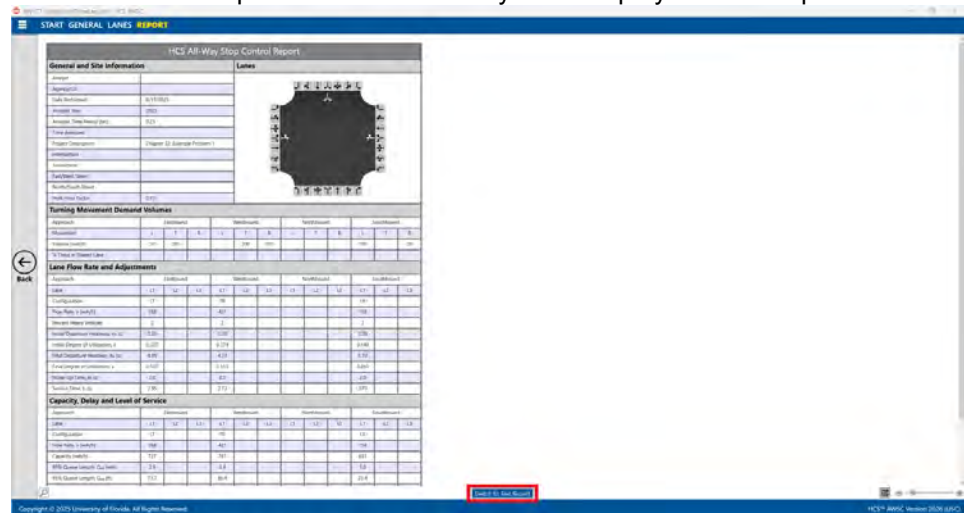


b. Keyboard Shortcuts

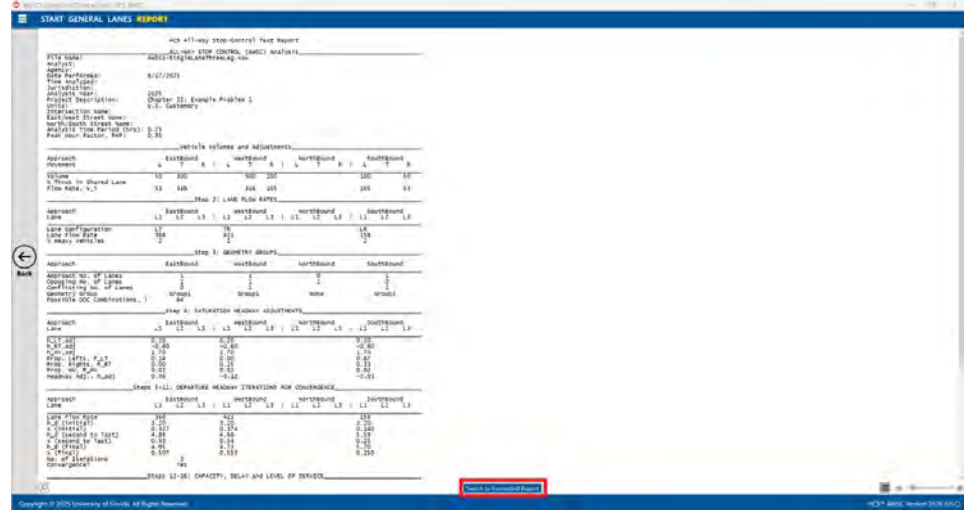
- i. Formatted Report: keyboard shortcut is “F4”
- ii. Text Report: keyboard shortcut is “F6”

