Qatar 2050 قطر
الخطة الشاملة للنقل
Transportation Master Plan

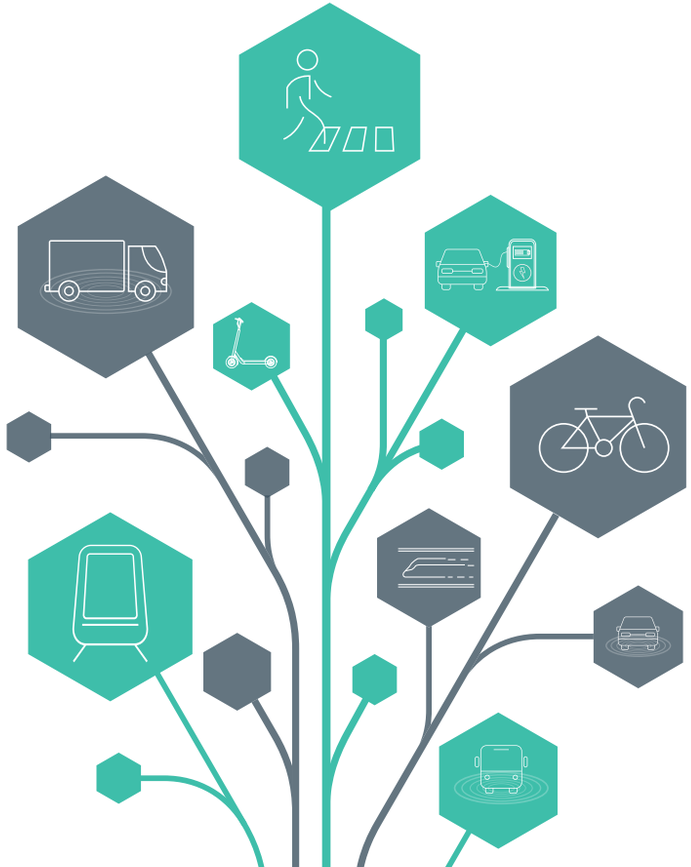
وزارة المواصلات
MINISTRY OF TRANSPORT

2050

Updating Transportation
Master Plan For Qatar
TMPQ

TIP-DBMS User Manual

نقل متكامل ومستدام للجميع
INTEGRATED & SUSTAINABLE TRANSPORT FOR ALL



2050

نقـل متكامـل ومسـتدام للجميـع

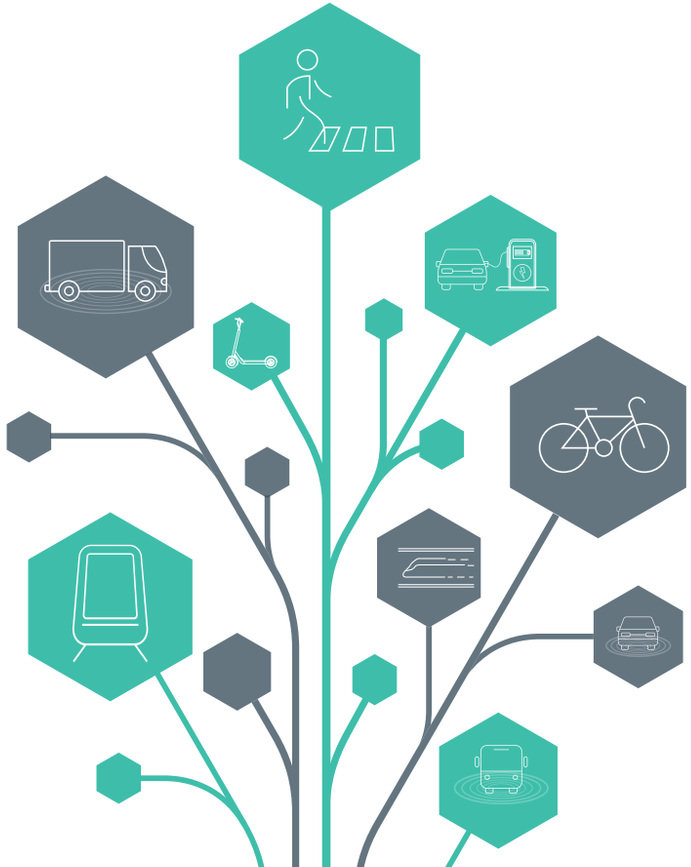
INTEGRATED & SUSTAINABLE TRANSPORT FOR ALL

ملاحظة:

يرجى العلم أن أي إشارة أو ذكر لـ "وزارة المواصلات والاتصالات" واختصارها "MOTC" في هذا التقرير، أصبحت تشير حالياً إلى "وزارة المواصلات" و اختصارها "MOT".

Note:

Please note that any reference or mention of the "Ministry of Transport and Communications" and its abbreviation "MOTC" in this report, now refers to the "Ministry of Transport" and its abbreviation "MOT".



2050

نقـل متكامـل ومسـتدام للجميـع

INTEGRATED & SUSTAINABLE TRANSPORT FOR ALL

مقدمة

يعتبر قطاع النقل البري أحد القطاعات الرئيسية في تطوير مختلف جوانب الحياة وضمان لنقل السلع والخدمات للأفراد والمجتمعات، كما يدعم نمو القطاعات الأخرى، مثل الزراعة والصناعة والتعدين والتجارة ويدفع التنمية المستدامة للمدن والمجتمعات والاقتصاد لتحقيق أهداف رؤية قطر الوطنية 2030.

ومن هذا المنطلق والتزاماً بمسؤولياتها قامت وزارة المواصلات والاتصالات بإعداد خطة النقل الشاملة لدولة قطر حتى عام 2050م بمشاركة ومساهمة العديد من الجهات الحكومية والخاصة والمختصين بهذا المجال.

توفر خطة النقل الشاملة لدولة قطر إطارًا شاملاً لمستقبل النقل البري فضلاً عن مجموعة متكاملة من المبادرات والمشاريع لخدمة جميع مستخدمي أنظمة وشبكات النقل البري، وذلك لتطوير مستوى خدمات النقل بما يتواكب مع النمو السكاني المتزايد في جميع أنحاء دولة قطر والتنمية الاقتصادية على مدار الثلاثين عامًا القادمة حتى عام 2050م. وهذه الخطة بعيدة المدى ستضع دولة قطر في المقدمة كأحد أكثر دول العالم استدامة من خلال توفير حلول نقل مبتكرة ومستدامة لدعم الاقتصاد، وتحسين جودة الحياة للمواطنين والمقيمين في دولة قطر مع الحفاظ على هويتها الوطنية.

واستمدت هذه الخطة مبادراتها وسياساتها وأدلتها من ركائز رؤية قطر الوطنية 2030، والتي تطمح إلى أن تكون دولة قطر في طليعة الدول المتقدمة، في ظل القيادة الرشيدة لحضرة صاحب السمو الشيخ تميم بن حمد آل ثاني أمير البلاد المفدى.

كما قدمت العديد من الجهات مساهمات وتعاوناً كبيراً في إعداد هذه الخطة الطموحة. ولمواصلة تطوير هذه الخطة وضمان تنفيذها بنجاح تحث وزارة المواصلات والاتصالات جميع الجهات الأخرى للاطلاع على هذه الخطة، والعمل معًا مسترشدين بها لتطوير أنظمة نقل بري متكاملة تلتزم بالأهداف الوطنية لمستقبل مزدهر ومستدام.

كما تؤكد وزارة المواصلات والاتصالات على التزامها بالعمل الجاد والدؤوب من خلال المشاريع والبرامج المستقبلية التي تهدف إلى بناء نظام نقل بري قائم على أحدث التقنيات وأفضل الممارسات في هذا القطاع.

Foreword

Land transportation is one of the key sectors that tremendously helps improve all aspects of life and ensures the delivery of goods and services to individuals and communities. It also underpins the growth of other sectors, such as agriculture, industry, mining and trade and drives the sustainable development of cities, societies and the economy in step with the objectives of the Qatar National Vision 2030.

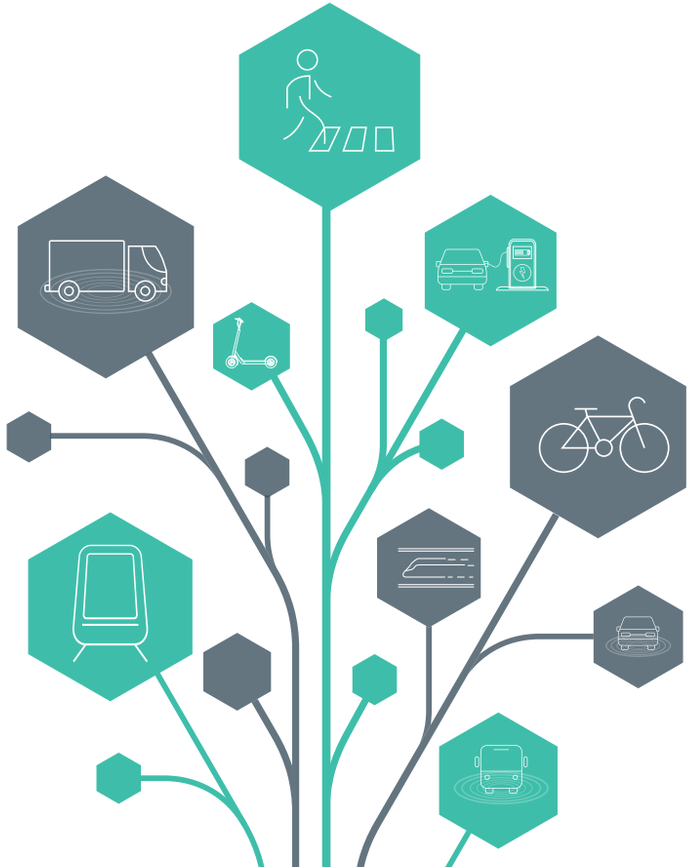
It is with this understanding that the Ministry of Transport and Communications (MOTC), in compliance with its responsibilities, has developed the Transportation Master Plan for the State of Qatar (TMPQ) with collaboration and input from multiple government and private entities and other relevant stakeholders and organizations.

The TMPQ provides an overarching framework for the future of land transportation that recommends an integrated set of transportation initiatives and projects for all users of land transportation systems, which will accommodate the population growth and a growing development momentum across Qatar over the next 30 years until 2050. This far-reaching masterplan can eventually bring Qatar to the forefront of world's most sustainable nations by providing innovative and sustainable transportation solutions that further boost the economy, improve the quality of life for citizens and residents, while preserving the national identity of Qatar.

The transportation schemes, initiatives, policies and manuals within TMPQ have been derived from the pillars of the Qatar National Vision 2030, which strive to place Qatar in forefront and the most advanced nations under the leadership of the Emir of Qatar, His Highness Sheikh Tamim Bin Hamad Al Thani.

A multitude of stakeholders played key roles and made very significant contributions to this ambitious plan. To continue that development and for successful implementation, MOTC encourages all other entities to familiarize themselves with the TMPQ and work together guided by this plan to develop integrated transportation systems that zoom on in the national objectives for a prosperous and sustainable future.

MOTC further stresses its commitment to working relentlessly on many future projects and programs and which aim to deliver a land transportation system that is based on latest technologies and best practices in the transportation field.



2050

نقـل متكامـل ومسـتدام للجميـع

INTEGRATED & SUSTAINABLE TRANSPORT FOR ALL

Disclaimer

The Ministry of Transport and Communications (MOTC) of Qatar has developed this document with upmost due diligence, using information, statistics and survey data available at the time of writing and following international best practices.

Without any liability to MOTC, the using of content contained herein and its supplementary data for any work purpose, does not relieve the user from exercising due diligence and sound engineering practices as per international best practices, nor does it entitle the user to claim or receive any kind of compensation for damages or loss that might be attributed to such use.

Access to this document shall be officially requested from MOTC Which means your acceptance to what is stated in this notice. Except where otherwise specified, users may view, copy and print the Document Contents only for their own use, provided that all copies and printouts of the Contents bear the copyright and other proprietary notices and disclaimers displayed on the Document. Users shall not advertise, publicize, release statements and/or disclose any information included in this Document whatsoever without the prior written consent from MOTC.

Future changes, amendments and versions of this Document will be made available by MOTC and can be obtained by contacting the department authorized by the Ministry. Users are therefore advised to investigate and verify that the version they have is the latest and up-to-date one.

Note: New findings, technologies, and topics related to the planning, designing, operating, and maintaining of transportation and traffic systems will regularly be used by MOTC to keep this report up to date. Users are encouraged to provide feedback through MOTC communication channels. Feedback will be reviewed, assessed, and possibly included in the next version.

Copyright © 2021. All rights reserved.

تنويه

قامت وزارة المواصلات والاتصالات بإعداد هذا التقرير ضمن اختصاصاتها وصلاحياتها وفقاً لأحدث الممارسات العالمية في هذا المجال وبناءً على المعلومات، والإحصائيات والبيانات المتوفرة عند إعداد هذا التقرير. لذا إن استخدام هذا التقرير لأي عمل، لا يعفي المستخدمين من استخدام أحدث الممارسات العالمية، واتباع الأساليب الهندسية الصحيحة وفقاً لأحدث التقنيات العالمية المتبعة.

وعليه وجب التأكيد على أن وزارة المواصلات والاتصالات لا تتحمل أي مسؤولية مالية أو قانونية يمكن أن تُعزى إلى هذا الاستخدام، كما أنه لا يحق للمستخدمين المطالبة أو استلام أي نوع من التعويض عن أية أضرار أو خسائر.

وللحصول على نسخة من هذا التقرير، يجب التقدم بطلب رسمي إلى وزارة المواصلات والاتصالات في دولة قطر والذي يعد موافقة على ماورد في هذا التنويه. ويجوز للمستخدمين عرض محتويات التقرير ونسخها وطباعتها للاستخدام الخاص فقط، شريطة أن تحمل جميع النسخ والمطبوعات الخاصة بالمحتويات حقوق النشر وإشعارات الملكية وإخلاء المسؤولية الأخرى المعروضة على التقرير. كما لا يجوز للمستخدمين الإعلان أو النشر أو الإفصاح عن البيانات و / أو الكشف عن أي معلومات مدرجة في هذا التقرير على الإطلاق دون موافقة كتابية مسبقة من قبل وزارة المواصلات والاتصالات.

وفيما يخص التغييرات أو الإصدارات المستقبلية، ستقوم الوزارة بتوفيرها ويمكن الحصول عليها من خلال الاتصال بالإدارة المخولة في الوزارة، وعليه يتوجب على المستخدمين التحقق بشكل متواصل بأن لديهم أحدث إصدار من هذا التقرير.

ملاحظة: ستقوم وزارة المواصلات والاتصالات بمواصلة تحديث وتعديل هذا التقرير مع الأخذ بعين الاعتبار النظريات الجديدة وأحدث الأساليب التكنولوجية والمواضيع المُستجدة التي تتعلق بتخطيط وتحليل وتصميم أنظمة النقل والمرور.

إن وزارة المواصلات والاتصالات تشجع المستخدمين على تقديم الملاحظات والاقتراحات والتعليقات وردود الأفعال وذلك من خلال قنوات الاتصال الخاصة بالوزارة، وسيتم مراجعة هذه الملاحظات والاقتراحات ومن ثم تقييمها للنظر في إمكانية إدراجها ضمن الإصدار القادم من التقرير.

حقوق النشر © 2021 . كل الحقوق محفوظة.

Qatar 2050 قطر
الخطة الشاملة للنقل
Transportation Master Plan

Table of Contents

GLOSSARY - - - - - I

01 INTRODUCTION - - - - - 1-1

1.1 Document Purpose - - - - - 1-1

1.2 Project Background - - - - - 1-1

1.3 TIP-DBMS Introduction - - - - - 1-1

1.4 Definitions - - - - - 1-1

02 USER ACCESS - - - - - 2-1

2.1 Accessing TIP-DBMS - - - - - 2-1

2.2 Obtaining a LOGIN - - - - - 2-1

2.3 Logging IN - - - - - 2-2

2.4 Core User Interface (UI) - - - - - 2-8

03 CORE FUNCTIONALITY - - - - - 3-1

3.1 Geocoder/Location Search - - - - - 3-1

3.2 Zoom - - - - - 3-1

3.3 Overview Map - - - - - 3-1

3.4 Main Menu - - - - - 3-2

3.5 Layers List and Legend - - - - - 3-3

3.6 Feature Attribute Information - - - - - 3-6

Qatar 2050 قطر
الخطة الشاملة للنقل
Transportation Master Plan

3.7 Basemaps - - - - - 3-6
3.8 Print - - - - - 3-7
3.9 Measure - - - - - 3-8
3.10 Mark-Ups / Red-Lining - - - - - 3-9
3.11 Bookmarks - - - - - 3-11
04 EDIT FUNCTIONALITY - - - - - 4-1
4.1 TIP Editor Tool: View Schemes - - - - - 4-1
4.2 TIP Editor Tool: Filter Schemes - - - - - 4-2
4.3 TIP Editor Tool: Export Schemes - - - - - 4-2
4.4 TIP Editor Tool: Sort Schemes - - - - - 4-3
4.5 TIP Editor Tool: Add/Edit Schemes - - - - - 4-4
05 REPORTS FUNCTIONALITY - - - - - 5-1

Qatar 2050 قطر
الخطة الشاملة للنقل
Transportation Master Plan

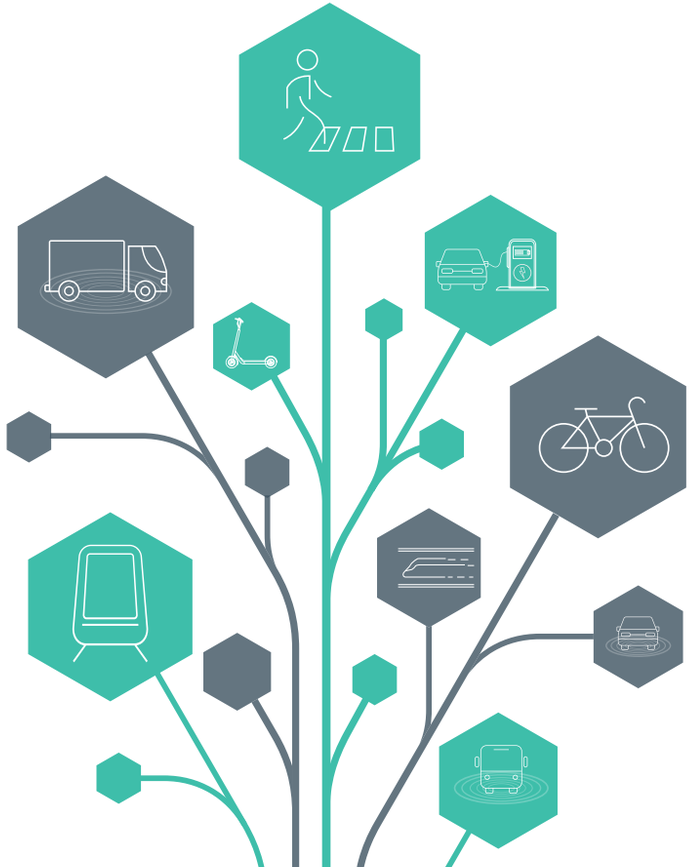
List of Figures

Figure 2.1 TIP-DBMS Welcome Page - - - - - 2-1
Figure 2.2 Login Request - - - - - 2-2
Figure 2.3 Welcome Email- - - - - 2-2
Figure 2.4 User Sign-in- - - - - 2-3
Figure 2.5 Accept Invitation- - - - - 2-3
Figure 2.6 Review Permissions- - - - - 2-4
Figure 2.7 More Information Required- - - - - 2-4
Figure 2.8 Account Security- - - - - 2-5
Figure 2.9 Account Security 2- - - - - 2-5
Figure 2.10 Account Security 3- - - - - 2-6
Figure 2.11 Account Security 4- - - - - 2-6
Figure 2.12 Registration Successful- - - - - 2-7
Figure 2.13 Registration Successful 2- - - - - 2-7
Figure 2.14 Core UI- - - - - 2-8
Figure 2.15 Core UI- - - - - 2-8
Figure 2.16 Copyrights- - - - - 2-8
Figure 3.1 Geocoder- - - - - 3-1
Figure 3.2 Zoom- - - - - 3-1

Figure 3.3 Overview Map- - - - - 3-2
Figure 3.4 Overview Map 2- - - - - 3-2
Figure 3.5 Main Menu- - - - - 3-3
Figure 3.6 Main Menu 2- - - - - 3-3
Figure 3.7 Layers List- - - - - 3-3
Figure 3.8 Layers List 2- - - - - 3-4
Figure 3.9 Layers List 3- - - - - 3-5
Figure 3.10 CGIS Data Tab- - - - - 3-5
Figure 3.11 CGIS Data Tab 2- - - - - 3-6
Figure 3.12 Attribute Information- - - - - 3-6
Figure 3.13 Base maps- - - - - 3-7
Figure 3.14 Printing- - - - - 3-7
Figure 3.15 Measure- - - - - 3-8
Figure 3.16 Measure 2- - - - - 3-8
Figure 3.17 Measure 3- - - - - 3-9
Figure 3.18 Mark-ups- - - - - 3-9
Figure 3.19 Mark-ups 2- - - - - 3-10
Figure 3.20 Mark-ups 3- - - - - 3-10

