

# APPENDICES

## Appendix One

Written Response by Fiji Roads Authority



## Parliament Standing Committee on Social Affairs

Clarification of Issues – Fiji Roads Authority Annual Reports

Tuesday 9 July 2019 – 1.30pm

Item	Question	Comments
<b>GENERAL QUESTIONS</b>		
1.	Brief the committee on the functions of the Fiji Roads Authority.	<p>The function of Fiji Roads Authority is to manage the current vested assets related to Roads, Streetlighting, Traffic Signals, Bridges, Crossings and Jetties throughout the Fiji Islands.</p> <p>Under this obligation the Authority carries out Periodic Maintenance to all Asset classes and delivers Capital Improvements to provide a more efficient transportation network.</p>
2.	Inform the committee of the key challenges the Authority faces whilst trying to achieve its strategic objectives and how it is planning to overcome these challenges.	<p>The key challenges facing the Authority are:</p> <ol style="list-style-type: none"> <li>1. Asset deterioration as a result of Historic under-funding and mis-management</li> <li>2. Vehicle Overloading</li> <li>3. Resource Availability</li> <li>4. Design and Construction Capability and Capacity</li> <li>5. Uncontrolled Urban Development</li> </ol>
3.	How does the Authority ensure that both male and female employees are treated equally in recruitment, training, hiring and promotion?	<p>Our recruitment (new hires and promotion) process is merit based. Candidates are shortlisted based on entry requirements regardless of gender.</p> <p>Training provided is based on the TNA matrix jointly agreed to by the employee and manager.</p>
4.	Does the Authority align itself to any of the Sustainable Development Goals? If so, can you further enlighten the Committee on this?	<p>FRA does align itself to SDG 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation and SDG 11: Make cities and human settlement inclusive, safe, resilient and sustainable. In aligning to the two SDGs, do we contribute to SDG 1: No Poverty.</p> <p>We are building resilient infrastructure and providing access to the rural community. This relates to access to basic service and reducing vulnerability to climate-related extreme events, other economic, social and environmental shocks.</p> <p>Sustainability is a serious consideration for the Authority. We recognize the limitations that we face in Fiji on resource availability and take this into account by re-using material wherever possible. Sub-grade materials can be re-worked, with minimal need for additives, to provide the foundation for a new road surface.</p> <p>We also recognize the impact that a lack of consideration for sustainability can have on the environment.</p>

		<p>If we do not consider sustainability in our work we over-exploit natural resources, which can cause irreparable damage to the environment. With this in mind the Authority is planning to ban the use of River Gravels in Roadworks from 2020.</p> <p>The Authority also understands the link between durability and sustainability, so in all of our works we look for the best 'whole of life' solution. We prefer to provide a long-term solution to any issue than a short term repair.</p>
5.	Update the committee on the Authority's future plans and initiatives.	<p>Over the past two years the planning attention of the Authority has been on 'stabilising' the network and developing a Forward Works Plan with a focus on ensuring Public Safety and bring the assets to a condition whereby they can be effectively maintained going forward. As a consequence of the decades of neglect of these assets, this is a continuing mission.</p> <p>However, we have been able to embark on a number of enhancements and improvements to the network and it our intention to continue this into the future.</p> <p>Our future plans and initiatives include (but are in no way limited to):</p> <ol style="list-style-type: none"> <li>1. Provide access to the most remote communities.</li> <li>2. Increase Unsealed to Sealed programme.</li> <li>3. Increasing lane-space within the current right-of-way.</li> <li>4. 3-lane highways with flow direction related to peak hour traffic.</li> <li>5. Upgrade existing streetlighting and TS installations throughout Fiji.</li> <li>6. Providing more durable solutions.</li> <li>7. Raise road and bridge/crossing levels to deal with Climate change conditions.</li> <li>8. Supporting Park and Ride schemes.</li> <li>9. Vehicle dimension restrictions.</li> <li>10. Incorporate ITS in the Highway Network</li> </ol>
<b>JANUARY – JULY 2016 ANNUAL REPORT OF THE FIJI ROADS AUTHORITY</b>		
6.	The committee notes from the Annual Report that as at July 2016, a total of 5,696 km of roads in the four Divisions were unsealed. What is the Authority's future plans with respect to the sealing of some of these roads and how does it prioritise which roads to seal?	<p>The way in which the Authority is approaching this issue is to focus on section of rural roads for sealing related to the use of that section of the road.</p> <p>Priority is given to sealing rural roads outside of Schools and Civic Amenity Buildings (hospitals, police posts, etc). The second criterion is for full village frontage sealing, where the entire village road is sealed.</p> <p>When we are considering the unsealed to seal programme works for the entire length of an Unsealed Road the selection criteria is based on Population served by the road.</p>
7.	What is the criteria used to prioritise the sealing of roads?	I believe this question has been answered in 9. Above.



