1- Overview of the land transportation sector
In the aftermath of the Lebanese war, reconstruction projects and plans emerged successively: The Urgent Rehabilitation Program of 1991 adopted by the Lebanese Government, the “Horizon 2000” program of 1993, the five-year Economic Development Plan of 1999, and the Development Program of 2003. As a consequence of the reconstruction era, the land transportation sector has witnessed, since 1992 to date, vast renovation and rehabilitation works on the existing Lebanese roads in addition to the construction of new roads. Between 1992 and 2016, the aggregate value of executed projects totaled around US$ 2.474.04 million, of which projects worth US$ 1.363.89 million completed up until the end of 2016 and US$ 1.110.16 million projects that are still active to date.
Recognizing the need to develop a sustainable land transport sector, the Council for Development and Reconstruction (CDR) developed a vast array of road infrastructure projects to help achieving safe, secure and sustainable land transport system across all Lebanese regions, including inter alia the following:
• Coastal road project;
• Beirut-Syrian border road project;
• Penetrator roads connected with Beirut ring road project;
• Urban Transport Development Project (UTDP) for Greater Beirut and Mount Lebanon;
• Renovation and upgrading of Beirut road network;
• Renovation and upgrading of Beirut suburbs road network;
• Renovation and upgrading of main and secondary roads in Lebanese regions;
• Construction of new main and secondary roads in Lebanese regions.

The CDR completed parts of the above-mentioned projects, and other parts are still underway. The CDR works on securing the technical and financial needs to award the remaining contracts and complete these projects.

2- Main projects achieved (1992 – 2016)
The CDR focused on the activation of the two main axes in Lebanon: the coastal road and the Beirut-Syrian border road. In this context, several projects were completed and the remaining projects are underway on these axes to guarantee an efficient, fast and safe transportation system.
In the context of the coastal road, many contracts were executed, mainly:
• Completion of the study to implement the International Road Agreement in Lebanon.
• Rehabilitation of Sour-Naqoura road.
• Execution of works on Deir Aamar – Abdeh roads (with addendum No.1).
• Expansion and rehabilitation of the road stretching from Abdeh to Homs-Aboudieh bifurcation.
• Execution of the Abdeh-Qobbet el Choumra road within the framework of northern coastal road works extending to the Syrian borders.
• Execution of the Homs-Arida highway within the framework of northern coastal road works extending to the Syrian borders.
• Completion of the rapid northern coastal road: Chekka-Tripoli-Al Bahsas section.
• Renovation Tabarja-Chekka highway.
• Renovation of the coastal road extending from Dora to Tabarja.
• Improvement of Nahr el Kalb intersection.
• Improvement of the coastal highway in the Nahr el Kalb region.
• Rehabilitation of northern Beirut entrance, the lane extending from Dora to Tabarja.
• Repair of landslide at Adma interchange on the northern coastal highway between Tabarja and Nahr el Kalb.
• Execution of works at Nahr el Kalb Interchange (with addendums, 1, 2 and 3).
• Execution of phase 4 road works on the South Highway Zahrani-Sour-Cana crossing between Litani Bridge and Burj Rahhal main road.
• Reconstruction of Al Masbah bridge and the bridge located near the Ministry of Displaced on top of South-Beirut highway in Damour.
• Execution of phase 5 road works on the Saida
seafront, including construction of a bridge in Sinniq region, connecting the coastal road with the South highway.

In the context of Beirut-Syrian border road:
A number of contracts were executed, mainly:

- Execution of works complementing the project aimed at providing road traffic safety installations and material on the border road extending from Lebanon to Syria in Masnaa Region.
- Execution of Sofar Bridge reconstruction project and a section of the highway that was destroyed during July 2006 Israeli attacks.
- Renovation and asphalting of the Damascus road, Hazmieh-Saoufar section.
- Renovation and asphalting of the Mdeirej-Masnaa road.
- Execution of Sofar Bridge reconstruction project and a section of the highway that was destroyed during July 2006 Israeli attacks (including addendum No.1).
- Completion of unfinished works within the framework of Sofar Bridge reconstruction project and a section of the highway damaged by the July 2006 Israeli attacks (including addendum No.1).
- Beautification works at the internal Bhamdoun road as part of the project intended to expand and rehabilitate the current Damascus road (Hazmieh-Sofar Section) (With addendums No.1 and 2).
- Works to expand and rehabilitate the current Damascus road – Section 3 – Aley-Sofar (with addendums 1 and 2).
- Execution of works to expand and rehabilitate the Hazmieh-Jamhour road – Phase 1 and 2 (Execution of Camille Chamoun Boulevard – As-Sayad roundabout (104 km) with addendums 1-5).
- Supply of road safety tools and equipment at the Lebanese-Syrian border in the region of Masnaa.
- Execution of works complementing the project intended to supply road safety tools and equipment at the Lebanese-Syrian border in the region of Masnaa.
- Completion of the expansion and renovation of Rayak-Baalbek section (from Douris to Baalbek with Baalbek entrance from Tell Aammar intersection to Rayak) as part of the project intended to rehabilitate the Chtaura-Rayak-Baalbek Syrian border road.
- Renovation of Camille Chamoun Boulevard between Chevrolet intersection and Galerie Semaan overpass.
- Renovation and expansion of Taadod-Rayak road, within the project of Chtaura-Riyak-Baalbek-Northern Lebanese border, parts 1 and 2.
- Within the framework of Chtaura-Baalbek- Syrian border road (El Kaa): execution of remaining road works for the renovation of Baalbek east entrance.

