Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
Maintenance Branch

ARMP software

(Version 3.0, 2019)

User's Manual

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Softwel (P) Ltd.
254 Shree Ekata Marga, New Baneshore, Kathmandu-34, Nepal
Phone 977-1-4104307, 4104319
Fax 977-1-4104307
Email support@softwel.com.np, Http www.softwel.com.np

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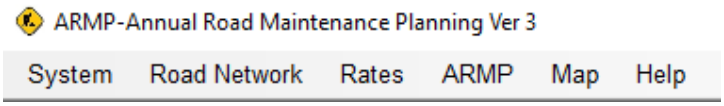
1. Menu Bar



System: Allows users to create new user, change password, view users, login and logout/quit.

Road Network: Allows admin users to update the road network including dynamic segmentation using pavement data (width, last resurface etc)

Rates: Allows users to view routine labour rates, work item and recurrent maintenance rates.

Norms Allows users to view routine and recurrent norms.

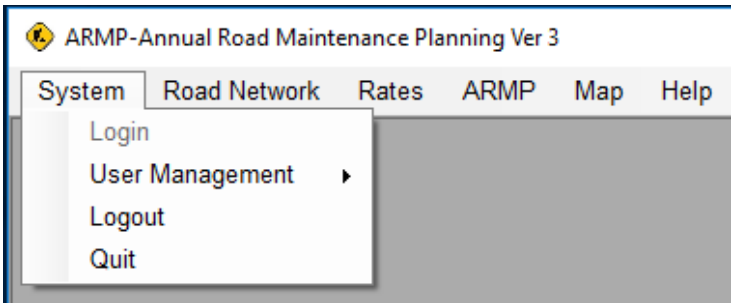
ARMP Provides users to perform the following

- To view road register
- To view details related to regular maintenance cost estimate and reactive maintenance/periodic maintenance/road side maintenance
- To view details related to rehabilitation/reconstruction and upgradation of selected roads
- To view bridge routine details
- Select bridge for routine maintenance cost calculation, minor bridge maintenance details and its summary
- To view Annual Road Maintenance Summary taking into consideration a particular region/division/nation.

Map: Allows users to view map of the assessed data.

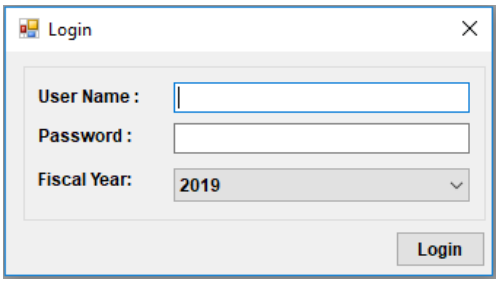
Help: Provides brief detail about the software like version number etc.

2. System Menu



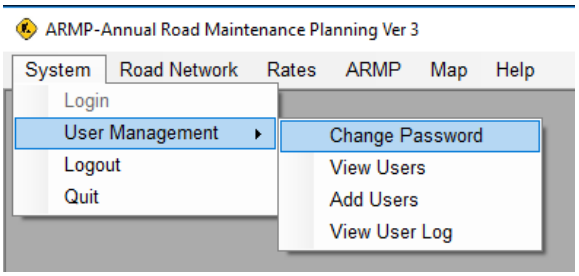
Within the **System** menu, users are provided with the option to login into the tool. Further, within the option of **user management**, one can change his/her login password. For users who login as 'Admin', they are able to view/add users**. Logout/Quit** options are also provided in this menu.

2.1 Login Screen



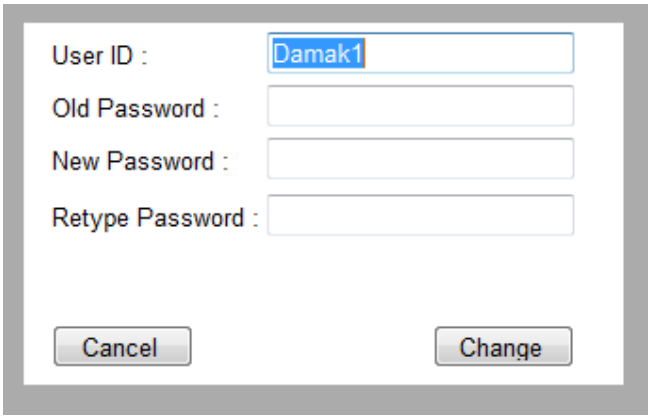
So as to prevent unauthorized access to the tool, users are supposed to login using a proper **username** and **password**. They can also choose the fiscal year, e.g. 2012 or 2013 for which the details are to be viewed.

2.2 User Management



By clicking on the user management sub menu, the user is provided with four options- change password, view users, add users and view user log.

2.3 Change Password

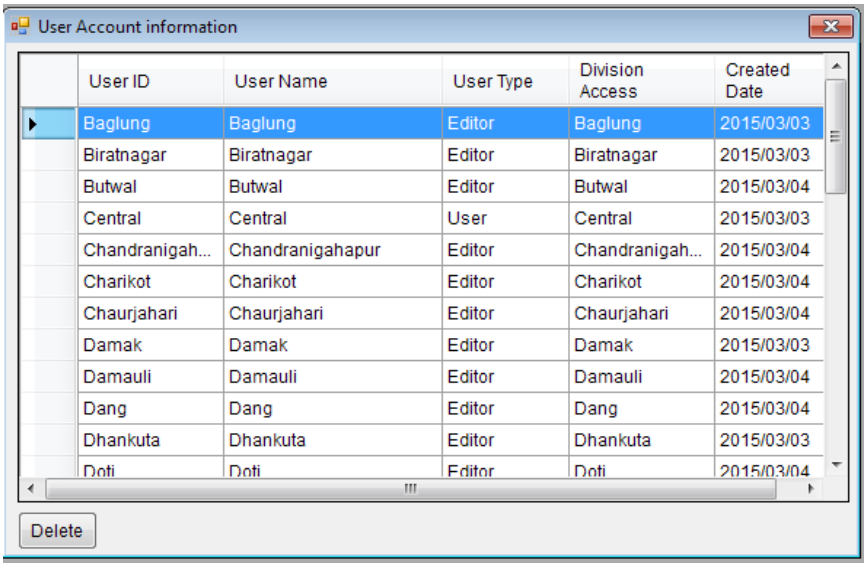


To change the password, details such as user id, old password and new password are to be entered and 'Change' button is to be pressed for successfully changing the password.

2.4 View Users (For Admin Only)

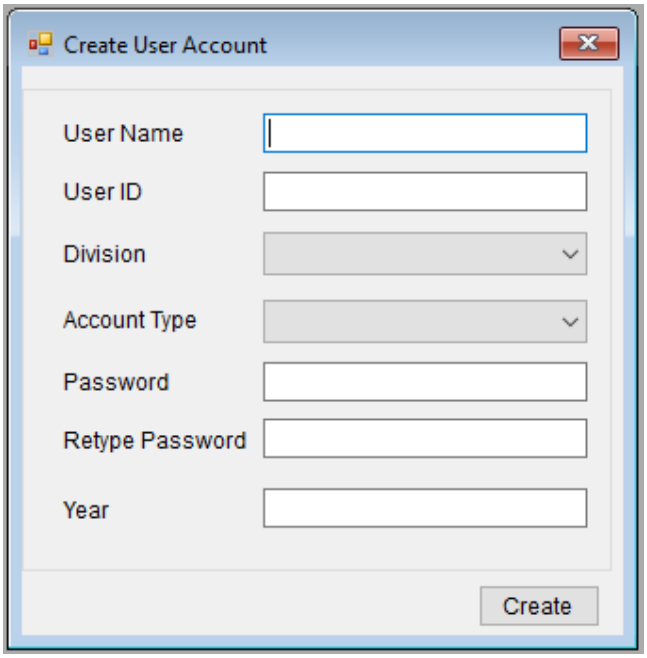
For users with 'Admin' rights, it is possible to view all the users who are currently using the system. To view the same, view users' option within the user management sub-menu is to be selected.

Admin users are able to view details such as name of the user, user id, login type (Editor/Admin/User) and the date on which the account was created.



2.5 Add Users Sub Menu (For Admin Only)

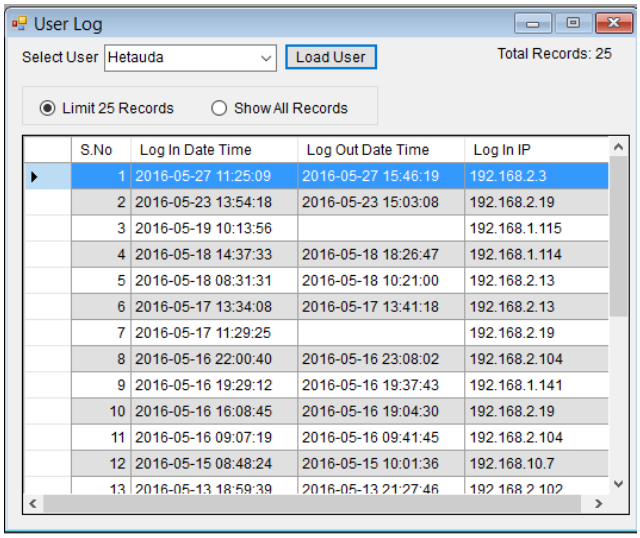
Admin users are able to add new users by selecting the '**Add Users**' option within the **user management** sub menu.



To add new users, a number of details are to be provided such as user name, user id, division (Eastern/Central/Western/Mid-Western/Bhaktapur/Dhankuta etc), account type (user/admin/editor), password and the current year.

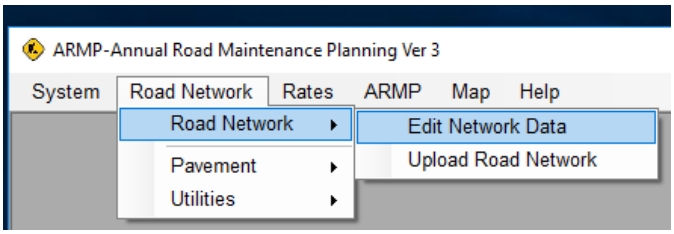
2.6 View User Log (For Admin Only)

For users with 'Admin' rights, it is possible to view log of all the users including login time, logout time and the user's IP address using the system.



S.No	Log In Date Time	Log Out Date Time	Log In IP
1	2016-05-27 11:25:09	2016-05-27 15:46:19	192.168.2.3
2	2016-05-23 13:54:18	2016-05-23 15:03:08	192.168.2.19
3	2016-05-19 10:13:56		192.168.1.115
4	2016-05-18 14:37:33	2016-05-18 18:26:47	192.168.1.114
5	2016-05-18 08:31:31	2016-05-18 10:21:00	192.168.2.13
6	2016-05-17 13:34:08	2016-05-17 13:41:18	192.168.2.13
7	2016-05-17 11:29:25		192.168.2.19
8	2016-05-16 22:00:40	2016-05-16 23:08:02	192.168.2.104
9	2016-05-16 19:29:12	2016-05-16 19:37:43	192.168.1.141
10	2016-05-16 16:08:45	2016-05-16 19:04:30	192.168.2.19
11	2016-05-16 09:07:19	2016-05-16 09:41:45	192.168.2.104
12	2016-05-15 08:48:24	2016-05-15 10:01:36	192.168.10.7
13	2016-05-13 18:59:39	2016-05-13 21:27:46	192.168.2.102

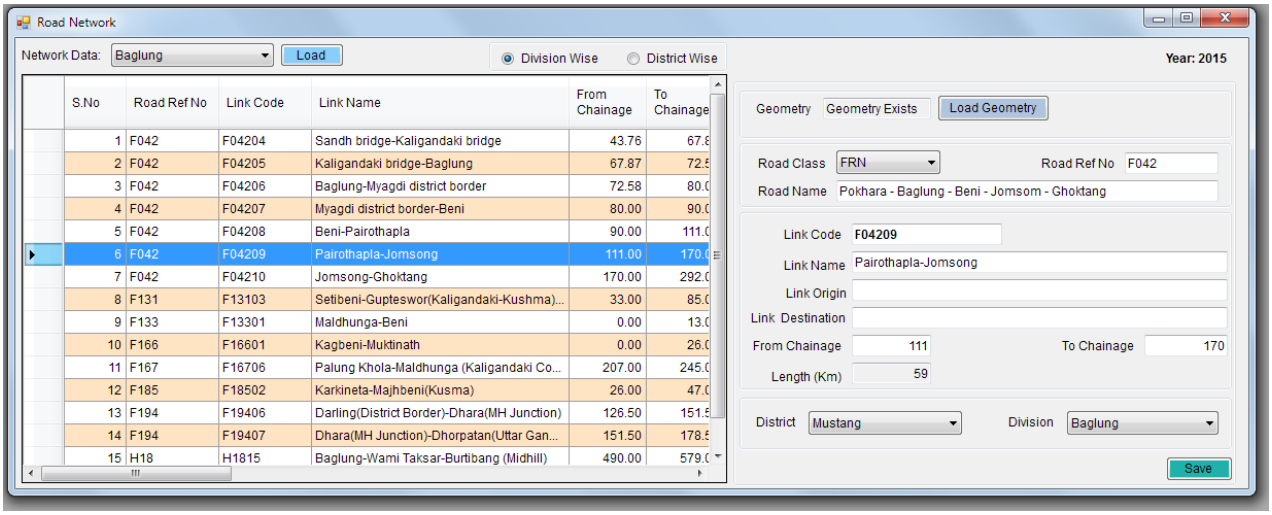
3. Road Network



The road network menu provides access to edit the network data including uploading of the road geometry using shape files. It also provides tools for creating sections within link with chainages for the various pavement types, resurfacing/construction dates and the road condition (IRI, SDI) and the traffic data.

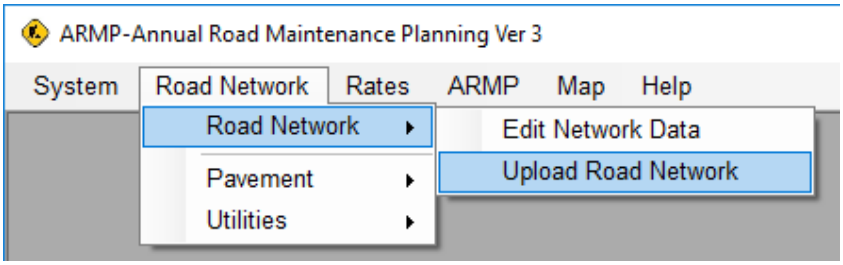
3.1 Edit Network Data

The Basic road network data can be edited or even road link deleted using this tool. Once deleted the road link is also deleted from the map.

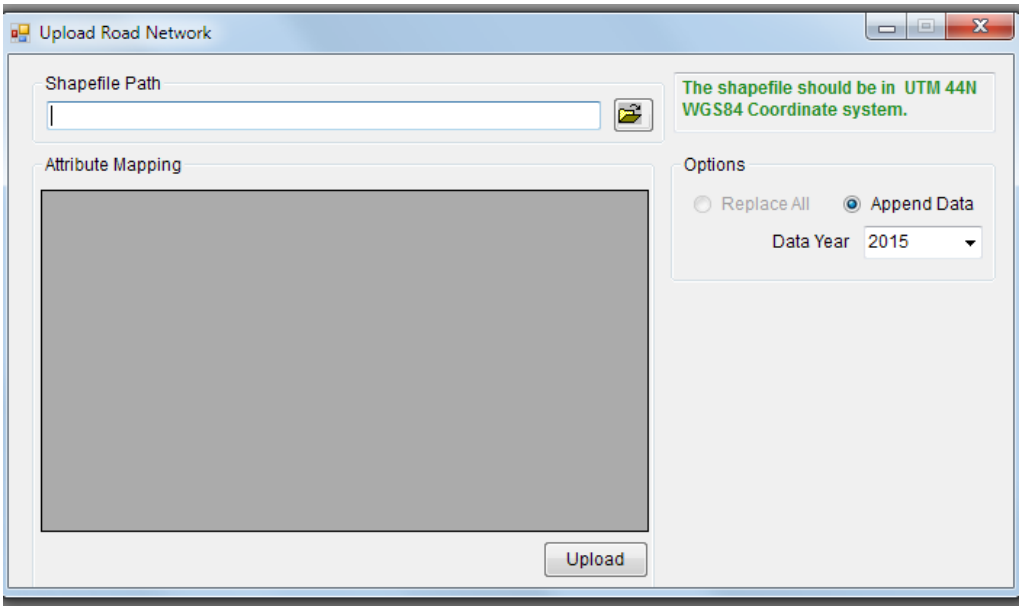


3.2 Upload Road Network

The geometry of the road network can be uploaded using this tool.

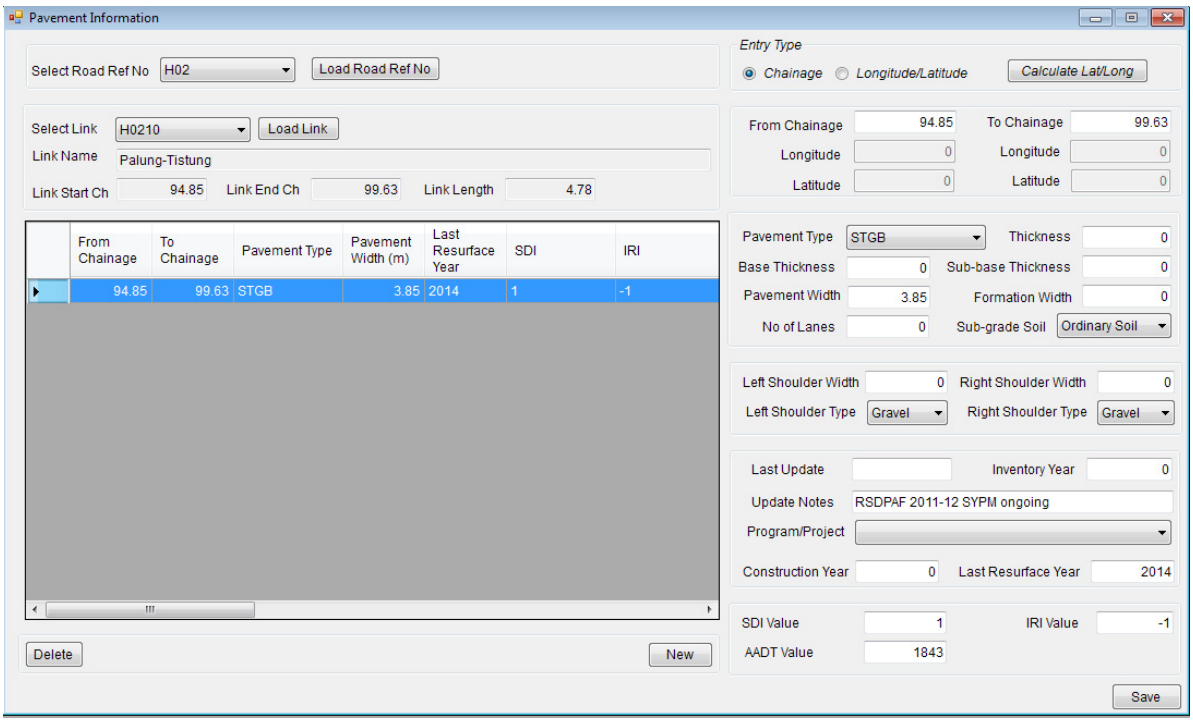


Basic attribute mapping is essential to uniquely identify the road (e.g road code etc..). The geometry should be UTM Zone 44N coordinate system.

