Trip

Use the Trip Definition pane to plan and evaluate your route.

• **Generate a Trip** – enter a point of origin and a destination then the system will create a route between the two

Note: Your origin and destination may be an address, a specific intersection or exit, or a state border. If <u>BOTH</u> your origin and destination are outside of lowa you must add original origin and destination on the application page.

- Pick a Trip on the Map enter a point of origin the connecting routes and the final destination
- Load a Saved Trip choose from a selection of previously designed and recorded routes

Use the Trip Commands pane to Modify a Trip or Manage Saved Trips.

- **Modify Trip** choose this option to alter a route that has been analyzed by clicking on the map to select a new point of origin, a different destination, and if necessary, intermediate locations
- **Manage Saved Trips** choose this option to add new routes to the database for re-use later, to edit existing routes, and to delete routes that you no longer need

Use the Tools pane to scan the database for specific map elements then display the results on the map. These items remain on the map when you return to the Trip Definition pane, allowing you to find specific spots more easily on the map.

- **Display Limitations** use this function to search the database for Clearances, Load Rating tolerances, and/or Restrictions and then to present the results of that search on the map
- **Find Intersection** use this function to search the database for intersections and then to present the results of that search on the map
- Find Item use this function to search the database for items and then to present the results of that search on the map
- **Find Keypoint** use this function to search the database for locations that have been identified and recorded via the **Keypoint Manager** and then to present the results of that search on the map
- Find Route use this function to search the database for designated routes and then to present the results of that search on the map
- **Find Structure** use this function to search the database for structures and then to present the results of that search on the map
- Map Options use these options to control the color scheme of selected map items
- **Restriction Information** use this function to view the features of an interfering condition
- Route Information use this function to view route attributes stored in the database

Using the Map

The Map panel is an interactive display that features conventional controls like dragging to pan and middle mouse scrolling to zoom

Note: Use the collapse/expand grips in the center of the panel's frame to make the most of your workspace.



Zoom In – click this icon to increase the magnification level by one increment; you can also scroll the middle mouse button up to zoom in

Zoom Out – click this icon to decrease the magnification level by one increment; you can also scroll the middle mouse button down to zoom out



Fit Features – click this icon to zoom and focus the map on your route



Clear Features – click this icon to remove the segments of an unfinished trip from the map



Clear Trip – click this icon to remove and complete trip from the map



Base Map – hover your cursor over this icon to choose from a list of map presentation options





Base Map options – click the radio button for the desired map presentation

Scale - values are displayed in miles and feet

Lat 41.356554 , Lon: -95.642162 Current cursor coordinates – displayed values indicate the latitude and longitude of the point on the map over which the cursor is currently hovering

Generate a Trip

Use the Generate a Trip function to identify a point of origin and a destination then the system will create a route between the two.

1. From the Trip Definition drop-down, choose the Generate a Trip option.



The Trip Definition pane will change, reconfiguring to allow you to define your trip by choosing a start location, identifying points of transition along the way, and designating your destination.

2. Designate your Starting Point by clicking on the map, by entering a recognized location, or by entering a street address. Be aware that you can select any item from the Defined Trip Locations list then click the Clear button to remove that location from the list and its marker from the map

Map:

- Your cursor is already equipped to select Start and End locations on the map.
 - a. Click and drag on the map to pan to the desired area then use your mouse wheel to zoom in on the desired location. Be aware that you can zoom in close enough to choose a particular onramp. It isn't essential that you zoom in to that degree, but it may be helpful.
 - b. Left-click to set your Start point. When you click, the map panel will center on the location, illustrating the origin point with a circle.





c. Pan and zoom the map to the End point of your route then left-click.



d. Click the Fit Features icon on the Map's toolbar to view the whole route.



Location:

a. Designate a Start point by entering a location (for example, US 69 & Garfield Ave) in the field provided. You need only enter the first few numbers or letters in the name before the system presents you with options; choose the desired location from those options then click the Add button.