c. Report Toggle Buttons

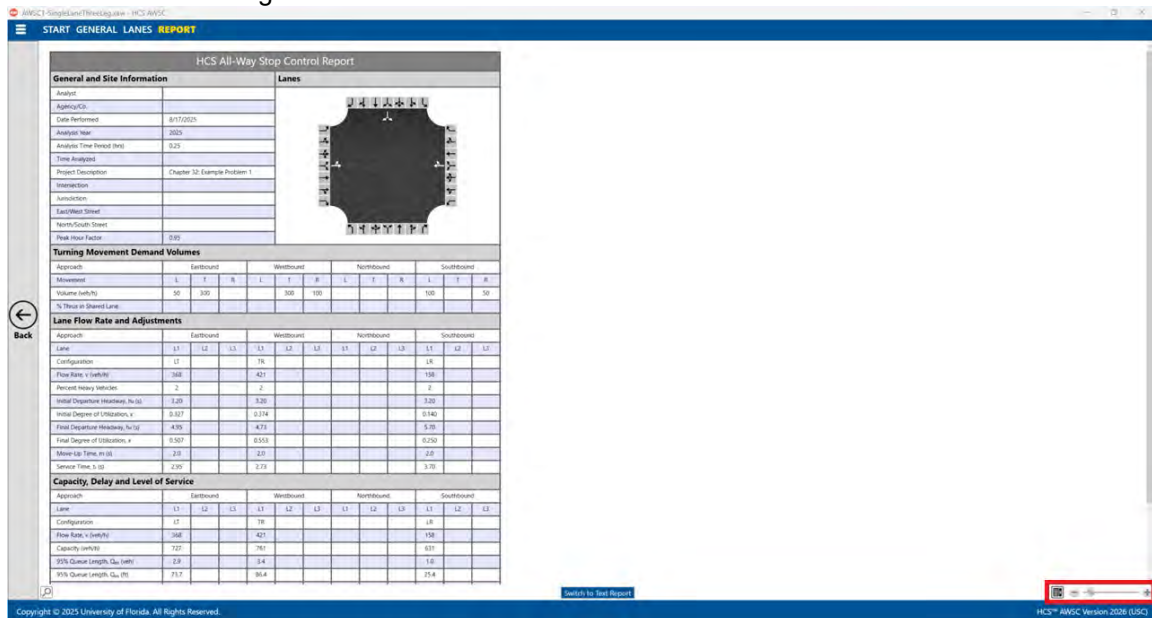
- i. Whether viewing the report in Page View or Full View, a toggle button will be available at the bottom of the screen underneath the report.
- ii. If the formatted report is currently being displayed, the toggle button will say “Switch to Text Report” which will allow you to display the text report if clicked.



- iii. If the text report is currently being displayed, the toggle button will say “Switch to Formatted Report” which will allow you to display the formatted report if clicked.



4. The magnification of the report currently being displayed can be changed using the zoom slider found at the bottom right-hand corner of the screen.

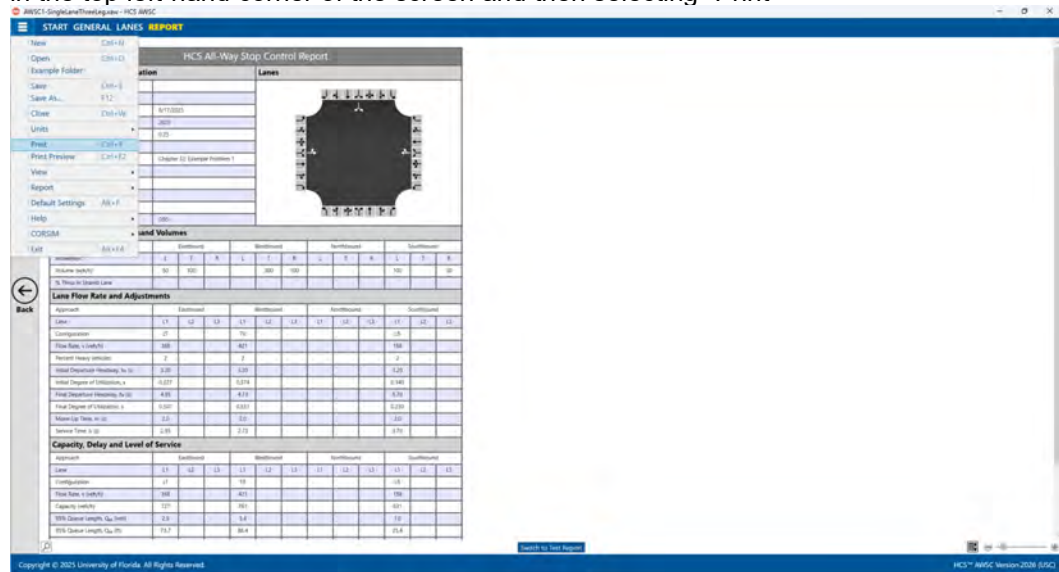


- a. To zoom in, drag the slider to the right; to zoom out, drag the slider to the left
- b. Clicking the plus (+) button will zoom in; clicking the minus (-) button will zoom out