8.	<p>Elaborate on the Agreement for the Development of Rural Roads for the four Divisions which was signed on 2nd February 2016 and how this has been monitored. How many rural roads have been developed as part of this Agreement and how does the Authority identify and prioritise the development of such roads? Is there a mechanism in place through which individuals can request to have roads developed?</p>	<p>In 2015, FRA identified 142 projects through an extensive community consultation and management with stakeholders. 54 in the Eastern Division, 48 in the Central Division, 20 in the Western Division and 20 in the Northern Division.</p> <p>These were later prioritized by all the Divisional Commissioners and the MOA was signed in 2016.</p> <p>The progress of the projects are monitored by FRA and commissioners through the monthly meetings.</p> <p>To date the following projects have been completed:</p> <ul style="list-style-type: none"> <li>• 1 in the Central Division</li> <li>• 27 in the Eastern Division</li> <li>• 4 in the Western Division</li> <li>• 2 in the Northern Division</li> </ul> <p>The following projects are in progress:</p> <ul style="list-style-type: none"> <li>• 3 in the Northern Division</li> <li>• 2 in the Western Division</li> <li>• 5 in the Eastern Division</li> <li>• 7 in the Central Division</li> </ul> <p>The remaining projects have been scoped and are included in the Forward Works Programme for the next three years.</p>
9.	<p>The committee is concerned with the frequent washing away of Irish Crossings by strong currents resulting in high replacement costs. Are there plans to improve the engineering design of these structures or to replace them with bridges so as to make them more resilient to floods?</p>	<p>The work to improve the 'Irish Crossings' is already underway.</p> <p>Over the past 12 months the Authority has replaced 5 previously flood prone low-level crossings with a new and more durable crossing that has already proven that it is less prone to flooding.</p> <p>To provide an example for the reasoning behind this initiative; Vakabuli Paipai Crossing the Western Division would be inundated 4 or 5 times a year, cutting off communities and resulting in hundreds of thousands of dollars in repair work every year. This had been going on since its construction decades ago, resulting in millions of wasted dollars.</p> <p>In 2018 the Authority replaced the crossing with a new less susceptible crossing at a cost of \$1.6 Million. This crossing will only flood in the most severe cyclones and since its construction it has been unaffected and accessible through a complete wet season; and the return on investment period could be as short as 3 years.</p>
10.	<p>Provide a list of all the Irish Crossings in Fiji together with the names of the crossings that have had the most number of reinstatement works carried out from 2015 to date and a breakdown of the costs incurred.</p>	<p>Refer to attachment I</p>
11.	<p>How has FRA managed to work with the Government to address the problem of overloading in Fiji? What is the mandated weight limit of vehicles in Fiji as comparable to other countries and has consideration been given to construct roads which can sustain</p>	<p>Overloading has been an issue in Fiji for many years. Over the past twelve months FRA has worked with LTA to cease the historic allowance of manufacturers recommended specifications and enforce the LTA regulations set in 2000. In general, these regulations for trucks allow slightly</p>