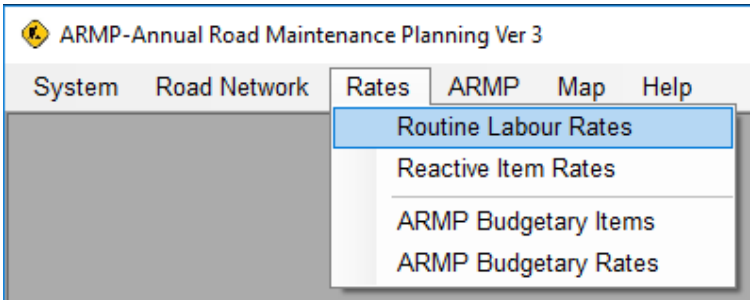


3.3 Pavement

The pavement information is tool for dynamic segmentation of the road links by various parameters. Links sections can be defined using 'From' and 'To" Chainages and various parameters can be provided and the software will break the links accordingly.

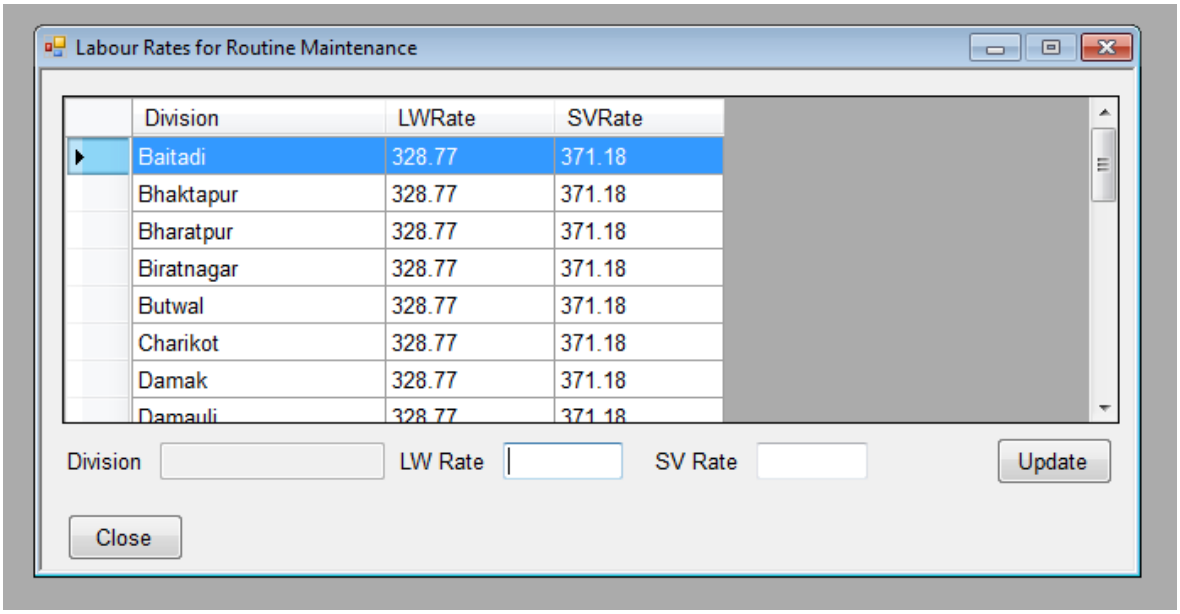


4. Rates Menu



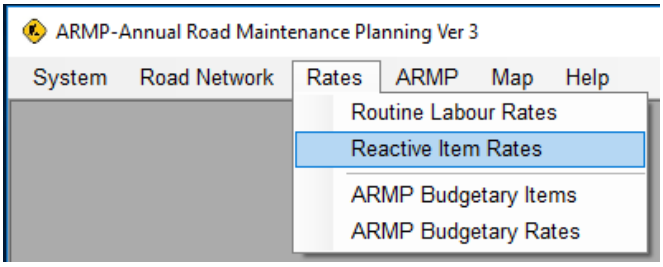
Within the rates menu, users are able to view the routine labour rates (For Admin only). Work item and recurrent maintenance rates can also be viewed within the menu.

4.1 Routine Labour Rates (For Admin Only)



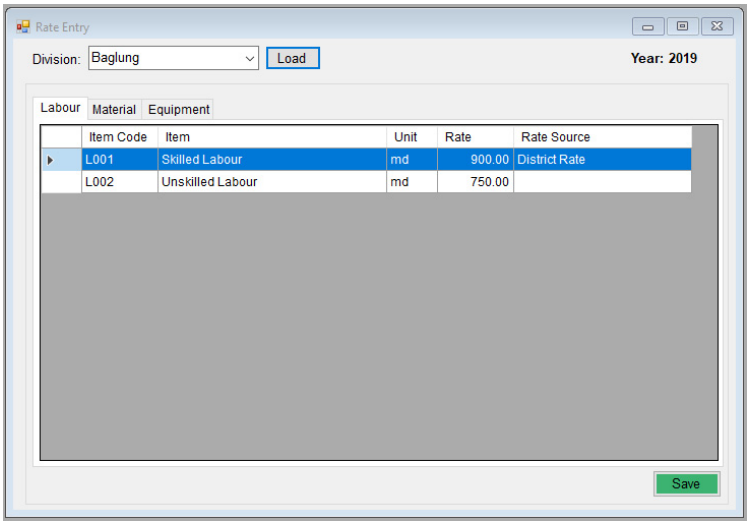
Admin users are able to view the routine labour rates for various divisions of the country and are also able to update the corresponding LWRate/SVRate.

4.2 Reactive Item Rates



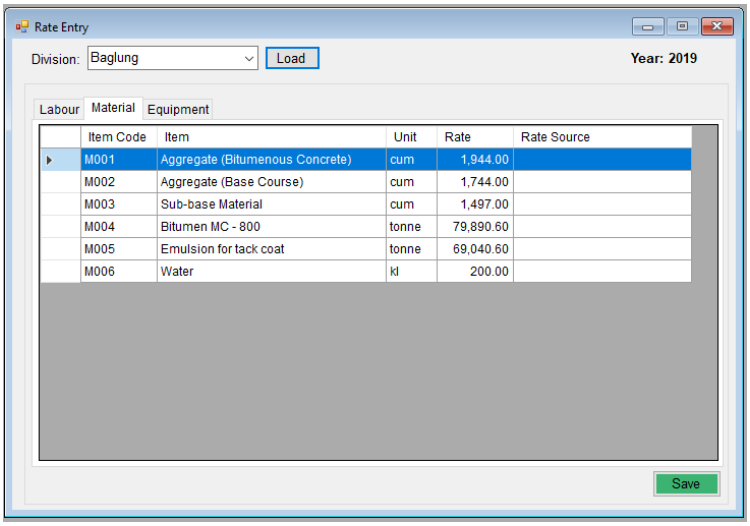
Within the Reactive Item Rates submenu, Users have to fill the Reactive item rates.

4.2.1 Labour Tab



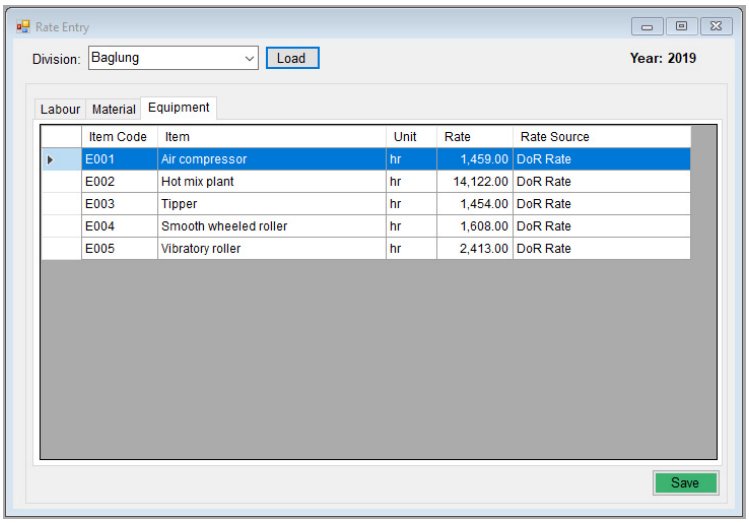
Users should enter current district rate of skilled and unskilled labour rates.

4.2.2 Material Tab



Users should enter the rate for materials. The rate should include all production and transport cost.

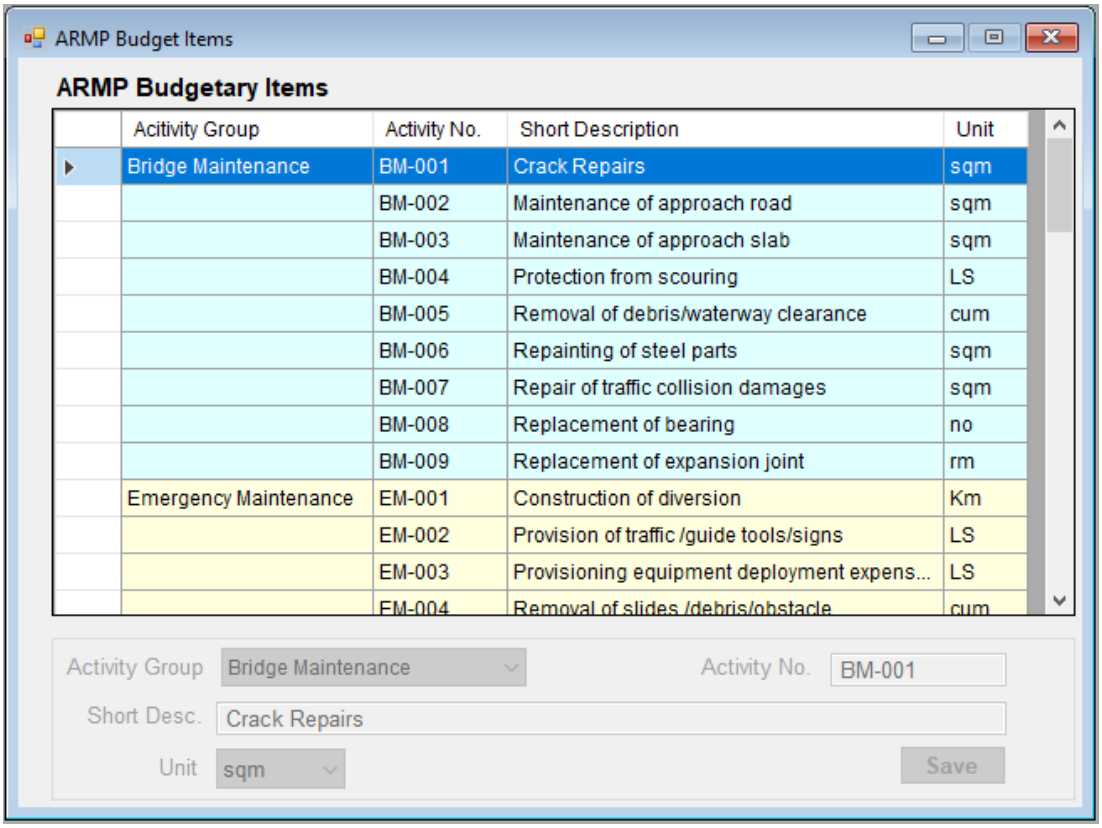
4.2.3 Equipment Tab



Users should enter the rate for equipment prescribed by DoR. The rate should include equipment purchasing cost, fuel cost, maintenance, maintenance crew and operation cost.

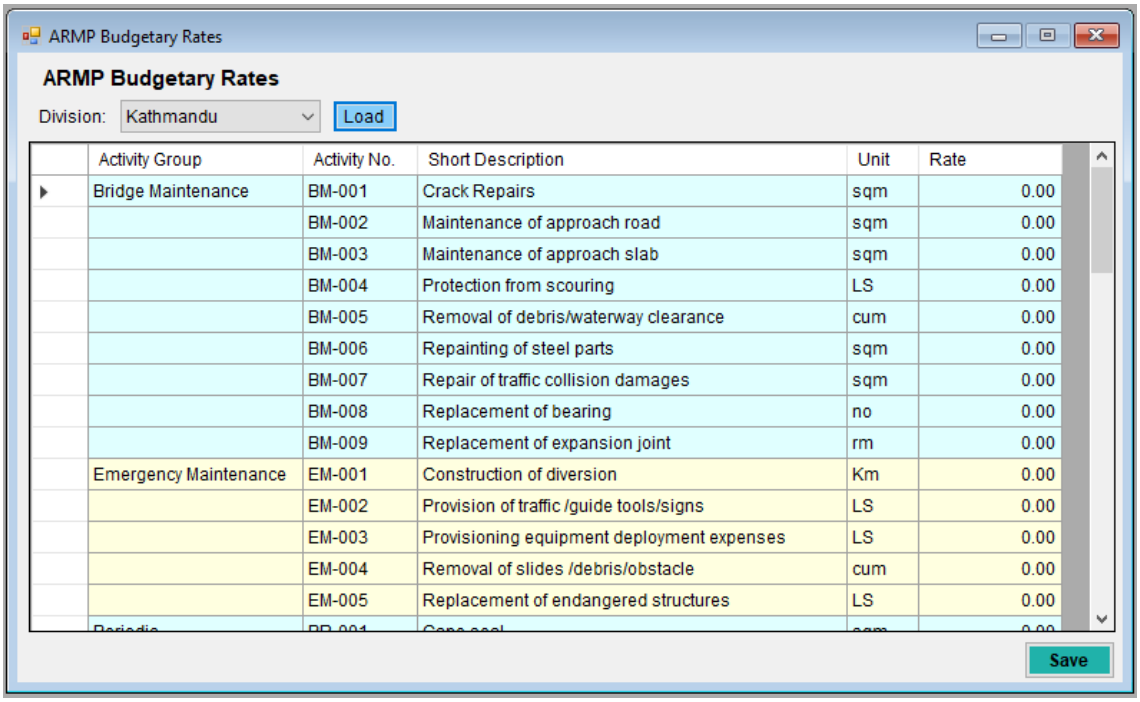
4.3 ARMP Budgetary Items (Admin Only)

These are standard items defined for entire ARMP. Editing of items are only available for the admin users.



4.4 ARMP Budgetary Rates

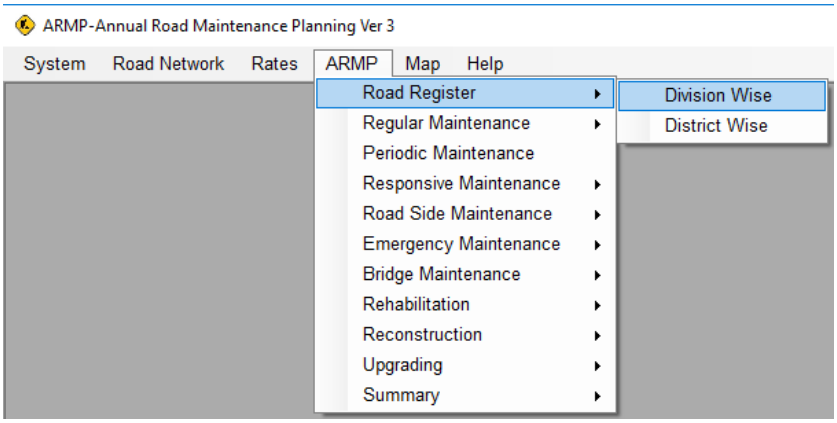
The rates for standard items defined for entire ARMP can be entered using this tool. Each division should provide the rates applicable to the entire division.



Activity Group	Activity No.	Short Description	Unit	Rate
Bridge Maintenance	BM-001	Crack Repairs	sqm	0.00
	BM-002	Maintenance of approach road	sqm	0.00
	BM-003	Maintenance of approach slab	sqm	0.00
	BM-004	Protection from scouring	LS	0.00
	BM-005	Removal of debris/waterway clearance	cum	0.00
	BM-006	Repainting of steel parts	sqm	0.00
	BM-007	Repair of traffic collision damages	sqm	0.00
	BM-008	Replacement of bearing	no	0.00
	BM-009	Replacement of expansion joint	rm	0.00
Emergency Maintenance	EM-001	Construction of diversion	Km	0.00
	EM-002	Provision of traffic /guide tools/signs	LS	0.00
	EM-003	Provisioning equipment deployment expenses	LS	0.00
	EM-004	Removal of slides /debris/obstacle	cum	0.00
	EM-005	Replacement of endangered structures	LS	0.00

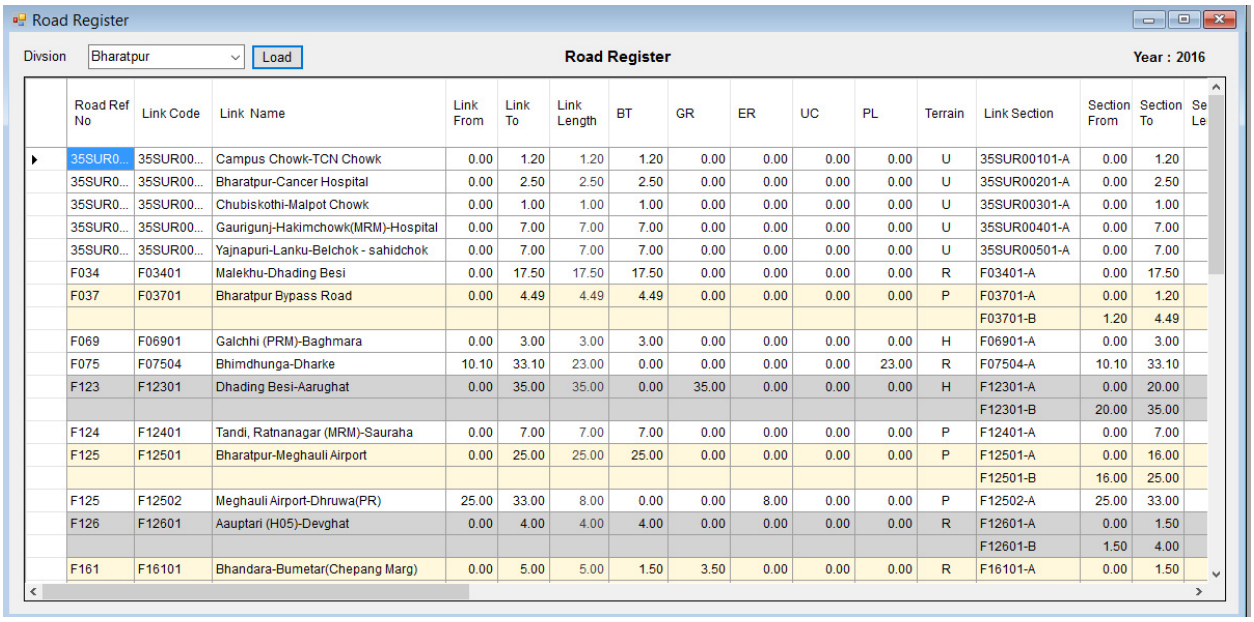
5. ARMP MENU

5.1 Road Register



5.1.1 Division wise Road Register

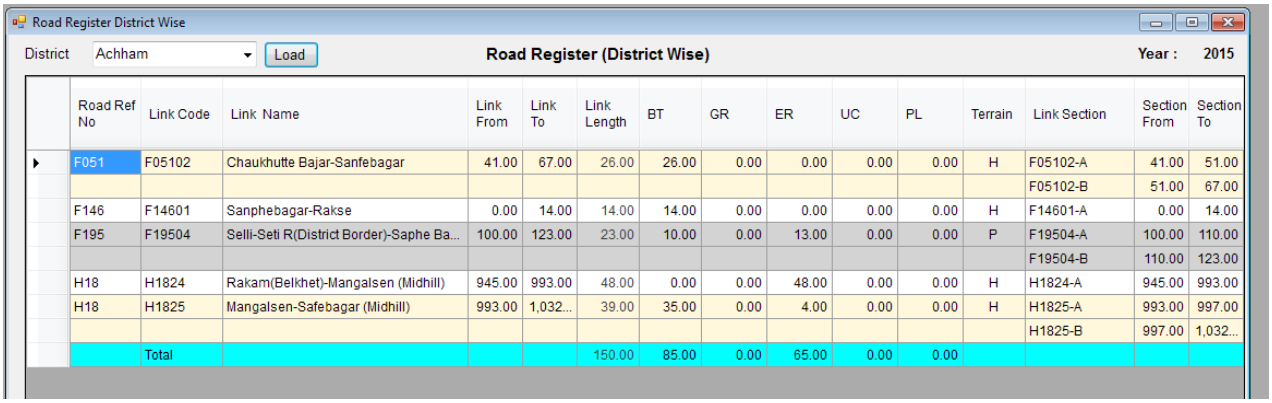
Provides the road register by division. It also includes the sub-links and the activities e.g. last resurfacing, pavement status and project notes for each of the links and sub-links.