The problem of transportation in urban areas is worsening, especially within Greater Beirut and its surroundings, where private cars constitute the main transport means, which will necessitate, if no public transportation is developed, the creation of additional spaces for roads and car parks in addition to adopting a developed system to manage traffic.

To face this challenge, the CDR conceived the Urban Transport Development Project (UTDP) in Greater Beirut and Mount Lebanon.

Urban Transport Development Project for Greater Beirut and Mount Lebanon:
This project aims at facilitating the traffic flow within the Greater Beirut area and is composed of three components:
- Improvement of main traffic axes, including the construction of bridges and tunnels at 19 intersections and the execution of related site works along main roads.
- Installation of 220 traffic lights and 30 traffic-monitoring cameras, traffic signs, road markings, and creation of a monitoring and management center for traffic circulation, and improving the pedestrian walkways.
- Parking management program with parking meters for 5000 cars.

In the context of the Urban Transport Development Project for Greater Beirut and Mount Lebanon, the following projects were executed:
- Dora bridge
- Antelias bridge
- Mathaf intersection
- Bchamoun-Aramoun
- Hayek bridge
- Organization and launching of an awareness campaign
- Traffic police training
- Installation of traffic lights and traffic- closed-circuit television (CCTV) cameras (addendum number 1) (civil works and installations)
- Installation of road-side Park meters.
- Supply of computers and other equipment to the Lebanese Traffic Management Center.
- Providing training to a number of Internal Security Forces officers and police on how to manage traffic and handle traffic congestion scientifically
and professionally.
- Procurement of motorcycles to the Internal Security Forces (Groups 1 and 2).
- Procurement of wireless devices for the Internal Security Forces.
- Rehabilitation of the Dekwaneh square roundabout and its subsidiary roads.
- The underpass project on the intersection of Bechara El Khoury with the Independence Avenue.
- Moucharafieh Bridge (the overpass works on the Chatila – Kafaat Boulevard – Chiyah-Moucharafieh intersection).
- Project intended to find a solution to the problem of low altitude under the Beirut River Bridge on the Dora-Qarantina Highway, and under the bridge leading to Bourj Hamoud over the Emile Lahoud and Beirut River Highway.

Beirut entrances connected to the Ring Highway:
- The ring highway encircling Beirut and the series of penetrators connected to this highway is anticipated to reduce traffic congestion at the capital access points and facilitate traffic between the North and the South. Detailed plans of the penetrator road network were divided into 3 sections:
  - Beirut Northern access point
  - Beirut Central access point
  - Beirut Southern access point

The main completed projects include:
- Execution of the underpass beneath the Mar Mikhael intersection, In the context of the Urban Transport Development project;
- The Antelias bridge, In the context of the Urban Transport Development project;
- The underpass beneath the Tayouneh roundabout, In the context of the Urban Transport Development project;
- Provision of furniture to the Traffic Management Center;
- Provision of computers and other devices to the Lebanese Traffic Management Center;
- The underpass and the overpath on the intersection between the airport road and Chiyah boulevard;
- Tiro road;
- Adlieh connector;
- Harat Hreik-Airport connector;
- Hazmieh-Airport connector (between Camille Chamoun Boulevard and Haret Hreik intersection)

- Cocody-Cola 1 and 2, in addition to Cocody interchange;
- Khaldeh-Cocody road;
- Chatila roundabout;
- Chatilla-Kafa’at road parallel to Nahr Beirut (PN3);
- Adlieh-Damascus road (A1) extending to as-Sayad interchange;
- Execution of bridge and tunnel works at the Mkalles roundabout (with addendums 1 and 2);
- Reconsideration of the study pertaining to Charles Helou interchange connecting the Beirut-Tripoli highway “Beirut Port-Nahr el Mot” section with Charles Helou Boulevard next to the Lebanese Emigrant Statute, which is ratified by Decree No. 9308, dated 08/10/1996.
- Execution of the project intended to expand a section of the Beirut-Tripoli Highway, extending from Qarantina Bridge to Charles Helou Station for Travel and Land Transport.

In the context of the Metn expressway:
- Landslides repairs on the Metn Highway Jouret El-Ballout – Baabdat section;
- Site works for wastewater evacuation in Mar Chaaya to avoid causing damage to the Metn expressway in the area of Mar Chaaya-Aatchaneh intersection.
- Grubbing of the Bqaile’-Sannine road within the Upper Mountains Road Project “مشروع طريق القمم” (with addendums 1 and 2);
- Roumieh – Beit Mery interchange and Kanabet Broumana bridge works (with addendums 1-2-3).