Select an optic	on from the list		
Generate a Tr	rip 🔻		
Intersection /	/ Keypoint		•
US-69 & Gar	field Ave		×
No Offset or	Entry 🔹		
0.00 MilePoi	int		
Analyze All	Possible Trips		
Add	Add Segment	Clear	
Analyze	Reverse		

- b. Designate an End point by entering a location (for example, I-80 & Nebraska border) in the field provided. You need only enter the first few numbers or letters in the name before the system presents you with options; choose the desired location from those options then click the Add button.
- c. Click the Fit Features icon on the Map's toolbar to view the whole route.



Address:

a. Check the Enter Location by Address box then enter the street address from which you will be travelling.



b. It is likely that the street address you give will not fall directly on a routable road. An alert will appear to tell you when this is the case. Click the OK button to acknowledge the alert.

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- c. Options for a point of entry to the routing network will appear below. When you click on an option, the map will center on the chosen spot. If the entry point is desirable, click OK.
- d. The Enter Location by Address box remains checked, so you need only enter the street address of your destination then click the Add button.
 - If you receive the same Alert message as before, click OK then choose from the optional exits of the routing network before clicking OK.

The destination is marked with a red circle.

- e. Click the Fit Features icon on the Map's toolbar to view the whole route.
- 3. If you need your route to pass through locations that do not fall along the system generated route, you can add those points of transition by clicking on the map, by entering a recognized location, or by entering an address.

Map:

a. Your cursor remains equipped to add points of transition to your route, so you can click on the map to identify a location.



b. You will notice that the newly chosen point was added to the bottom of the Defined Trip Locations list. Drag the location up to put your route in the correct order.

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Defined Trip Locations
4
Start on US-69 in Polk County
1 Via I-35 in Polk County
end on I-80 in Pottawattamie County

Location:

a. Identify a point of transition by entering a location (for example, I-80 at I-235) in the field provided. You need only enter the first few numbers or letters in the name before the system presents you with options; choose the desired location from those options then click the Add button.

80	×
1-80	^
C80	
80 Ave	
80th Ave	
80th Ave Frntg	
80th Pl	
80th Srte	-

b. When the newly chosen point appears at the bottom of the Defined Trip Locations list, drag the location up to put your route in the correct order.

Defined Trip Locations	
Start on US-69 in Polk County	4
1 Via I-80 at I-235	
end on I-80 at the Nebraska Border	1

Address:

a. Enter the street address to which you will be travelling and follow the same procedure you used to identify your Start and End points.

Trip Definition	^
Salact an antion from the list	
Generate a Trin	
concide c mp	
Street Address	•
1334 us-	×
1334 US-69 N, Des Moines, IA 50316	
0.00 MilePoint	
Analyze All Possible Trips	

b. The newly chosen point appears at the bottom of the Defined Trip Locations list, so drag it up to put your route in the correct order.

4. Click the Analyze button to have the system generate your trip.



5. Review the results on the Analysis Results & Directions pane.

Analysis Results & Directions
Analysis Passed
The highlighted trip has been analyzed without any clearance, load or restriction failures.
Trip Description START ON US-69 NB at GARFIELD AVE Intersection (IN DES MOINES AT GARFIELD AVE), I-80 WB, I-29 NB, I-80 WB, END ON I-80(STATE BORDER OF NEBRASKA)
Trip Length 138.94 miles
Count Failures: 0 Clearance, 0 Load, 0 Restrictions

- If you wish to eliminate the current trip and start defining a new route, click the Clear Trip icon on the Map.
- Use the Override and Edit options to work around analysis complications and move the application forward.
 - ٠
- Override Analysis check this box to allow a trip that failed analysis
- Override Trip check this box to disable the other Trip page functionality, allowing the application to proceed without a successfully analyzed route
- Edit Trip click this button if you checked the Override Trip box but you want to enter a text description of your route
- 6. Click the Trip Commands title bar then expand the drop-down and choose the Save Trip option to store a copy of your trip for future use.