Road Ref No	Link Code	Link Name	Link From	Link To	Link Length	BT	GR	ER	UC	PL	Terrain	Link Section	Section From	Section To	Se Le
35SUR0...	35SUR00...	Campus Chowk-TCN Chowk	0.00	1.20	1.20	1.20	0.00	0.00	0.00	0.00	U	35SUR00101-A	0.00	1.20	
35SUR0...	35SUR00...	Bharatpur-Cancer Hospital	0.00	2.50	2.50	2.50	0.00	0.00	0.00	0.00	U	35SUR00201-A	0.00	2.50	
35SUR0...	35SUR00...	Chubiskothi-Malpot Chowk	0.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	U	35SUR00301-A	0.00	1.00	
35SUR0...	35SUR00...	Gaurigunj-Hakimchowk(MRM)-Hospital	0.00	7.00	7.00	7.00	0.00	0.00	0.00	0.00	U	35SUR00401-A	0.00	7.00	
35SUR0...	35SUR00...	Yajnapuri-Lanku-Belchok - sahidchok	0.00	7.00	7.00	7.00	0.00	0.00	0.00	0.00	U	35SUR00501-A	0.00	7.00	
F034	F03401	Malekhu-Dhading Besi	0.00	17.50	17.50	17.50	0.00	0.00	0.00	0.00	R	F03401-A	0.00	17.50	
F037	F03701	Bharatpur Bypass Road	0.00	4.49	4.49	4.49	0.00	0.00	0.00	0.00	P	F03701-A	0.00	1.20	
												F03701-B	1.20	4.49	
F069	F06901	Galchhi (PRM)-Baghmara	0.00	3.00	3.00	3.00	0.00	0.00	0.00	0.00	H	F06901-A	0.00	3.00	
F075	F07504	Bhimdhunga-Dharke	10.10	33.10	23.00	0.00	0.00	0.00	0.00	23.00	R	F07504-A	10.10	33.10	
F123	F12301	Dhading Besi-Aarughat	0.00	35.00	35.00	0.00	35.00	0.00	0.00	0.00	H	F12301-A	0.00	20.00	
												F12301-B	20.00	35.00	
F124	F12401	Tandi, Ratnanagar (MRM)-Sauraha	0.00	7.00	7.00	7.00	0.00	0.00	0.00	0.00	P	F12401-A	0.00	7.00	
F125	F12501	Bharatpur-Meghauli Airport	0.00	25.00	25.00	25.00	0.00	0.00	0.00	0.00	P	F12501-A	0.00	16.00	
												F12501-B	16.00	25.00	
F125	F12502	Meghauli Airport-Dhruwa(PR)	25.00	33.00	8.00	0.00	0.00	8.00	0.00	0.00	P	F12502-A	25.00	33.00	
F126	F12601	Aauptari (H05)-Devghat	0.00	4.00	4.00	4.00	0.00	0.00	0.00	0.00	R	F12601-A	0.00	1.50	
												F12601-B	1.50	4.00	
F161	F16101	Bhandara-Bumetar(Chepang Marg)	0.00	5.00	5.00	1.50	3.50	0.00	0.00	0.00	R	F16101-A	0.00	1.50	

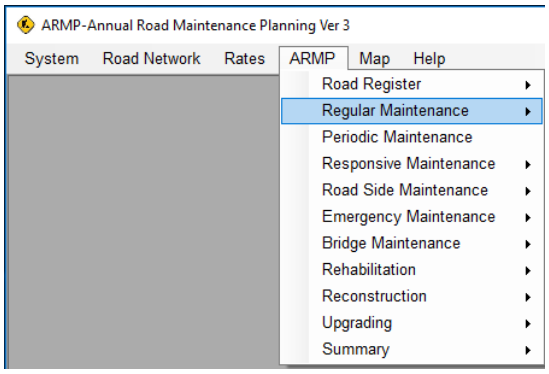
5.1.2 District wise Road Register

Provides the road register by district. It also includes the sub-links and the activities e.g. last resurfacing, pavement status and project notes for each of the links and sub-links.

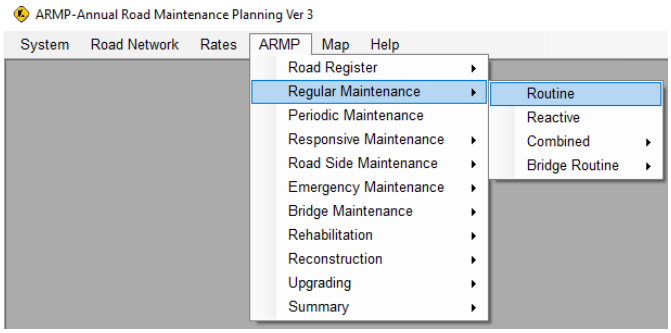


Road Ref No	Link Code	Link Name	Link From	Link To	Link Length	BT	GR	ER	UC	PL	Terrain	Link Section	Section From	Section To
F051	F05102	Chaukhutte Bajar-Sanfebagar	41.00	67.00	26.00	26.00	0.00	0.00	0.00	0.00	H	F05102-A	41.00	51.00
												F05102-B	51.00	67.00
F146	F14601	Sanphebagar-Rakse	0.00	14.00	14.00	14.00	0.00	0.00	0.00	0.00	H	F14601-A	0.00	14.00
F195	F19504	Selli-Seti R(District Border)-Saphe Ba...	100.00	123.00	23.00	10.00	0.00	13.00	0.00	0.00	P	F19504-A	100.00	110.00
												F19504-B	110.00	123.00
H18	H1824	Rakam(Belkhet)-Mangalsen (Midhill)	945.00	993.00	48.00	0.00	0.00	48.00	0.00	0.00	H	H1824-A	945.00	993.00
H18	H1825	Mangalsen-Safebagar (Midhill)	993.00	1,032...	39.00	35.00	0.00	4.00	0.00	0.00	H	H1825-A	993.00	997.00
												H1825-B	997.00	1,032...
	Total				150.00	85.00	0.00	65.00	0.00	0.00				

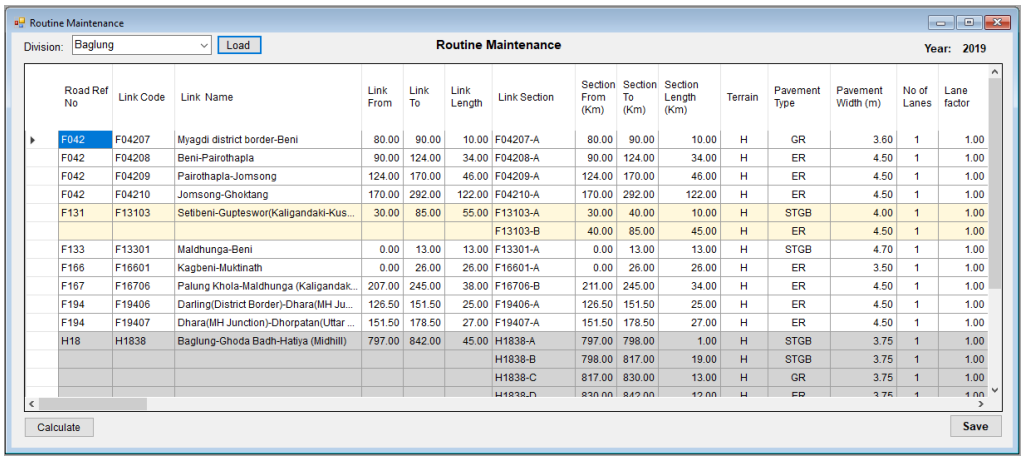
5.2 Regular Maintenance



5.2.1 Routine



Routine Screen



Road Ref No	Link Code	Link Name	Link From	Link To	Link Length	Link Section	Section From (Km)	Section To (Km)	Section Length (Km)	Terrain	Pavement Type	Pavement Width (m)	No of Lanes	Lane factor
F042	F04207	Myagdi district border-Beni	80.00	90.00	10.00	F04207-A	80.00	90.00	10.00	H	GR	3.60	1	1.00
F042	F04208	Beni-Pairothapla	90.00	124.00	34.00	F04208-A	90.00	124.00	34.00	H	ER	4.50	1	1.00
F042	F04209	Pairothapla-Jomsong	124.00	170.00	46.00	F04209-A	124.00	170.00	46.00	H	ER	4.50	1	1.00
F042	F04210	Jomsong-Ghoktang	170.00	292.00	122.00	F04210-A	170.00	292.00	122.00	H	ER	4.50	1	1.00
F131	F13103	Setibeni-Gupteswor(Kaligandaki-Kus...	30.00	85.00	55.00	F13103-A	30.00	40.00	10.00	H	STGB	4.00	1	1.00
						F13103-B	40.00	85.00	45.00	H	ER	4.50	1	1.00
F133	F13301	Maldhunga-Beni	0.00	13.00	13.00	F13301-A	0.00	13.00	13.00	H	STGB	4.70	1	1.00
F166	F16601	Kagbeni-Muktinath	0.00	26.00	26.00	F16601-A	0.00	26.00	26.00	H	ER	3.50	1	1.00
F167	F16706	Palung Khola-Maldhunga (Kaligandak...	207.00	245.00	38.00	F16706-B	211.00	245.00	34.00	H	ER	4.50	1	1.00
F194	F19406	Darling(District Border)-Dhara(MH Ju...	126.50	151.50	25.00	F19406-A	126.50	151.50	25.00	H	ER	4.50	1	1.00
F194	F19407	Dhara(MH Junction)-Dhorpatan(Uttar ...	151.50	178.50	27.00	F19407-A	151.50	178.50	27.00	H	ER	4.50	1	1.00
H18	H1838	Baglung-Ghoda Badh-Hatiya (Midhill)	797.00	842.00	45.00	H1838-A	797.00	798.00	1.00	H	STGB	3.75	1	1.00
						H1838-B	798.00	817.00	19.00	H	STGB	3.75	1	1.00
						H1838-C	817.00	830.00	13.00	H	GR	3.75	1	1.00

a) Select the Division and press 'Load'

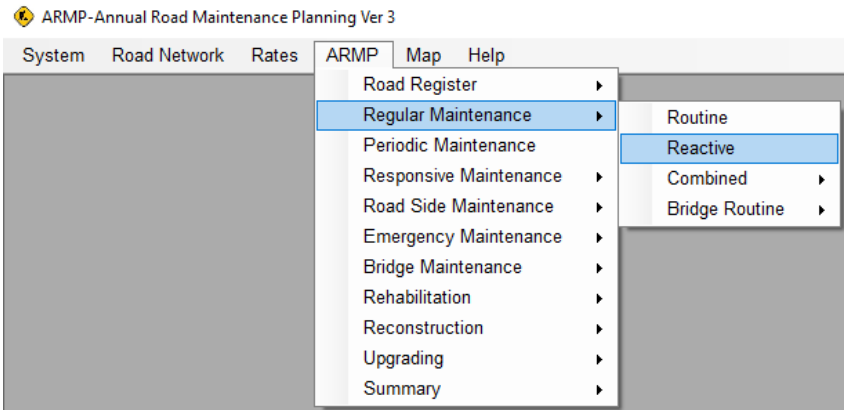
b) A decision has to be made to include or exclude the link from the routine maintenance based on the on-going project information. Reason for the excluding should be mentioned. The roads with PL or UC status are shown in red color and are automatically excluded.

c) The routine maintenance of the earthen road is estimated at NRs 20,000 per km which also includes the recurrent maintenance. This is automatically calculated.

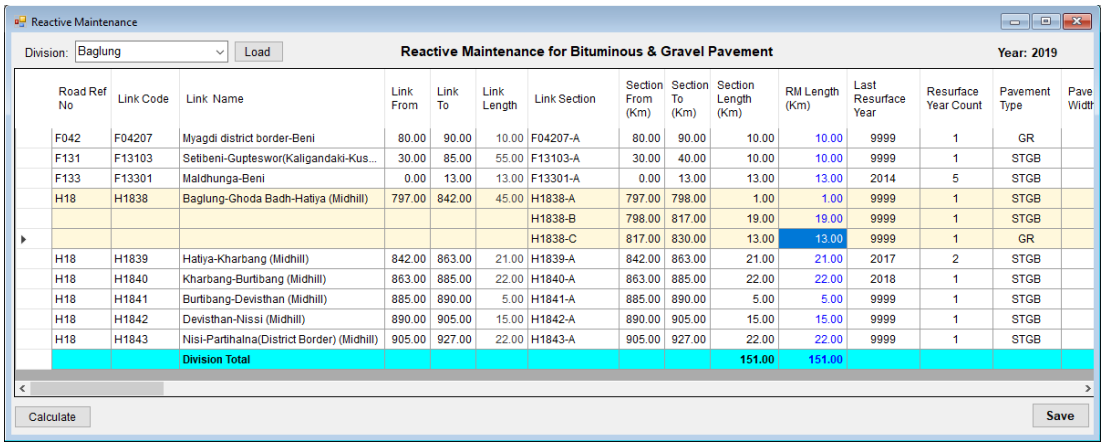
d) After making changes, press save to record the changes.

e) Right click on the grid to export the data to Excel.

5.2.2 Reactive



Reactive Maintenance Screen



Road Ref No	Link Code	Link Name	Link From	Link To	Link Length	Link Section	Section From (Km)	Section To (Km)	Section Length (Km)	RM Length (Km)	Last Resurface Year	Resurface Year Count	Pavement Type	Pave Width
F042	F04207	Myagdi district border-Beni	80.00	90.00	10.00	F04207-A	80.00	90.00	10.00	10.00	9999	1	GR	
F131	F13103	Setibeni-Gupteswor(Kaligandaki-Kus...	30.00	85.00	55.00	F13103-A	30.00	40.00	10.00	10.00	9999	1	STGB	
F133	F13301	Maldhunga-Beni	0.00	13.00	13.00	F13301-A	0.00	13.00	13.00	13.00	2014	5	STGB	
H18	H1838	Baglung-Ghoda Badh-Hatiya (Midhill)	797.00	842.00	45.00	H1838-A	797.00	798.00	1.00	1.00	9999	1	STGB	
						H1838-B	798.00	817.00	19.00	19.00	9999	1	STGB	
						H1838-C	817.00	830.00	13.00	13.00	9999	1	GR	
H18	H1839	Hatiya-Kharbang (Midhill)	842.00	863.00	21.00	H1839-A	842.00	863.00	21.00	21.00	2017	2	STGB	
H18	H1840	Kharbang-Burtibang (Midhill)	863.00	885.00	22.00	H1840-A	863.00	885.00	22.00	22.00	2018	1	STGB	
H18	H1841	Burtibang-Devisthan (Midhill)	885.00	890.00	5.00	H1841-A	885.00	890.00	5.00	5.00	9999	1	STGB	
H18	H1842	Devisthan-Nissi (Midhill)	890.00	905.00	15.00	H1842-A	890.00	905.00	15.00	15.00	9999	1	STGB	
H18	H1843	Nisi-Partihalna(District Border) (Midhill)	905.00	927.00	22.00	H1843-A	905.00	927.00	22.00	22.00	9999	1	STGB	
		Division Total							**151.00**	**151.00**				

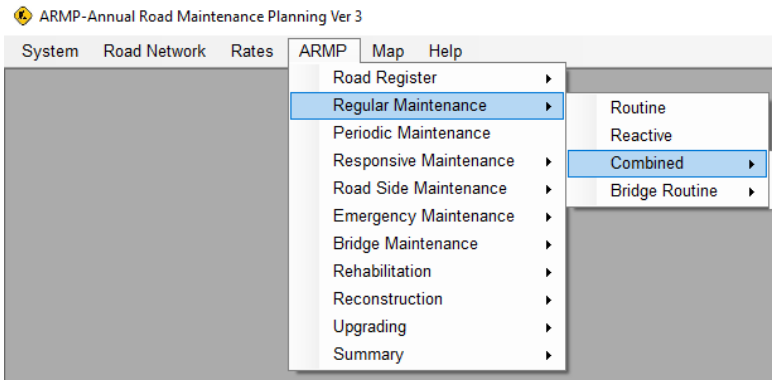
a) Select the Division and press 'Load'.

b) Users are required to enter the length in “RM Length (Km)” column, % of potholes in “Adopted Pothole Area (%)” column, and % of potholes in shoulder in “Adopted Shoulder Area (%)” column.

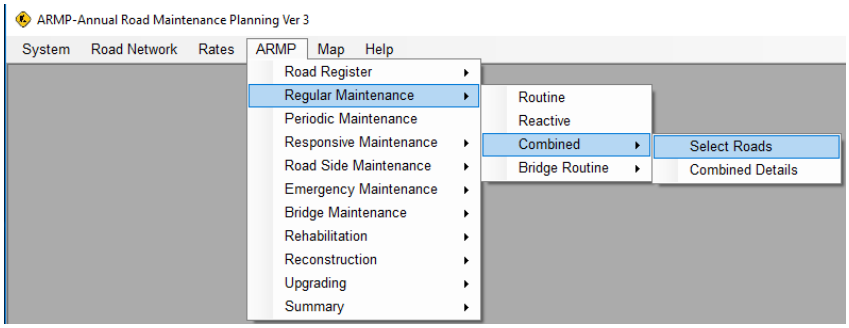
c) After making changes, click Calculate Tab and to save changes record, click Save tab.

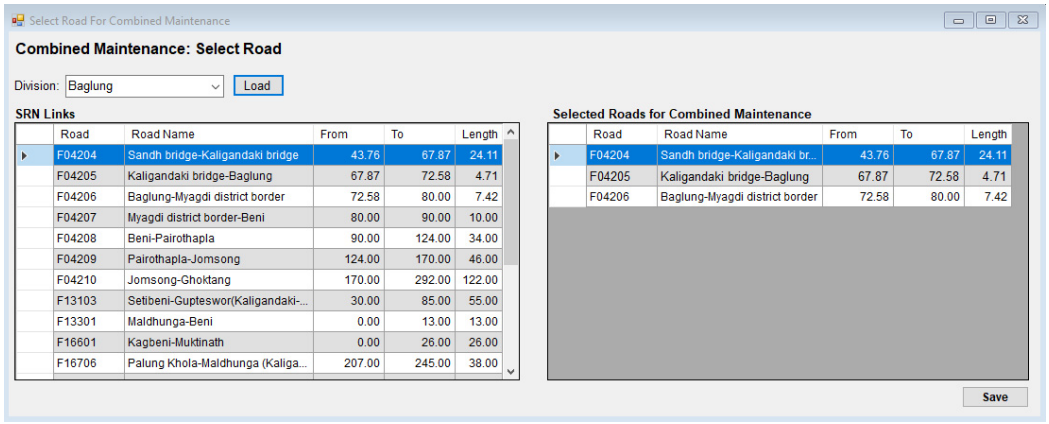
d) Right click on the grid to export the data to Excel.