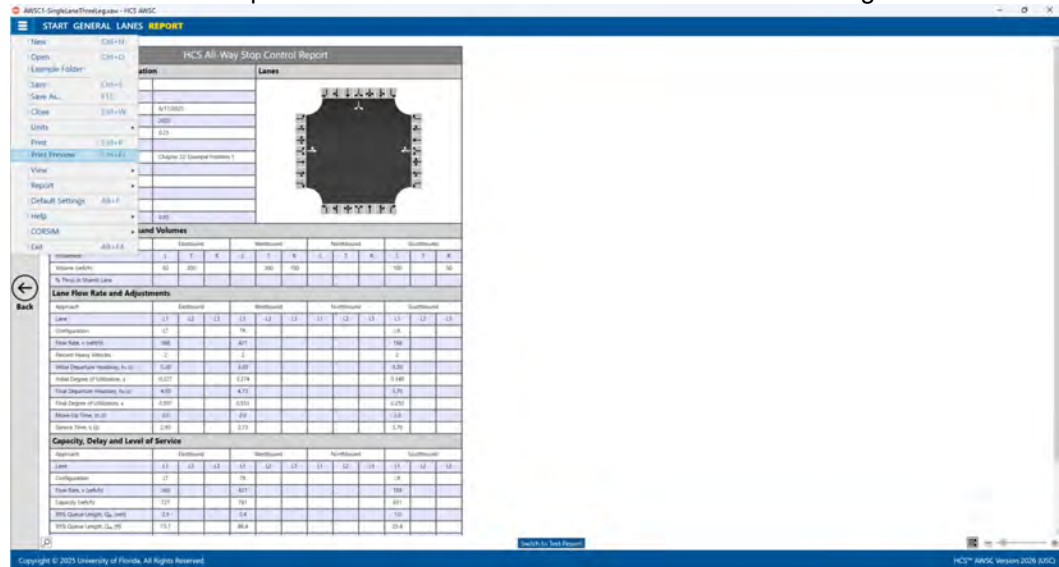
- c. Holding down “ctrl” on the keyboard and scrolling up on the mouse wheel will zoom in; holding down “ctrl” on the keyboard and scrolling down on the mouse wheel will zoom out

Print a Report

1. There are four options for printing a report:
 - a. Selecting *File > Print* from the main menu; this can be found by selecting the three lines in the top left-hand corner of the screen and then selecting “Print”



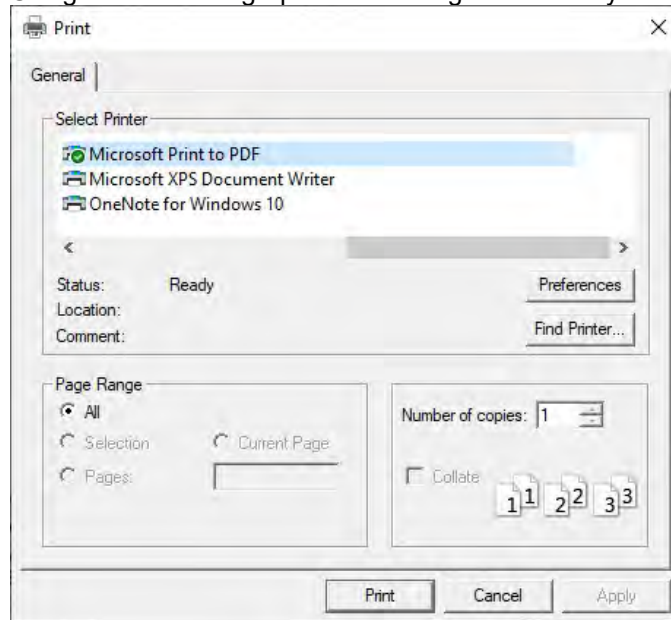
- b. Selecting *File > Print Preview* from the main menu; this can be found by selecting the three lines in the top left-hand corner of the screen and then selecting “Print Preview”



- c. Using keyboard shortcut “Ctrl+P” for Print
- d. Using keyboard shortcut “Ctrl+F2” for Print Preview