Figure 3.21 Bookmarks- - - -

Figure 4.16 TIP Schemes - Edit Schemes 2- - - -



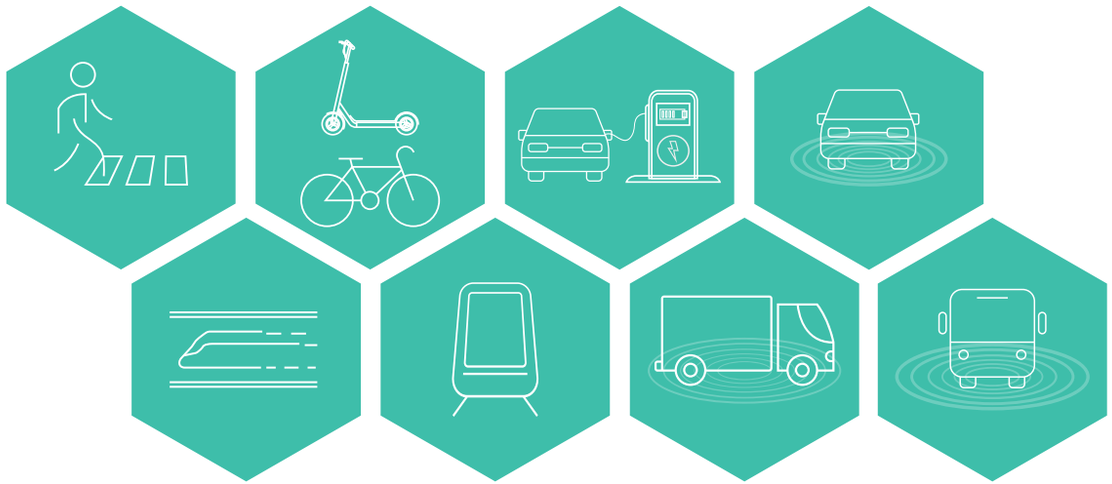
2050

نقـل متكامـل ومسـتدام للجميـع

INTEGRATED & SUSTAINABLE TRANSPORT FOR ALL

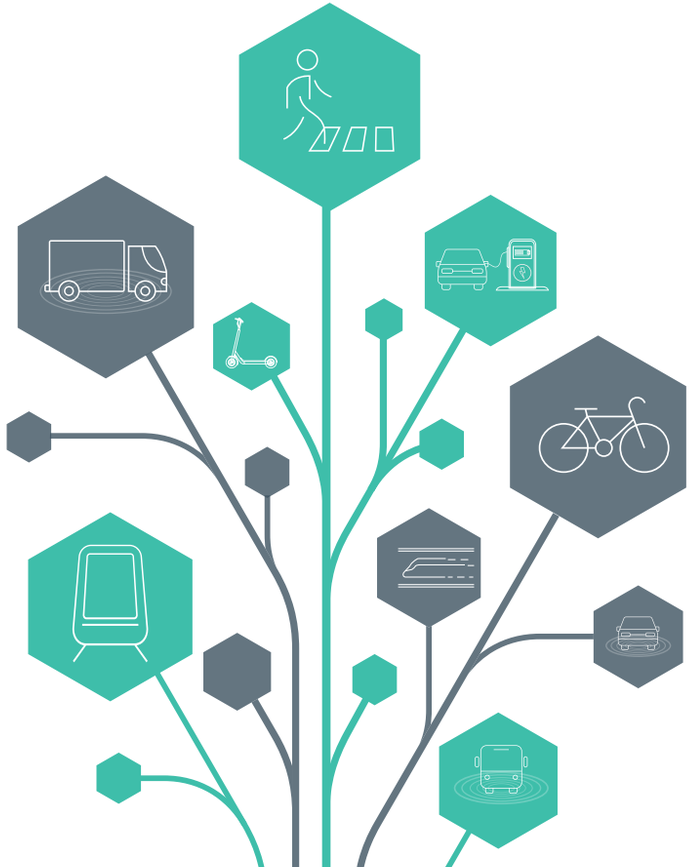
2070

GLOSSARY



GLOSSARY

Abbreviation	Description
API	Application Programming Interface
GIS	Geographic Information System
LDAP	Lightweight Directory Access Protocol
MOTC-LTPD	The Ministry of Transport and Communications – Land Transport Planning Department
PDF	Portable Document Format
TIP-DBMS	Transport Implementation Program – Database Management System
TIP-GIS Portal	Transport Implementation Program – Geographic Information System Portal
TDMS	Transportation Data Management System



2050

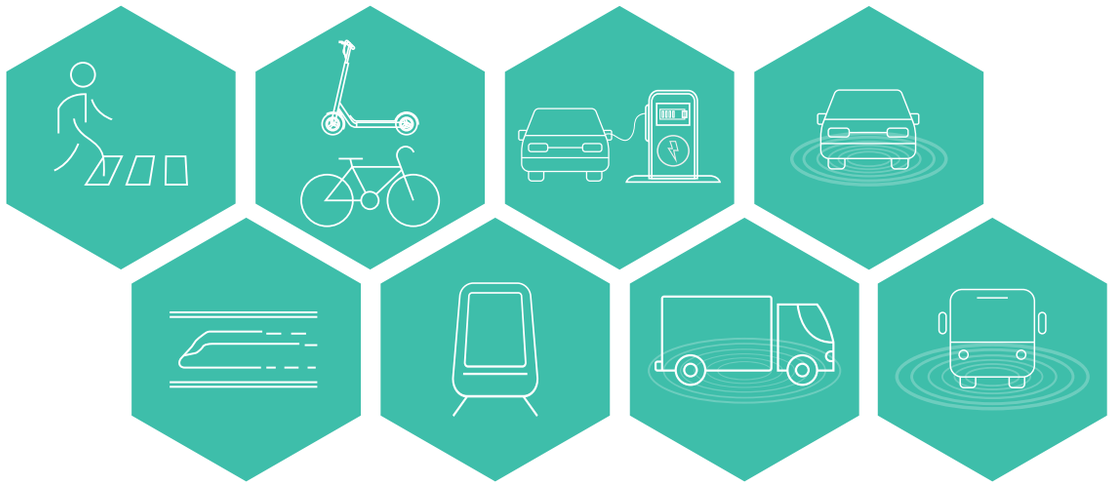
نقـل متكامـل ومسـتدام للجميـع

INTEGRATED & SUSTAINABLE TRANSPORT FOR ALL

2070

SECTION - 01

INTRODUCTION



1 INTRODUCTION

1.1 DOCUMENT PURPOSE

The purpose of this document is to provide TIP-DBMS end users with a reference guide to the access, capability and functionality use of the application.

1.2 PROJECT BACKGROUND

The Transportation Implementation Program (TIP) is an important output of the Transportation Master Plan for Qatar (TMPQ). It is a standalone web-based application which will be used to create, view and update the TMPQ projects spatially for horizon years 2025, 2030, 2035 and 2050.

Project recommendations include right-of-way acquisition, studies, policies, conceptual design projects, construction projects, etc. It also outlines which organization is responsible for a particular project. TIP-DBMS also allows you to find information stored in other connected information stores, based on the relevant asset location and access specific tool.

1.3 TIP-DBMS INTRODUCTION

TIP-DBMS is a web-based GIS application, which runs in an internet browser such as Internet Explorer, Google Chrome or Microsoft Edge. TIP-DBMS performs two key roles: to act as a repository, to store, manage, present and output spatial data in a user-friendly manner and secondly to provide tools and functions specifically to provide end users with the functionality to analyze and output reports.

TIP-DBMS contains all the spatial information relating to the TIP. The data is presented in agreed folders, formats and symbology to meet with industry standard and be accessible and intuitive for non-technical end users.

1.4 DEFINITIONS

Any reference to "system", "application" or "TIP-DBMS" refers to the combined modules:

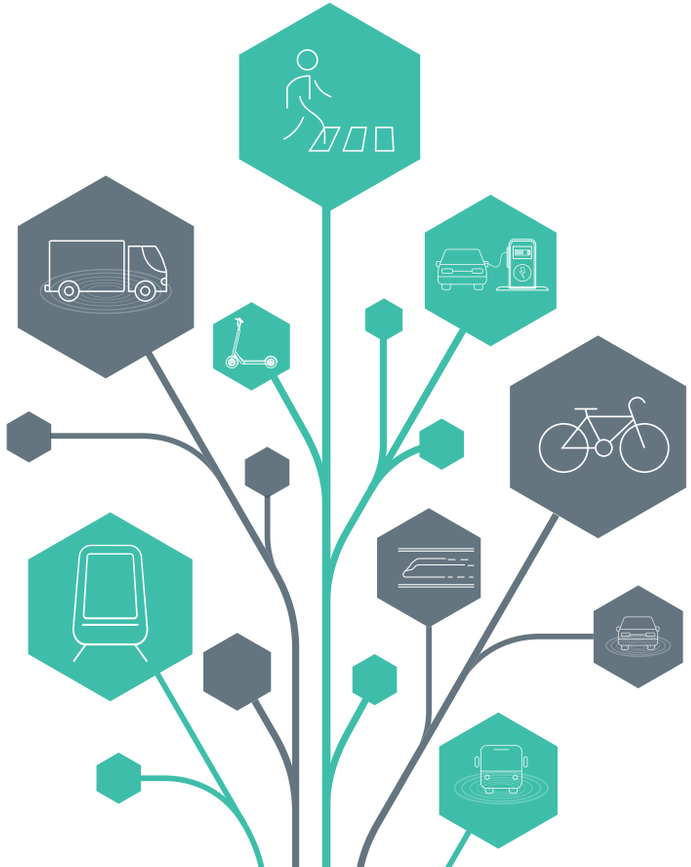
1. TIP-DBMS Database
2. TIP-GIS Portal

"TIP-DBMS Database" includes:

- Microsoft SQL Server database
- TIP data model
- TIP project data
- Re-structured and populated road data model

"TIP-GIS Portal" includes:

- Web-based GIS Portal application
- TIP Toolbar, containing TIP tools
- Transportation Toolbar, containing transportation tools



2050

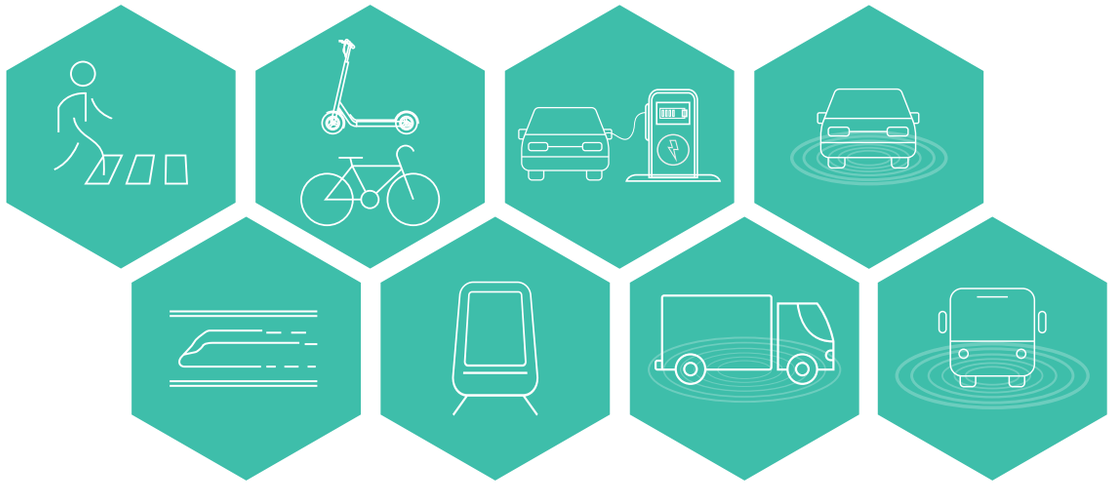
نقـل متكامـل ومسـتدام للجميـع

INTEGRATED & SUSTAINABLE TRANSPORT FOR ALL

02

SECTION - 02

USER ACCESS



2 USER ACCESS

2.1 ACCESSING TIP-DBMS

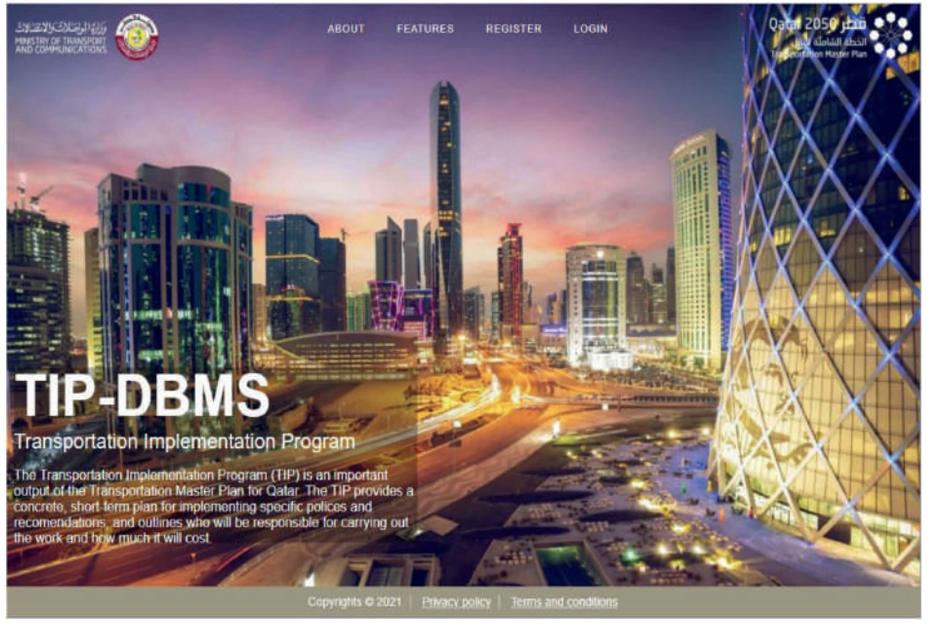
TIP-DBMS can be accessed through an internet browser. Chrome is recommended for best graphic rendering, but it will run on the latest version of Internet Explorer too.

Click the following link to access the TIP-DBMS:

https://TIP-DBMS.motc.gov.qa/

TIP-DBMS is available over the internet and intranet. TIP-DBMS is available to both authorized internal and authorized external users

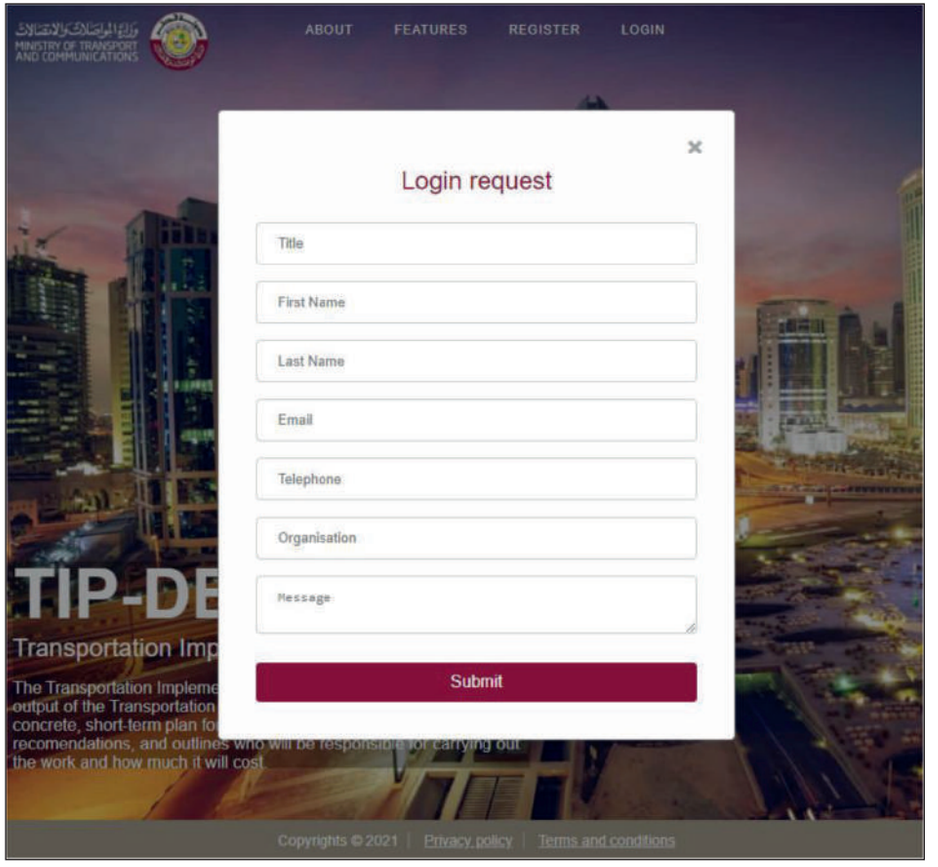
Figure 2.1 - TIP-DBMS Welcome Page



2.2 OBTAINING A LOGIN

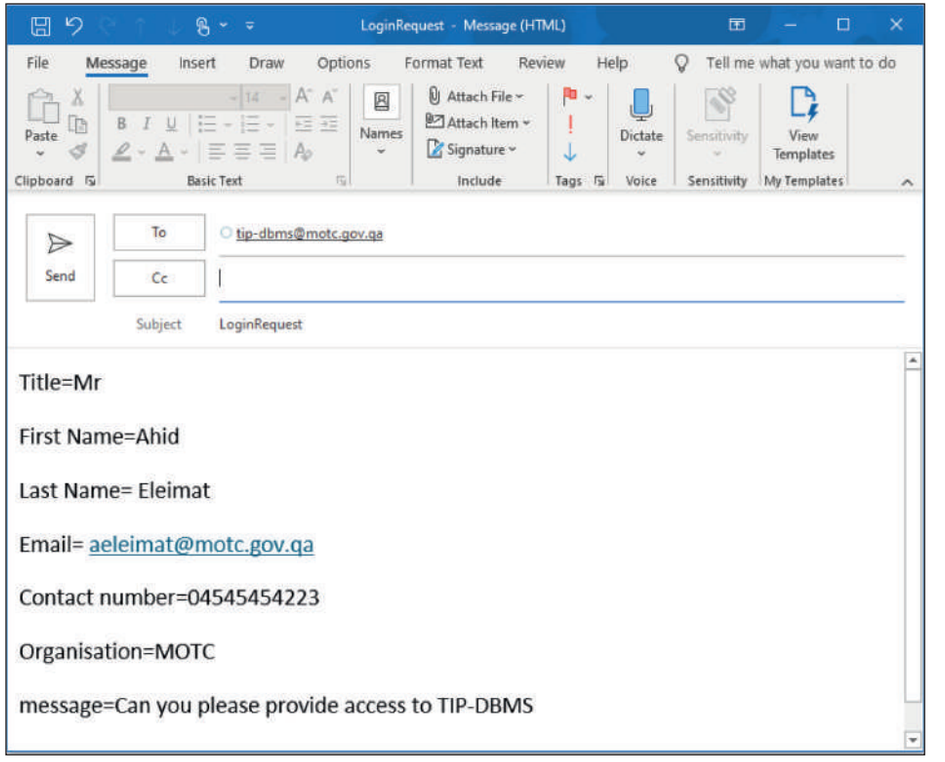
To obtain a login click on register button, fill in the login request form and click on submit button. A compiled email is created, and the user default mailbox will open for you to make any further changes. Click send email to send the user request to TIP-DBMS administrator.

Figure 2.2 - Login Request



Once the user request is verified and approved by the TIP-DBMS team. You should receive a welcome email to access the TIP-DBMS application. This email will contain the user login instructions and details.