7. Click the Save button to avoid losing your application.



8. Click the Continue button.



Pick a Trip on the Map

Use the Pick a Trip on the Map function to identify a point of origin the desired routes and a destination then the system will use the selected points to complete the route between the origin and destination.

1. From the Trip Definition drop-down, choose the Load a Saved Trip option.



The Trip Definition pane will change, reconfiguring to allow you to define your trip by choosing a start location, identifying points of transition along the way, and designating your destination.

2. Designate your Starting Point by clicking on the map.

<u>Map:</u>

- Your cursor is already equipped to select Start locations on the map.
 - a. Click and drag on the map to pan to the desired area then use your mouse wheel to zoom in on the desired location. Be aware that you can zoom in close enough to choose a particular onramp. It isn't essential that you zoom in to that degree, but it may be helpful.
 - b. Left-click to set your Start point. When you click, the map panel will center on the location, illustrating the origin point with a circle.
 - c. Pick on either side of the start point to determine the trip direction. Once the direction of travel is determined the purple starting segment will turn green.



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d. Pan and zoom the map to the next desired route of your trip then left-click.



e. Continue to pick on the route or click the Analyze button for trip analysis or the Clear Last button to undo the last selected route portion.



f. Click the Fit Features icon on the Map's toolbar to view the whole route.



Load a Saved Trip

Use the Load a Saved Trip feature to apply a previously defined route to your application.

1. From the Trip Definition drop-down, choose the Load a Saved Trip option.



The Trip Definition pane will change, reconfiguring to present a list of recorded routes. The list can be very long, so use the slider on the right side to scroll down through all the options.

2. Choose the desired route by clicking on the Trip Name and then click on Analyze.

The Map shows your trip.



- 3. Click the Analyze button to have the system evaluate your trip.
- 4. Use the Request Permit Office Review to send to the Permit Office with difficulties routing. Include the desired route in the Comment Section.
- 5. Click the Save button to avoid losing your application.



6. Click the Next button to complete the steps in your application request, choose payment options, send to Permit Office or if allowed the system will automatically issue the permit.



March 4, 2024



Modify Trip

Use the Modify Trip function to alter a route that has been analyzed by clicking on the map to select a new point of origin, a different destination, and if necessary, intermediate locations.

1. After you have analyzed your route, open the Trip Commands pane and choose Modify Trip from the drop-down.

elect an option from the list	
Modify Trip 🔹	
Modify Trip	
Manage Saved Trips	

2. Expand the Select Modify Location drop-down to choose whether you wish to change the route At the Start, In the Middle, or At the End.

Trip Commands	٨
Select an option from the list	
Modify Trip 🔹	
Select modify location	•
Select modify location	
At the start	
In the middle	
At the end K	

3. The cursor is now equipped to mark a segment of the roadway adjacent to the existing route; move it into the map panel and left-click on the desired location.

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When you click, the panel will zoom and focus on the location, illustrating the modified portion of the route with a different color.

4. Click the Analyze button.



The Analysis Results & Direction pane will show a Pass/Fail message, a Trip Description, and the Trip Length.

- a. If your analysis failed, return to the Trip Definition pane and click the Clear Last button to eliminate the final segment of the route then click Analyze. In this way, you can find the faulty segment of your route.
- b. Click the Add Segment button to re-equip the cursor to mark new locations on the map.
- c. Left-click on the desired location(s) on the map then click Analyze.
- d. Repeat steps a through c until you have formulated a passable route.
- 5. Click the Trip Commands title bar then expand the drop-down and choose the Save Trip option to store a copy of your trip for future use.

Modify Trip	•
Modify Trip	
Save Trip	
Delete Trip	

6. Click the Save button to avoid losing your application.



7. Click the Continue button.



Manage Saved Trips

Use the Manage Saved Trips function to add new routes to the database for re-use later, to retrieve existing routes from the database, and to delete routes that you no longer need.