5.2.3 Combined



Select Roads

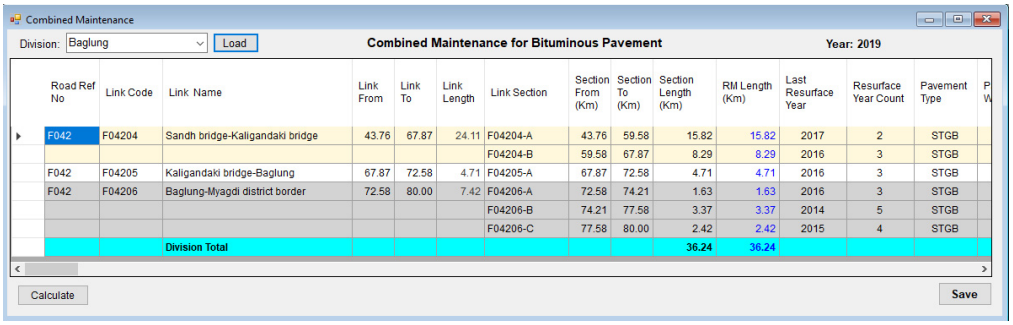




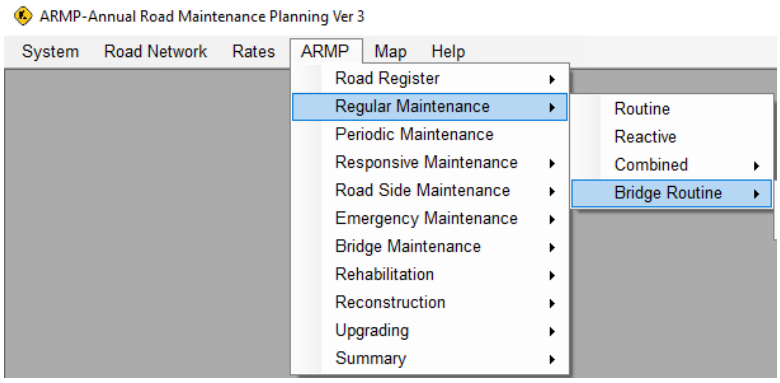
a) Select roads for combined maintenance i.e regular and reactive combined and carried out by the division office'.

b) Provide details for each roads similar to the regular and the reactive maintenance

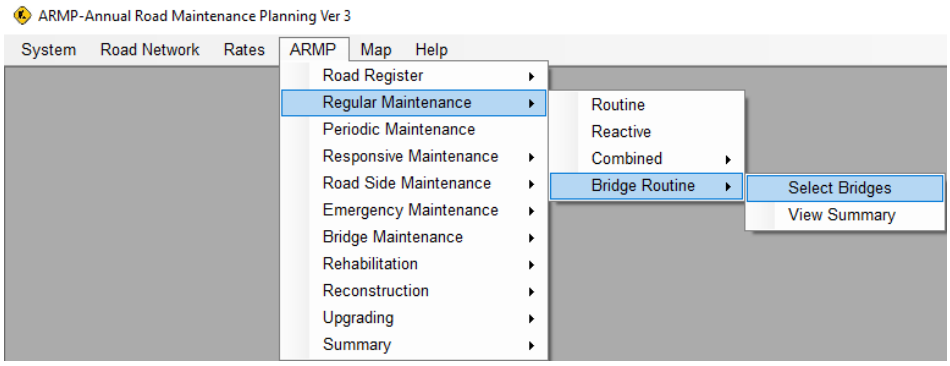
Combined Details



5.2.4 Bridge Routine

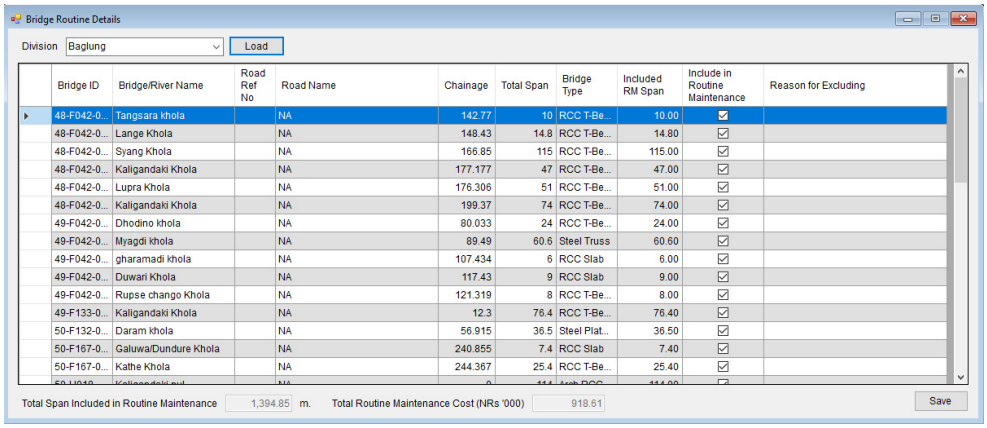


Select Bridge

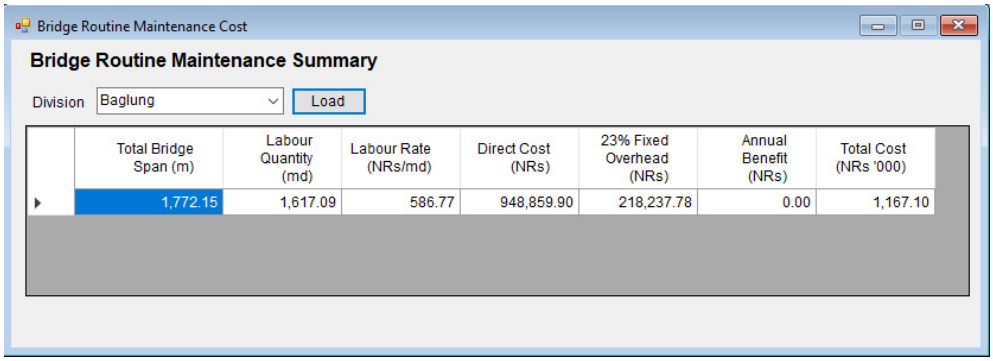


Prepare Bridge Routine Details

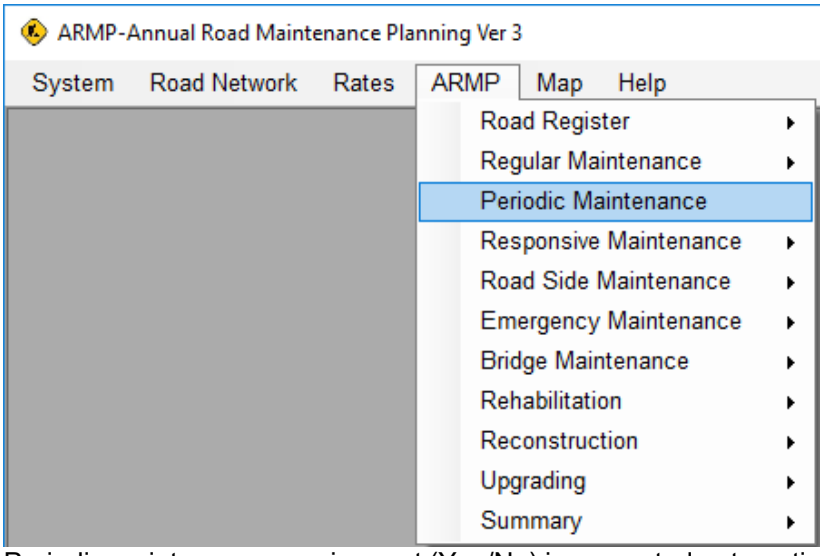
Select the bridge to include in the routine maintenance or not. Reason for exclusion also should be mentioned if the bridge is not included for routine maintenance.



View Routine Summary

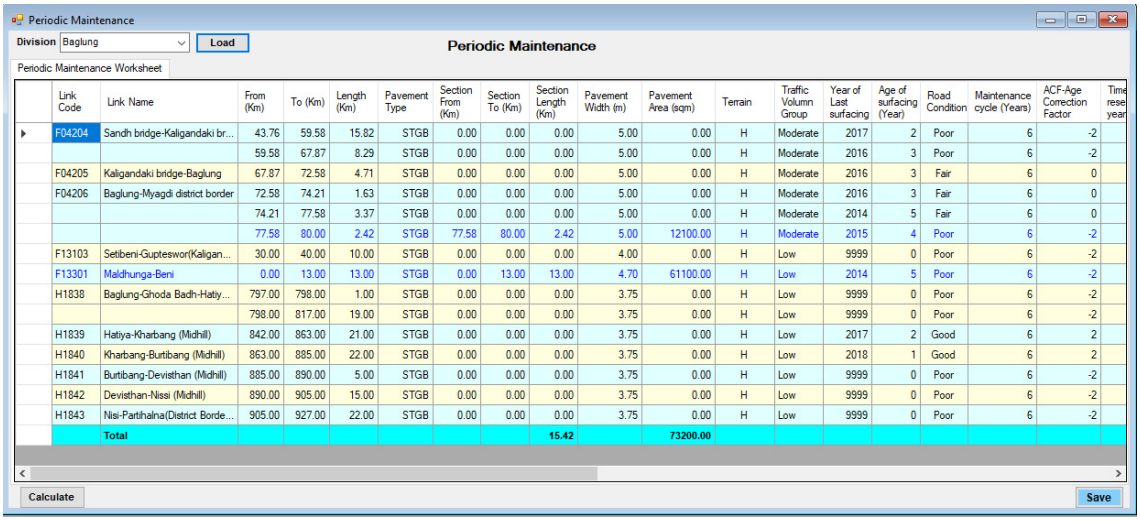


5.3 Periodic Maintenance



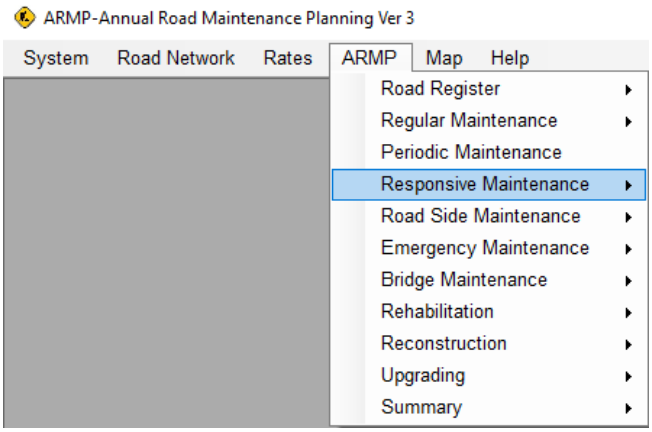
Periodic maintenance requirement (Yes/No) is computed automatically based on the last year of resurface, traffic, SDI values. The current method is the one which is in practice in the DoR. The ARMP is already updated with the recent data on the pavement condition, traffic data and last re-surface year and also updated with the 2018 periodic plan. Decision can be made to include the road under periodic maintenance even the calculation shows "No" based on observation by the division. Right click on the grid to export the data to Excel

Periodic Maintenance Screen

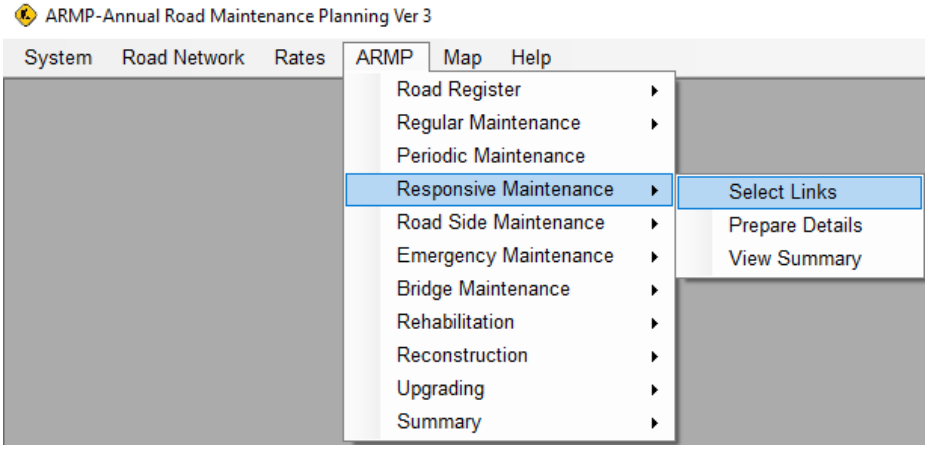


Link Code	Link Name	From (Km)	To (Km)	Length (Km)	Pavement Type	Section From (Km)	Section To (Km)	Section Length (Km)	Pavement Width (m)	Pavement Area (sqm)	Terrain	Traffic Volumn Group	Year of Last surfacing	Age of surfacing (Year)	Road Condition	Maintenance cycle (Years)	ACF-Age Correction Factor	Time rese year
F04204	Sandh bridge-Kaligandaki br...	43.76	59.58	15.82	STGB	0.00	0.00	0.00	5.00	0.00	H	Moderate	2017	2	Poor	6	-2	
		59.58	67.87	8.29	STGB	0.00	0.00	0.00	5.00	0.00	H	Moderate	2016	3	Poor	6	-2	
F04205	Kaligandaki bridge-Baglung	67.87	72.58	4.71	STGB	0.00	0.00	0.00	5.00	0.00	H	Moderate	2016	3	Fair	6	0	
F04206	Baglung-Myagdi district border	72.58	74.21	1.63	STGB	0.00	0.00	0.00	5.00	0.00	H	Moderate	2016	3	Fair	6	0	
		74.21	77.58	3.37	STGB	0.00	0.00	0.00	5.00	0.00	H	Moderate	2014	5	Fair	6	0	
		77.58	80.00	2.42	STGB	77.58	80.00	2.42	5.00	12100.00	H	Moderate	2015	4	Poor	6	-2	
F13103	Setibeni-Gupteswor(Kaligan...	30.00	40.00	10.00	STGB	0.00	0.00	0.00	4.00	0.00	H	Low	9999	0	Poor	6	-2	
F13301	Maldhunga-Beni	0.00	13.00	13.00	STGB	0.00	13.00	13.00	4.70	61100.00	H	Low	2014	5	Poor	6	-2	
H1838	Baglung-Ghoda Badh-Hatiy...	797.00	798.00	1.00	STGB	0.00	0.00	0.00	3.75	0.00	H	Low	9999	0	Poor	6	-2	
		798.00	817.00	19.00	STGB	0.00	0.00	0.00	3.75	0.00	H	Low	9999	0	Poor	6	-2	
H1839	Hatiya-Kharbang (Midhill)	842.00	863.00	21.00	STGB	0.00	0.00	0.00	3.75	0.00	H	Low	2017	2	Good	6	2	
H1840	Kharbang-Burtibang (Midhill)	863.00	885.00	22.00	STGB	0.00	0.00	0.00	3.75	0.00	H	Low	2018	1	Good	6	2	
H1841	Burtibang-Devisthan (Midhill)	885.00	890.00	5.00	STGB	0.00	0.00	0.00	3.75	0.00	H	Low	9999	0	Poor	6	-2	
H1842	Devisthan-Nissi (Midhill)	890.00	905.00	15.00	STGB	0.00	0.00	0.00	3.75	0.00	H	Low	9999	0	Poor	6	-2	
H1843	Nisi-Partihalna(District Borde...	905.00	927.00	22.00	STGB	0.00	0.00	0.00	3.75	0.00	H	Low	9999	0	Poor	6	-2	
	Total							15.42		73200.00								

5.4 Responsive Maintenance

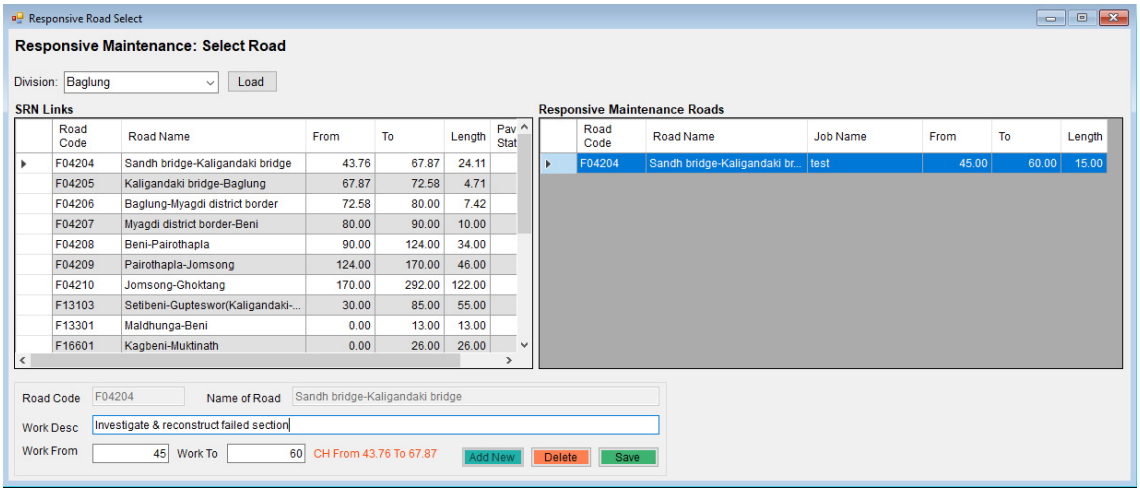


5.4.1 Select Links

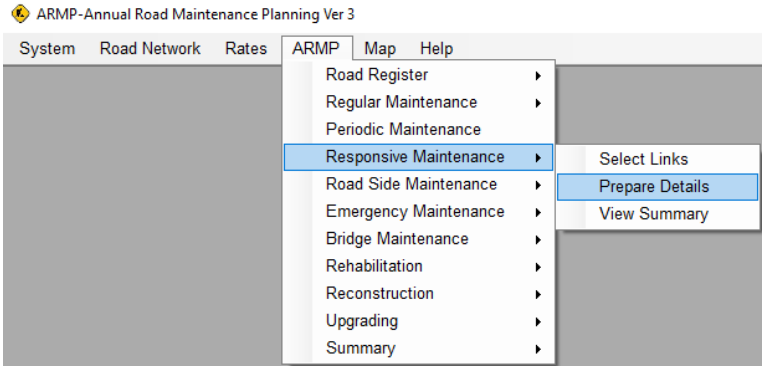


Links requiring responsive maintenance should be selected using this tool. The work description should be provided and should not be repeated for the same link. It is better to mention responsive maintenance e.g. “Investigate & reconstruct failed section" etc. rather than putting generic description. The length of the section should also be provided.