Figure 2.3 - Welcome Email

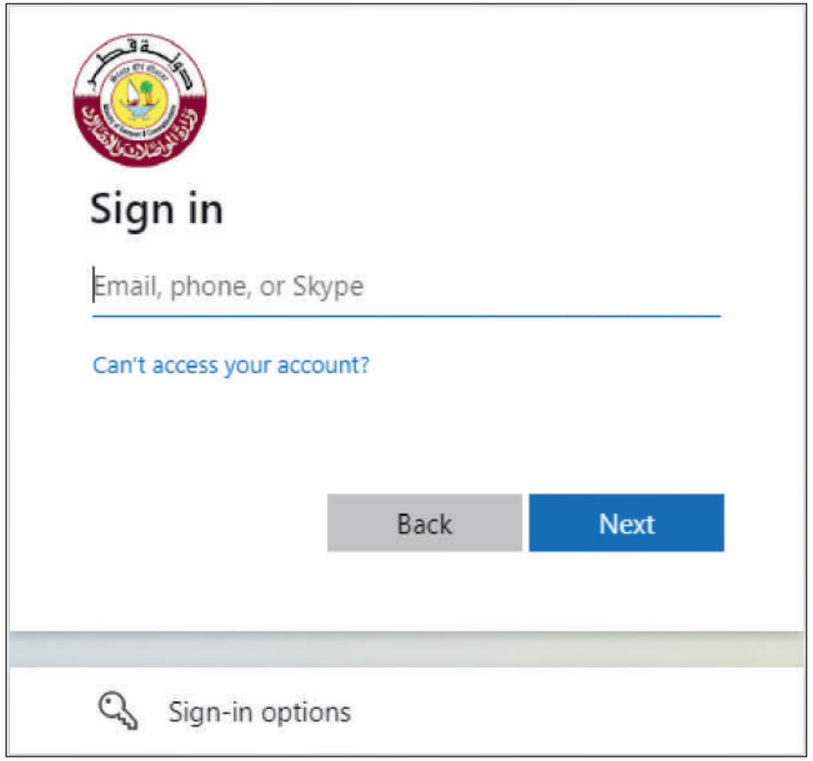


2.3 LOGGING IN

On the TIP-DBMS landing page click on Login link. User will be redirected to Microsoft Azure authentication page. Enter the email Id and click next. Enter the security code sent to the user mobile number or authenticator app. Once the account is verified application will redirect to TIP-DBMS GIS application.

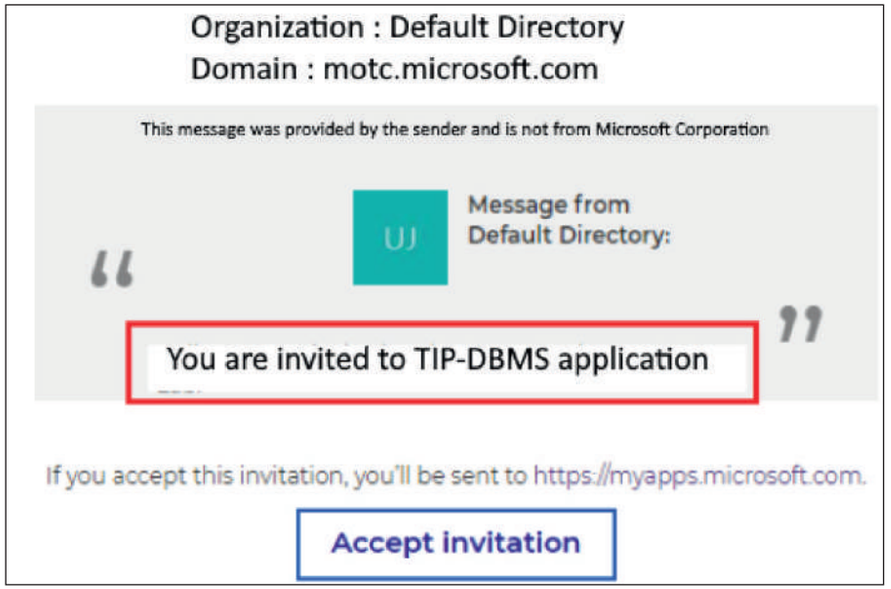
Note: If user is logging to TIP-DBMS for the first time, then follow the instructions in the section 5.

Figure 2.4 - User Sign-in



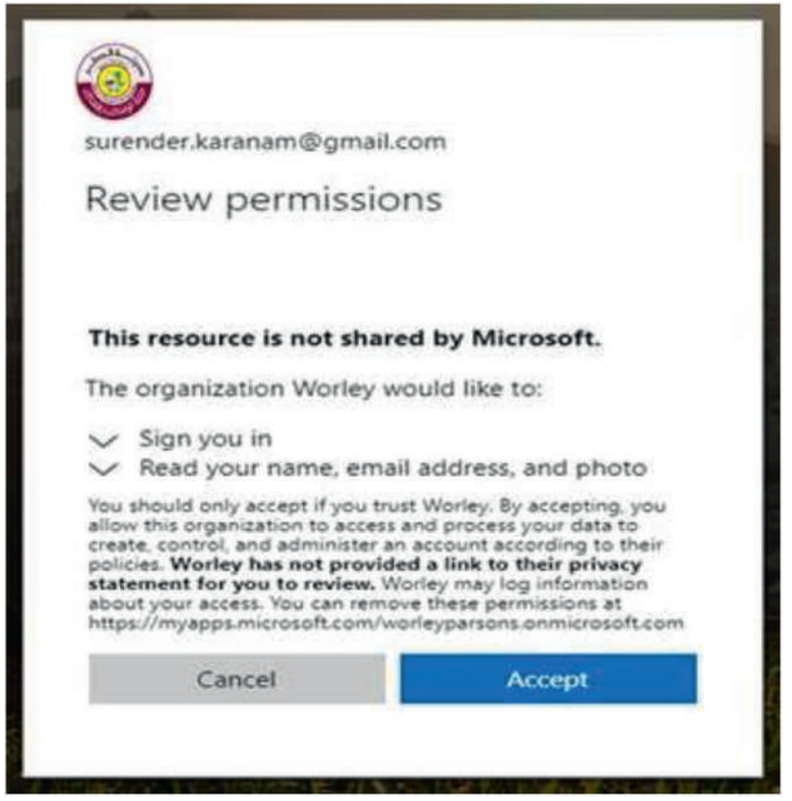
User will receive the invitation email from MOTC, please click on "Accept Invitation"

Figure 2.5 - Accept Invitation



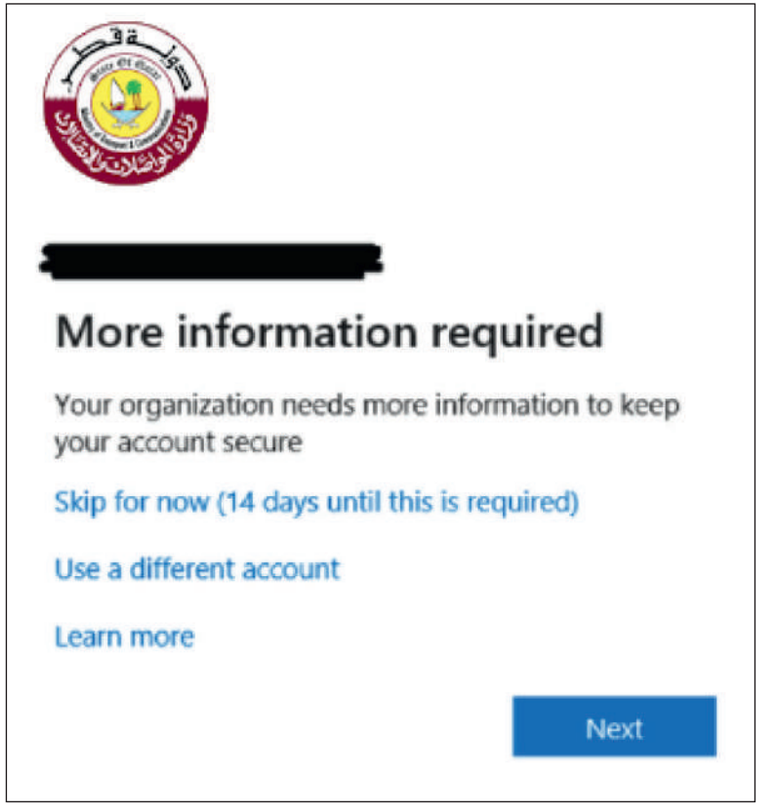
Click **Accept** to review permissions.

Figure 2.6 - Review Permissions



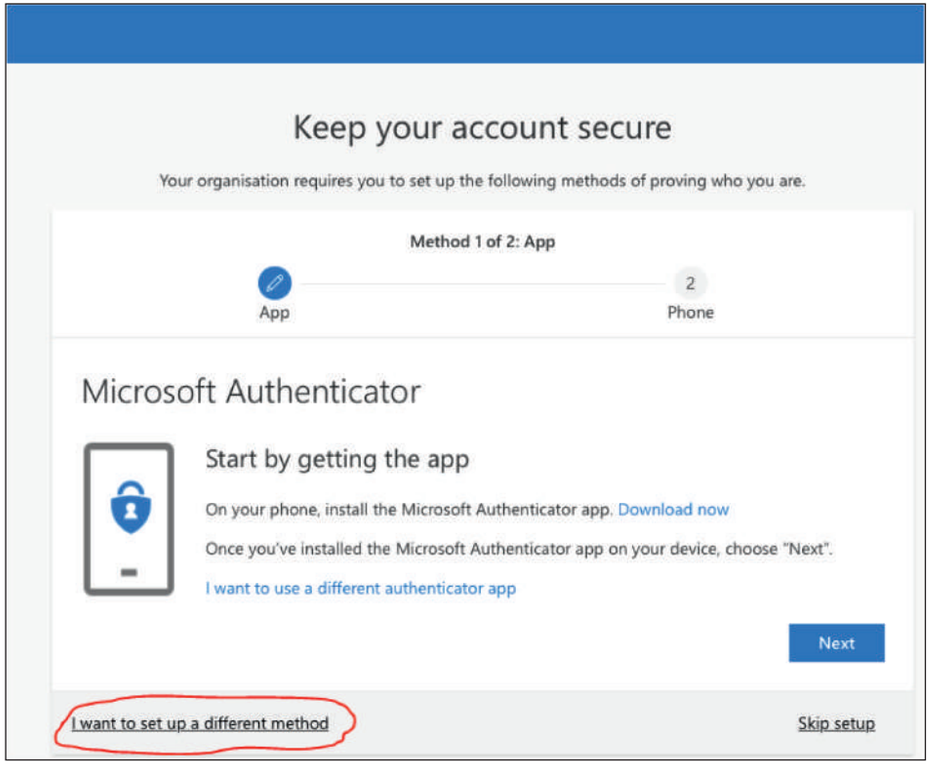
More information required page is displayed. Click **Next** to continue

Figure 2.7 - More Information Required



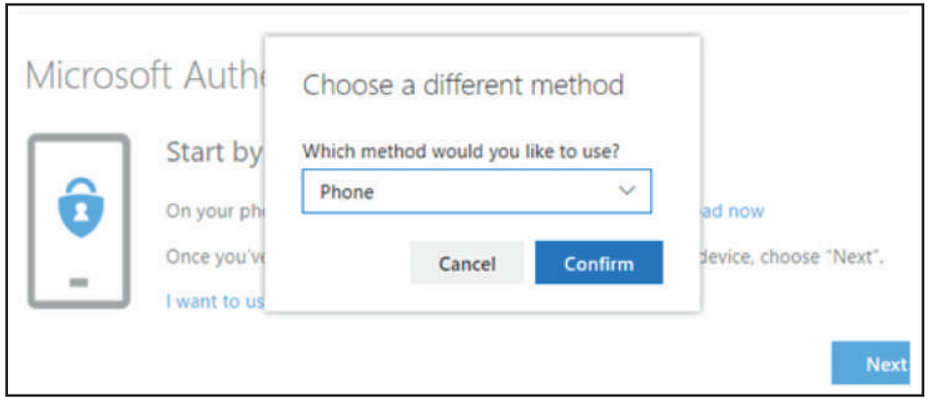
User have couple of methods to secure their account. Click on **I want to setup a different method** and select **Phone** (this method is recommended), if user would like to use Authenticator App then just click **Next** and follow the screen instructions.

Figure 2.8 - Account Security



Once user clicks on, **I want to setup a different method**, a dropdown is displayed. Select **Phone** from the dropdown and click on **Confirm.**

Figure 2.9 - Account Security 2



Pick the **Country**, enter **Mobile Number** and select **Text me a code**. Or enter the user landline number and select **Call Me**. (Text me a code is recommended), click **Next**. A verification code is sent the user selected device. Enter the code and click **Next**.

Figure 2.10 - Account Security 3

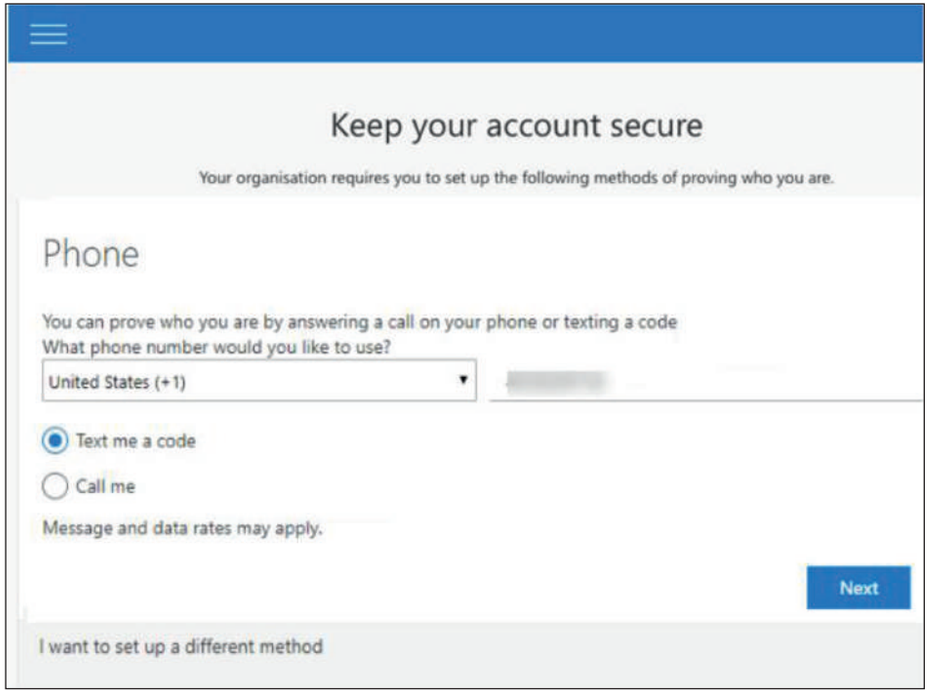
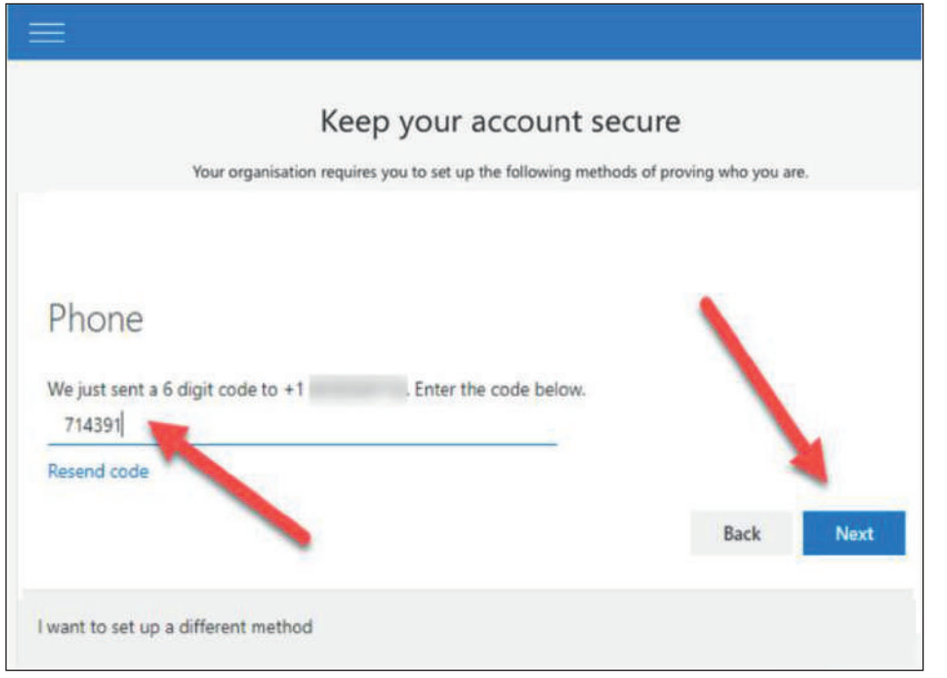


Figure 2.11 - Account Security 4



Registration Successful message is displayed as below. Click **Next** and on the next page click **Done**.

Figure 2.12 - Registration Successful

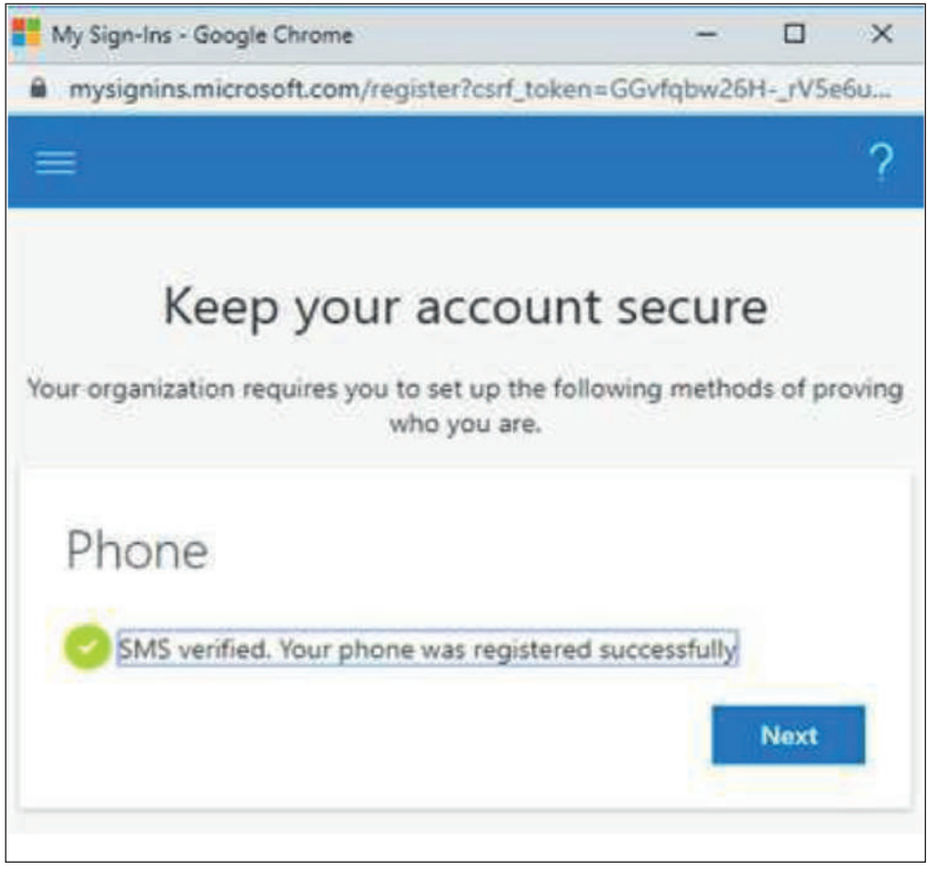
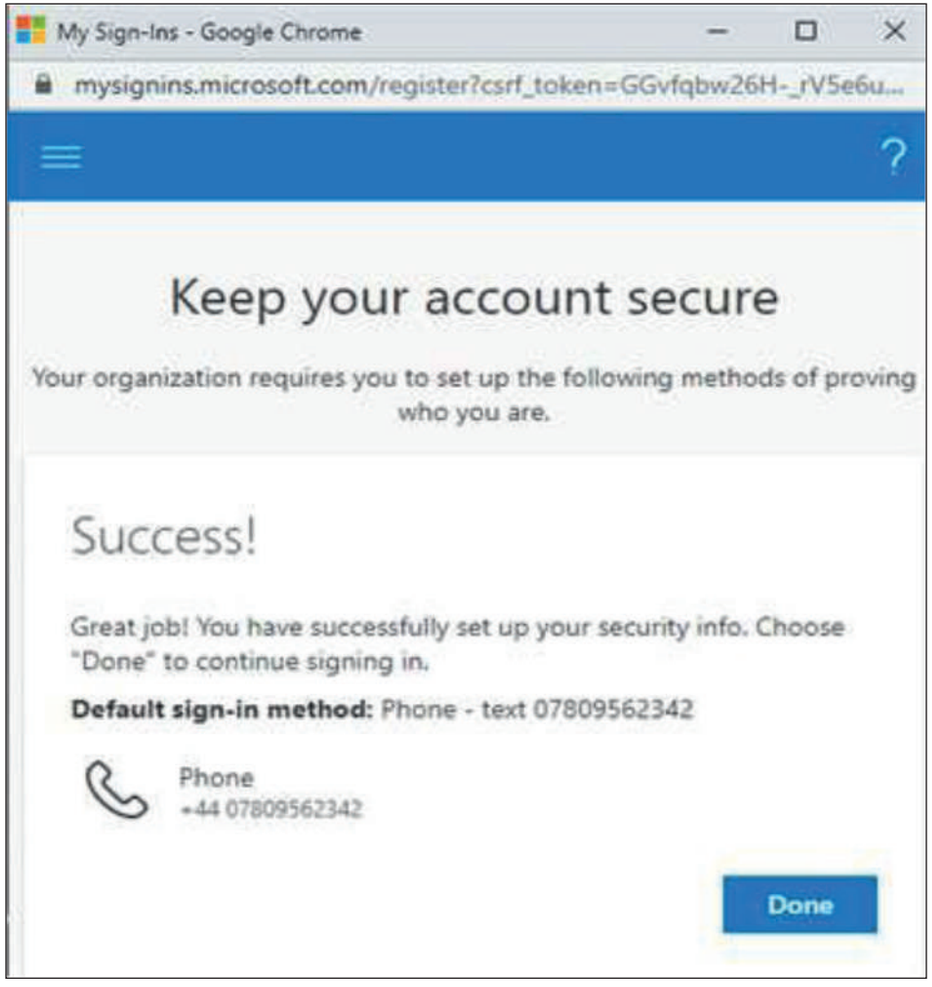


Figure 2.13 - Registration Successful 2



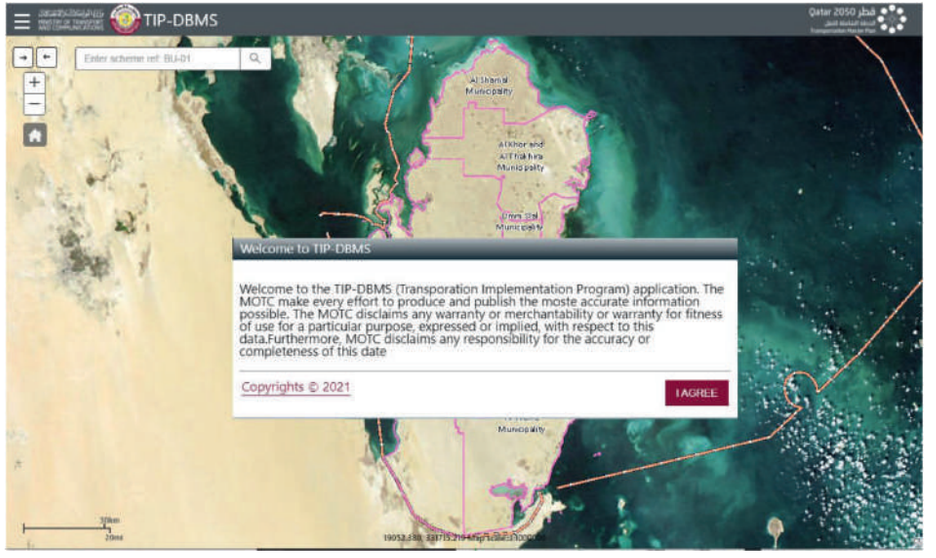
User is redirected to TIP-DBMS Landing page and will be logged into the application automatically.