Adding a Trip

1. After you have analyzed your route, open the Trip Commands pane and choose Manage Saved Trips from the drop-down.

Trip Commands	
Select an option from the list	
Manage Saved Trips 🛛 🔻	
I am looking for	
 En. Saved Trips 	Ê
Add Trip.,	
BIG BIG	
🗋 BRIA 📋 Paste	
DAVEATTEMPT#1	
DEFECT TEST1	
DEMO TEST1	-

The Trip Commands pane will change, reconfiguring to present a list of recorded routes.

2. Right-click on the folder in which you wish to store the route. From the context menu, choose Add Trip.

Note: You can also create new folders by choosing the Add Category option and then adding or pasting routes into that folder.

Rename a Trip

1. With an application open to the Trip page, access the Trip Commands pane and choose Manage Saved Trips from the drop-down.

The Trip Commands pane will change, reconfiguring to present a list of recorded routes. The list can be very long, so use the slider on the right side to scroll down through all of the options.

2. Double-click on the desired route to make the name edit-able. After making the necessary changes, strike the Enter key.

Trip Comman	ds	•
Select an option	n from the list	
Manage Saved	a Trips 🔻	
I am looking f	for	
🖌 🗈 Saved T	rips	*
4 👗 MY C	NWC	
D BIO	G TRIP	
D B	BIG TRIP #2	
🗋 BR	NAN-TEST	
D DA	AVEATTEMPT#1	
🗋 DE	EFECT TEST1	Ŧ

The route now appears on the table under its new name.

Copy or Cut a Trip

1. With an application open to the Trip page, access the Trip Commands pane and choose Manage Saved Trips from the drop-down.

The Trip Commands pane will change, reconfiguring to present a list of recorded routes. The list can be very long, so use the slider on the right side to scroll down through all of the options.

2. Right-click on the name of the desired trip then choose Copy or Cut from the context menu.



Trip Commands	
Select an option from the list	
Manage Saved Trips 🛛 🔻	
I am looking for	
En Saved Trips	^
🖌 🛓 MY OWN	
BIG TRIP	
BIG TF Copy	
BRIAN 🔏 Cut	
🗅 DAVE. 💼 Delete	
DEFECT TEST1	
DEMO TEST1	-

3. Right-click on the name of the folder into which you wish to place the chosen trip and choose Paste from the context menu.

Trip Commands	
Select an option from the list	
Manage Saved Trips 🔹	
I am looking for	•
 ☐ 123T ☐ 123T ☐ 0TH, ☐ 1234 ☐ Paste ☐ 1234 ☐ Paste ☐ 1KEVIN1 	
□ BC-1	•

Deleting a Trip

1. With an application open to the Trip page, access the Trip Commands pane and choose Manage Saved Trips from the drop-down.

The Trip Commands pane will change, reconfiguring to present a list of recorded routes. The list can be very long, so use the slider on the right side to scroll down through all of the options.

2. Right-click on the desired route then choose the Delete option from the context menu.

Trip Commands	
Select an option from the list	
Manage Saved Trips 🔹	
I am looking for	
Saved Trips MV OWN	
BIG TF Copy	
BRIAN % Cut	
DAVE Delete	
D DEFECT TEST1	
DEMO TEST1	•

The selected trip is removed from the table of available options.

Display Limitations

Use the Display Limitations function to search the database for Clearances, Load Rating tolerances, and/or Restrictions and then to present the results of that search on the map.

- 1. With an application open to the Trip page, access the Tools pane then choose Display Limitations from the drop-down.
- 2. Identify the limitations that you wish to scan for by checking the Clearances, Load Rating, and/or Restrictions boxes.
- 3. Choose a specific county in which to search for limitations or check the All Counties box to scan the entire database.
 - Scanning for more than one limitation or in all counties will extend the search time required, perhaps significantly.
- 4. Enter your Vehicle Height in the field provided then click the Analyze button.
- 5. When the database scan is complete, the results will display on the Map.