Rehabilitation of roads in Beirut suburbs:
Among the main completed contracts:
Northern suburbs: works on the Bourj Hammoud, Jdeideh and Zalka road sections, roads parallel to Nahr el Mot and Nahr Antelias, roads extending over Dbayeh section, Nahr Beirut-Dora road and the road that replaced the railway track inside Bourj Hamoud. Rehabilitation works of Sin el Fil road and Saloumi-Naba’a-Nahr el Mot road.
Southern suburbs: works completed to date are: road networks located within the range of Chiyah Boulevard and adjacent streets axis, Choueifat-Khaldeh road, Harat Hreik storm water drainage tunnel, as well as the sections of Mreibeh, Kassis, Ghobeiri, Harat Hreik, Borj el Brajneh, Furn el Chebbak and Ain el Remmaneh. Also, the rehabilitation works of Jamous roads and their associated public services were completed. Rehabilitation of primary and secondary roads network and creation of main and secondary roads in the Lebanese regions: Major contracts completed include:
• Execution of site works at Gebrayel passageway, Rahbeh’s entrance and passageway, and Birkayel’s passageway and an internal road in Fnaideq;
• Rehabilitation of the road of Beit el Faqs-Qarsi-ita-Sahet Nemrine;
• Two gyratories in Hadeth el Joubbe and Hasroun and the Diman road (Qadisha roundabout);
• Ehden gyratory works – Phase 2;
• Rehabilitation of Nahr Ibrahim-El Adra road;
• Execution of remaining works of Chnaniir-Dlebat project;
• Halba-Bireh-Qobbayat road, including two bridges in Qubbayat;
• Road Connectors works in Bcharre;
• Upgrading and expansion of al-Madfoun-Kifian road;
• Ayto-Ehden road;
• Rehabilitation of Aardat-Mejdalaya road;
• Grubbing and construction of the road of Daael - Basatin al Ossi - Beit Chlala – Tannourine El Tahta;
• Ehden gyratory – Phase I;
• Ras Kifa-Ayto road;
• Kfar Harra-Bire;
• Chakra-Mqable;
• Andaket-Kounieh;
• Akroum-Kfartoun;
• Aardat-Mejdalaya;
• Execution and asphalting of Beit Mery road;
• The new road extending between Jouneh-Bkerke-Harissa;
• Ghazir-Kfour-Fatqa connector;
• Jeita-Aintoura roundabout connector;
• Ajaltoun interchange;
• Rehabilitation of the road extending from Dbayeh to Antelias and Rabieh-Naccache connector;
• Deek el Mehdi & Naccache - Rabieh intersection;
• Beit el Heith – Qartaba project (Phase I extending from Beit el Heith to Sawaneh – 5km + Addendums 1,2,3,4 + Section II);
• Execution of works to rehabilitate the two wastewater treatment plants in Jbaa, Aintourin, implemented as part of Ehden gyratory project;
• Rehabilitation of Joun-Zaarourie-Zaitouniye road (with addendums 1 and 2);
• Bteghrine Zaarour connector;
• Jour et el Balout – Deir Mar Chaaya connector and Deir Mar Chaaya – Aatchaneh, Baabdat Connector and Deir Mar Chaaya Baabdat connector;
• Works at Gebrayel passageway, Rahbeh passageway and entrance, Berqayel passageway and an internal road in Fnaideq;

In the context of Sir El Dannieh-Jbab el Homor-Hermel road project:
• Execution of Jbab el Homor-Hermel road;

It is worth mentioning that this report outlines the projects that have been referred to the CDR by the Construction Projects Council “المشروع الإنشائية” and the Construction Projects Council for Greater Beirut “المحمدية بيروت الكبرى”.

In the context of Transport Development in Greater Beirut:
• Rehabilitation, asphalting and lighting of Kuwait Street and its forks.

In the context of Rehabilitation and Improvement of International Roads project and the Coastal Road project:
• South highway Jiyeh-Zahrani section (Phase 1);
• South highway project, Saida coastal road (phase 2);
• South highway project, Saida coastal road (phase 3);
• Deir Zahrani-Nabatiye road and Deir Zahra ni-Azze Romine road;
• South highway section of Rmeileh intersection and Sinniq connector;
• Construction of Jdra’ entry and exit points;
• Construction of Qalamoun and Balamand entry and exit points, with pedestrian walkways in Qalamoun and Na’emeh;
• Lighting installations on South highway Jiyeh-Zahrani-Abou el Aswad section;
• Lighting installations on South highway Jiyeh-Awali and Sinniq-Zahrani section;
• Road circulation signage and protection barriers on South highway Jiyeh-Zahrani section;
• Execution phase 4 works at the South Highway Zahrani-Sour section-Kana diversion between Litani bridge and Bourj Rahal main raod.
Within Beirut-Damascus road (Masnaa) project:
• Hadath-Masnaa highway, execution of Sofar-Mdeirej connector;
• Aley access points project;
• Reconsideration of plans and land acquisitions pertaining to Sections 1, 2, 3, and 4 of the project on the planning and upgrading of the road extending from Zouk Mosbeh – Mairouba- Kfardebian – to Tibeh (Baalbek), reconciliation contract.
• Execution of the project aimed at completing the Hazmieh connector-Rehabilitation of the old Damascus road in Hazmieh.