SECTION 2

2.4 CORE USER INTERFACE (UI)

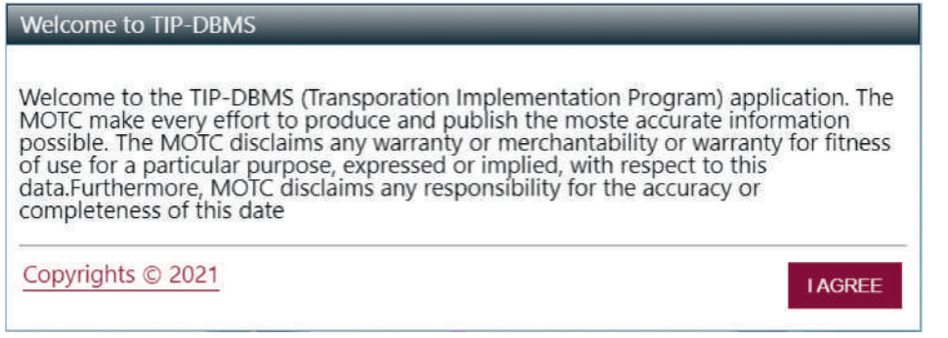
Once the user is logged in successfully, they will be able to view the mapping screen which is part of the core UI.

Figure 2.14 - Core UI



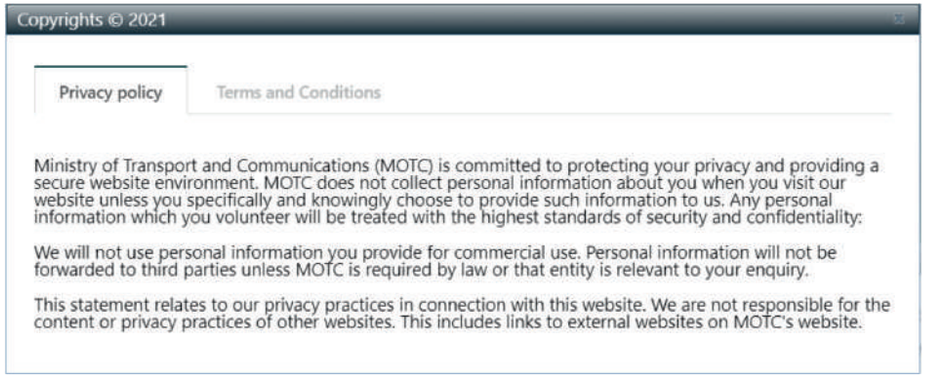
Once logged in the TIP-DBMS map window will show disclaimer as a flash screen.

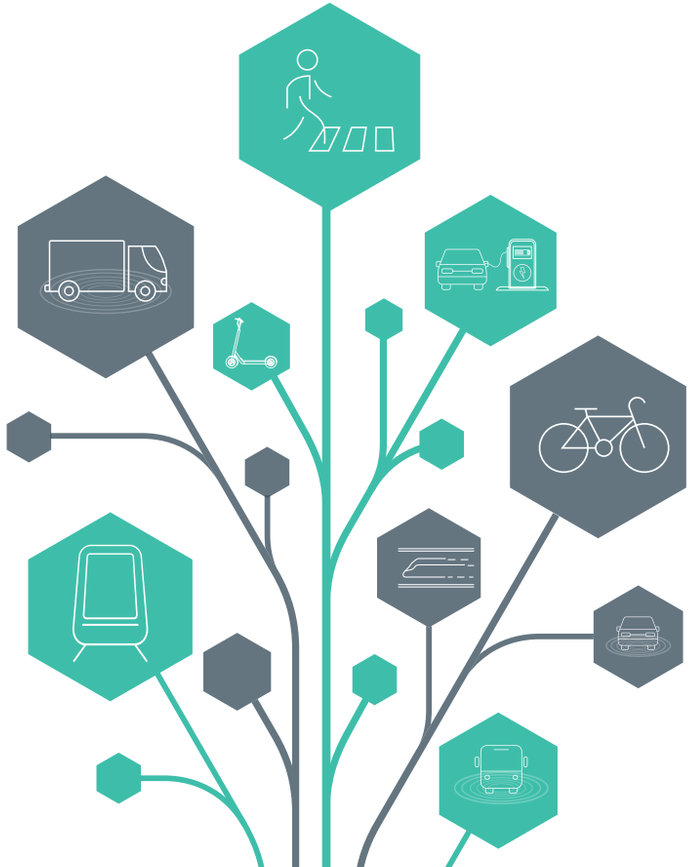
Figure 2.15 - Core UI



User can click on copyrights link to see Copyrights and Term and condition for TIP-DBMS application.

Figure 2.16 - Copyrights





2050

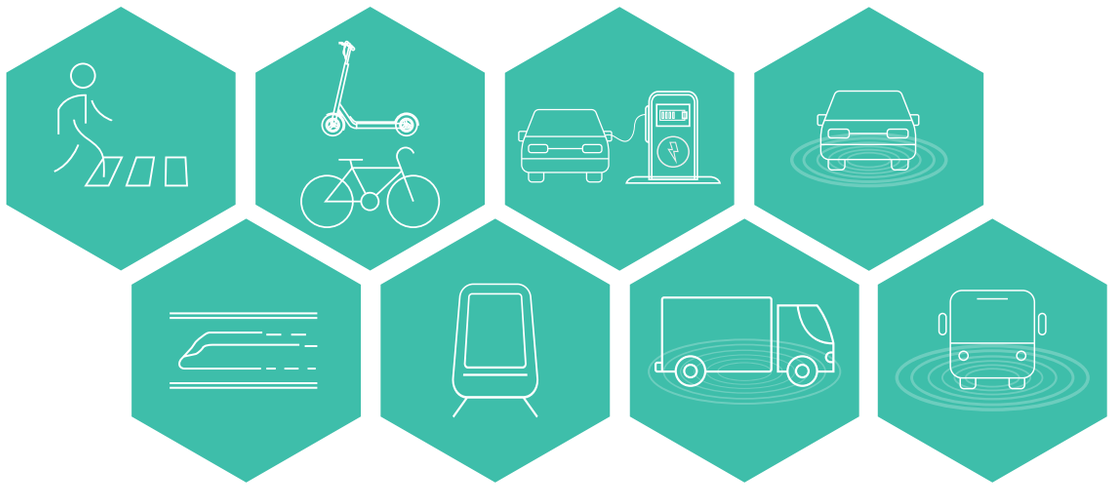
نقـل متكامـل ومسـتدام للجميـع

INTEGRATED & SUSTAINABLE TRANSPORT FOR ALL

2070

SECTION - 03

CORE FUNCTIONALITY



3 CORE FUNCTIONALITY

3.1 GEOCODER/LOCATION SEARCH

The geocoder provides the user access to a locational search. Type a scheme reference number, mode type into the text box to find and zoom to specific scheme locations. As you type, the tool will list suggestions.

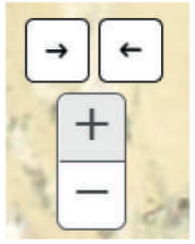
Select the entry that matches the user search to zoom to the location.

Figure 3.1 - Geocoder

3.2 ZOOM

Zoom in or out on the map, using the cursor to pan to the required location, use the left and right arrow buttons to zoom to previous and next locations. You can also use the middle mouse scroll wheel to scroll in and out.

Figure 3.2 - Zoom



Zooms to the default map extent.

3.3 OVERVIEW MAP

An overview map will open in the bottom right corner when the arrow is clicked.

Figure 3.3 - Overview Map

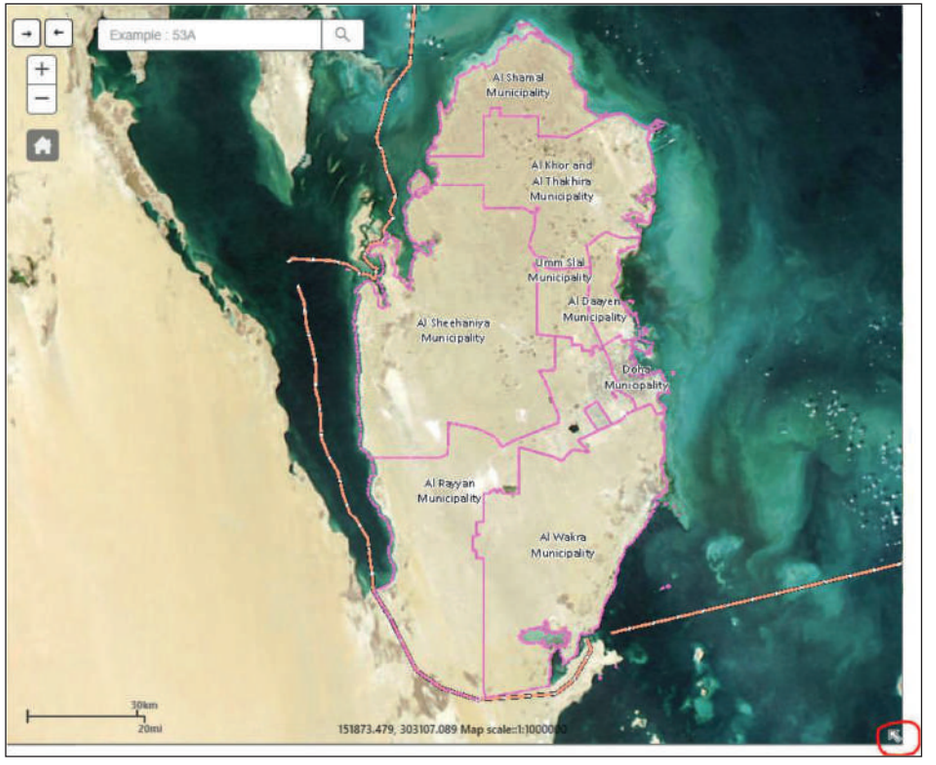


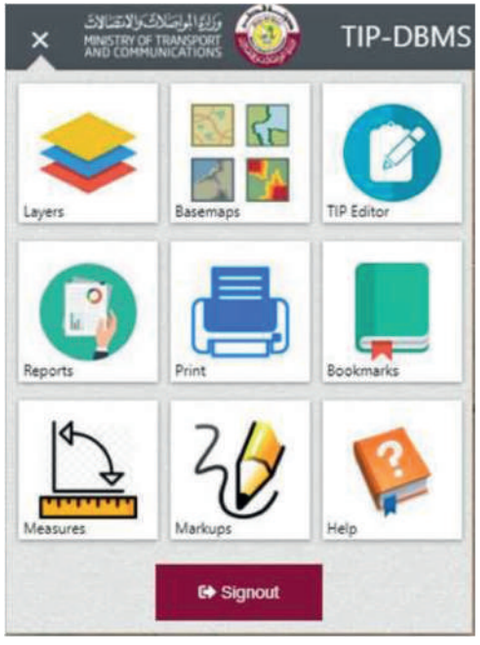
Figure 3.4 - Overview Map 2

3.4 MAIN MENU

The menu button on the top left corner provides access to the list of map tools like map layers, base maps and other map tools. Click on menu button to expand the menu items in a grid format. The Map Toolbox expands to provide access to a number of tools to help you utilize and interpret the information.

Figure 3.5 - Main Menu

Figure 3.6 - Main Menu 2

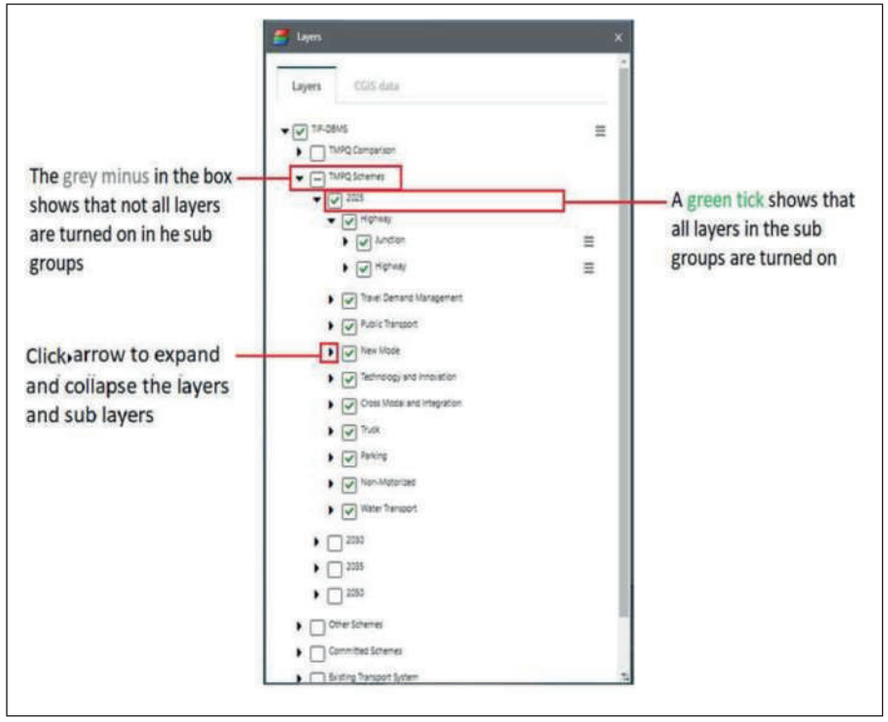


3.5 LAYERS LIST AND LEGEND

Layer tool has layers tab and CGIS data tab. Layers tab contains all the operational layers related to TIP-DBMS application. CGIS data tab contains the data published by CGIS.

The layer button expands to show the vector layers for the TIP-DBMS, these can be turned on or off by ticking the arrow associated with the layer. Click on the arrow to expand and view sub layers and groups.

Figure 3.7 - Layers List



SECTION 3

TMPQ Comparison:

TMPQ Comparison group contains the schemes with only selected transport modes representing one symbol for each horizon year. This group was added on request by MOTC Team.

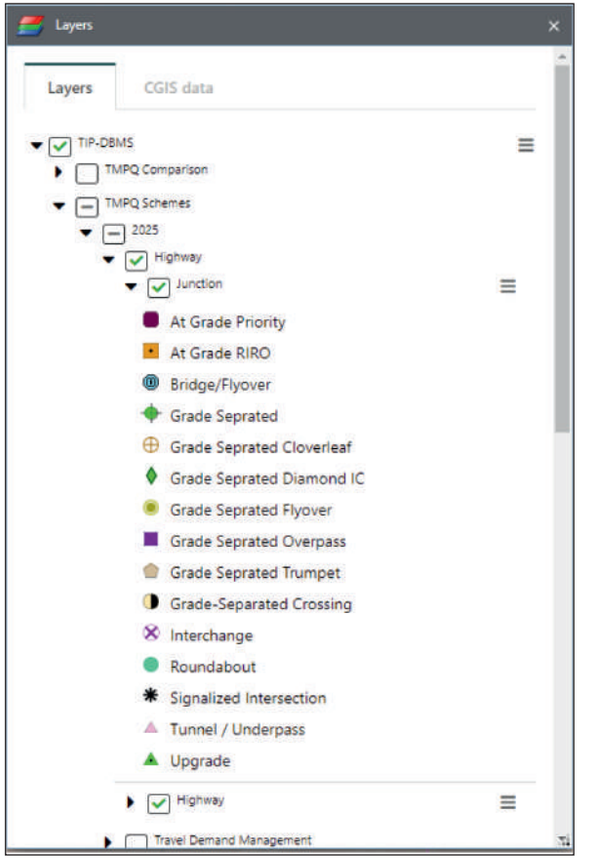
This group includes the selected proposed transportation schemes as a part of updated TMPQ project. This group is sub-grouped into different horizon years; 2025,2030,2035 and 2050. The objective of this group is for a quick reference of available schemes in each horizon year. For each horizon year, only the selected proposed schemes were loaded and symbolized. Proposed scheme symbology remains the same in all the horizon years, however they differentiated with different colors. The proposed schemes in this group were loaded in alphabetical order. Like the TMPQ Schemes, there will be no further sub-groups within the horizon year group to differentiate different transport modes. All the loaded GIS layers shall be controllable with on/off option at the layer level as well as at horizon year level. In the master map document (MXD), all the GIS layers were controlled by a definition query in ArcGIS.

TMPQ Schemes:

This group includes all the proposed transportation schemes as a part of updated TMPQ project. This group is sub-grouped into different horizon years; 2025,2030,2035 and 2050. Each horizon year were again sub-grouped based on the mode of transportation, such as highway, TDM, public transport etc. and respective proposed GIS layers were loaded and symbolized. Proposed schemes were symbolized differently for each horizon year. All the loaded GIS layers shall be controllable with on/off option at the layer level as well as at group level and even at horizon year level. In the master map document (MXD), all the GIS layers were controlled by a definition query in ArcGIS.

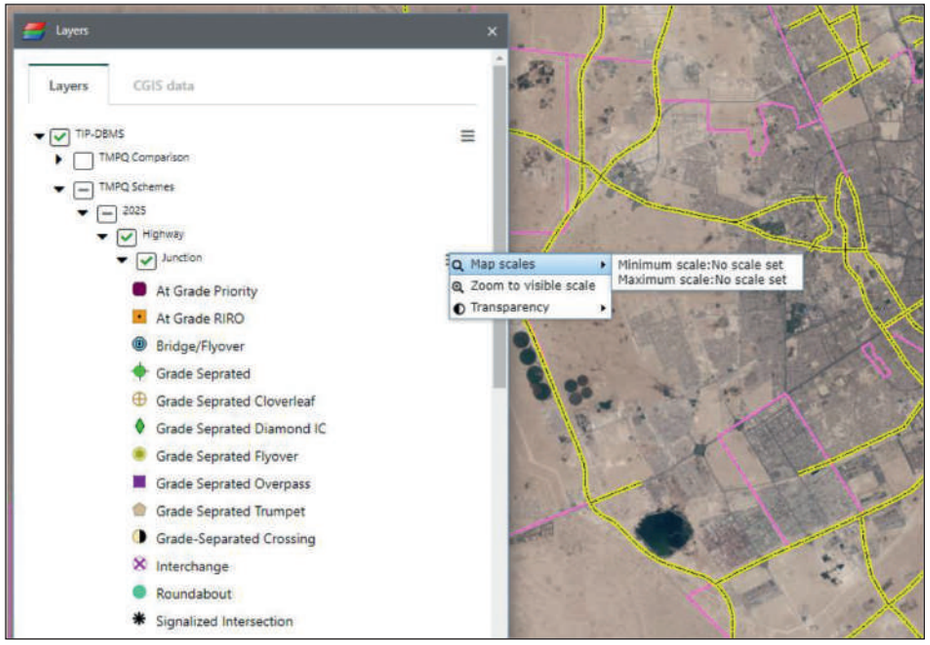
Expand individual layer to view the symbology/legend.