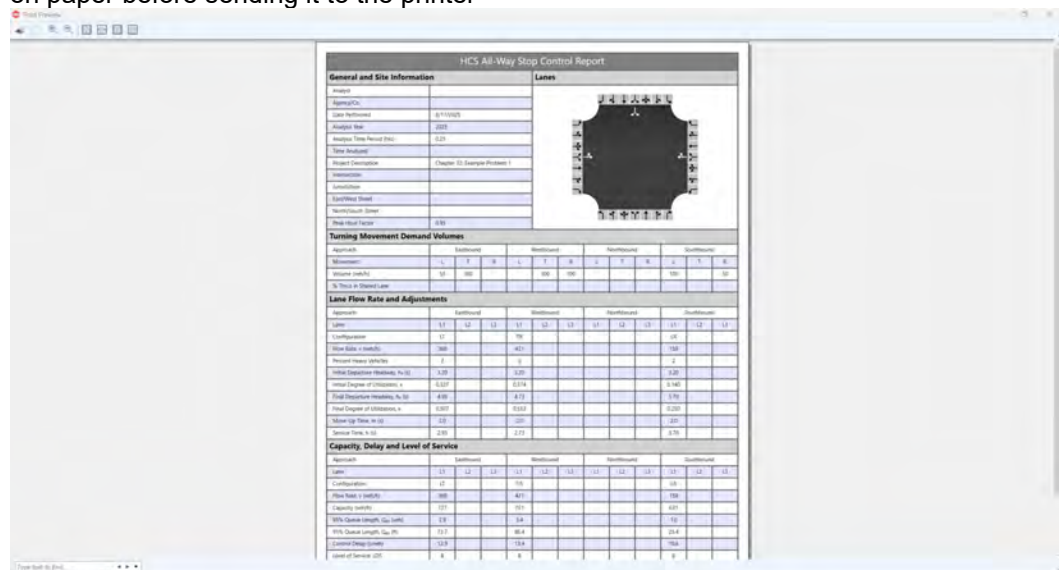
2. Print

- a. Using Print will bring up a Print dialog box where you can select which printer to print to



3. Print Preview

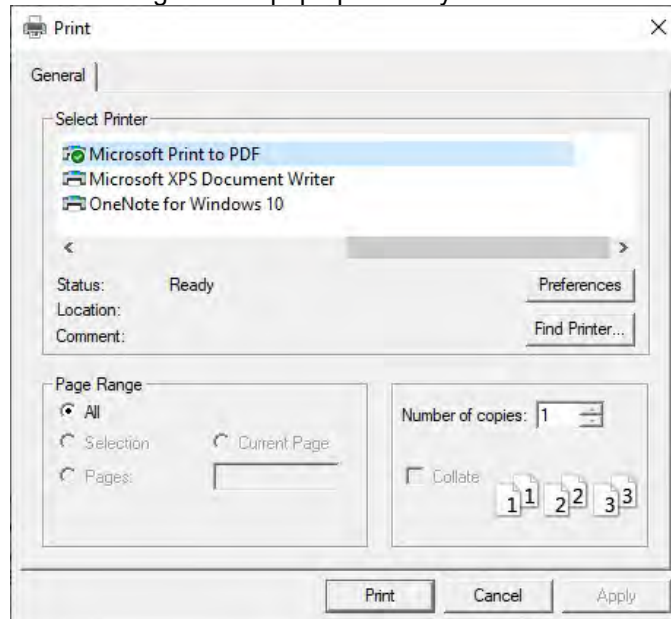
- a. Using Print Preview will bring up a window where you can view how the report will look on paper before sending it to the printer



- b. The print icon in the toolbar found in the top left-hand corner can then be selected



- c. A Print dialog box will pop up where you can select which printer to print to



Glossary of Terms

Agency

This field is provided to document the agency or company associated with this analysis or project.

Analysis Time Period

The length of time (T) the peak flow remains constant (usually 0.25 hours) and is used in the delay equations. If v/c exceeds 0.90, control delay may be significantly affected by the value of T. The range is 0.25 hrs to 3.00 hours. The default is 0.25 hours.

Analysis Year

This field is provided to document the year for which the analysis is being performed.

Analyst

The field is provided to document the individual performing the analysis.

Capacity

Capacity is the maximum hourly rate at which persons or vehicles can be reasonably expected to traverse a point or uniform segment of a lane or roadway during a given time period under prevailing roadway, traffic, and roadway conditions.

Control Delay

Control Delay is the portion of total delay attributed to traffic control measures, either traffic signals or stop signs.

Date Performed

The date will default to the computer's date, but may be edited. The format of the date is determined by the user's 'Short date style' preferences (regional setting icon on the Control Panel).

Delay

The difference between the travel time actually experienced and the reference travel time that would result during conditions with ideal geometric characteristics and in the absence of incidents, control, and traffic.

East/West Street Name

The name of the east/west intersecting street is coded to document the intersection being analyzed.

Intersection

The name of the intersection, usually defined by the two intersecting streets, is coded to document the intersection being analyzed and will be printed on the report.

Jurisdiction

The field is provided to document any jurisdiction convention or project related information.