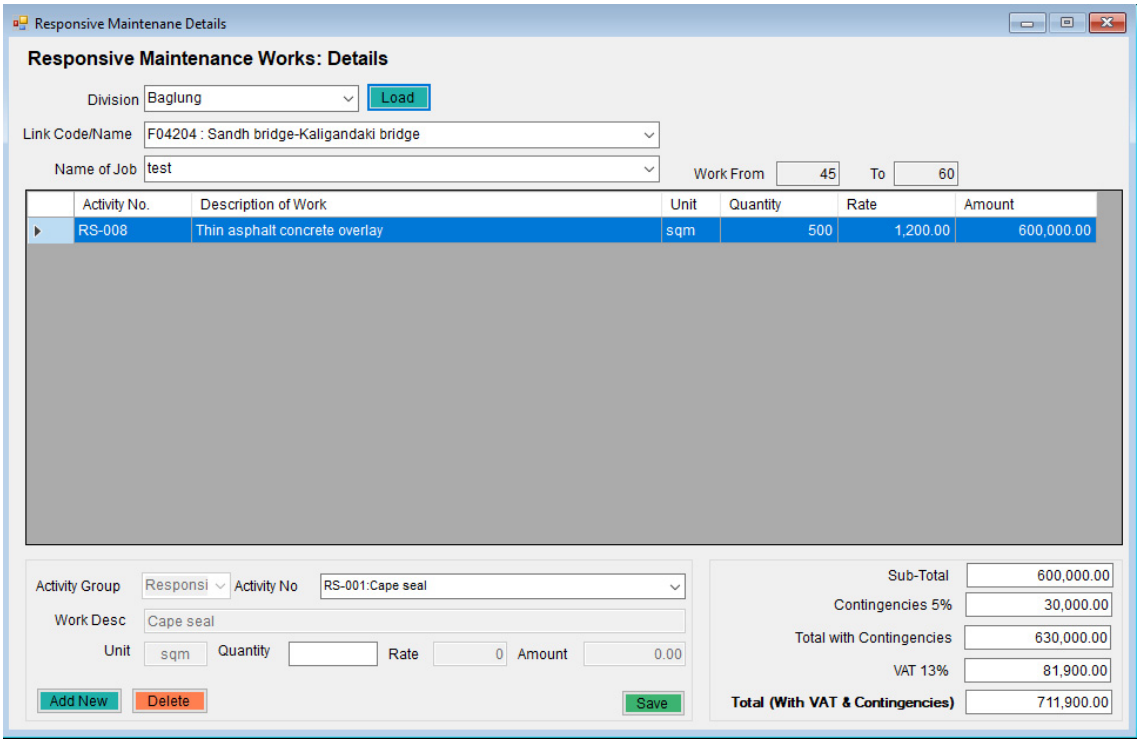
Responsive Road Select Screen



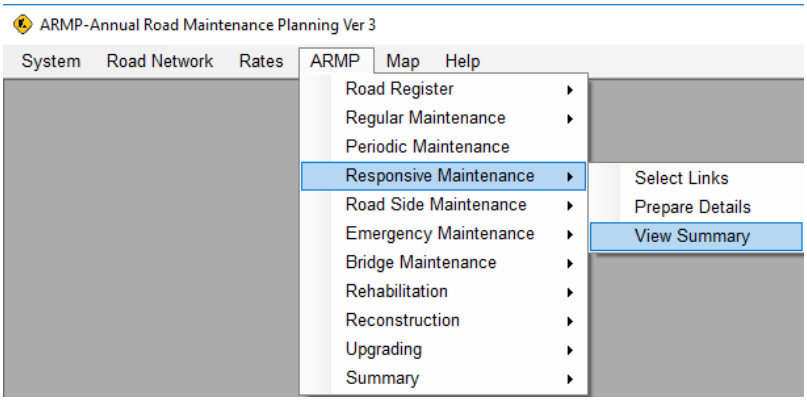
5.4.2 Prepare Details



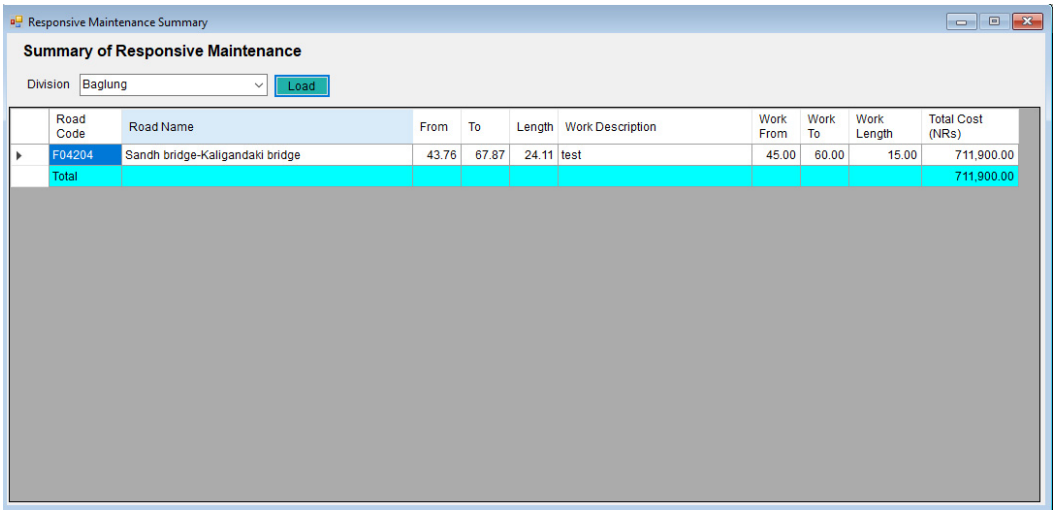
Under each of the selected link and the work description, details should be prepared. Standard items will be available and quantities should be provided. The total cost is automatically computed. Right click on the grid to export entire details data to Excel



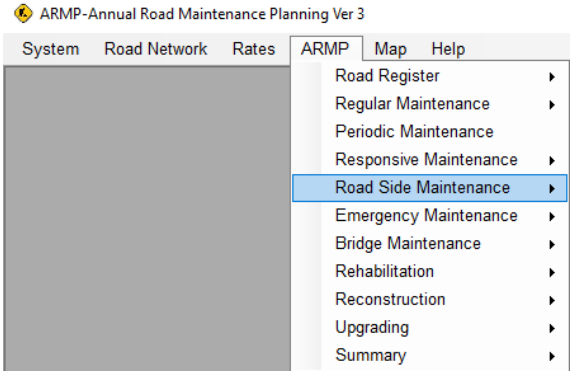
5.4.3 View Summary



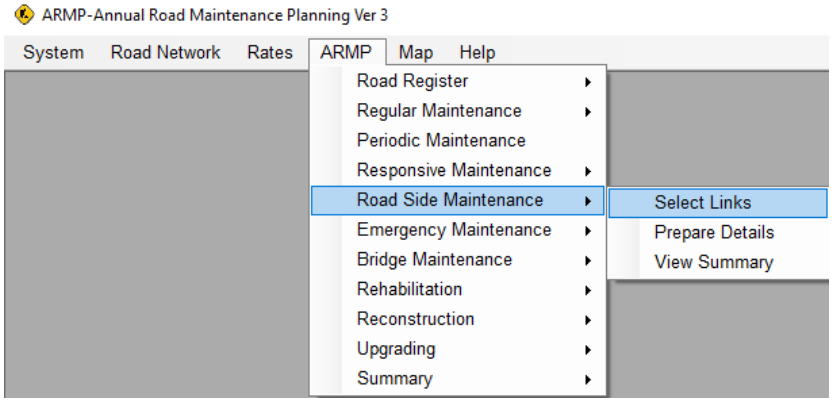
Provides the summary of the responsive maintenance works. Right click on the grid to export the data to Excel.



5.5 Road Side Maintenance

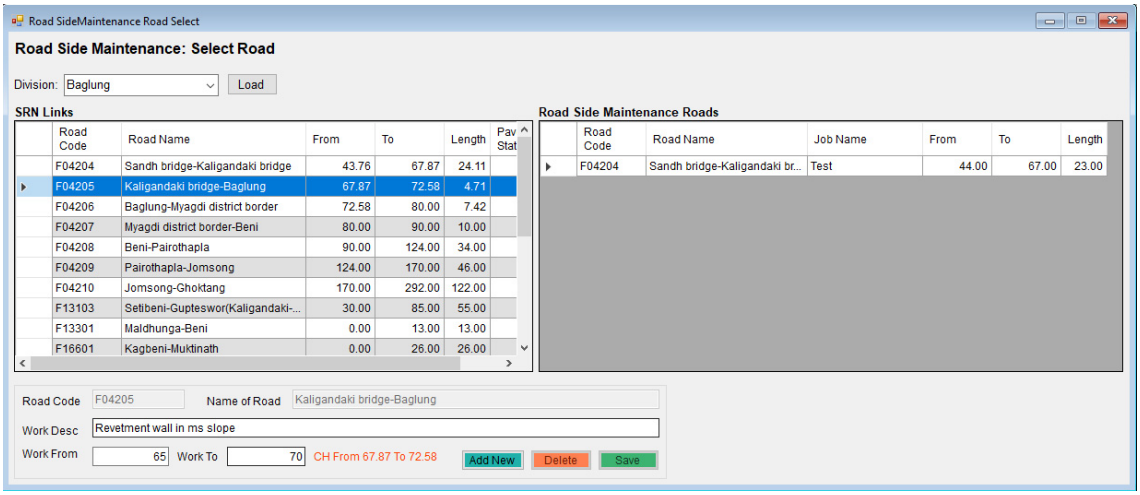


5.5.1 Select Links

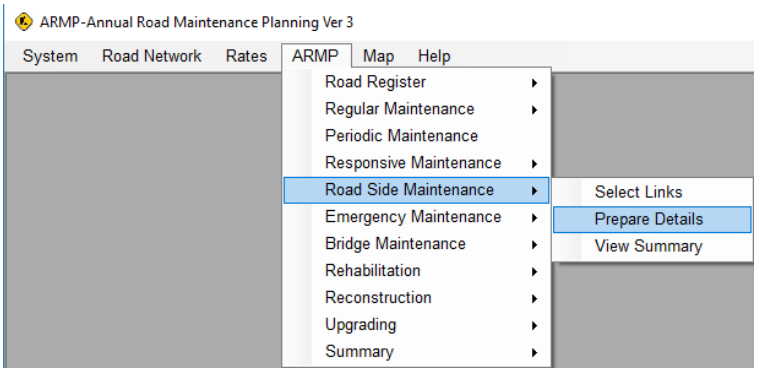


Links requiring road side maintenance should be selected using this tool. The work description should be provided and should not be repeated for the same link. It is better to mention road side maintenance e.g. “Revetment wall in ms slope" etc. rather than putting generic description. The length of the section should also be provided.

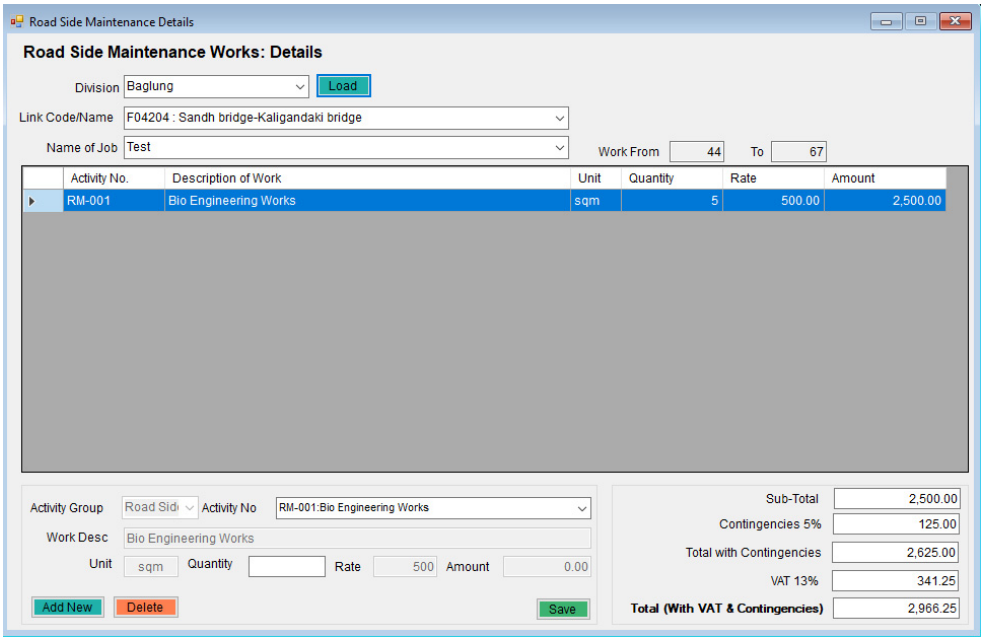
Road Side Maintenance Select Screen



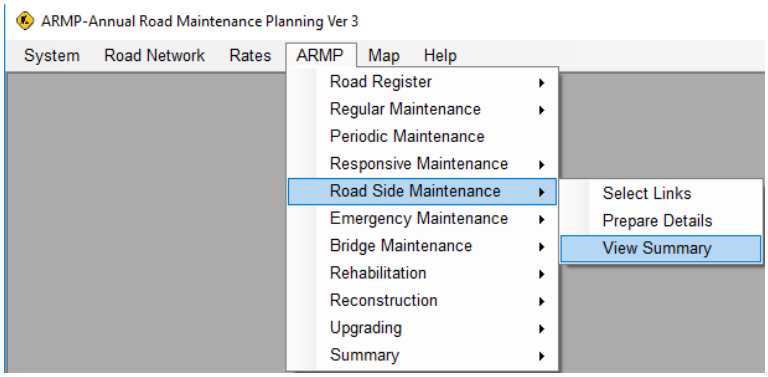
5.5.2 Prepare Details



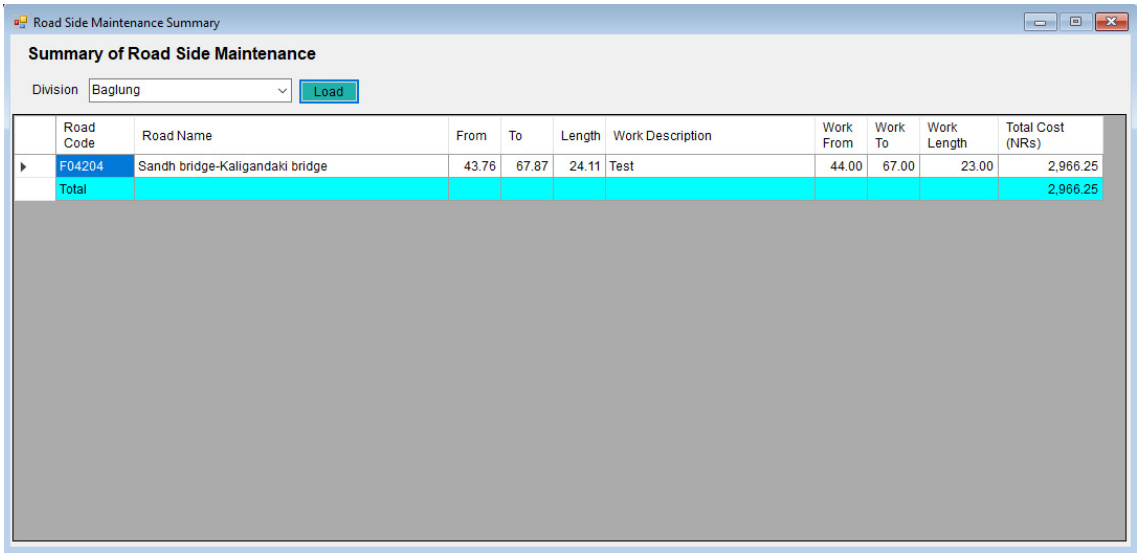
Under each of the selected link and the work description, details should be prepared. Standard items will be available and quantities should be provided. The total cost is automatically computed. Right click on the grid to export entire details data to Excel



5.5.3 View Summary

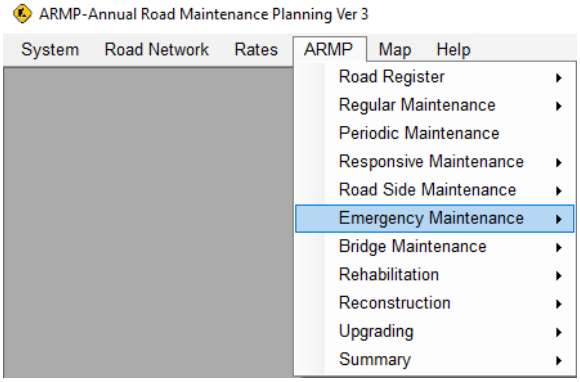


Provides the summary of the road side maintenance works. Right click on the grid to export the data to Excel.

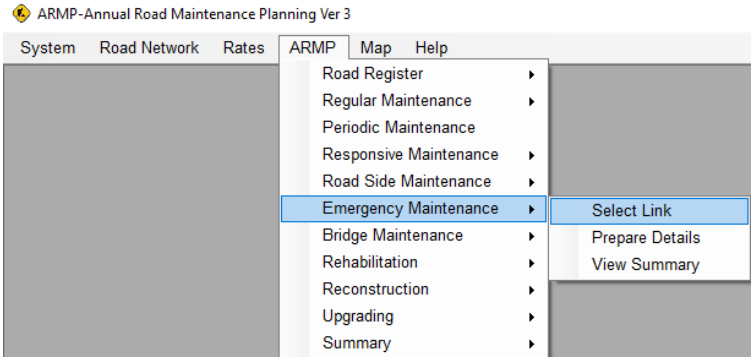


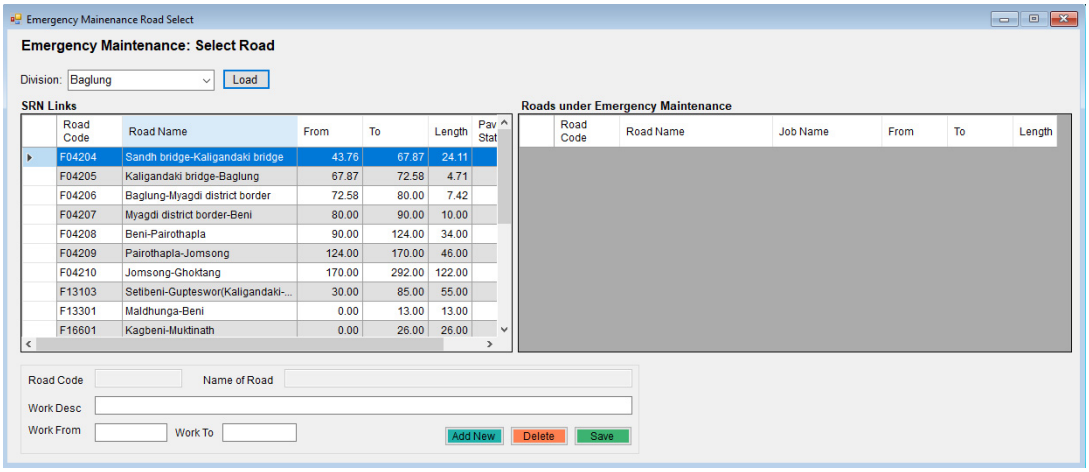
Road Code	Road Name	From	To	Length	Work Description	Work From	Work To	Work Length	Total Cost (NRs)
F04204	Sandh bridge-Kaligandaki bridge	43.76	67.87	24.11	Test	44.00	67.00	23.00	2,966.25
Total									2,966.25