Figure 3.8 - Layers List 2



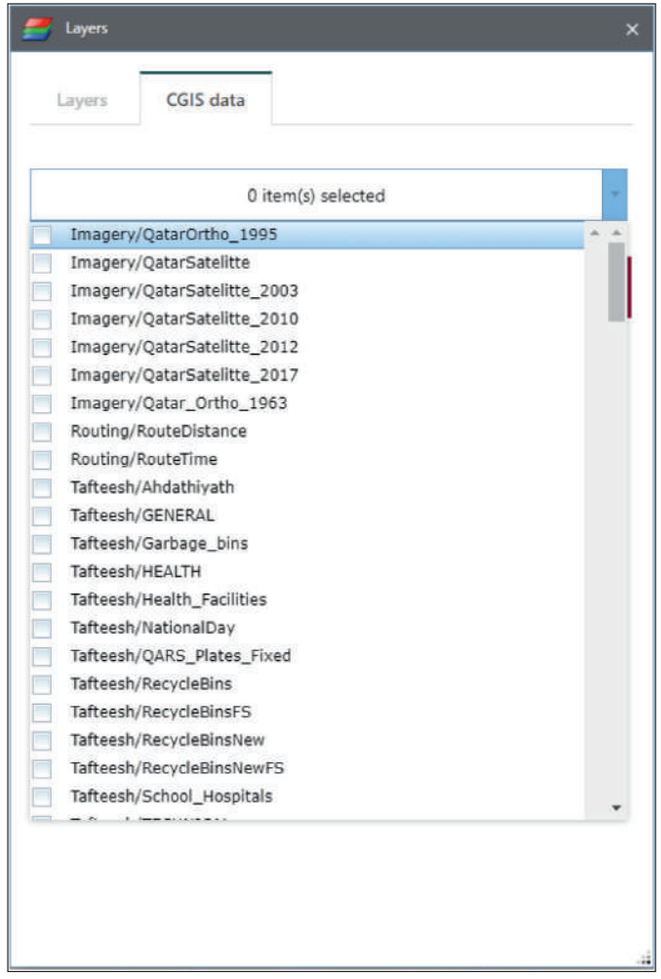
You can see the layer visibility scales (Min and Max scale) and Zoom to visible scale and change Layer transparency.

Figure 3.9 - Layers List 3



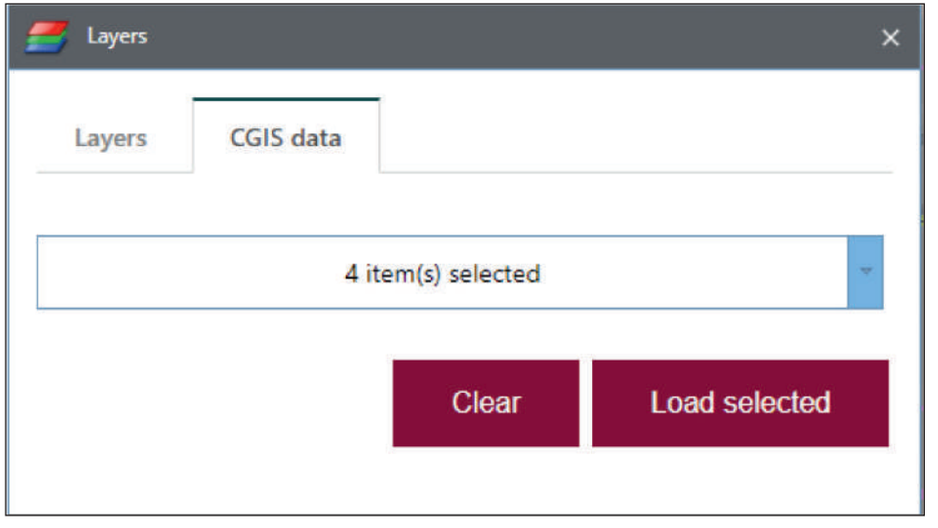
Click on CGIS data tab and pick the required layers from drop down list.

Figure 3.10 - CGIS Data Tab



Click on Load selected button to load the CGIS data on to the map. To clear the loaded CGIS data click on clear button.

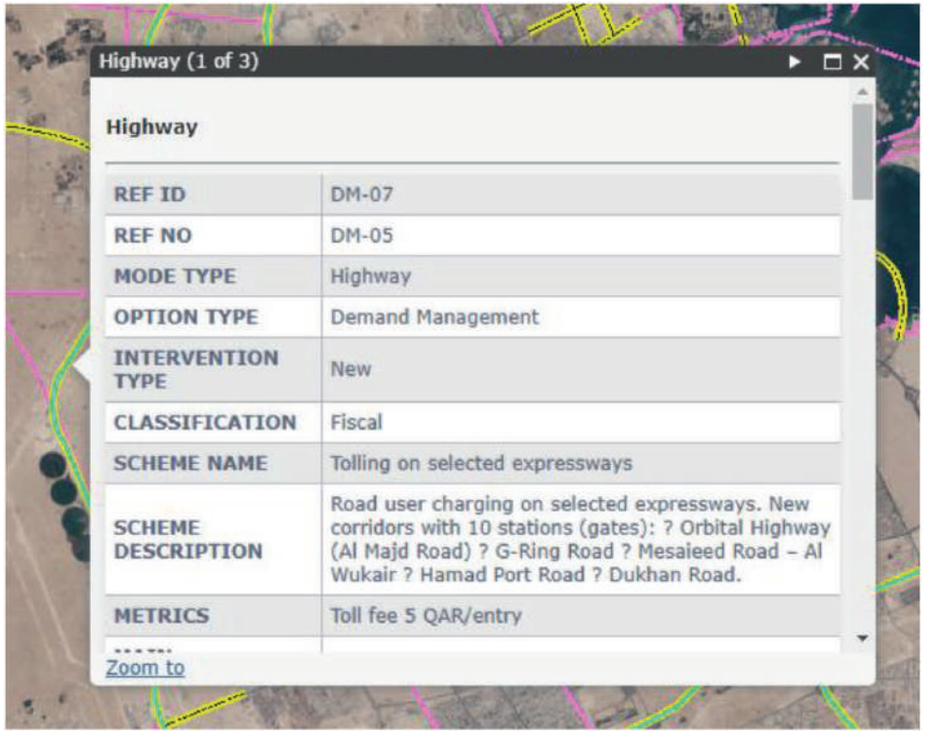
Figure 3.11 - CGIS Data Tab 2



3.6 FEATURE ATTRIBUTE INFORMATION

Attribute information about a feature can be obtained by clicking the cursor on the feature in the map window. If there are several visible layers at the same location, the results for each layer can be scrolled through and the feature will be highlighted on the map with an option to zoom to the feature extents.

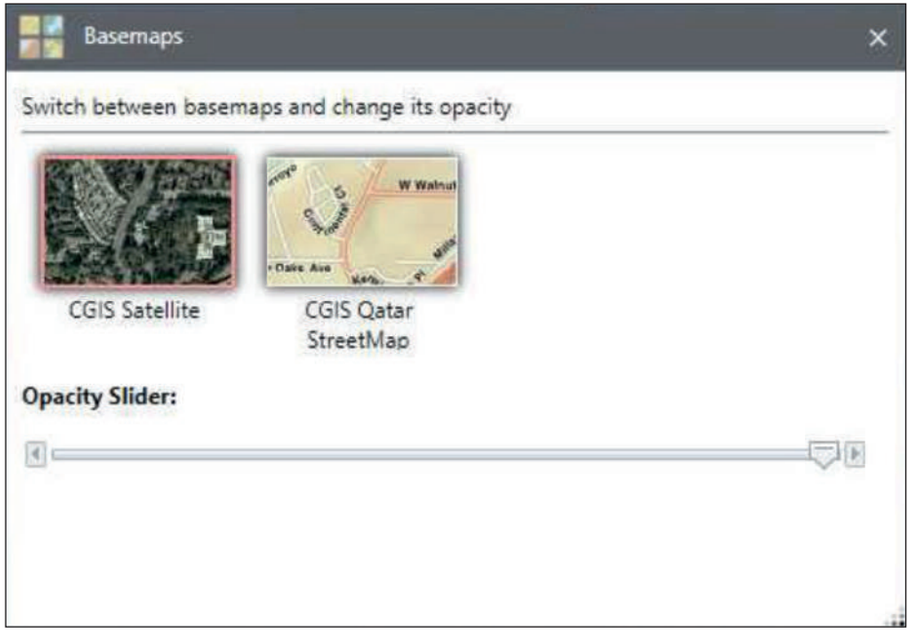
Figure 3.12 - Attribute Information



3.7 BASEMAPS

The base maps tool allows you to change the base map background from a range of MOTC and CGIS base maps. You can use the Opacity slider to change the transparency of the base maps.

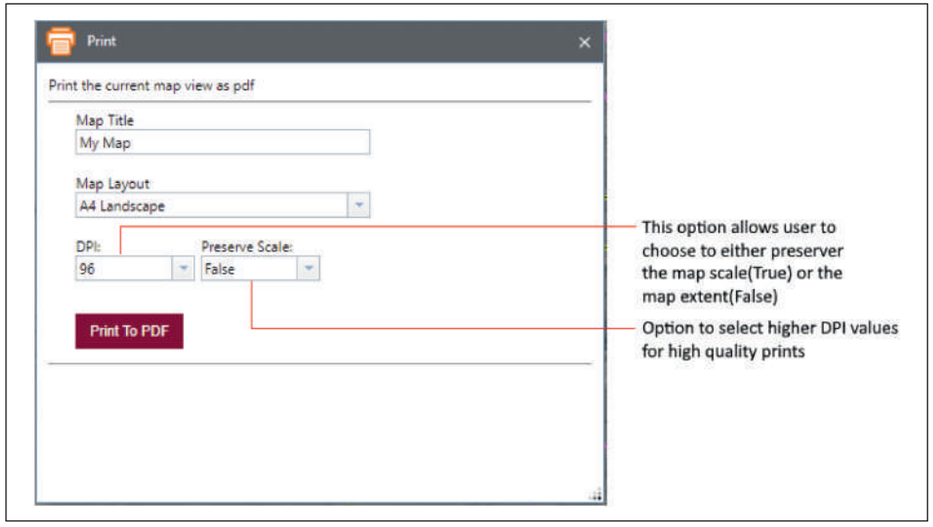
Figure 3.13 - Base maps



3.8 PRINT

By adding the user own title and selecting a size template, you can create PDF maps of the data and scale you have displayed in the map.

Figure 3.14 - Printing



There is a dropdown box to select the **DPI** of Print (quality of the output map) to either 96 (default), 200 or 300 (best quality).

There is also a dropdown box added to **Preserve Scale** while printing. This option allows you to choose to either preserve the map scale (True) or the map extent (False – this is default) of the printed map.

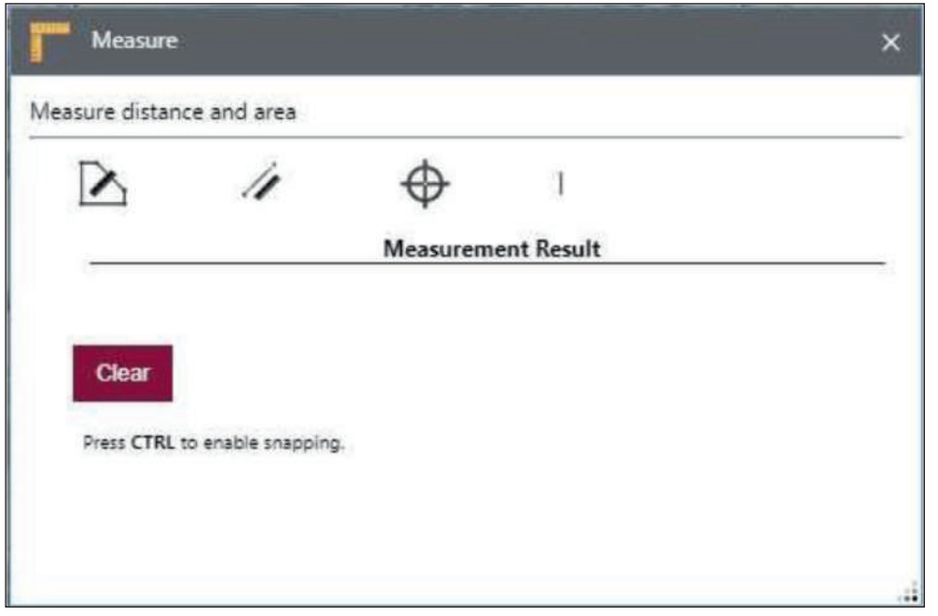
If you chose **True** the printed map will use the exact scale of the map window in, but the printed map may not contain all of the information within the map window depending on the size (A3, A4 etc.) and orientation (Portrait/landscape) of the map you have chosen to print.

If you choose **False** will use the exact extent of the map window but the scale will change depending on the size (A3, A4 etc.) and orientation (Portrait/landscape) of the map you have chosen to print

3.9 MEASURE

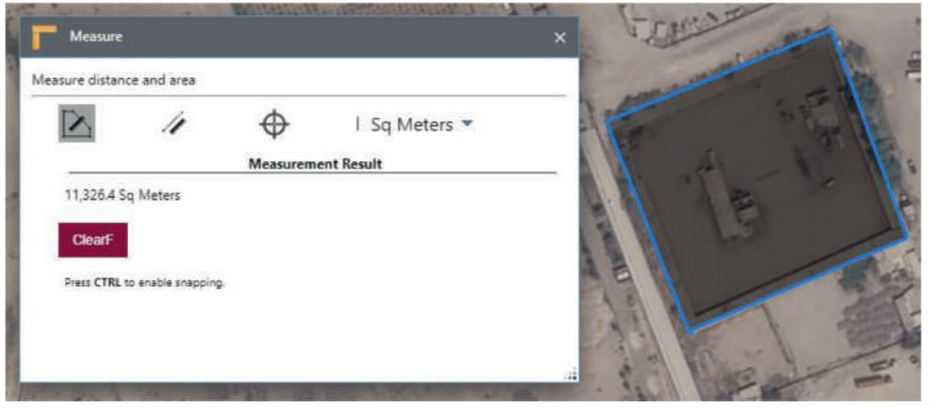
The area measurement tool allows you to draw the user required area by clicking the cursor either freehand or by pressing the Ctrl button to snap to a map feature and by double clicking back at the start point to finish. The units for the results can be changed using the dropdown list

Figure 3.15 - Measure



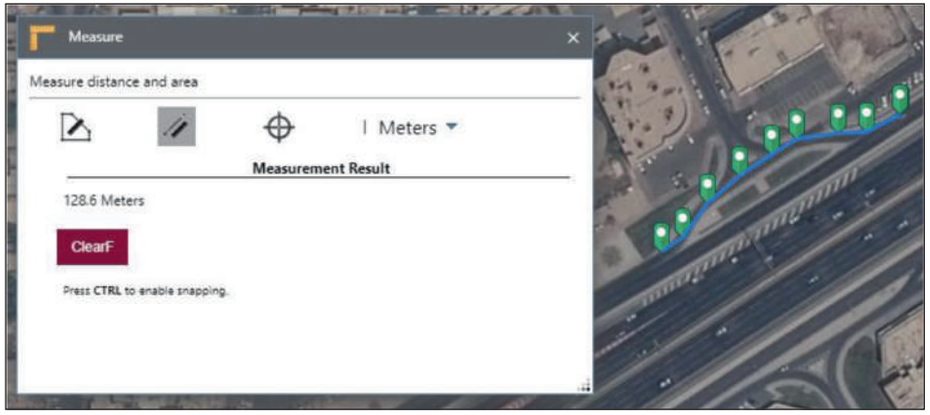
The measurement tool allows you to choose an area to measure distances and again the feature can be drawn freehand or by snapping to existing vector features and the units selected from the dropdown list.

Figure 3.16 - Measure 2



The measurement tool allows you to choose a line to measure distances and again the feature can be drawn freehand or by snapping to existing vector features and the units selected from the dropdown list.

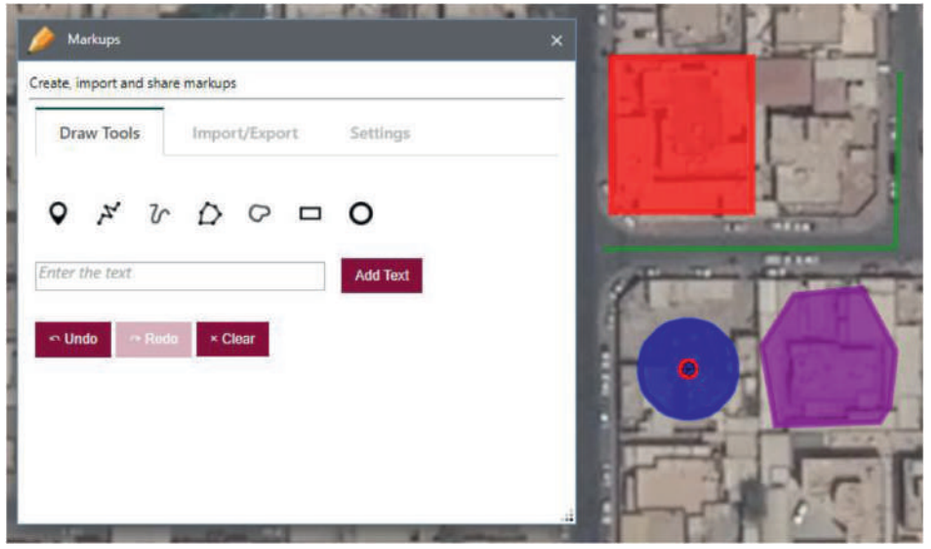
Figure 3.17 - Measure 3



3.10 MARK-UPS / RED-LINING

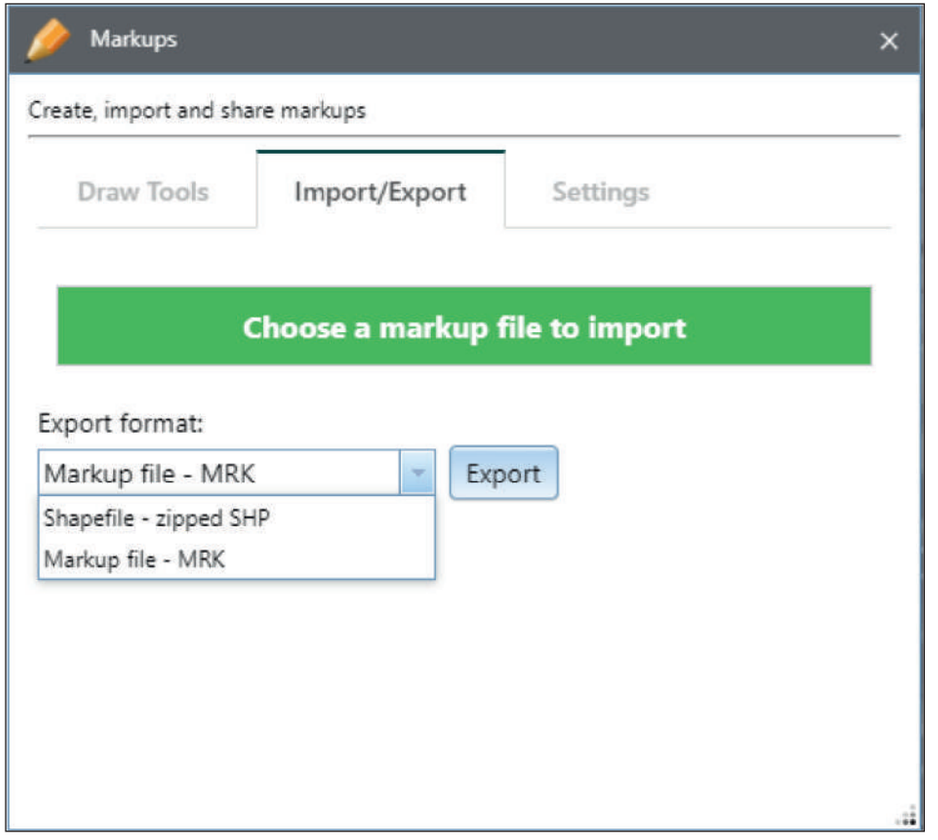
The Mark-ups tool allows you to mark-up a map using a variety of different shapes like lines, polygon, circle and rectangle.

Figure 3.18 - Mark-ups



The marked-up features can then be either printed as a PDF using print tool or exported out as a shapefile and sent to the GIS for verification and inclusion back into the master GIS database and web portal if required. All this functionality is available under the **Import/Export** tab.