3- Work progress during 2016 in contracts awarded before 2016
The following projects are underway:
In the context of the coastal road project
• Completion of necessary works for the Sour-Naqoura project.
• Execution of section 1 works of phase 5 extending from Abassiye to Cana intersection (from 25+900 to 30+300) as part of the south highway, Zahrani section, Sour-Cana bifurcation.
• Execution of Tripoli west ring road (Mina-Bedawi section) + Addendum 1.
In the context of Beirut-Damascus Road (Masnaa) Project:
• Execution of the Arab Highway Project: Mdeirej-Jisr el Namlieh-Chtaura-Taanayel section, Phase 1 (Jisr el Namlieh (Bouarej)-Chtaura-Taanayel section) + Addendums 1, 2 and 3.
• Execution of the Taanayel-Masnaa section of the Arab highway + Addendums 1 and 2.
• Baalchmay-Sofar section (6.5 km).
• Execution of the works of part II of the various construction projects at the Masnaa border point (with Addendum 1);
• Execution of the necessary geotechnical surveys to study the landslide in Jdita, Bouarej, Mraijet, Rmatieh in the outskirts of the Arab highway project (Mdeirej-Chtaura section);
In the context of the Chtaura-Baalbek-Syrian Border (Qaa) Project:
• Rehabilitation of Karak – Hamra Plaza – Ablah – Taadod – Rayak road + Addendum 1.
In the context of the Metn Express Highway Project:
• Execution of the works of the second phase of the planning of Roumieh – Beit Mery road.
• Execution of Mar Chaaya – Aatchaneh – Ain Alaq connector.
In the context of miscellaneous roads across the Lebanese regions:
• Execution of road works in Hbarieh-Chbeaa and Zaghl-Chouaya-Chbeaa (with Addendums 1, 2 and 3).
• Expansion and renovation of Amchit-Maifouq road (with addendums 1, 2 and 3).
• Execution of the works of new roads connectors linked with Amchit – Maifouq road Project.
• Execution of Beit Ayoub-Fnaideq road.
In the context of Sir El Dannieh- Jbab el Homor-Hermel road Project:
• Sir El Dannieh-Jbab el Homor road;
• Execution of Sir El Dannieh-Bqarsouna-Qarsita road.
In the context of Qadisha Roundabout Project:
• Execution of the works of phase 2 of the Hadath el Jubba and Hasroun gyratories and Diman road Project.

4- Main contracts awarded during 2016
In the context of the Urban Transport Development Project in Greater Beirut
• Addendum 4 for the project intended to install traffic lights & traffic monitoring cameras and build the traffic management building.
In the context of the coastal road
• Completion and supervision of the necessary works of the Sour-Naqoura project.
• Addendum 1 for the execution of the works of the west highway of Tripoli.
In the context of the Arab highway
• Addendums 1 and 2 for the Arab highway project: Mdeirej – Jisr el Namlieh – Chtaura – Taanayel section – Phase I
• Necessary Geotechnical surveys to study the potential landslide in the second phase section of the Arab highway project/Mdeirej-Chtaura-Taanayel (Lot A) stretching between Mdeirej and Namlieh.
• Addendum 1 for the execution of the works of the second part of the various construction projects at the Masnaa border center.
• Preparation of detailed studies related to landslide repair works in Jdita, Bouarej, Mraijet, Rmatieh and provision of technical support during the execution of these works.
In the context of Hbarieh – Chebba & Zaghl – Chouaya – Chebba projects
• Addendum 2 to the contract intended to execute the works of the second optional section of the two projects of Hbarieh – Chebba and Zaghl – Chouaya – Chebba roads.
In the context of the Karak – Rayak road execution project
• Addendum 1 to the contract related to the rehabilitation the Karak – Hamra Plaza – Ablah – Taadod (Rayak) road.
In the context of the Jounieh – Bkerki – Harissa
road project
- Rehabilitation and expansion of Daroun – Harrissa road and supervision of works
- In the context of the Upper Mountains Road project
- Addendum 3 to the contract related to the grubbing of the Bqaileh-Sannine road.
- In the context of the Sir El Dannieh- Jbab el Hmor- Hermel road Project
- Addendums 2, 3 and 4 to the contract related to the execution of additional works as part of the Sir El Dannieh-Bqarsouna-Qarsita road project
- In the context of the Batroun-Tannourine express road project
- Addendum 3 to the grubbing of the road of Bqaileh-Sannine project.
- In the context of roads rehabilitation project in Lebanon
- Conducting a comprehensive survey of the status of roads in the Lebanese regions stretching over 600 kms, identifying classification criteria and coding and classifying each road status according to IRAP SRS