Lanes

Lanes is a graphic data entry screen for coding lane configuration data. Lane combinations can be selected by clicking on the appropriate arrows to place them on the central diagram for each approach. Clicking on an arrow on the central diagram will remove it. As arrows are selected, others may become disabled as appropriate.

Note: As stipulated in the HCM methodology, each approach can have up to three lanes.

Level of Service (LOS)

A level of service is a letter designation that describes a range of operating conditions on a particular type of facility. Six levels of service are defined, using the letters A through F. Level of service A represents the best level of service, and generally describes operation of free flow and very low delay. Level of service F represents the worst operating conditions.

LOS criteria for AWSC intersections are given in the exhibit below. As the exhibit notes, LOS F is assigned if the volume-to-capacity (v/c) ratio of a lane exceeds 1.0, regardless of the control delay. For assessment of LOS at the approach and intersection levels, LOS is based solely on control delay.

Control Delay (s/veh)	LOS by Volume-to-Capacity Ratio ^a	
	$v/c \leq 1.0$	$v/c > 1.0$
0–10	A	F
>10–15	B	F
>15–25	C	F
>25–35	D	F
>35–50	E	F
>50	F	F

Note: ^a For approaches and intersectionwide assessment, LOS is defined solely by control delay.

Movement Volume

The value of movement volume is a number between 0 and 9999 veh/h. The default value is 0 veh/h.

North/South Street Name

The name of the north/south intersecting street is coded to document the intersection being analyzed.

Peak-Hour Factor

The hourly volume during the analysis hour divided by the peak 15-min flow rate within the analysis hour; a measure of traffic demand fluctuation within the analysis hour. The peak-hour factor (PHF) is entered for the intersection to compute peak flow rates.

Percent Heavy Vehicles

The percentage of heavy vehicles is entered for each movement. This value is used in the calculation of headway adjustment.

Percent Thrus Using Shared Lane

When there is a shared left-thru or shared thru-right lane coded beside a thru lane(s), this field is activated to provide for the percentage traffic split.

Project Description

This field is provided for the user to document the analysis with any information for identification purposes.

Queue Length

Queue Length is the number of vehicles in queue.

Stored Heavy Vehicle Length

The lane length in feet, or meters in metric, occupied by a queued heavy vehicle; this affects the computation of queue length

Stored Passenger Car Length

The lane length in feet, or meters in metric, occupied by a queued passenger car; this affects the computation of queue length

Time Analyzed

Documenting the time frame of the analysis as morning peak, afternoon peak, existing conditions, future projections, etc.

Traffic Volume

The hourly volumes (V) for each movement are coded in vehicles per hour (veh/h).

v/c Ratio

The v/c Ratio is the volume capacity ratio, which is the volume of one movement (or shared-lane movements) divided by the movement capacity of the movement (or shared-lane movements).

Index

A

- Acknowledgements 6
- Agency 43
- All-Way Stop-Controlled Intersections 10
- Analysis Time Period 43
- Analysis Year 43
- Analyst 43
- AWSC Report 11

C

- Capacity 43
- Change the Lane Configuration 26
- Change the View 24
- Close 7
- Close a File 20
- Control Delay 43
- CORSIM 9
- Create a New File 12

D

- Date Performed 43
- Default Settings 8
- Delay 44

E

- East/West Street Name 44
- Edit the Default Settings 22
- Enable and Edit the Percent Thrus Using Shared Lane Fields 33
- Exit 9
- Exit the Program 21

F

- Facility Name 44

G

- General Controls 8
- Getting Started 7
- Glossary of Terms 43

H

- HCM Chapter 21 10
- Help 9
- How To 12

I

- Index 45
- Intersection 44
- Introduction 1

J

- Jurisdiction 44

L

- Lanes 44
- Level of Service (LOS) 44
- License Agreement 1

M

- Menu Items 8
- Movement Volume 44

N

- New 8
- North/South Street Name 45

O

- Open 8
- Open an Existing File 15
- Operational Data 10

P

- Peak-Hour Factor 45
- Percent Heavy Vehicles 45
- Percent Thrus Using Shared Lane 45
- Print 8
- Print a Report 38
- Print Preview 8
- Project Description 45

Q

- Queue Length 45

R

Report 8

S

Save 8

Save a File 19

Save As... 8

Stored Heavy Vehicle Length 46

Stored Passenger Car Length 46

System Requirements 7

T

Time Analyzed 46

Trademarks and Copyrights 6

Traffic Volume 46

V

v/c Ratio 46

View 8

View Results of the Analysis 35