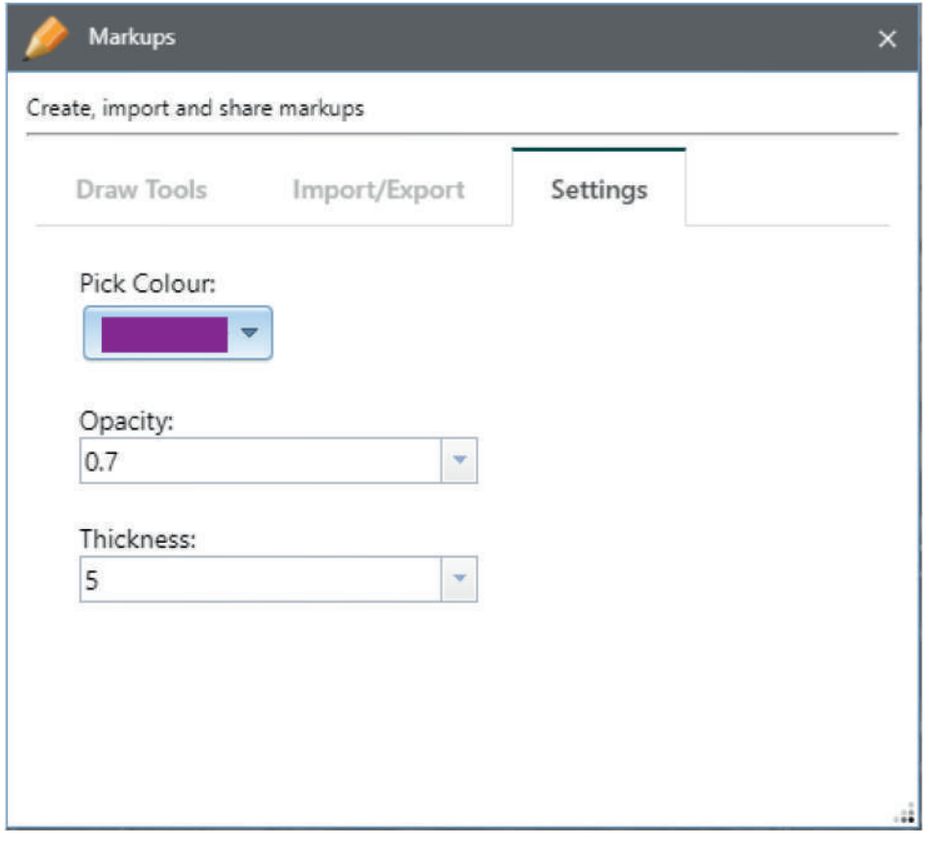
Figure 3.19 - Mark-ups 2



Mark-ups can also be exported to mark-up format (".mrk) and shared with others by sending the file through email or saved for future use. Once the mark-up file is received, the recipient user can import the mark-up using the import mark-up button, and can edit, make updates and send it back again in ".mrk" format.

Under settings tab there are options to change the thickness, color and opacity of the user mark-ups.

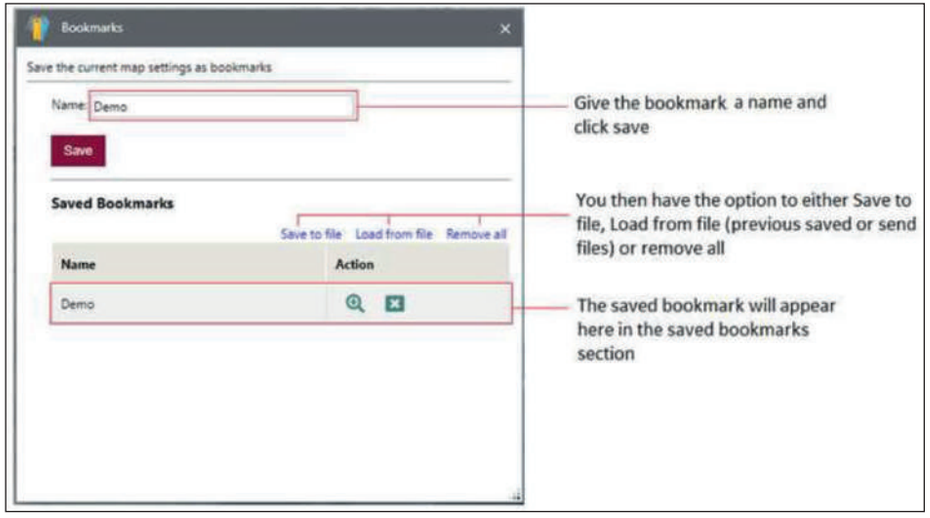
Figure 3.20 - Mark-ups 3



3.11 BOOKMARKS

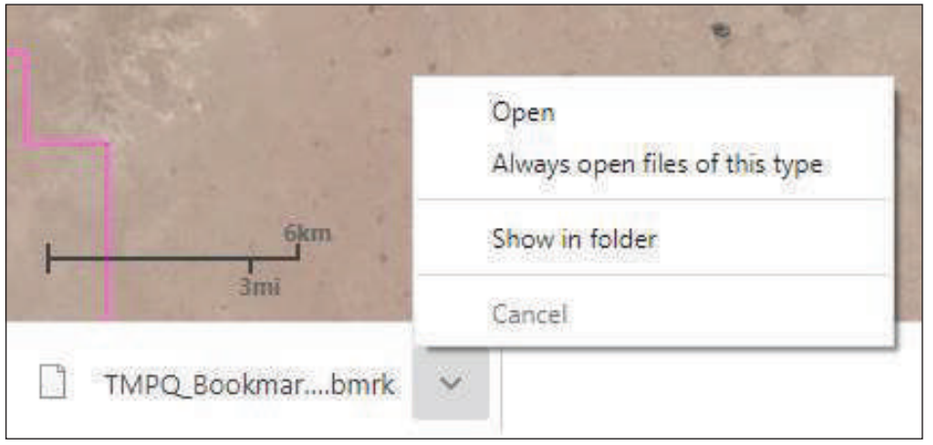
Bookmarks tool enables users to save the current map settings into a session and restore them again later. A Bookmark file can be shared with other users and can be used as a collaboration tool.

Figure 3.21 - Bookmarks



To save a Bookmark, give it a name and click Save. A saved Bookmark includes the Map extents, visible Layers, Markups/Redlines and active Base map.

You then have the option to Save to File, this saves the Bookmarks file (.bmrk extension) to the user's download folder (e.g. **:\Users\<username>\Downloads**) so you can load them back into TIP-DBMS application later.



Note: Click "Show in the folder" to see the saved bookmark in the windows explorer.

You also have the option to Load from file, this can be a previously saved Bookmark or one someone has sent to you.

If you are using Google Chrome and you do not get a pop up Save As window (see image below) to save the Bookmarks file, it automatically downloads the file as TMPQ-Bookmarks.bmrk to user download folder (e.g. **C:\Users\<username>\Downloads**).

SECTION 3

Figure 3.22 - Bookmarks 2

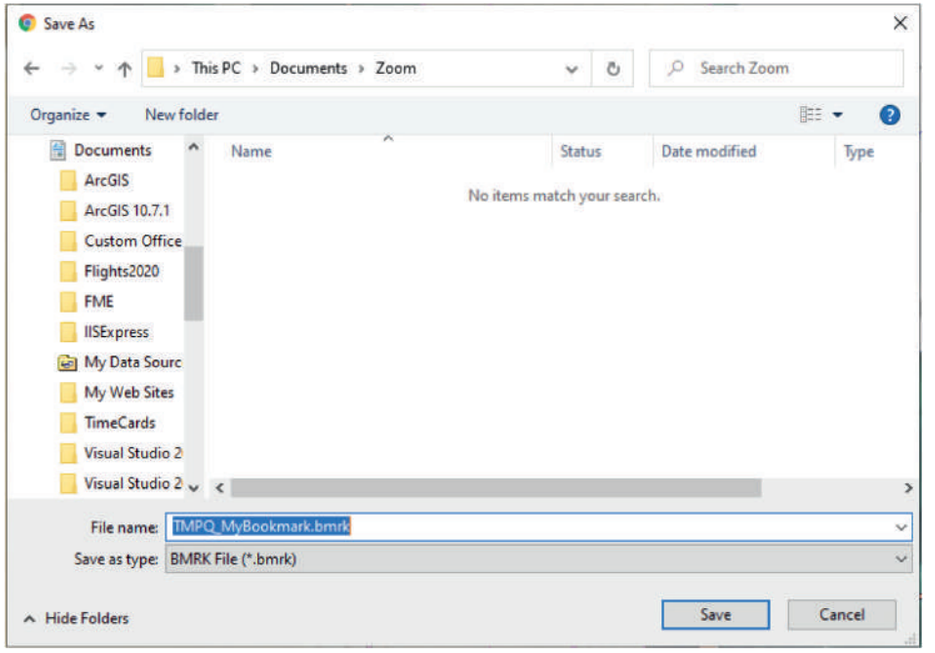
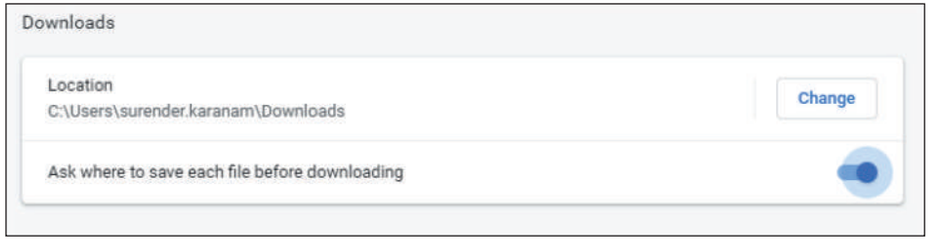
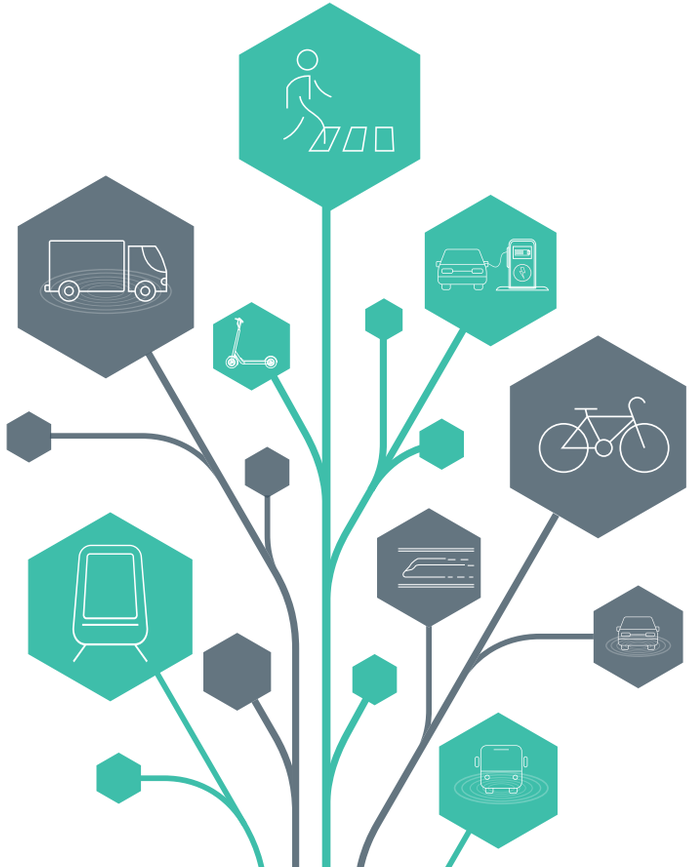


Figure 3.23 - Bookmarks 3



To make browser ask where to save before downloading, Google Chrome settings at used computer will need to be changed.

Go to chrome://settings/ and then under Advanced setting and downloads and enable the option below:



2050

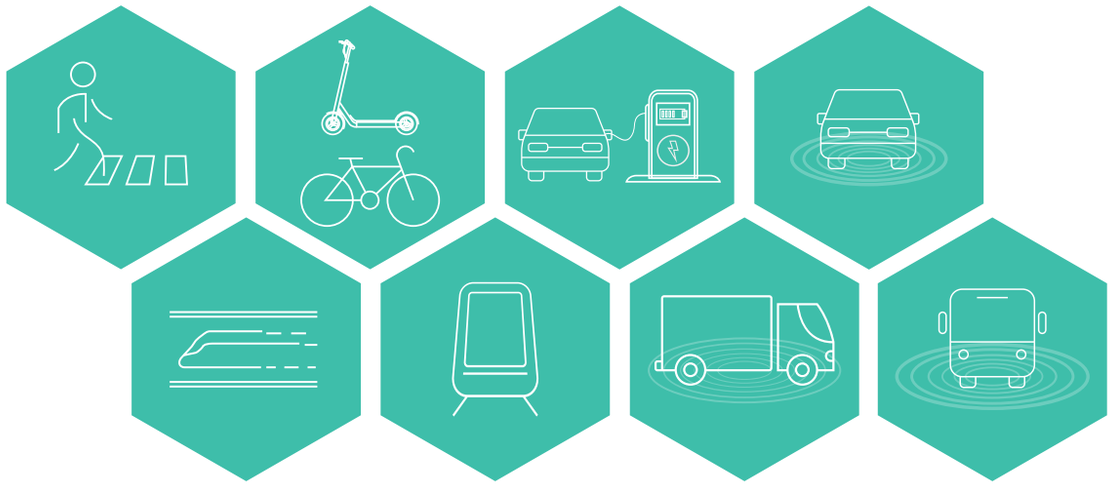
نقـل متكامـل ومسـتدام للجميـع

INTEGRATED & SUSTAINABLE TRANSPORT FOR ALL

2070

SECTION - 04

EDIT FUNCTIONALITY



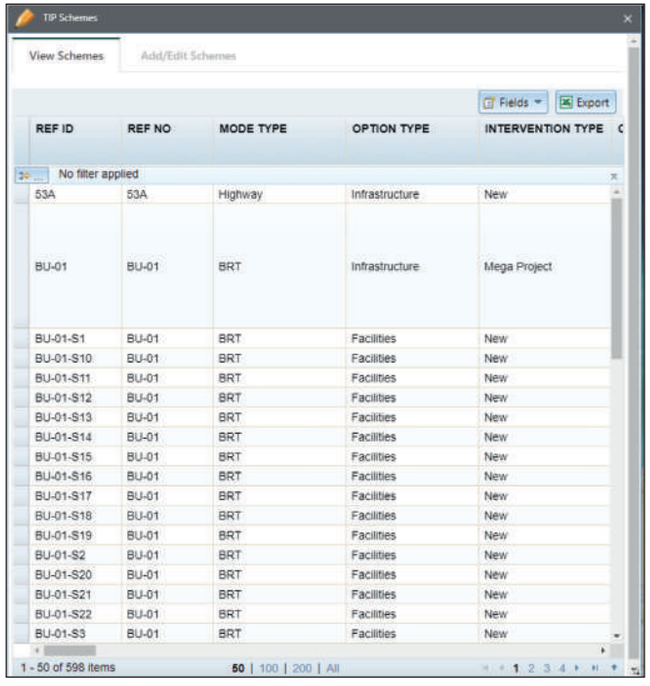
4 EDIT FUNCTIONALITY

The following tools and functions relate to the non-standard functionality associated with the TIP Tool

4.1 TIP EDITOR TOOL: VIEW SCHEMES

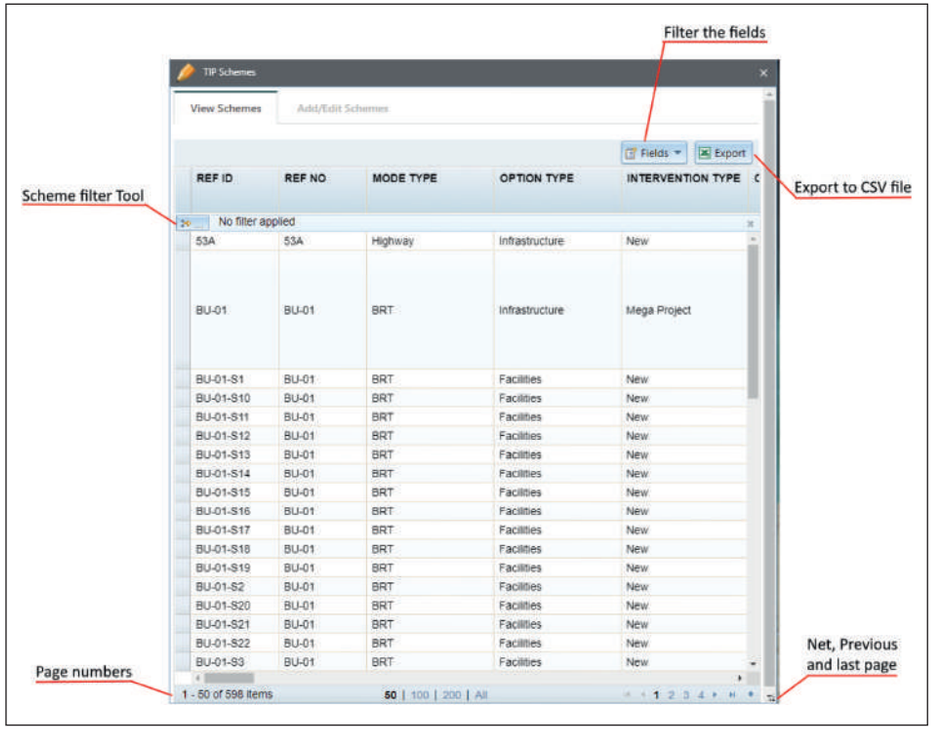
TIP Editor tool allows the user to view proposed schemes in tabular grid and on the map. Advanced users will be able to add new schemes, edit and delete existing schemes.

Figure 4.1 - TIP Schemes



View Schemes tab shows all the proposed schemes in tabular gird format. Each page shows 50 schemes per page. Click on next and previous buttons to move to next and previous page.

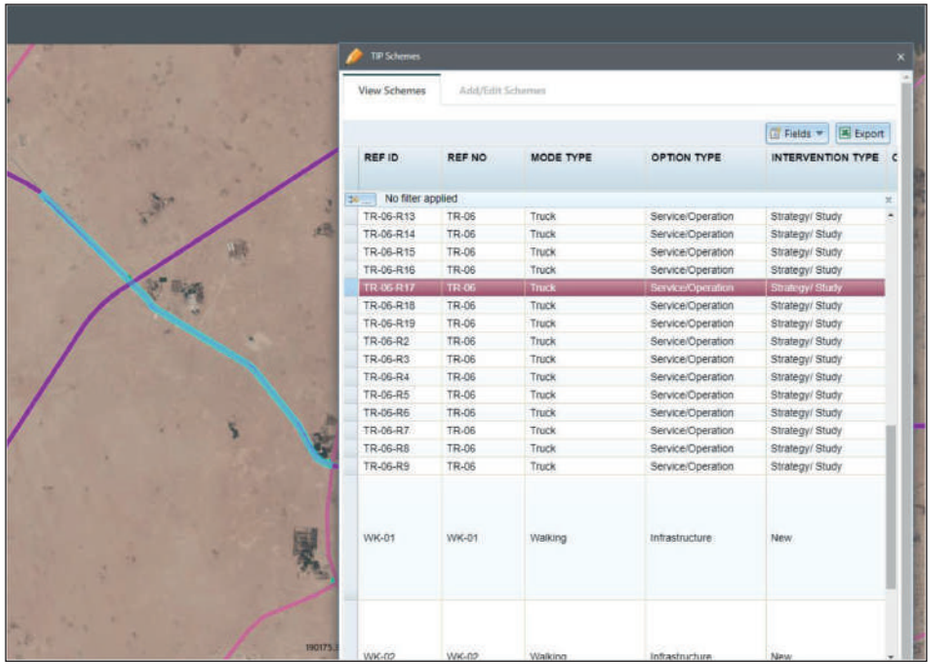
Figure 4.2 - TIP Schemes 2



SECTION 4

Select the scheme in the grid to view the scheme on the map. The map zooms to selected scheme.

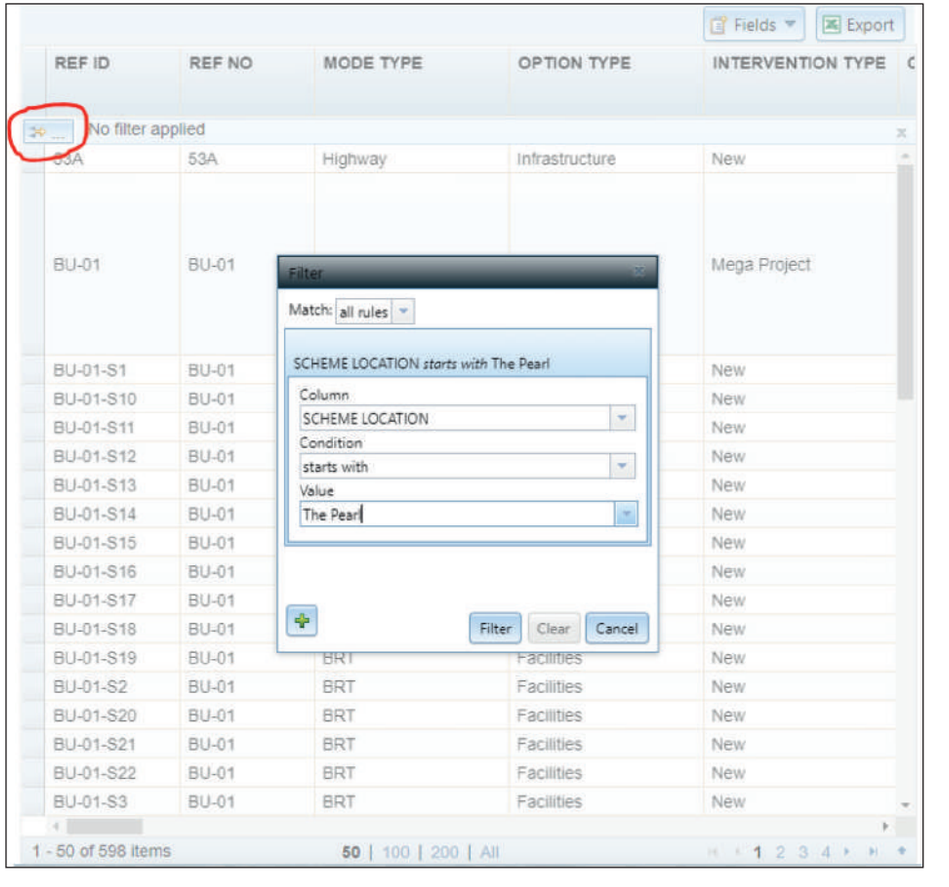
Figure 4.3 - TIP Schemes 3



4.2 TIP EDITOR TOOL: FILTER SCHEMES

Using the filter tool, user can filter the schemes by different attribute fields. Select the field name, select the condition, and select the desired value from the dropdown.