5-Main projects under preparation for 2017-2019
- Tripoli East Highway project (Al Bahsas-Beddawi);
- Completion of the South highway;
- Mdeirej (Hamana)-Jisr el Namlie (Bouerij) section located on Beirut-Damascus road (Masnaa);
- Construction of a road between Jamhour and Baalchmay (12.7 km) (Arab highway);
- Construction of Hadath-Dekwaneh road (6.2 km) (Beirut ring road);
- Ain Alaq-Bteghrine road within Metn expressway project;
- Galerie Semaan overpass;
- Tunnel and bridge next to the Ministry of Resources;
- Sir road project;
- Jounieh – Bkerke – Harissa road;
- Bqerqasha gyratory;
- Cedars road;
- Ghazir-Jdeidet Ghazir road;
- Expansion and rehabilitation of Mairouba - Nahel Dahab - Jouret el Termos – Hadchat - Yahchouch road;
- Haret Sakhr – Daroun road;
- Main intersections on Jeita – Faraya road (Jeita-Sheile-Balloune-Daraya-Ajaltoun);
- Rehabilitation of Jbeil – Anaya road;
- Completion of Bir el Heith-Qartaba road;
- Arab Highway, Beddawi-Abboudieh section.
## Major contracts awarded during 2016

<table>
<thead>
<tr>
<th>Project</th>
<th>Approximate amount (USD)</th>
<th>Source of funding</th>
<th>Expected start date</th>
<th>Expected execution date</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the context of the Urban Transport Development Project in Greater Beirut</td>
<td></td>
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<tr>
<td>Addendum 4 for the project intended to install traffic lights &amp; traffic monitoring cameras and build the traffic management building</td>
<td>36,134 + 259,098.91 Surplus</td>
<td>World Bank</td>
<td>August 2016</td>
<td>August 2017</td>
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<tr>
<td>In the context of the coastal road</td>
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<tr>
<td>Completion and supervision of the necessary works of the Sour-Naqoura project</td>
<td>/26,388,648/</td>
<td>Program Law</td>
<td>September 2016</td>
<td>August 2018</td>
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<tr>
<td>Addendum 1 for work execution on the west highway of Tripoli</td>
<td>/13,401,014/</td>
<td>CDR EIB</td>
<td>December 2016</td>
<td>December 2018</td>
</tr>
<tr>
<td>In the context of the Arab highway</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Addendums 1 and 2 for the Arab highway project: Mdairei – Jisr el Namlieh – Chtaura – Taanayel section – Phase I</td>
<td>/53,788,410/</td>
<td>CDR LP OFID SAUDI SFD</td>
<td>December 2016</td>
<td>December 2018</td>
</tr>
<tr>
<td>Necessary Geotechnical surveys to study the potential landslide in the second phase section of the Arab highway project/Mdairej-Chtaura-Taanayel (Lot A) stretching between Mdairej and Namlieh</td>
<td>/442,880/</td>
<td>The Republic of Lebanon</td>
<td>March 2016</td>
<td>August 2017</td>
</tr>
<tr>
<td>Addendum 1 for the execution of the works of the second part of the various construction projects at the Masnaa border center</td>
<td>/1,226,174/</td>
<td>LP</td>
<td>October 2016</td>
<td>June 2017</td>
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<tr>
<td>Preparation of detailed studies related to landslide repair works in Jdita, Bouarej, Mraijet, Rmatieh and provision of technical support during the execution of these works</td>
<td>/61,644/</td>
<td>CDR</td>
<td>August 2016</td>
<td>November 2016</td>
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<tr>
<td>In the context of Hbarieh – Chebaa &amp; Zaghla – Chouaya – Chebaa projects</td>
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<tr>
<td>Addendum 2 to the contract intended to execute the works of the second optional section of the two projects of Hbarieh – Chebaa and Zaghla – Chouaya – Chebaa roads</td>
<td>/1,696,467/</td>
<td>The Republic of Lebanon</td>
<td>March 2016</td>
<td>March 2018</td>
</tr>
<tr>
<td>Description</td>
<td>Amount</td>
<td>Parties</td>
<td>Dates</td>
<td></td>
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<td>-----------------------------------------------------------------------------</td>
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<tr>
<td>Addendum 1 to the contract related to the rehabilitation the Karak – Hamra Plaza – Ablah – Taadod (Rayak) road</td>
<td>/2,076,720 / Surplus after funding adjustment</td>
<td>The Republic of Lebanon+ Loan from the Kuwait Fund for Economic and Social Development</td>
<td>February 2016 - August 2018</td>
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<td>Addendum 1 to the contract related to the rehabilitation the Karak – Hamra Plaza – Ablah – Taadod (Rayak) road</td>
<td>/7,241,811.50</td>
<td>CDR</td>
<td>September 2016 - August 2018</td>
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<td>Addendum 3 to the contract related to the grubbing of the Bqaile‘-Sannine road</td>
<td>/106,516</td>
<td>The Republic of Lebanon</td>
<td>December 2016 - December 2018</td>
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<tr>
<td>Addendum 3 to the contract related to the grubbing of the Bqaile‘-Sannine road</td>
<td>/12,440,019</td>
<td>The Republic of Lebanon</td>
<td>Consecutively: January 2016 - April 2016 - August 2016 - December 2017</td>
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<tr>
<td>Addendum 3 to the grubbing of the road of Bqaileh-Sannine project</td>
<td>/6,081 / Surplus</td>
<td>CDR</td>
<td>July 2016 - October 2016</td>
<td></td>
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<tr>
<td>Conducting a comprehensive survey of the status of roads in the Lebanese regions stretching over 600 kms, identifying classification criteria and coding and classifying each road status according to IRAP SRS</td>
<td>/394,654</td>
<td>The Republic of Lebanon</td>
<td>September 2016 - June 2017</td>
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</tbody>
</table>
# Major projects in progress 2017 - 2018