5.6 Emergency Maintenance

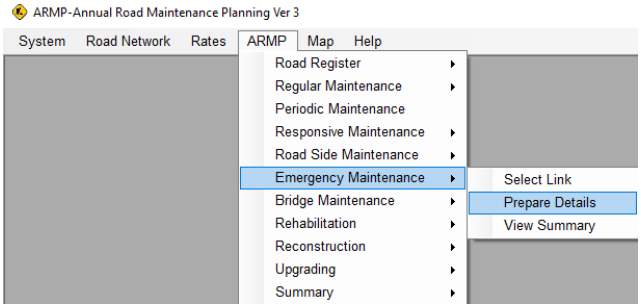


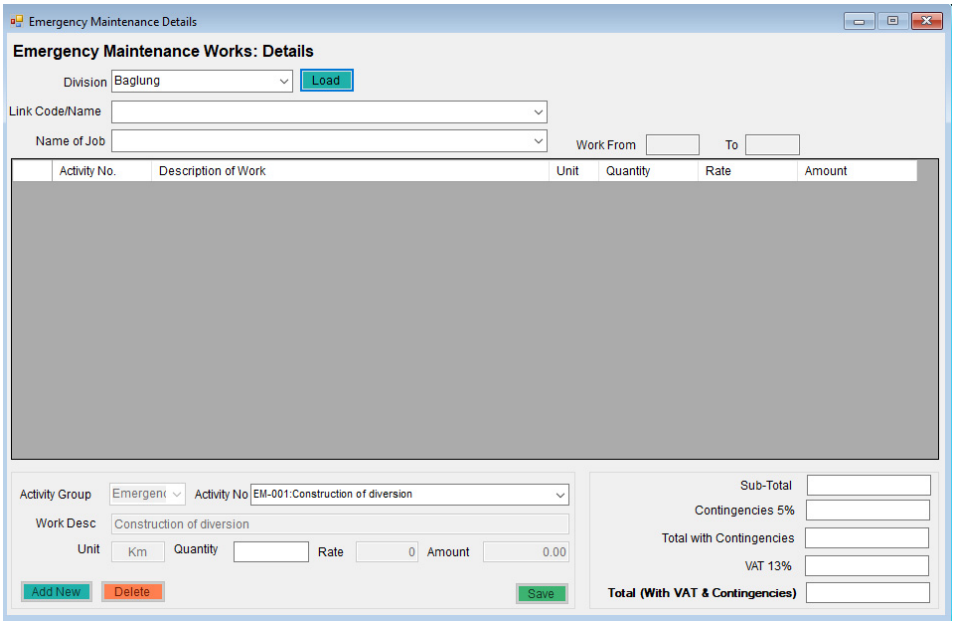
5.6.1 Select Links



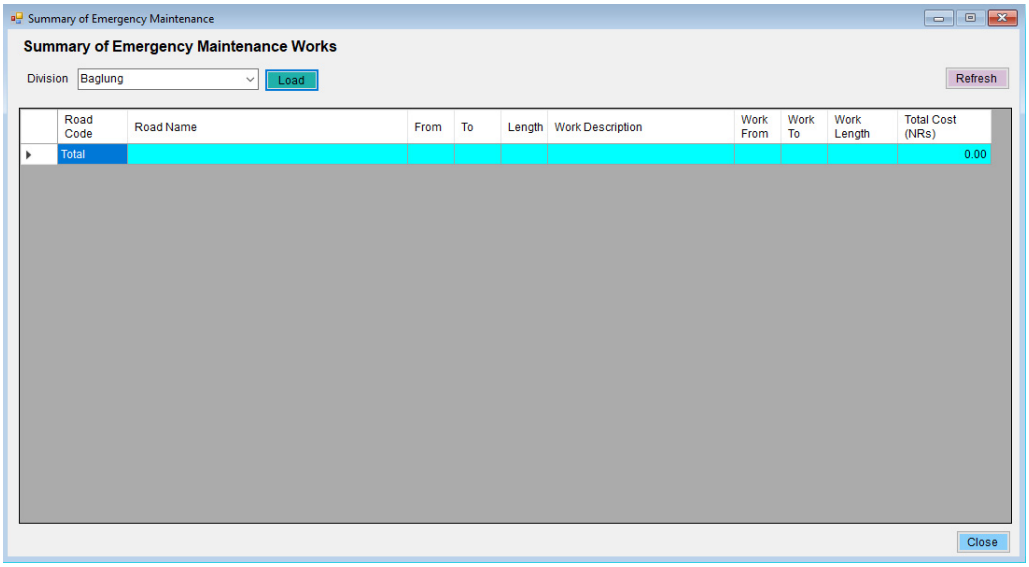


5.6.2 Prepare Details

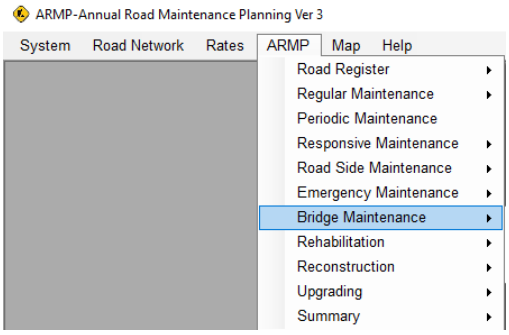




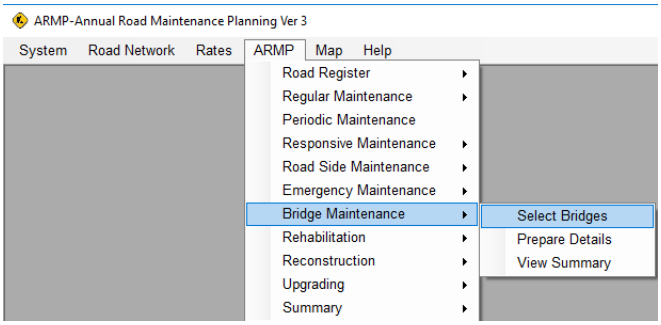
5.6.3 View Summary



5.7 Bridge Maintenance

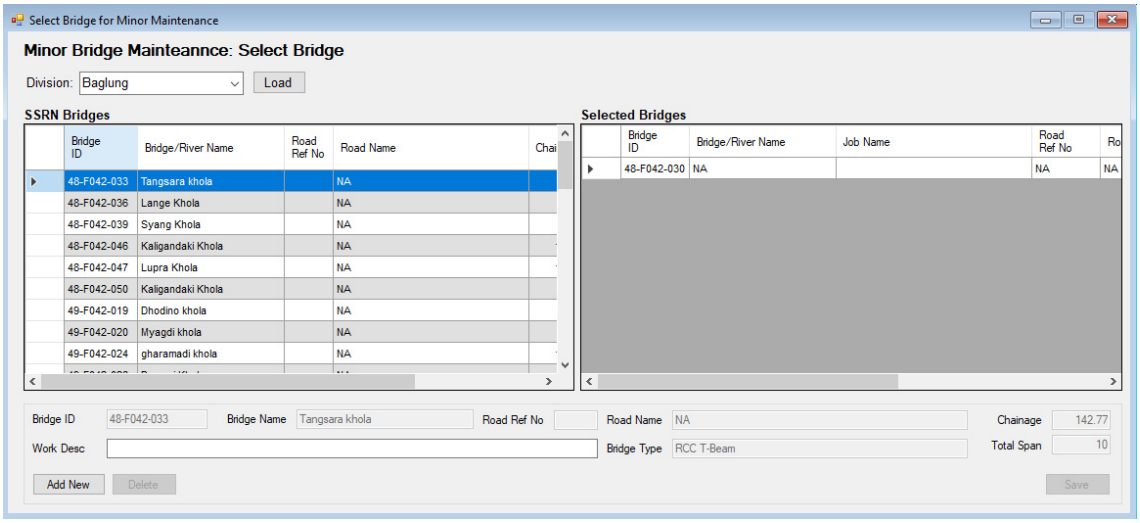


5.7.1 Select Bridge

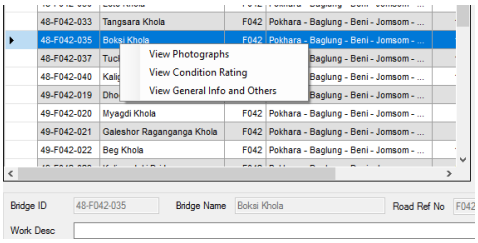


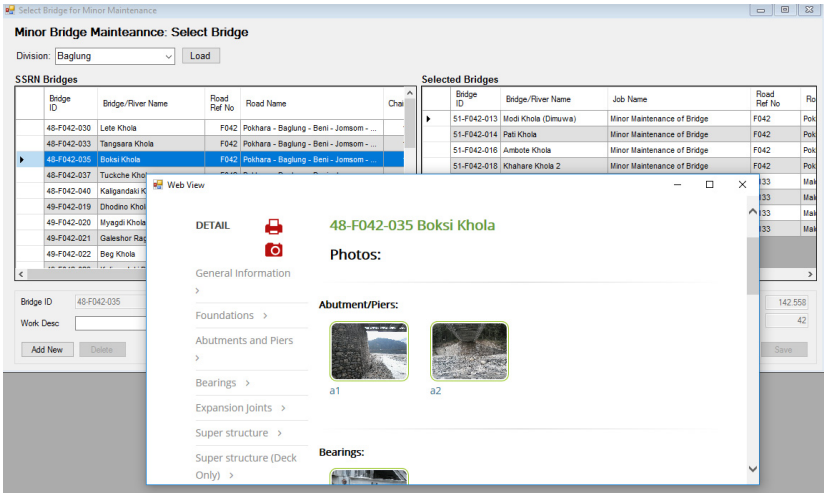
Select Bridge for Minor Maintenance

Select the bridges for minor maintenance and also provide the work descriptions. If same bridge is used for different works, the work description should be different.

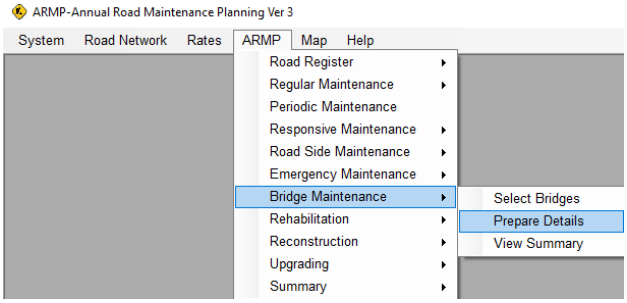


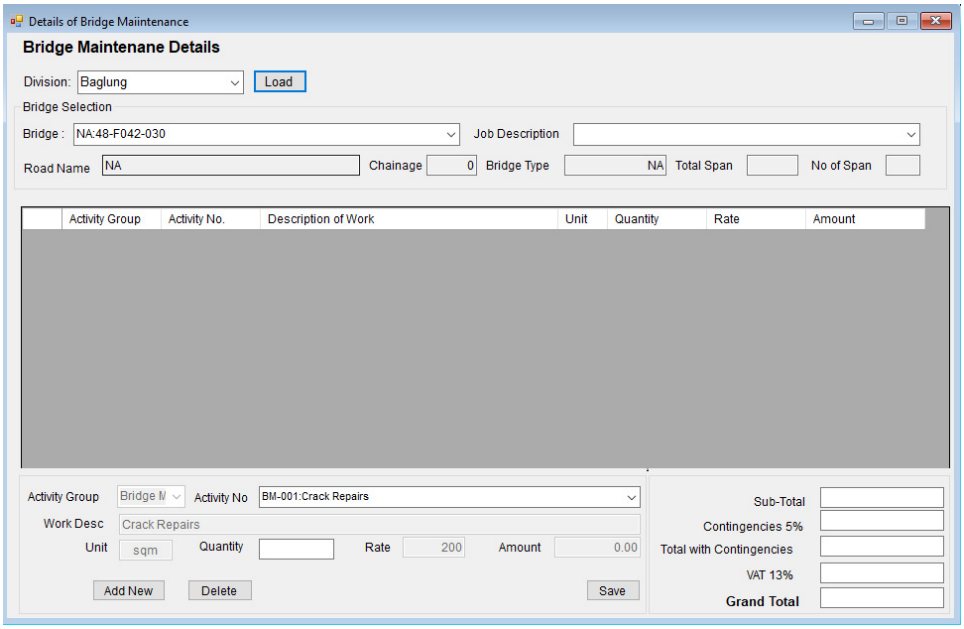
Right click on the bridge can bring bridge details from the condition assessment under the BMS. The view photographs option will take to the detailed photographs available for the bridge and other menus provides access to the bridge condition.



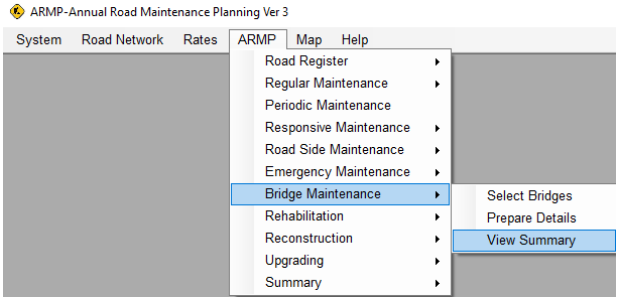


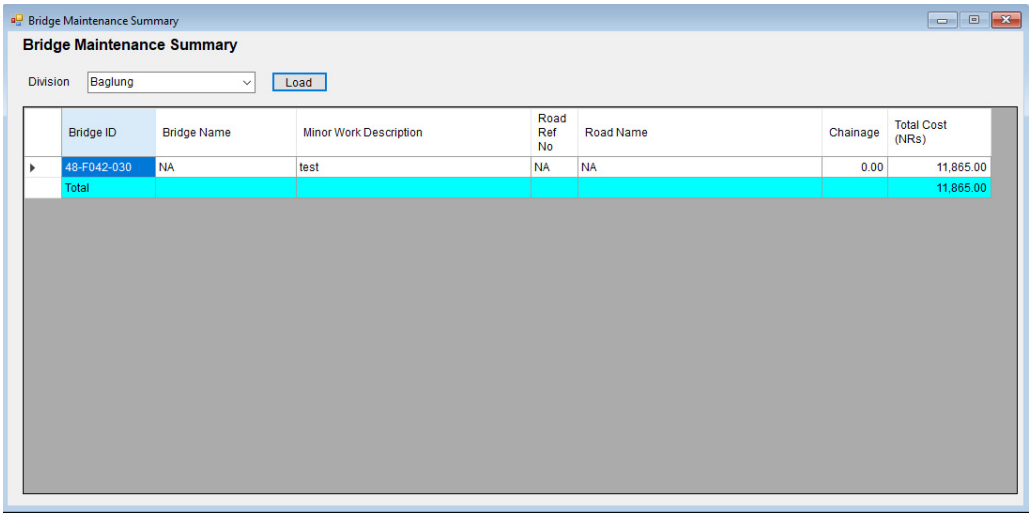
5.7.2 Prepare Detail



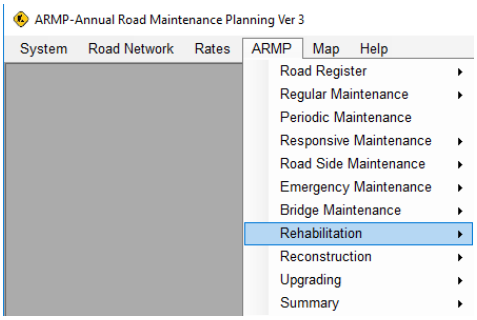


5.7.3 View Summary

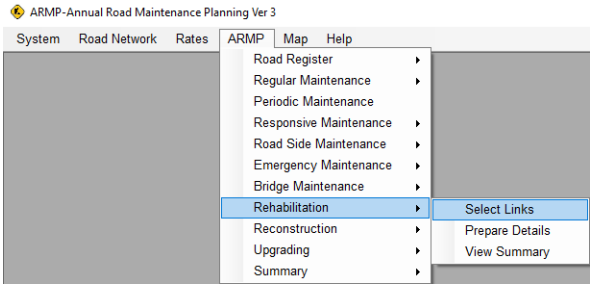




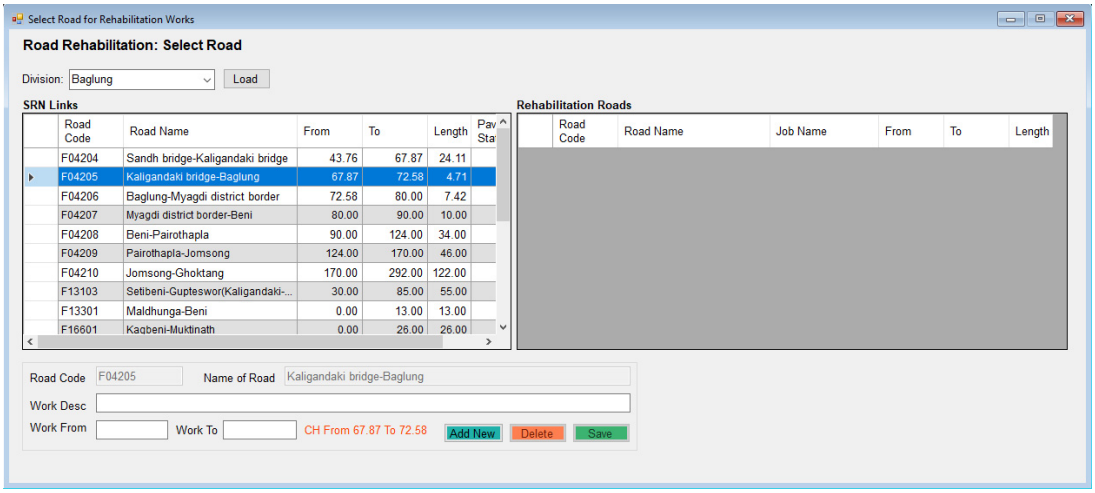
5.8 Rehabilitation



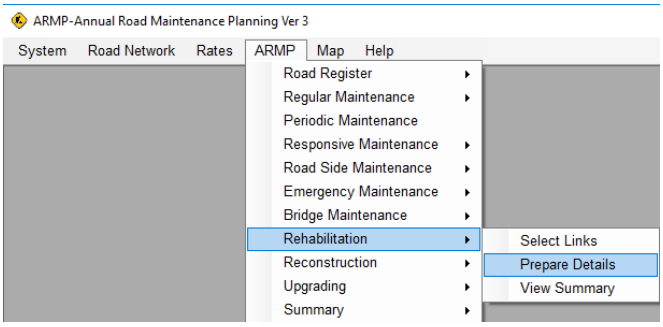
5.8.1 Select Links



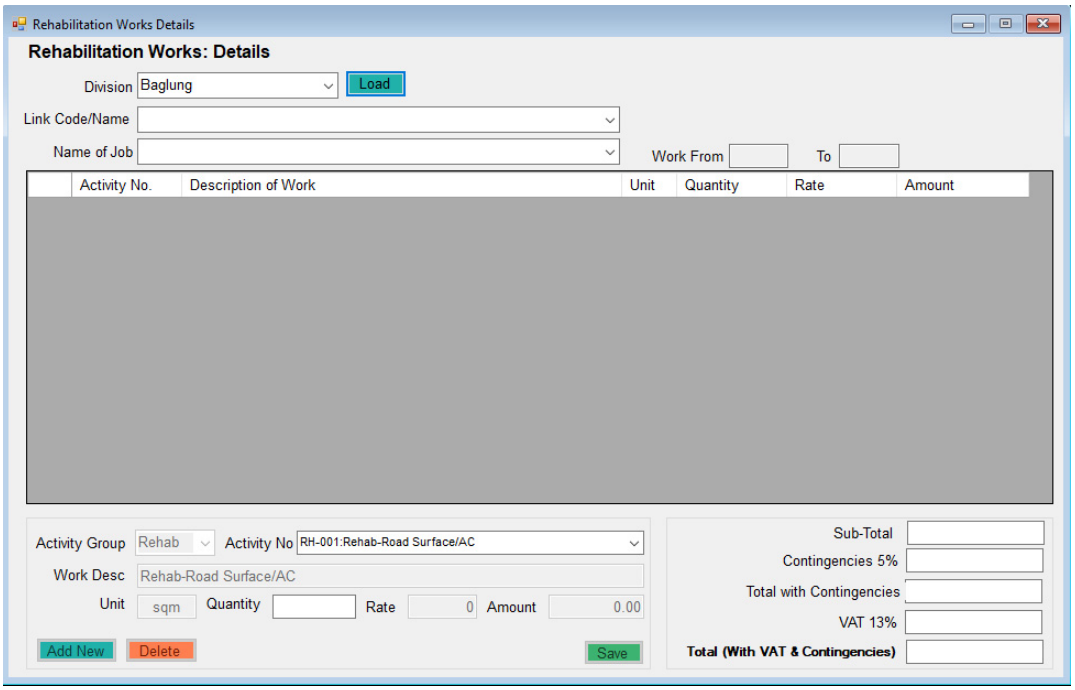
Links requiring rehabilitation should be selected using this tool. The work description should be provided and should not be repeated for the same link. The length of the section should also be provided.