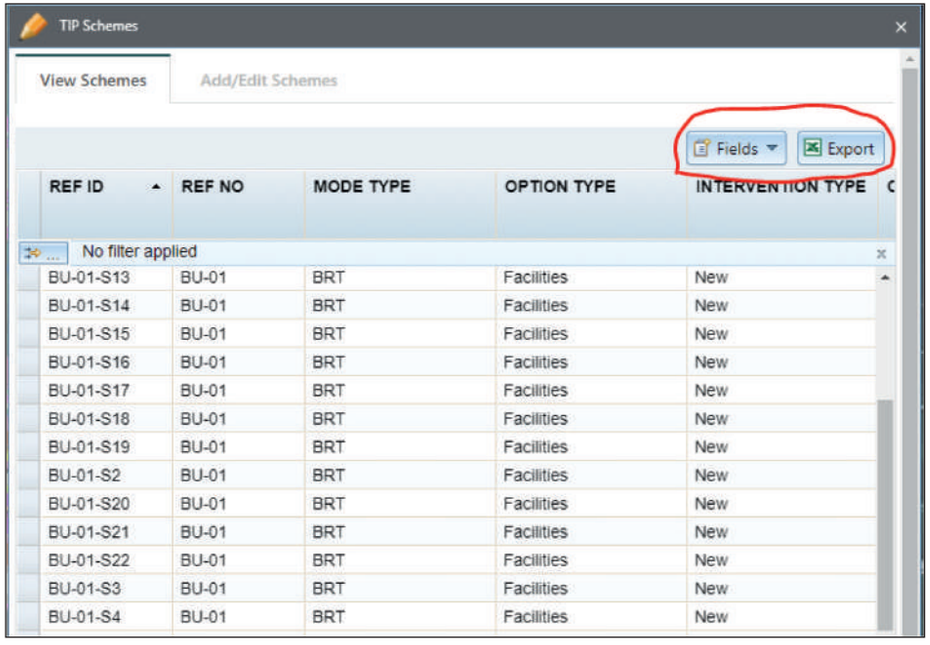
Figure 4.4 - TIP Schemes - Filter



4.3 TIP EDITOR TOOL: EXPORT SCHEMES

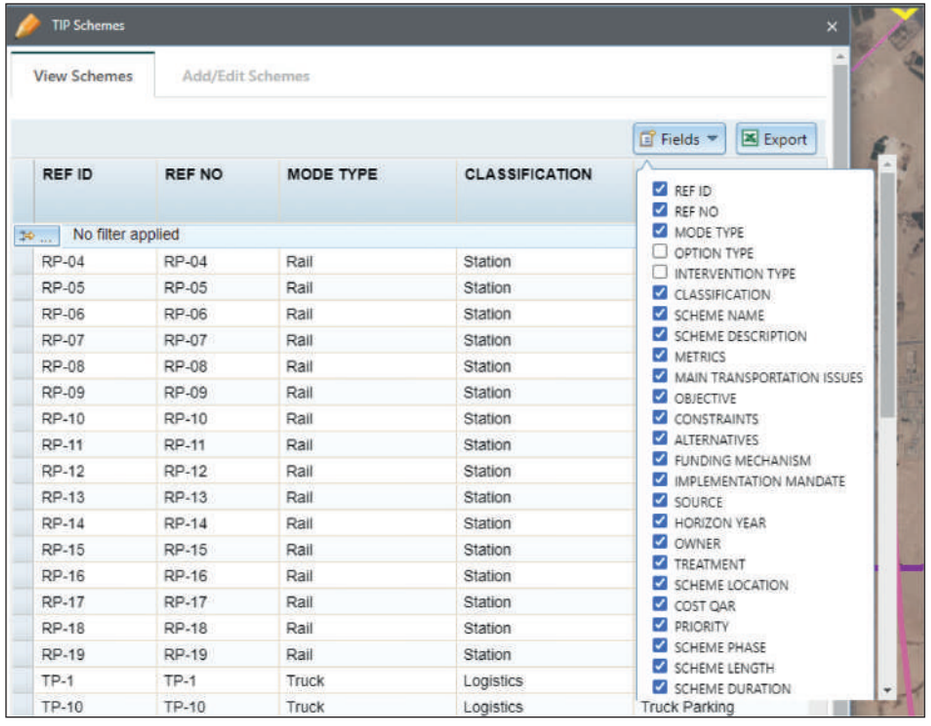
Click on export tool to export schemes to XLS/CSV file. When filters are applied, the filtered results are exported.

Figure 4.5 - TIP Schemes - Export



Click on Fields drop down menu to select and deselect the fields to be displayed in the schemes grid.

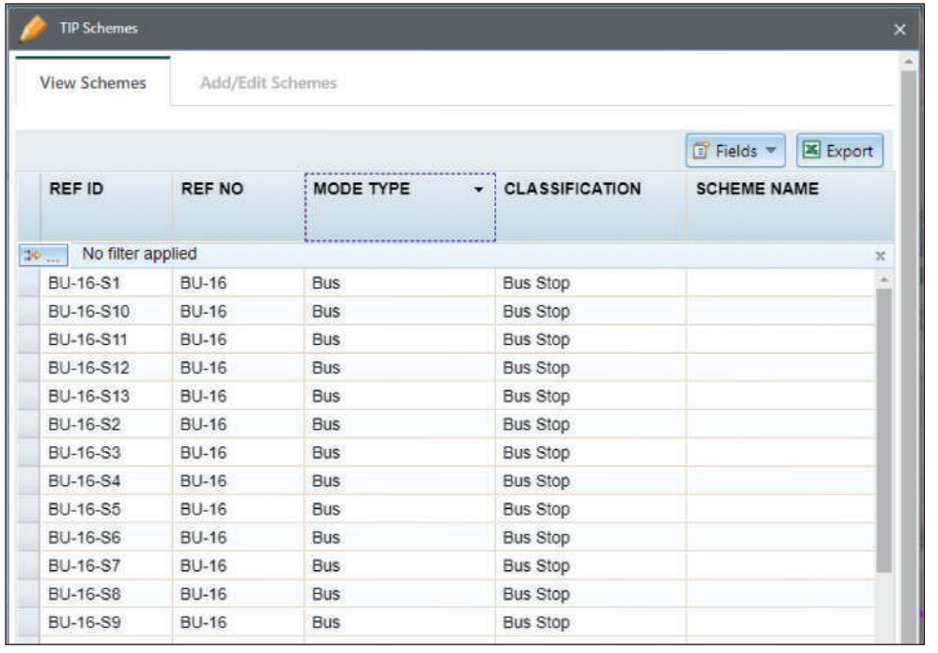
Figure 4.6 - TIP Schemes - Fields



4.4 TIP EDITOR TOOL: SORT SCHEMES

Click the field name to sort the schemes both in ascending and descending order. The arrow shows the order of sort.

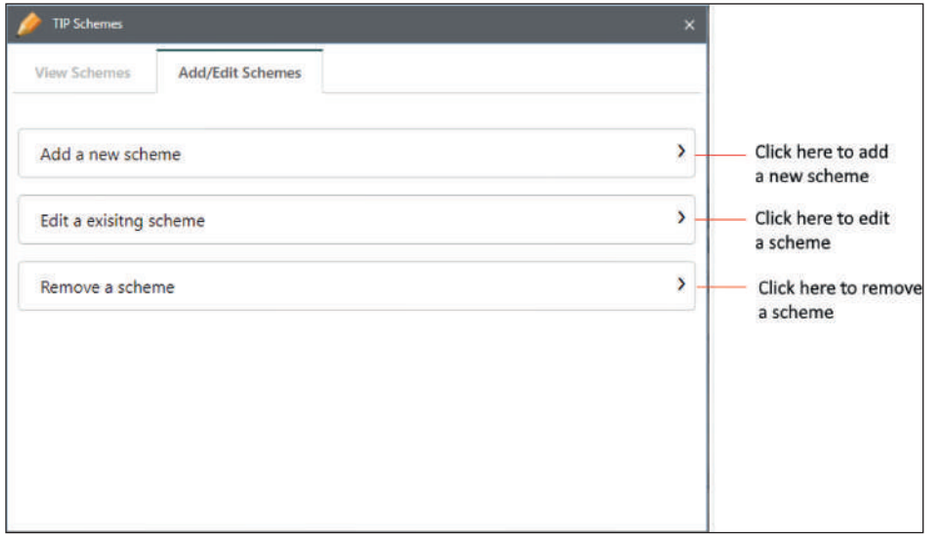
Figure 4.7 - TIP Schemes - Sort



4.5 TIP EDITOR TOOL: ADD/EDIT SCHEMES

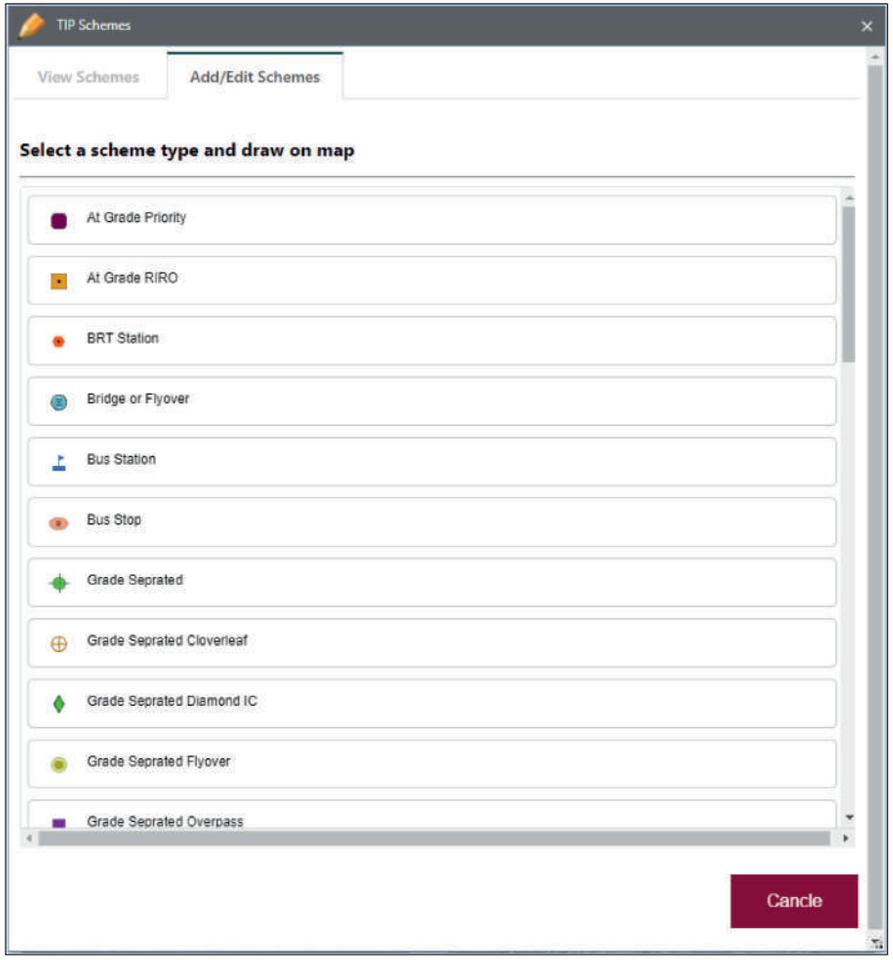
Add/Edit Schemes allows the advanced users to add, edit and remove schemes. Click on required action to execute the task. To perform these activities, send a request to TIP-DBMS support from the main page.

Figure 4.8 - TIP Schemes - Add/Edit



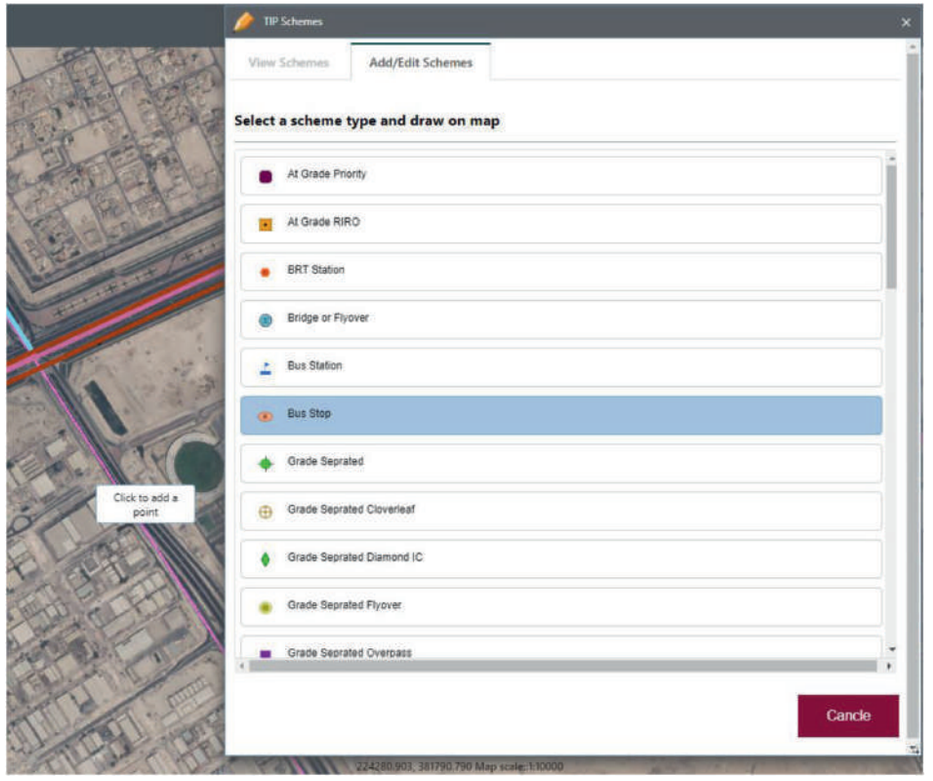
Click on **Add a new scheme** button, the application will request you to select a type from the variety of available scheme types. You can use the scroll on the right side to see the full list of scheme types. Click the scheme type to proceed or click on **Cancel** button to return to previous window.

Figure 4.9 - TIP Schemes - Add/Edit 2



Zoom on the map to the location you would like to draw a new scheme. Click the scheme type in the TIP editor tool. An arrow with a tool tip is shown allowing you to start drawing the scheme on the map.

Figure 4.10 - TIP Schemes - Draw Schemes

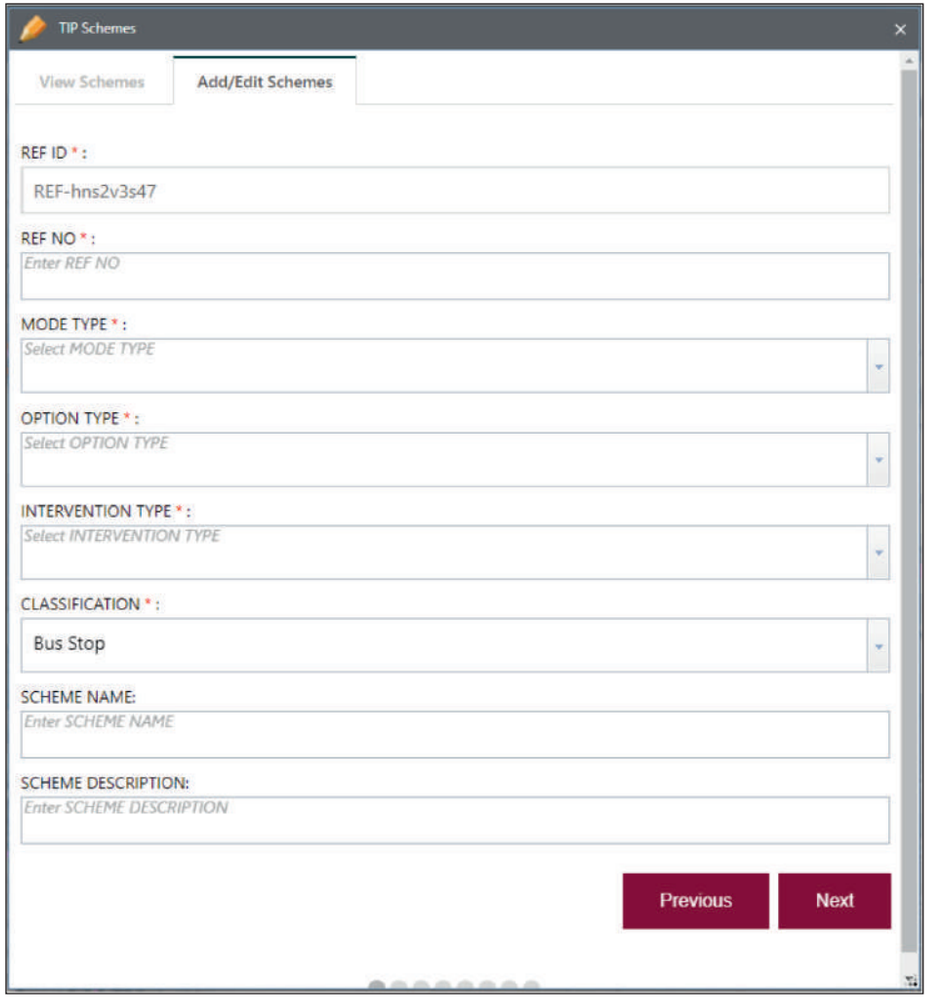


To draw a network / area scheme (line feature/polygon feature) start clicking on the map until you finish the scheme. Double click to finish drawing the scheme. To draw a point feature scheme just click on the map.

Figure 4.11 - TIP Schemes - Draw Schemes 2

Once the scheme is draw on the map, user needs to fill the scheme details. Without filling the information, the scheme will not be added to the map. Click on Next and Previous buttons to move from next to previous pages. The fields marked as "*" are mandatory fields to proceed to next page user needs to fill all the mandatory fields.

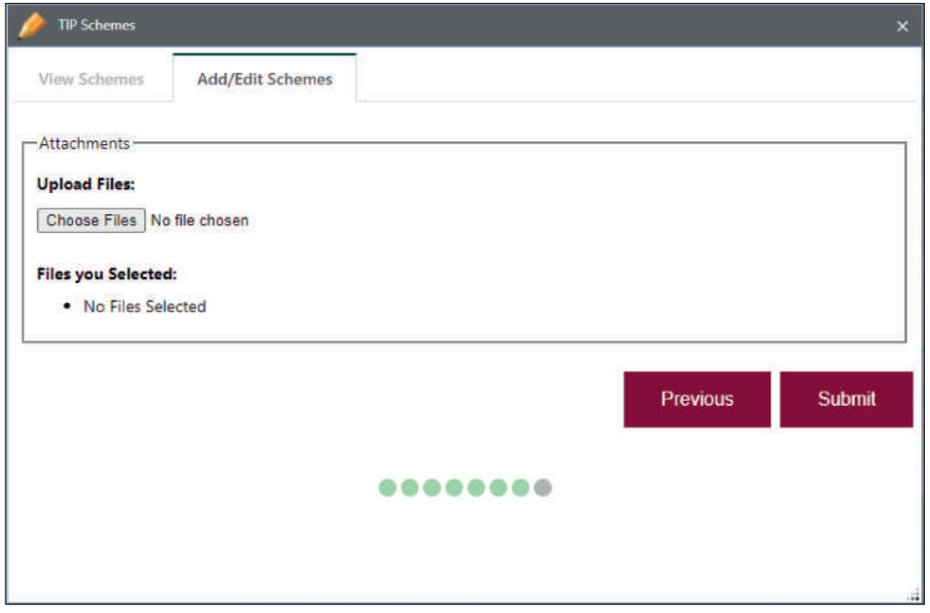
Figure 4.12 - TIP Schemes - Draw Schemes 2



SECTION 4

User can attach reference documents to the scheme. Click on **Choose Files** button and select the reference documents (PDF, Word documents, Excel sheets, photographs etc.). Click on **Submit** button to submit the scheme.