<table>
<thead>
<tr>
<th>Project</th>
<th>Approximate amount (USD)</th>
<th>Source of funding</th>
<th>Expected start date</th>
<th>Expected execution date</th>
</tr>
</thead>
<tbody>
<tr>
<td>East ring road of Tripoli (extending from Al Bohsas to Beddawi)</td>
<td>100,000,000</td>
<td>Islamic Development Bank</td>
<td>September 2017</td>
<td>September 2021</td>
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<tr>
<td>Completion of South highway (until Tyre entrance)</td>
<td>35,000,000</td>
<td>Islamic Development Bank</td>
<td>October 2017</td>
<td>October 2019</td>
</tr>
<tr>
<td>Mdeirej (Hamana)-Jisr el Namlieh (Bouerij) on Beirut-Damascus road</td>
<td>45,000,000</td>
<td>Saudi Fund for Development</td>
<td>January 2018</td>
<td>February 2021</td>
</tr>
<tr>
<td>Construction of a road between Jamhour and Baalchmay (12.7 km) (Arab</td>
<td>300,000,000</td>
<td>Proposed to the World Bank</td>
<td>December 2018</td>
<td>December 2020</td>
</tr>
<tr>
<td>Construction of Hadath-Dekwaneh road (6.2 km) (Beirut ring road)</td>
<td>250,000,000</td>
<td>Proposed to the World Bank</td>
<td>December 2018</td>
<td>December 2021</td>
</tr>
<tr>
<td>Galerie Semaan overpass</td>
<td>10,000,000</td>
<td>World Bank</td>
<td>December 2018</td>
<td>December 2020</td>
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<tr>
<td>Sir road project</td>
<td>30,000,000</td>
<td>Islamic Development Bank</td>
<td>April 2018</td>
<td>April 2020</td>
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<td>Ain Alaq-Btghrine road-Metn expressway project</td>
<td>55,000,000</td>
<td>Ministry of Public Works' Program Law 2001/326</td>
<td>July 2018</td>
<td>July 2019</td>
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<td>Safety and landslide repairs in Byaadout</td>
<td>3,500,000</td>
<td>Public Budget reserves</td>
<td>June 2018</td>
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<td>Completion of Bir el Heith – Qartaba road</td>
<td>20,000,000</td>
<td>Islamic Development Bank</td>
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<td>Bqerqasha gyratory</td>
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<td>Cedars road</td>
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<td>Ghazir-Jdeidet Ghazir road</td>
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<td>Ministry of Public Works' Program Law 2001/326</td>
<td>January 2018</td>
<td>January 2020</td>
</tr>
<tr>
<td>Project Description</td>
<td>Cost</td>
<td>Responsible Authority</td>
<td>Start Date</td>
<td>End Date</td>
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<td>Expansion and renovation of Mayrouba-Nahr el Dahab-Jouret el Termos-Hadchat-Yahchouch road</td>
<td>20,000,000</td>
<td>Ministry of Public Works’ Program Law 2001/326</td>
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<td>January 2020</td>
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<td>Renovation of Haret Sakhr-Daroun road</td>
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<td>Proposed to the Saudi Fund for Development</td>
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<td>March 2020</td>
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<td>Main intersections on Jeita - Faraya road (Jeita-Sheile-Balloune-Daraya-Ajaltoun)</td>
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<td>Rehabilitation of Jbeil-Aanaya road</td>
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<td>Proposed to the Saudi Fund for Development</td>
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<td>March 2020</td>
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<td>Arab Highway Beddawi-Abboudieh section</td>
<td>270,000,000</td>
<td>Local funding Program Law 246</td>
<td>April 2018</td>
<td>December 2021</td>
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Roads - Maritime Transport

1-Sector Overview
The Beirut Port Authority and the Tripoli Port Authority supervised the large execution contracts awarded for the development of the Port of Beirut and the Port of Tripoli, with a total value of around US $175 million, funded by foreign funds. Most of the works under these contracts have been concluded. Going forward, the Lebanese Government orientation in this sector will be channeled towards the development and expansion of the port of Tripoli to become a maritime transport hub for transit to Iraq.

2-Main achievements for 1992 - 2016
Rehabilitation and Expansion of the Port of Beirut:
This project comprised the dredging and rehabilitation of Basins 1, 2 and 3, in addition to the completion of Basin 4 works to be used as a container terminal, alongside the completion of the breakwater execution. The contract was awarded to the Entre Canales/Cubiertas joint venture, and works started in early 1997. The Beirut Port Authority received a technical assistance from the Marseille Port Authority with regard to overall supervision of the studies, while Dar al Handasah (Shaer and Partners) was commissioned to supervise the execution of works. The project value reached US$91.1 million, partially funded by a loan from the European Investment Bank (Euro 45 million), while the remaining part of funds was covered by the Beirut Port Authority out of the Port’s revenues.