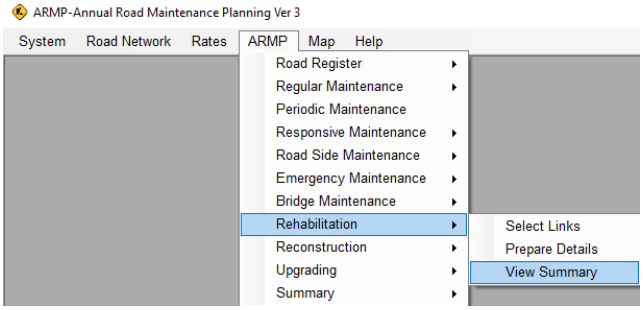
5.8.2 Prepare Details



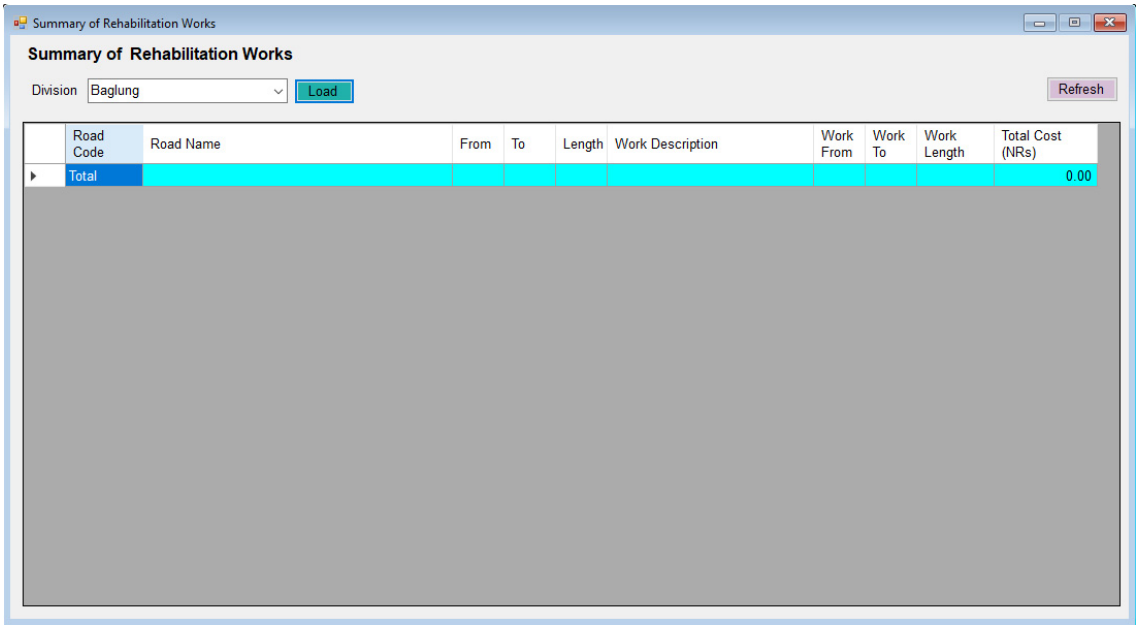
Under each of the selected link and the work description, details should be prepared. Standard items will be available and quantities should be provided. The total cost is automatically computed. Right click on the grid to export entire details data to Excel



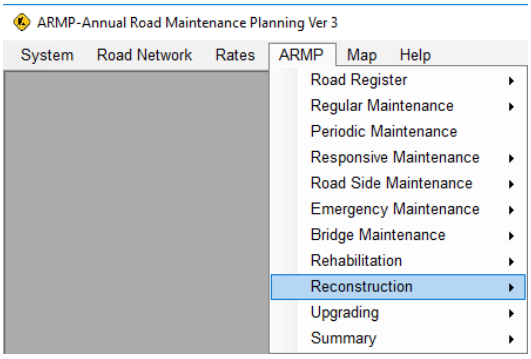
5.8.3 View Summary



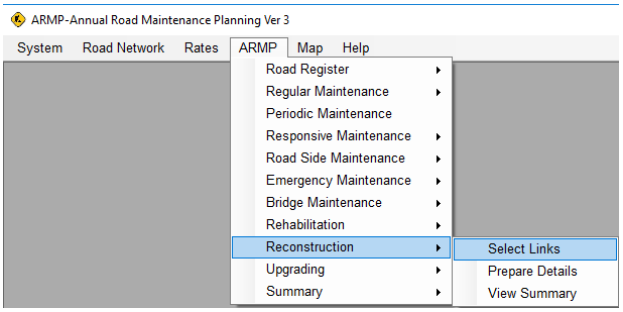
Provides the summary of the rehabilitation works. Right click on the grid to export the data to Excel


Summary of Rehabilitation Works
Summary of Rehabilitation Works
Division
Baglung
Load
Refresh
Road Code
Road Name
From
To
Length
Work Description
Work From
Work To
Work Length
Total Cost (NRs)
Total
0.00

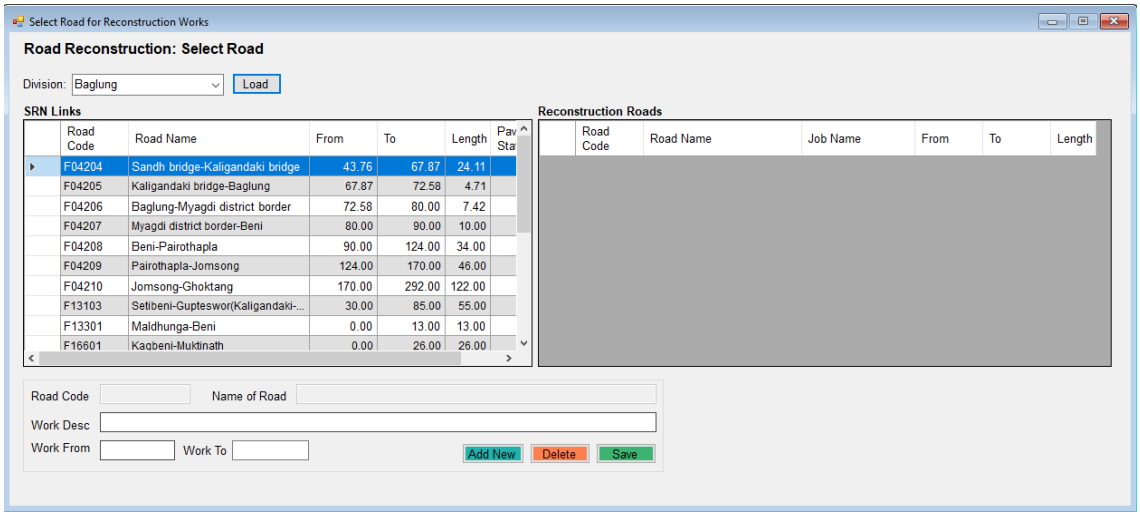
5.9 Reconstruction



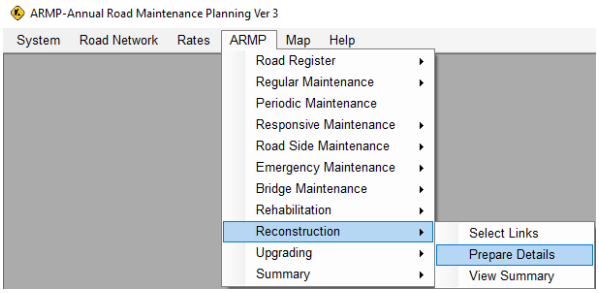
5.9.1 Select Links



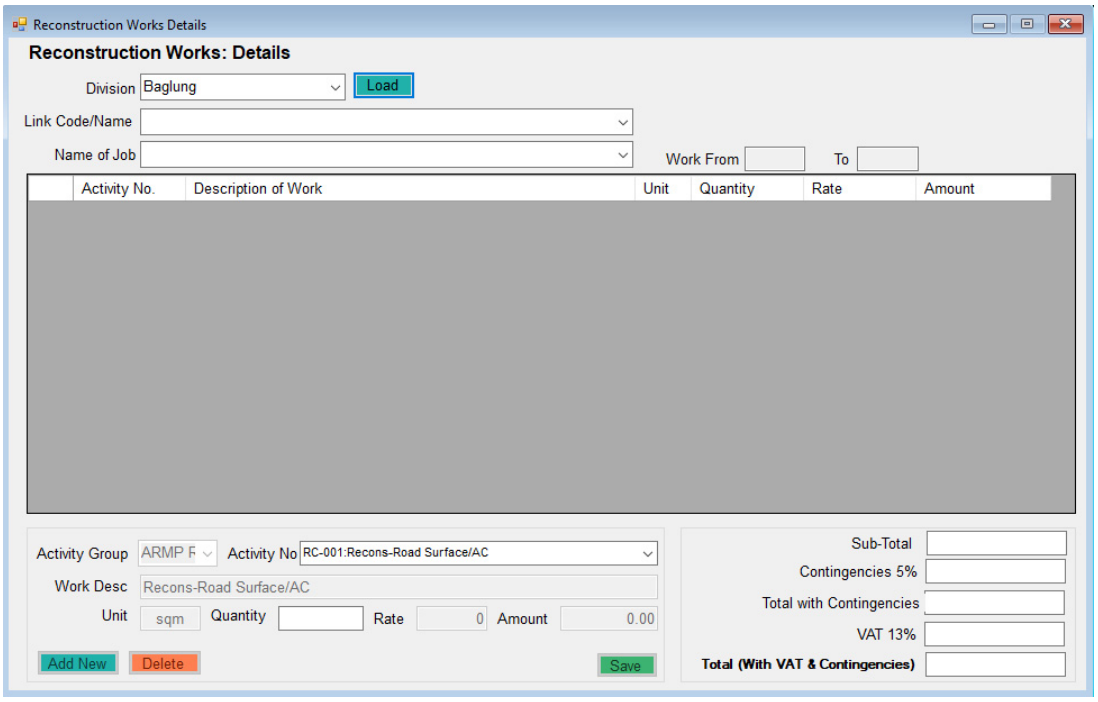
Links requiring reconstruction should be selected using this tool. The work description should be provided and should not be repeated for the same link. The length of the section should also be provided.



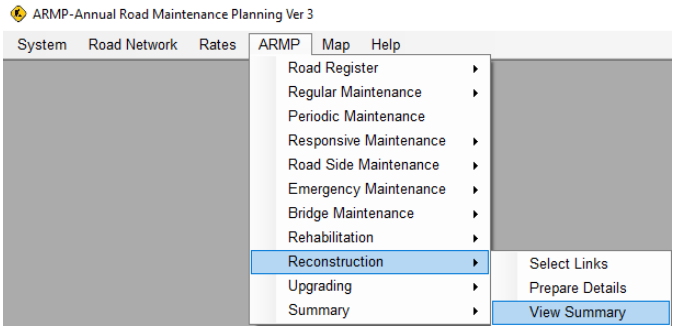
5.9.2 Prepare Details



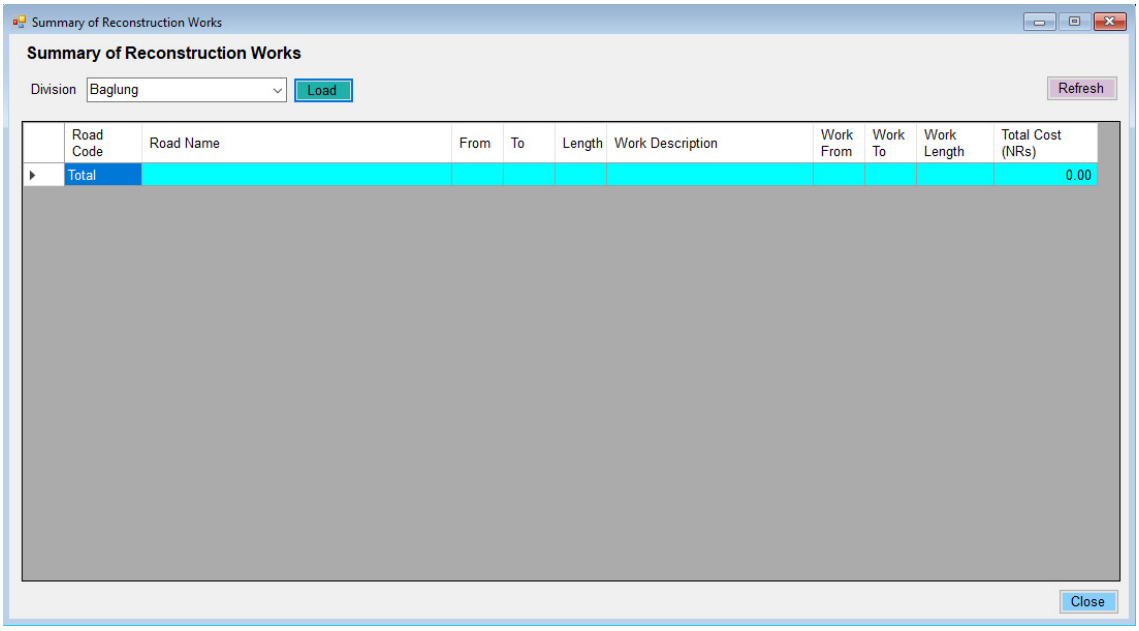
Under each of the selected link and the work description, details should be prepared. Standard items will be available and quantities should be provided. The total cost is automatically computed. Right click on the grid to export entire details data to Excel



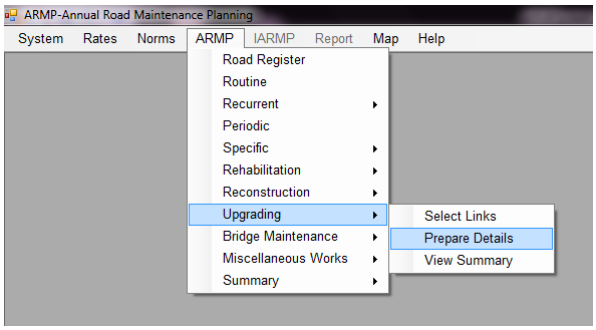
5.9.3 View Summary



Provides the summary of the reconstruction works. Right click on the grid to export the data to Excel

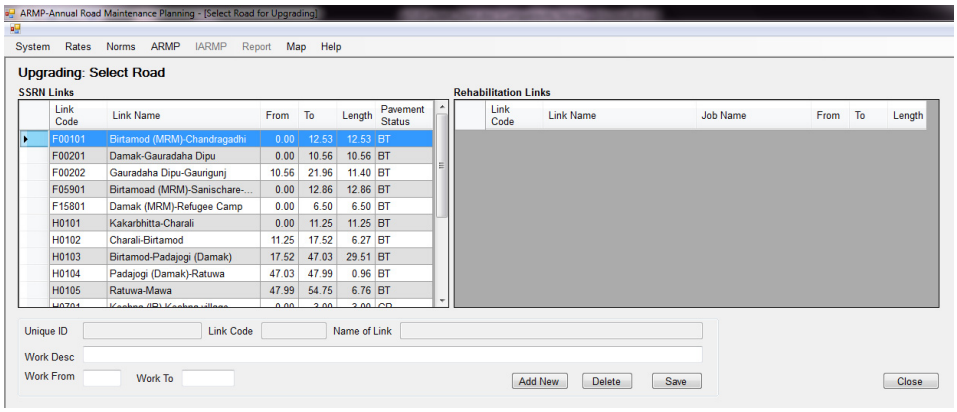

Summary of Reconstruction Works
Summary of Reconstruction Works
Division
Baglung
Load
Refresh
Road Code
Road Name
From
To
Length
Work Description
Work From
Work To
Work Length
Total Cost (NRs)
Total
0.00
Close

5.10 Upgrading



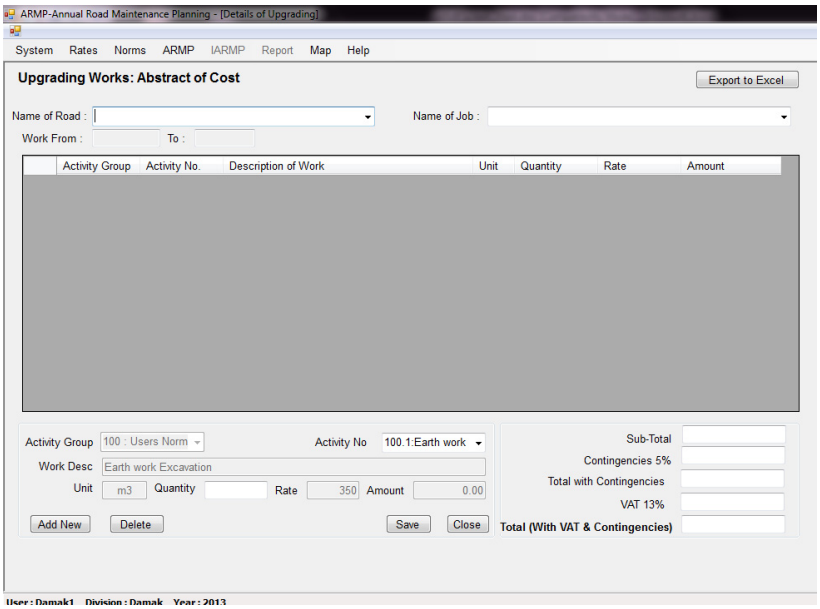
5.10.1 Select Links

Links requiring upgrading should be selected using this tool. The work description should be provided and should not be repeated for the same link. The length of the section should also be provided.