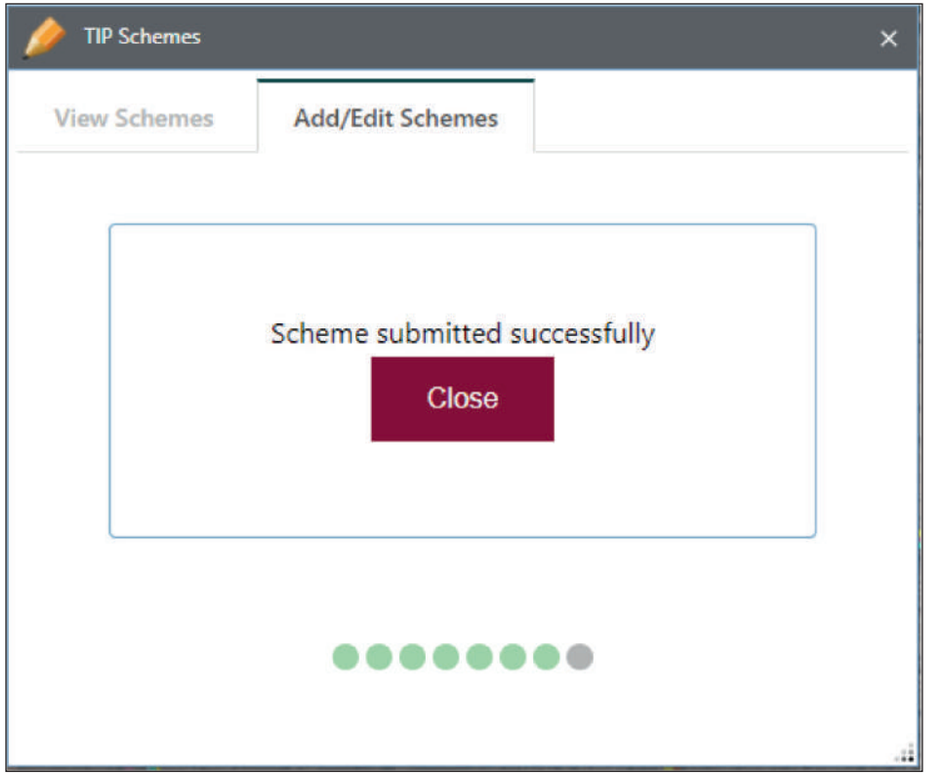
Figure 4.13 - TIP Schemes - Draw Schemes 3



Scheme submitted successfully message is displayed to the user.

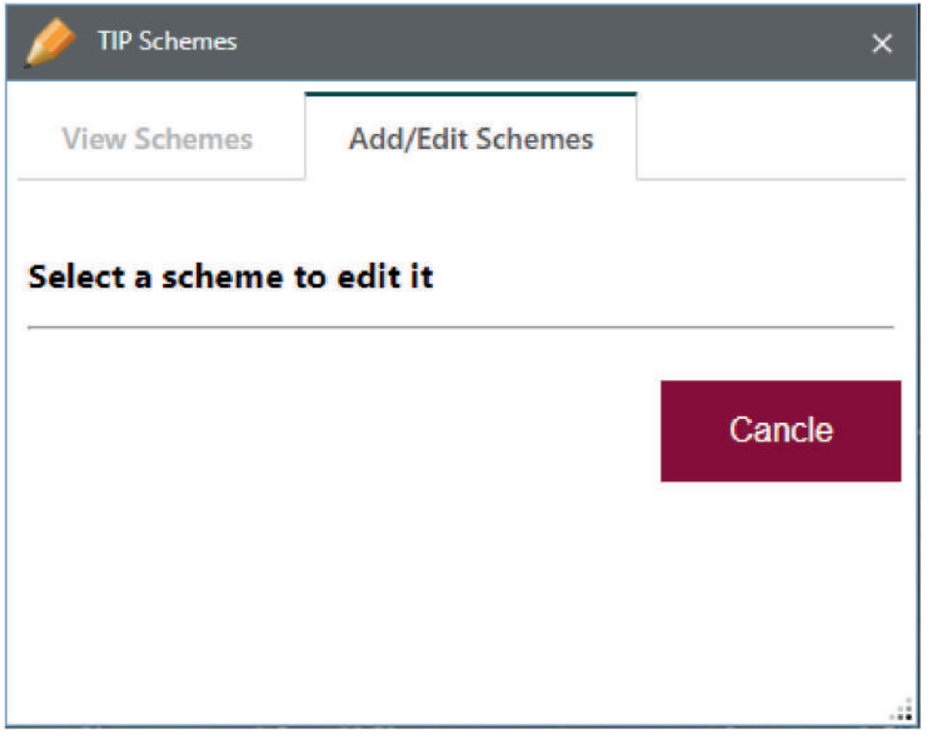
Click on Close button to return to main menu.

Figure 4.14 - TIP Schemes - Draw Schemes 4



To edit a scheme, click on the **Edit an Existing Scheme** button, the application will request you to select a scheme to edit. Click on **Cancel** button to cancel editing at any point of time. To proceed with editing, zoom to a scheme you want to edit and click the scheme. The scheme is highlighted on the map showing the vertices and is ready for editing.

Figure 4.15 - TIP Schemes - Edit Schemes

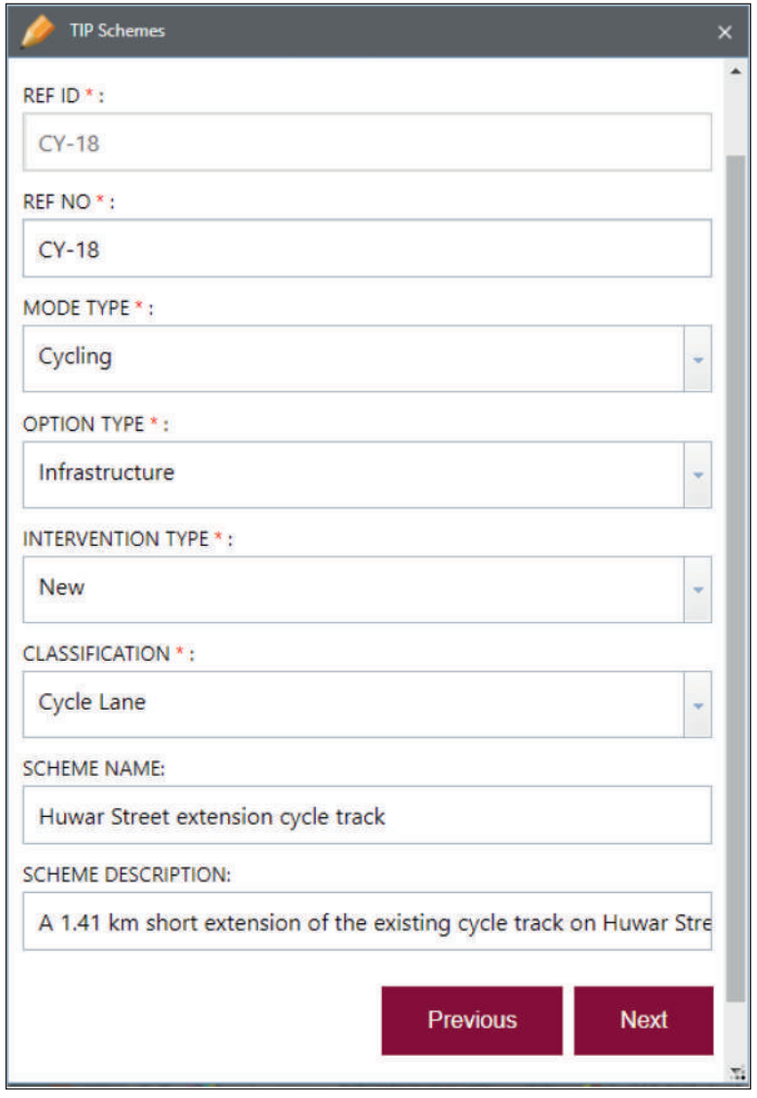


To edit the graphical information (e.g. extend or stretch etc.) just pick the vertex and drag to the desired location and release the mouse to finish.

Figure 4.16 - TIP Schemes - Edit Schemes 2

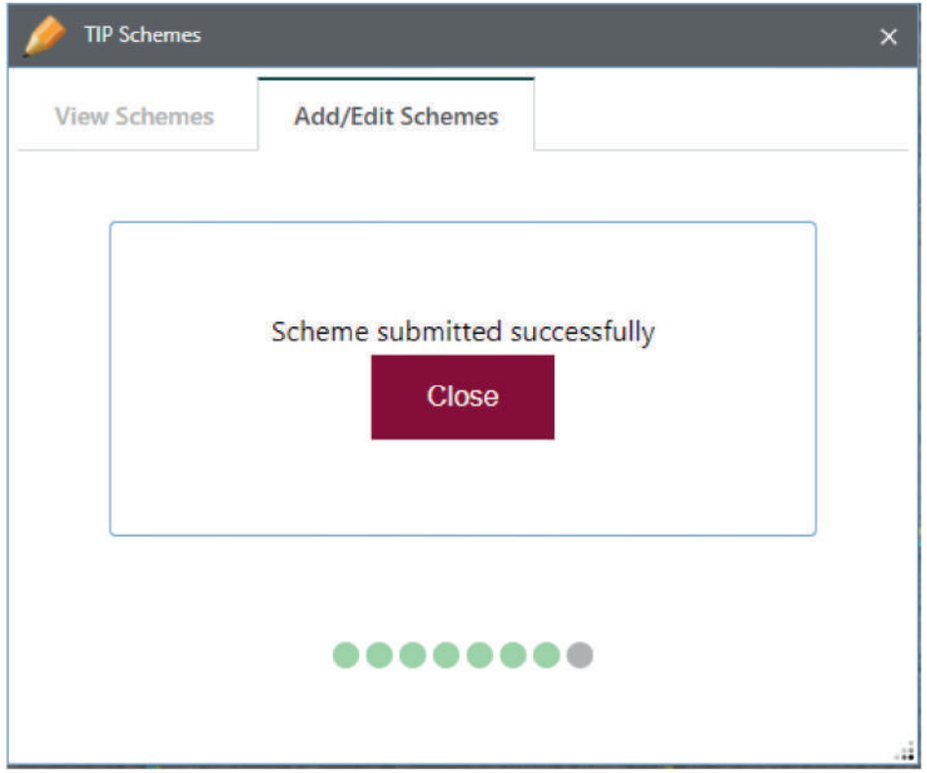
Once the editing is finished update the attribute information in the TIP tool window. Make the changes as required. Use **Next** and **Previous** button to move between pages. Once changes are finished click on **Submit** button to finish editing.

Figure 4.17 - TIP Schemes - Edit Schemes 3



Scheme submitted successfully message is displayed to the user. Click on Close button to return to main menu.

Figure 4.18 - TIP Schemes - Edit Schemes 4



To delete a scheme, click on **Remove a Scheme** button. Press and hold a control key, command key on the keyboard and click on the scheme to remove.

Figure 4.19 - TIP Schemes - Remove Schemes

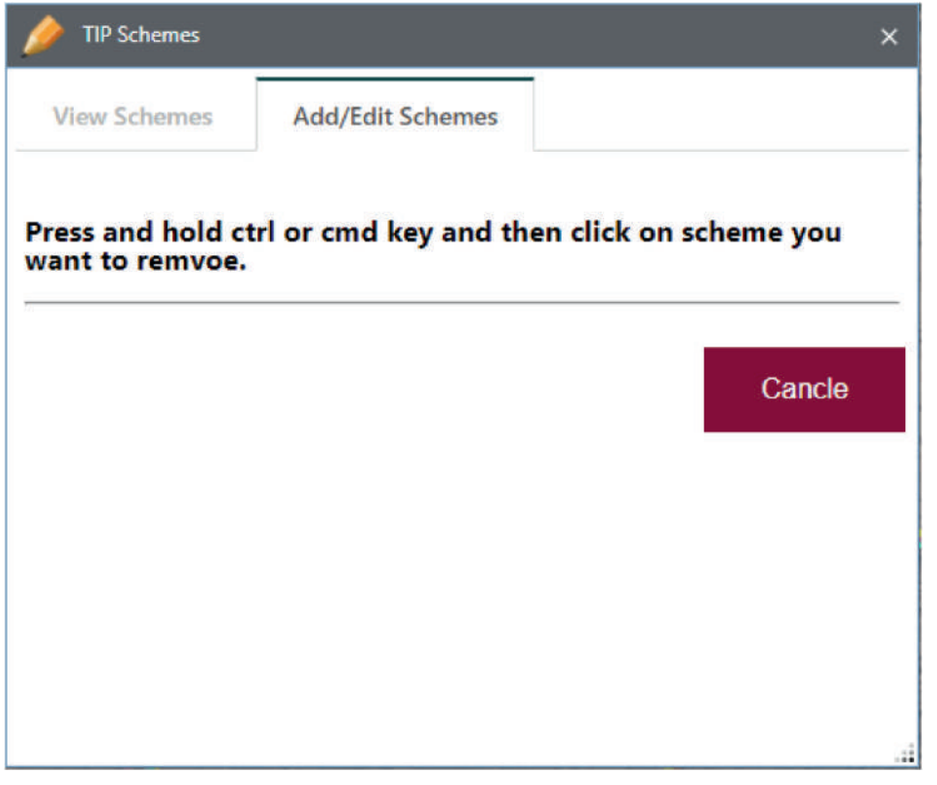
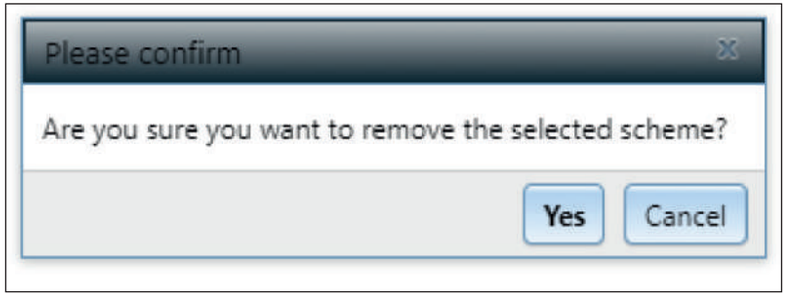
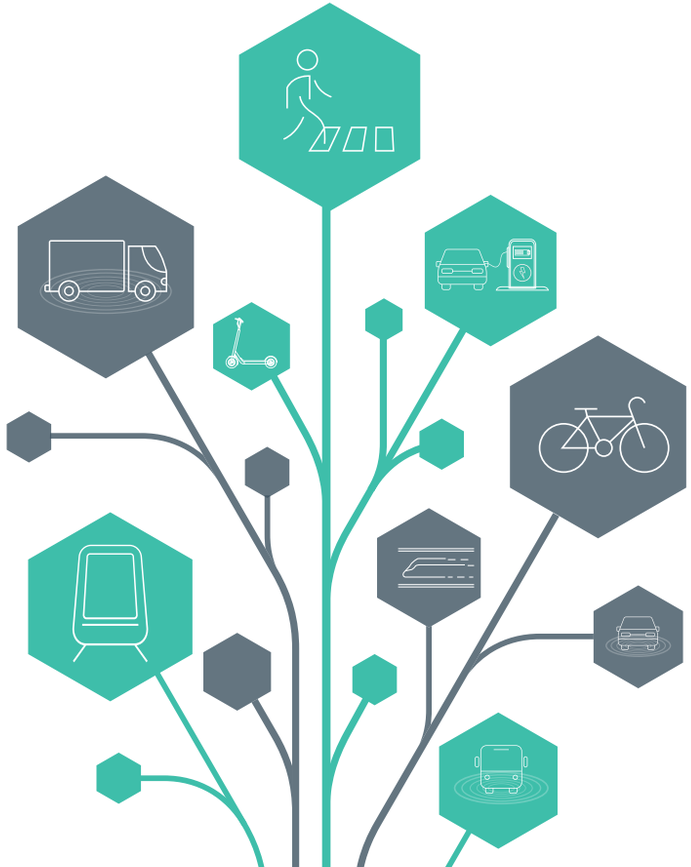


Figure 4.20 - TIP Schemes - Remove Schemes 2



A confirmation dialog box is displayed to the user to confirm the remove scheme operation. Click on **yes** to remove the scheme or click on **Cancel** to cancel the scheme remove action.



2050

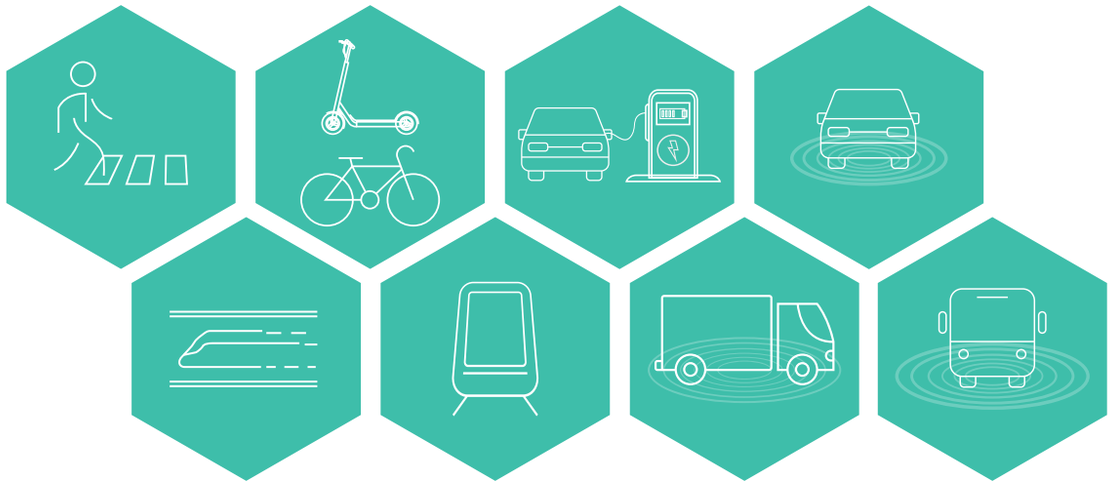
نقـل متكامـل ومسـتدام للجميـع

INTEGRATED & SUSTAINABLE TRANSPORT FOR ALL

2070

SECTION - 05

REPORTS FUNCTIONALITY

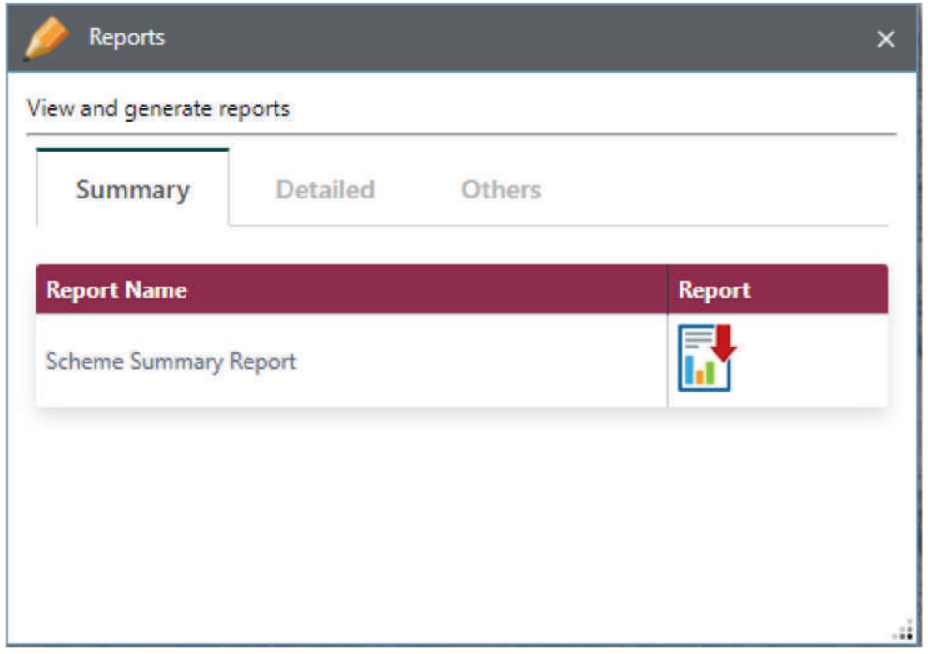


5 REPORTS FUNCTIONALITY

Generate variety of reports using Report tool. All reports are organized into three tabs.

Summary tabs shows scheme summary reports, **Detailed** tab shows the detailed scheme reports, and all other reports are available under **Others** tab.

Figure 5.1 - Reporting



وزارة المواصلات
MINISTRY OF TRANSPORT

ص.ب. 24455 P.O.
الدوحة, قطر Doha, Qatar
ت 1111 4045 974+ T
motc.gov.qa

نقل متكامل ومستدام للجميع
INTEGRATED & SUSTAINABLE TRANSPORT FOR ALL