At a later stage, the Beirut Port Authority awarded a contract for the execution of the first phase of Basin 5. The quay that will be constructed in this phase is 600m long and 15m deep and will be used as a container terminal. The total cost of this project is estimated at US $50 million, auto-financed by the Port revenues.

After procuring and installing basic equipment at the port container terminal, and therefore preparing the necessary requirements for the terminal to become operational, the Beirut Port Authority (The Temporary Administration for the Operation and Exploitation of the Port of Beirut) released a call for tenders in mid-2004 to subcontract the management and operation of the terminal. In August 2004, a contract was signed with the winning bidder (a joint venture between the British MERSEY (MDHC) and the American (IMA). The company started its actual operation at the Port of Beirut on 14/12/2004 under the name of Beirut Port International Management and the volume of work is expected to exceed 500 thousand TEU in 2005.

Rehabilitation and Modernization of the Port of Tripoli:
In order to ensure maritime navigation safety, works started in the autumn of 1997 in the depth of the commercial basin and the port’s access channel to dredge their sediment and debris. Additionally, the wrecks of five vessels sunken in the port’s basin were removed and the basin was dredged to a depth of 10m, with a US$ 2 million cost.

The Lebanese Government commissioned the French consulting firm SOGREAH to prepare a master plan for the development of the Port of Tripoli (funded by the Financial French-Lebanese Protocol). The preparation of this master plan is completed. It comprises the following:
- The Increase of the depth of the access channel from 10 to 13 meters.
- The construction of a 600m long quay extending from the existing port towards the Abu Ali river
- The construction of a detached breakwater (1000 meters) and completion of the construction of the northern breakwater near Abu Ali River.

As a first step, works started in 2001 to deepen the basin and the access channel, with an approximate cost of US$ 20 million.

The Port of Tripoli Development Project:
In order to prepare the Master Plan for the development of the Port of Tripoli, the Marseille Port Administration conducted a feasibility study for the expansion of this port, with a EUR 45 million loan from the European Investment Bank. These works have been divided into two groups:
Group 1: Comprises works to expand the temporary road for the existing main breakwater and extend the current main and secondary breakwaters. Group 1 works were awarded in April 2004 to Jan de Nul/Hydromar merger, with an approximate budget of US$ 23 million. Additionally, the supervision of these works was subcontracted and funded by the revenues of the Port of Tripoli. The execution of this group was concluded.
Group 2: Comprises works to construct a new 600m long quay, as well as works to excavate and deepen the port basin to accommodate ships requiring up to 15 meters of depth. The works of Group 2 and the supervision of these works were completed by the China Harbour Engineering Company, funded out of the revenues of the Port of Tripoli, after an agreement was reached between the contractor and the Port of Tripoli.

Preparation of the necessary studies and the tender document related to the project aimed at filling marine areas that will accommodate an economic zone in the Port of Tripoli.

Transformation of the Commercial Port in Tyre into a Tourist Destination:
The feasibility study related to the transformation of the commercial port of Tyre into a tourist destination was completed.

Tourist Port in Jounieh:
A feasibility study and an Environmental Impact Assessment related to the construction of a tourist port in Jounieh were completed.

2. Work Progress in 2016 in contracts awarded before 2016
The project aimed at filling marine areas that will accommodate an economic zone next to the Port of Tripoli continues.

3. Main projects under preparation in the horizon of 2017 - 2019
Tourist port in Tyre:
Following the completion of the feasibility study related to the transformation of the Commercial Port of Tyre into a tourist destination. The file was submitted to the Ministry of Public Works and Transport which outsourced the first phase of the works.

Tourist port in Jounieh
Following the completion of a feasibility study and an Environmental Impact Assessment related to the construction of a tourist port in Jounieh, the detailed studies of this project are expected to be outsourced to lay the ground for its implementation.

The new Commercial Port of the city of Sidon
The CDR is working on the feasibility study related to phase II of the new commercial port of the City of Sidon.
Overview of the Air Transport Sector

The Rafic Hariri International Airport Master Plan aimed at increasing the Airport’s handling capacity to 6 million passengers yearly, as a first phase, and thereafter increasing the capacity gradually to reach 16 million passengers yearly by 2035.

1- Main achievements during 1992 - 2016

Rafic Hariri International Airport (referred to in this report as the “Airport”)

The first phase of the project comprised the construction of a new passenger terminal and two new runways: a new runway at the east of the existing runway, and a new west runway protruding into the sea, built on land reclaimed, in order to route the aircrafts away from the skies of the capital Beirut. Consequently, the Airport is now able to handle around thirty planes simultaneously, stationed either at the embarkation gates or in the tarmacs.

Works started in 1994 and were concluded to date; some additional works are underway. Works of the first phase of the passenger terminal are completed and the terminal has been operational since 1998. The implementation of the second phase of the passenger terminal increased the passenger capacity to 6 million per year. At the end of January 2000, works at other facilities were subcontracted, including two additional luggage conveying systems; these works were concluded on June 30, 2000. The west runway has been operational since 2001.