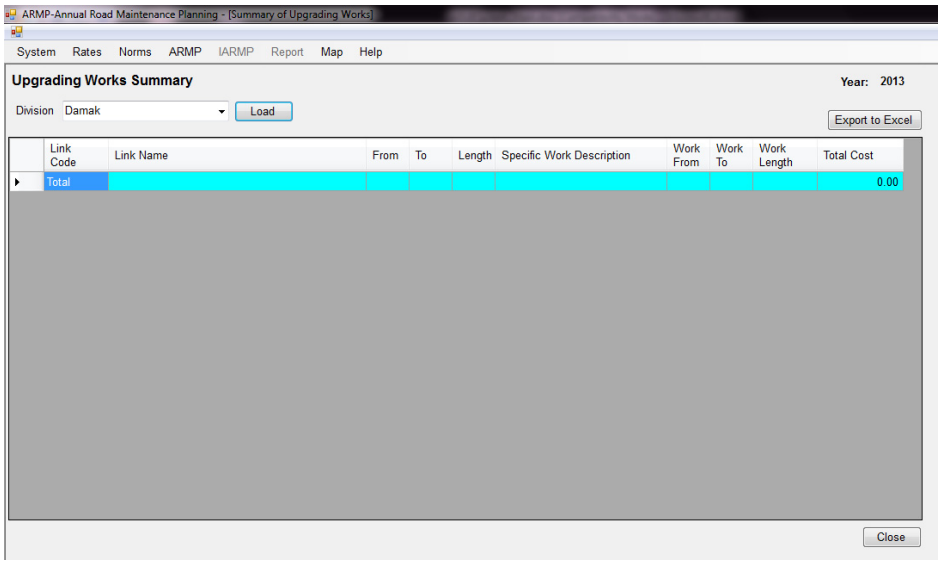
5.10.2 Prepare Details

Under each of the selected link and the work description, details should be prepared. Standard items will be available and quantities should be provided. The total cost is automatically computed. Right click on the grid to export entire details data to Excel

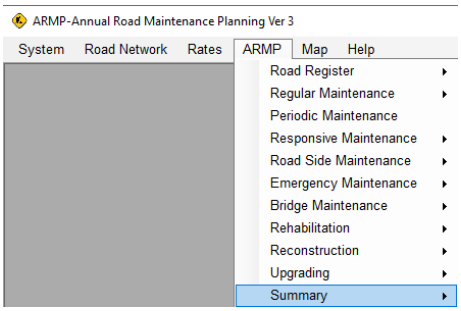


5.10.3 View Summary

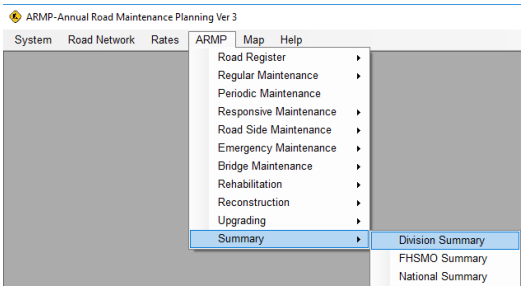
Provides the summary of the reconstruction works. Right click on the grid to export the data to Excel

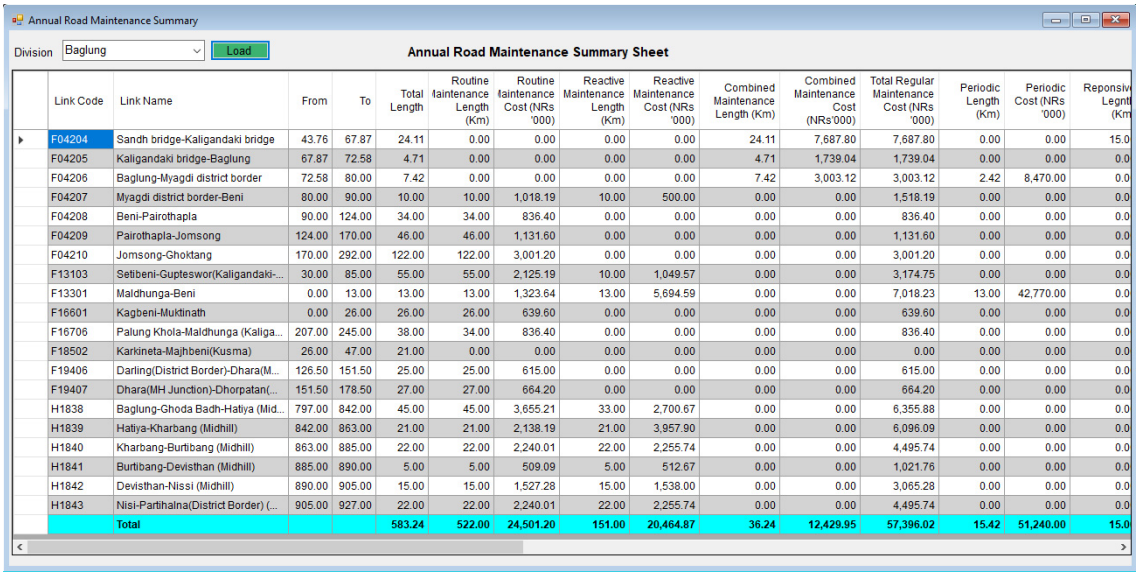


5.11 Summary Sub Menu



5.11.1 Division Summary





Annual Road Maintenance Summary

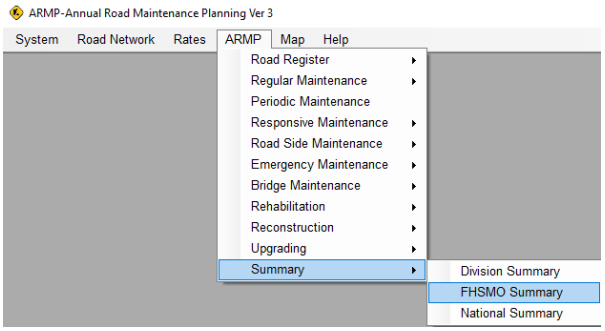
Division: Baglung — Load

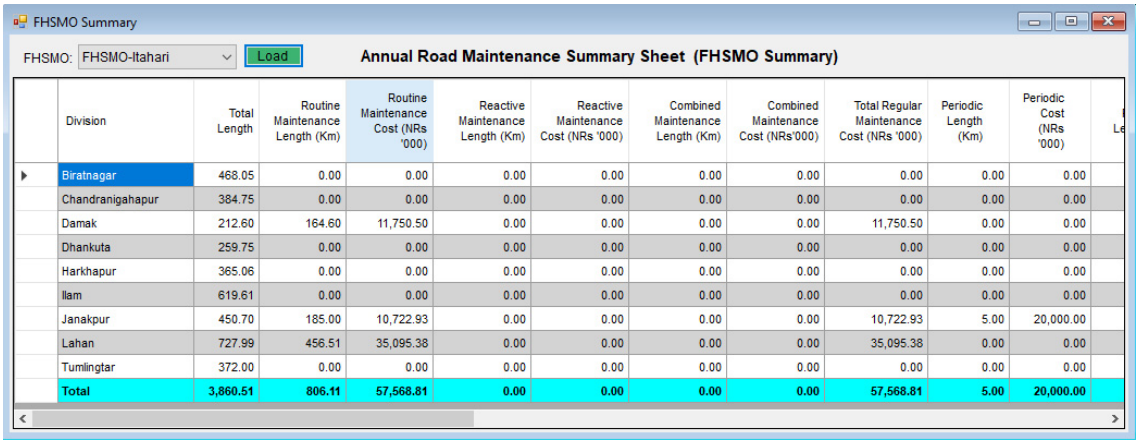
Annual Road Maintenance Summary Sheet

Link Code	Link Name	From	To	Total Length	Routine Maintenance Length (Km)	Routine Maintenance Cost (NRs '000)	Reactive Maintenance Length (Km)	Reactive Maintenance Cost (NRs '000)	Combined Maintenance Length (Km)	Combined Maintenance Cost (NRs'000)	Total Regular Maintenance Cost (NRs '000)	Periodic Length (Km)	Periodic Cost (NRs '000)	Reponsiv Legnt (Km
F04204	Sandh bridge-Kaligandaki bridge	43.76	67.87	24.11	0.00	0.00	0.00	0.00	24.11	7,687.80	7,687.80	0.00	0.00	15.0
F04205	Kaligandaki bridge-Baglung	67.87	72.58	4.71	0.00	0.00	0.00	0.00	4.71	1,739.04	1,739.04	0.00	0.00	0.0
F04206	Baglung-Myagdi district border	72.58	80.00	7.42	0.00	0.00	0.00	0.00	7.42	3,003.12	3,003.12	2.42	8,470.00	0.0
F04207	Myagdi district border-Beni	80.00	90.00	10.00	10.00	1,018.19	10.00	500.00	0.00	0.00	1,518.19	0.00	0.00	0.0
F04208	Beni-Pairothapla	90.00	124.00	34.00	34.00	836.40	0.00	0.00	0.00	0.00	836.40	0.00	0.00	0.0
F04209	Pairothapla-Jomsong	124.00	170.00	46.00	46.00	1,131.60	0.00	0.00	0.00	0.00	1,131.60	0.00	0.00	0.0
F04210	Jomsong-Ghoktang	170.00	292.00	122.00	122.00	3,001.20	0.00	0.00	0.00	0.00	3,001.20	0.00	0.00	0.0
F13103	Setibeni-Gupteswor(Kaligandaki-...	30.00	85.00	55.00	55.00	2,125.19	10.00	1,049.57	0.00	0.00	3,174.75	0.00	0.00	0.0
F13301	Maldhunga-Beni	0.00	13.00	13.00	13.00	1,323.64	13.00	5,694.59	0.00	0.00	7,018.23	13.00	42,770.00	0.0
F16601	Kagbeni-Muktinath	0.00	26.00	26.00	26.00	639.60	0.00	0.00	0.00	0.00	639.60	0.00	0.00	0.0
F16706	Palung Khola-Maldhunga (Kaliga...	207.00	245.00	38.00	34.00	836.40	0.00	0.00	0.00	0.00	836.40	0.00	0.00	0.0
F18502	Karkineta-Majhbeni(Kusma)	26.00	47.00	21.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
F19406	Darling(District Border)-Dhara(M...	126.50	151.50	25.00	25.00	615.00	0.00	0.00	0.00	0.00	615.00	0.00	0.00	0.0
F19407	Dhara(MH Junction)-Dhorpatan(...	151.50	178.50	27.00	27.00	664.20	0.00	0.00	0.00	0.00	664.20	0.00	0.00	0.0
H1838	Baglung-Ghoda Badh-Hatiya (Mid...	797.00	842.00	45.00	45.00	3,655.21	33.00	2,700.67	0.00	0.00	6,355.88	0.00	0.00	0.0
H1839	Hatiya-Kharbang (Midhill)	842.00	863.00	21.00	21.00	2,138.19	21.00	3,957.90	0.00	0.00	6,096.09	0.00	0.00	0.0
H1840	Kharbang-Burtibang (Midhill)	863.00	885.00	22.00	22.00	2,240.01	22.00	2,255.74	0.00	0.00	4,495.74	0.00	0.00	0.0
H1841	Burtibang-Devisthan (Midhill)	885.00	890.00	5.00	5.00	509.09	5.00	512.67	0.00	0.00	1,021.76	0.00	0.00	0.0
H1842	Devisthan-Nissi (Midhill)	890.00	905.00	15.00	15.00	1,527.28	15.00	1,538.00	0.00	0.00	3,065.28	0.00	0.00	0.0
H1843	Nisi-Partihalna(District Border) (...	905.00	927.00	22.00	22.00	2,240.01	22.00	2,255.74	0.00	0.00	4,495.74	0.00	0.00	0.0
	Total			**583.24**	**522.00**	**24,501.20**	**151.00**	**20,464.87**	**36.24**	**12,429.95**	**57,396.02**	**15.42**	**51,240.00**	**15.0**

Right click on the grid to export the data to Excel

5.11.2 FHSMO Summary

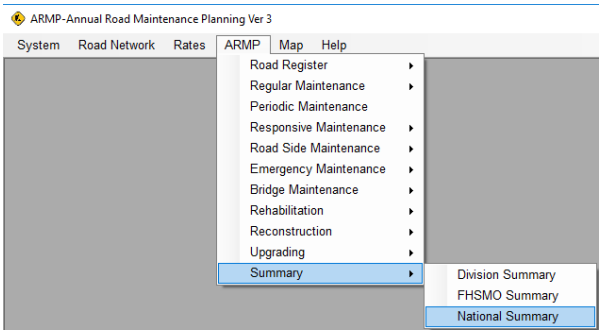


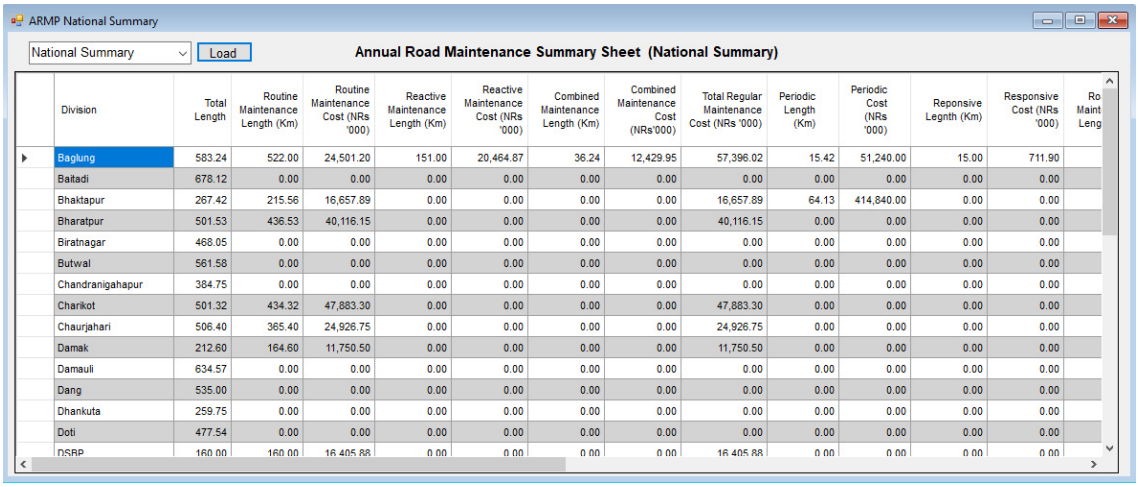


Division	Total Length	Routine Maintenance Length (Km)	Routine Maintenance Cost (NRs '000)	Reactive Maintenance Length (Km)	Reactive Maintenance Cost (NRs '000)	Combined Maintenance Length (Km)	Combined Maintenance Cost (NRs'000)	Total Regular Maintenance Cost (NRs '000)	Periodic Length (Km)	Periodic Cost (NRs '000)
Biratnagar	468.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chandranigahapur	384.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Damak	212.60	164.60	11,750.50	0.00	0.00	0.00	0.00	11,750.50	0.00	0.00
Dhankuta	259.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Harkhapur	365.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ilam	619.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Janakpur	450.70	185.00	10,722.93	0.00	0.00	0.00	0.00	10,722.93	5.00	20,000.00
Lahan	727.99	456.51	35,095.38	0.00	0.00	0.00	0.00	35,095.38	0.00	0.00
Tumlingtar	372.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**3,860.51**	**806.11**	**57,568.81**	**0.00**	**0.00**	**0.00**	**0.00**	**57,568.81**	**5.00**	**20,000.00**

Right click on the grid to export the data to Excel

5.11.3 National Summary



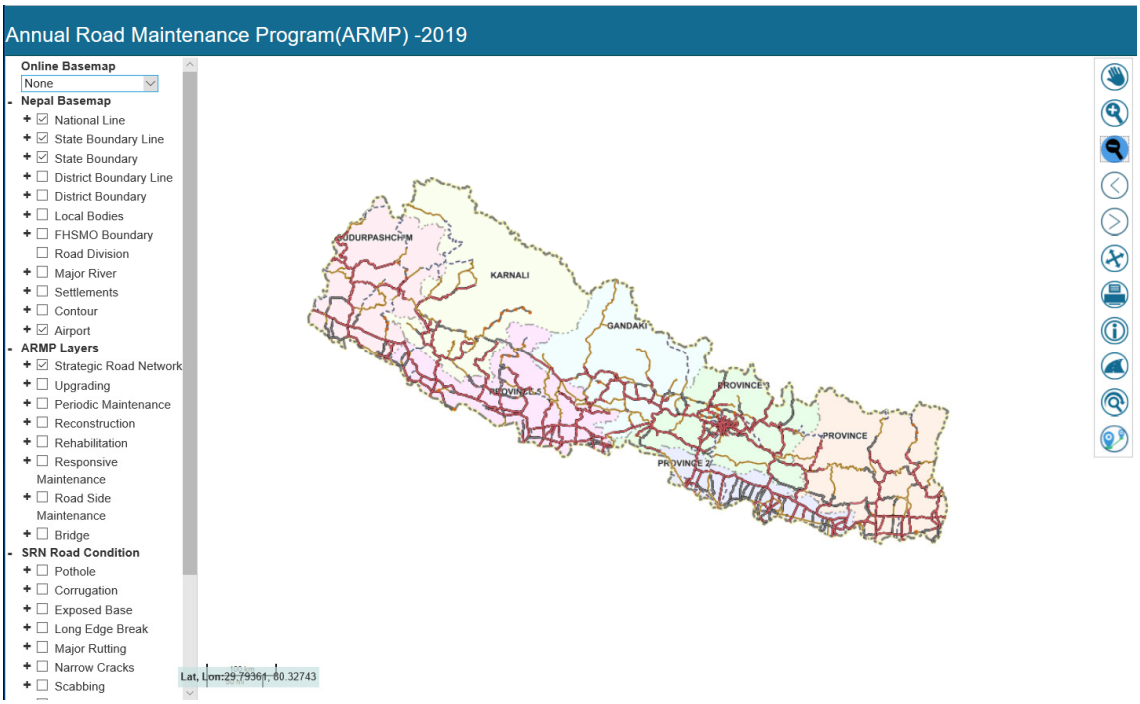


Division	Total Length	Routine Maintenance Length (Km)	Routine Maintenance Cost (NRs '000)	Reactive Maintenance Length (Km)	Reactive Maintenance Cost (NRs '000)	Combined Maintenance Length (Km)	Combined Maintenance Cost (NRs'000)	Total Regular Maintenance Cost (NRs '000)	Periodic Length (Km)	Periodic Cost (NRs '000)	Reponsive Legnth (Km)	Responsive Cost (NRs '000)	Ro Maint Leng
Baglung	583.24	522.00	24,501.20	151.00	20,464.87	36.24	12,429.95	57,396.02	15.42	51,240.00	15.00	711.90	
Baitadi	678.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Bhaktapur	267.42	215.56	16,657.89	0.00	0.00	0.00	0.00	16,657.89	64.13	414,840.00	0.00	0.00	
Bharatpur	501.53	436.53	40,116.15	0.00	0.00	0.00	0.00	40,116.15	0.00	0.00	0.00	0.00	
Biratnagar	468.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Butwal	561.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Chandranigahapur	384.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Charikot	501.32	434.32	47,883.30	0.00	0.00	0.00	0.00	47,883.30	0.00	0.00	0.00	0.00	
Chaurjahari	506.40	365.40	24,926.75	0.00	0.00	0.00	0.00	24,926.75	0.00	0.00	0.00	0.00	
Damak	212.60	164.60	11,750.50	0.00	0.00	0.00	0.00	11,750.50	0.00	0.00	0.00	0.00	
Damauli	634.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Dang	535.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Dhankuta	259.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Doti	477.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
DSRP	160.00	160.00	16,405.88	0.00	0.00	0.00	0.00	16,405.88	0.00	0.00	0.00	0.00	

Right click on the grid to export the data to Excel

5.12 Map

A basic map interface is provided using web based mapping.



The map interface provides following facilities.

a) View the SRN network

b) Zoom to Divisions and highlight/Mask

c) Export to PDF with various scales and paper size of A4/A3 in Portrait/Landscape orientation.

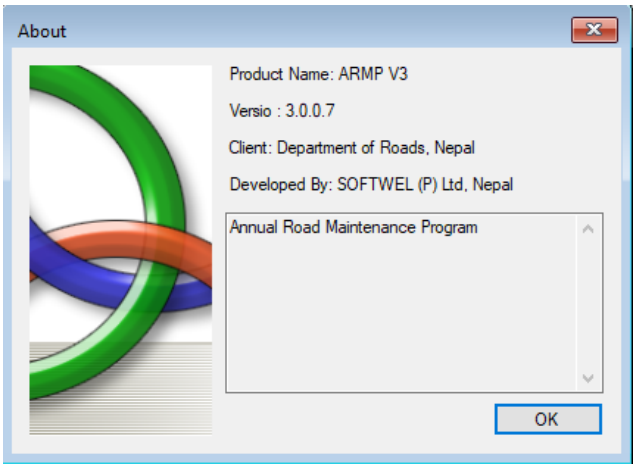
d) Overlay Google maps (Satellite, Hybrid, street, Terrain etc)

e) Search Roads using road code/link code

f) Turn On/Off various layers (Base Map and ARMP layers)

g) On screen Identification of various elements of the map.

h) Clipping of the road division boundary.

The map loading may vary with the internet speed.

5.13 Help Sub Menu (About)