Find Structure

Use the Find Structure function to search the database for structures and then to present the results of that search on the map.

1. With an application open to the Trip page, access the Tools pane then choose Find Structure from the drop-down.

Tools	
elect an option from	n the list
Find Structure	•
1	×
106550	
106740	
114470	
114500	
114520	
114590	
114800	-

2. Enter the first three digits of the bridge number in the field then pause while the system finds matching records. When the options appear, choose the desired bridge.

When the database scan is complete, the results will display on the Map.

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īools		^	2		
lect an option from the	list		<u>_</u> 7	Rock Falls	Creek
Find Structure	*		R . Back		
106550 >	<		- Stort Annual P		
tructures					
Under 1 of 🔻					
Attribute	Value				
Route	W River St (NE)	*			ł
County	Cerro Gordo				Marise
MilePoint	0.19 Miles				3
Direction	Both			A.	Shell Ro
Vertical Clearance - Cardinal	13' 0"		305th St		River
/ertical Clearance - Non Cardinal	13' 0"		1	1	14
Horizontal Clearance - Cardinal	24' 0"		1 mil		
Horizontal Clearance - Non Cardinal	24' 0"		in the second se		
eature	IANR RR		and the second sec		
Iulvert	No		and the second sec		
Feature Intersected	W RIVER ST E				
acility Carried	IANR RR				
Posted	No	-			

Find Intersection

Use the Find Intersection function to search the database for intersections and then to present the results of that search on the map.

- 1. With an application open to the Trip page, access the Tools pane then choose Find Intersection from the drop-down.
- 2. Enter the first three characters of the Route Name then pause while the system finds matching records. When the options appear, choose the desired intersection.



3. When the system presents the cross streets for the chosen route, select the desired intersection.



4. Click the Find button.

When the database scan is complete, the results will display on the Map.

Trip Definition	+ +
Trip Commands	-
Tools	
Select an option from the list Find Intersection	Commerce and
Start typing the Route Name	DPPER CO
Located Intersections	
 Flying Fox Rd-Ferny Glen at Upper Coomera Rd-Ferny Glen 	and the second sec
Find	UPPER COOR BD
Analysis Results & Directions	



Find Item

Use the Find Item function to search the database for locations and then to present the results of that search on the map.



- 1. With an application open to the Trip page, access the Tools pane then choose Find Items from the drop-down.
- 2. Enter the name of the item for which you wish to search in the field provided then click the search button.

When the database scan is complete, the results will display on the Map.

Find Keypoint

Use the Find Keypoint function to search the database for locations that have been identified and recorded via the **Keypoint Manager** and then to present the results of that search on the map.

- 1. With an application open to the Trip page, access the Tools pane then choose Find Keypoint from the drop-down.
 - Click the Find by Route radio button if you wish to use a route name to find the keypoint.
 - Click the Find by Keypoint name radio button if you know the designation given to the location.
- 2. Enter the first three characters of the Keypoint Name then pause while the system finds matching records. When the options appear, choose the desired name.

view an option from the list	
Find Keypoint 🔹	
Find by Route	
Find by Keypoint Name	
upp	
Upper Brookfield	<u></u>
Upper Calliope	
Upper Coomera	
Upper Freestone	
Upper Kedron	
Upper Mount Gravatt	
Upper Pilton	
Hanna Carina Caral	*

3. When the system presents the cross streets for the chosen route, select the desired intersection.



4. Click the Find button.

When the database scan is complete, the results will display on the Map.



Find Route

Use the Find Route function to search the database for designated routes and then to present the results of that search on the map.



- 1. With an application open to the Trip page, access the Tools pane then choose Find Route from the drop-down.
- 2. The cursor is now equipped to identify your choice of route, so move it over the map and click on the desired route.
 - If you choose the Route by Name option instead, you need only enter the first few numbers or characters of the name then select from the matching options.