The works concluded in other parts of the Airport are as follow:
- Airport Radar Building: works concluded in September 1996.
- Civil Aviation Safety Center: works concluded in October 1996.
- Ground Firefighting Services building: works concluded in July 1997.
- Automated Mail Processing Center: works concluded in November 1997.
- Infrastructure for passenger terminal and utilities buildings (electricity, water, main and internal roads), which were put in service in the beginning of 1998. The west loop leading to passenger terminal was concluded in February 2000.
- Two main water reservoirs and water towers are now fully operational.
- Additional buildings and airport guard and security buildings were delivered to the Airport administration.
- Two tunnels in Ouzai, under the west runway were opened to traffic in December 1997.
- The Ouzai-Khaldeh interchange at Costa Brava was opened to traffic in December 1997. Khaldeh interchange was open to traffic in September 1999 and the link with old Saida road was completed in December 1999.
- The Ouzai road embankment works were concluded in 2000.
- Car parking and aircraft fueling facilities were completed on the basis of a concession contract (Build Operate Transfer). Moreover, various contracts for consultancy services or supply of aeronautical equipment have been awarded (funded by the Lebanese-French Financial Protocol).
- Consultancy services for the modernization of the Lebanese Civil Aviation Authority.
- Training equipment for the Civil Aviation Safety Center (four contracts).
- Meteorological equipment (contracts for Phases 1 and 2).
- Construction of a VIP pavilion in March 2002.
- Another VIP lounge (General Aviation) to be delivered soon.
- Landscaping works at the VIP pavilion.
- Periodic routine air inspection of air navigation aiding devices (maintenance and operation).
- Consultancy services in the arbitration case related to Airport rehabilitation and modernization.
- Project intended to improve maritime protection and build a dock for boats of the maritime rescue station at the new western runway of the Airport.
- Supply of an air navigation information system with appendixes 1, 2 and 3.
- Operation and maintenance services at the new Airport building and ancillary facilities with appendixes 1 and B, in addition to oversight tasks.
- Oversight services over the rehabilitation of the Airport radar control and surveillance system.
- Geophysical surveys of the new eastern runway area.
Works to upgrade the circular Airport fencing.
Operation and maintenance services at the new Airport building and ancillary facilities with appendixes D, E, F, G, in addition to oversight tasks.
Periodic Routine air inspection of air navigation aiding devices with appendixes 1/2/3/4 and 5.
Oversight over the operation and maintenance of the Airport facilities and equipment until 30/6/2010.
Oversight over unfinished works of the projects related to the execution of civil works at the VIP pavilion – General Aviation (GA) and appendixes.
Preparation of technical and economic feasibility studies and detailed designs that fall under the Airport Modernization Program.
Oversight over the project on the rehabilitation of the Airport radar control and surveillance systems.
Oversight over the operation and maintenance of the Airport facilities and equipment.
Financial and engineering assessment of the VIP pavilion civil works project.
Rehabilitation of the asphalt pavement of the taxiway (M) in the section parallel to the Airport general aviation area.
Tender document to subcontract the complementary works of the geophysical surveys of the eastern runway.
Rehabilitation of the control and surveillance systems of the Airport Radar (Annex No.1).
Oversight over the project on the rehabilitation of the control and surveillance systems of the Airport Radar.
Oversight over the operation and maintenance of Airport facilities and equipment.
Operation and maintenance of the new Airport building and ancillary facilities (Appendix C).
Preparation of a comprehensive tender document to subcontract the operation and maintenance of the Airport facilities and equipment.
Preparation of a tender document to subcontract works of the Project related to the Lighting Control and Monitoring System (LCMS) of the Airport runways and taxiways.
Unfinished works of the projects related to the execution of civil works at the VIP pavilion – General Aviation (GA) and appendixes.
Rehabilitation and modernization of Airport Data Exchange Center (AMSS).
Embankment works for the Ghadir culvert within the vicinity of the Airport through open-air digging.
Operation and maintenance of the Airport buildings and facilities – Reconciliation Contract.
Shifting the lighting supply of the western runway /35 from the old inverter to the uninterruptable power generator (UPS) of the maritime runway 16/34.
Project related to the introduction of additional information services at the Airport Data Exchange Center (AMSS).
Project related to the Lighting Control and Monitoring System (LCMS) of the Airport runways and taxiways.
Replacement of the old system of the medium voltage network of the Rafic Hariri International Airport.

2-Main contracts awarded in 2016
Rehabilitation of the al Manara lighthouse in Beirut.
Renovation of the cooling systems in the passengers building at the Rafic Hariri International Airport.
Procurement and installation of water filtering system for the Rafic Hariri International Airport cooling system.

3-Work progress in 2016 in contracts signed before 2016
The implementation of the following projects is underway:
The execution of works for the rehabilitation of the aircraft tarmacs, the water evacuation channel and the electricity network of the shipping building and the hangar of the Trans Mediterranean Airways (T.M.A), alongside oversight over such works.
Continuation of the operation and maintenance of the Airport new building and ancillary facilities (appendix G), alongside oversight over such works.

4-Main projects under preparation in the horizon of 2017-2019
Preparations for the following contracts are underway:
Execution of the civil works for the rehabilitation of the Rafic Hariri International Airport runways and taxiways.
The CDR will start the review of the Rafic Hariri International Airport Master Plan, based on last years’ developments, and in collaboration with the Ministry of Public Works and Transport.