When the database scan is complete, the results will display on the Map.

Trip Definition	
Trip Commands	Thickbraes
Tools	Intronal Park K
Select an option from the list Find Route	
 Find Route by Picking on Map Find Route by Name 	Charters Towers
Pick a route on the map	White Mountains National Rack
The highlighted route is 14B	Participation Partic
✓ Fit to view	Hughenden
Analysis Results & Directions	



Map Options

Use the Map Options to control the color scheme of selected map items.

1. With an application open to the Trip page, access the Tools pane then choose Map Options from the drop-down.

Tools 🔺					
Select an option from the list					
Map Options 🔹					
Routing Items					
Trip Elements					
Start Point					
Fill					
Outline					
End Point					
Fill					
Outline					
Location Point					
Fill					
Outline					
Alternate Path					
Modify Segment					
Trip Segment					
Failed Segment					
Restriction Elements					
I ocate Elements					
m Miscellaneous					
· miscellarieous					
Apply Reset Reset to Default					

- 2. Expand the tree structure to find the desired map element then click on the swatch to open the presentation options dialog.
 - Click on the color swatch to open a color palette.
 - Transparency is presented in percentages. In the example, .60 equals 60%, meaning that 40% of the background image is showing through.
 - The Width is measured in pixels.
- 3. Click OK to execute your changes.

Color :	
Transparency :	0.60
Width :	1.00

Restriction Information

Use the Restriction Information function to view the features of an interfering condition.

Trip Definition	• ^	+	Analysis Failed X
Trip Commands	•	Ŀ	Failures: 0 Clearance, 0 Load, 1 Restrictions Please refer to Analysis Results & Directions for details.
Tools	*		
Select an option from the list Restriction Inform v			
Pick on analyzed trip item for restriction information			Get Restriction
SUPERLOAD RESTRICTION REPORT			
Route ID : I-90 Restriction Type : ROADWAY RANGE Reason : No Travel Allowed (RCRS Maintained Restriction) Comment : COMMENT Name : Only Affects Oversize / Overweight Single Trip Permits From : I-90 JACKSON County Log 143.60 To : I-90 JACKSON County Log 143.88 Schedule Date : SCHEDULED FROM 11/2/2017 TO 11/2/2017	~		2mi Lat: 43.827501 , Lon: -101.567593

- 1. With an application open to the Trip page, access the Tools pane then choose Restriction Information from the drop-down.
- 2. The cursor is now equipped to identify the restriction, so move it over the map and right-click on a red portion of the route then left-click the Get Restriction Information button.

The restriction report will display in the Tools panel.

Route Information

Use the Route Information function to view route attributes stored in the database.



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- 1. With an application open to the Trip page, access the Tools pane then choose Route Information from the drop-down.
- 2. The cursor is now equipped to identify your choice of route, so move it over the map and click on the desired route.

When the database scan is complete, the results will display.



Using the Map

The Map panel is an interactive display that features conventional controls like dragging to pan and middle mouse scrolling to zoom

Note: Use the collapse/expand grips in the center of the panel's frame to make the most of your workspace.



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Zoom In – click this icon to increase the magnification level by one increment; you can also scroll the middle mouse button up to zoom in

Zoom Out - click this icon to decrease the magnification level by one increment; you can also scroll the middle mouse button down to zoom out



Fit Features – click this icon to zoom and focus the map on your route



Clear Features - click this icon to remove the segments of an unfinished trip from the map



Clear Trip – click this icon to remove and complete trip from the map



lation

Base Map – hover your cursor over this icon to choose from a list of map presentation options



Base Map options - click the radio button for the desired map presentation

Scale - values are displayed in miles and feet

Lat: 41.494656 , Lon: -95.901079 Current cursor coordinates – displayed values indicate the latitude and longitude of the point on the map over which the cursor is currently hovering