	heavy truck traffic in turn allowing for the vehicle weight limit to be increased?	<p>higher limit that other neighbouring countries such as New Zealand.</p> <p>However, the regulations set in 2000 did not consider larger combination vehicles that are now present in Fiji. As such, FRA has assessed over 2000 applications for combination vehicles and approved exemptions in line with what is allowed on the standard network in New Zealand. These loading allowances are in line with the design standards that FRA constructs road and bridge infrastructure to. Heavy Haulage Zones near Fiji's ports have been established which allow additional weight to be moved so that imports and exports are not disrupted.</p> <p>In time, these routes will be reconstructed to a higher design standard to accommodate this weight. It would be cost prohibitive at this time to design the wider network to accommodate these higher axle loads. This together with the aging condition of many of Fiji's bridge assets, and a history of overloading means that currently these limits cannot be increased.</p>
12.	<b>FRA's Supply Chain:</b>	
	a. Update us on the progress made in expanding the role of Fijian involvement and Fijian companies in FRA's supply chain.	<p>Currently 76% of contracts let by the Authority are being delivered by local contractors.</p> <p>The Authority is continually working to open up more opportunities to local contractors by providing a range of tenders based on price.</p> <p>Lower value tenders allow the smaller local contractors to enter the market and progress to higher valued work as they gain experience and confidence.</p> <p>For Higher value tenders the pool of contractors is smaller and is generally overseas based.</p> <p>It is important to have these high value contracts for sound technical reasons but also because the winning tenderer will generally deploy smaller local contractors as sub-contractors. In doing this the smaller local contractor can gain valuable experience for its future.</p>
	b. How does FRA encourage the entry of new and high quality participants, both local and international, into its supply chain?	<p>We have an Internet-based tendering process and we are adopting standard Conditions of Contracts and Specifications for all of our works. By doing this. every tenderer operates on the same basis and overseas tenderers are no discouraged by unfamiliar requirements and processes.</p>
	c. Page 14 of Annual Report - How have foreign companies contracted by FRA such as those mentioned in Figure 3, included locals in their workforce?	<p>Overseas Contractors deploy local workers in a variety of ways.</p> <p>In some instances, they are deployed on a contract-by-contract basis.</p> <p>Other Overseas Contractors take a longer term view and deploy local workers with a view to training them and progressing them through the organisation structure.</p>



		<p>This has been done particularly successfully by those Overseas Contractors that have been working in Fiji for many years, such as Fulton Hogan, Higgins and Fletchers. When an Overseas Contractor wishes to bring in a worker from its home country they generally require an endorsement to do so from the Authority. We do not provide endorsements for any individual below managerial level.</p>
13.	<p>Page 11 of Annual Report (Table 1 – FRA’s Assets) – Explain the reduction in the total length of sealed and unsealed roads in the four divisions to 7,416km (2015: 7,525km).</p>	<p>In 2015, our knowledge of our assets was limited and would have reported assets that do not belong to us. We are continuously updating ownership on our asset management records.</p> <p>To date FRA owns 7525km of sealed and unsealed roads.</p>
14.	<p>What kind of quality measures does FRA engage in to ensure high quality roads in light of the frequent road maintenance works that are carried out?</p>	<p>Ensuring high-quality assets starts with the materials. We are challenged in Fiji with accessibility to raw materials, those we do have (road materials) are of the appropriate quality for our works. The challenge with these material is quantity and the processes to go through to manage the extraction.</p> <p>The manner of describing the works at tender stage also affects the quality of the output. The Authority has developed and implemented new, contemporary standards along with the FIDIC Conditions of Contract that clearly define quality expectations and the consequences on the Contractor for not delivering these.</p> <p>Throughout the delivery of the works on site the Authority has teams of Engineers and Inspectors monitoring the works to ensure compliance, these teams are expanding to cover the increasing workload.</p>
15.	<p>Provide us with a list of names of the existing roads, bridges and jetties that have repeatedly undergone maintenance works.</p>	<p>Refer to attachment I &amp; 111</p>
16.	<p>What is the standard of materials required for road renewal and maintenance works? Are the materials supplied from quarries around Fiji of the required standard?</p>	<p>There are suitable quarry materials available in Fiji. The key to successful use is testing at every stage of production and use.</p>
17.	<p>Explain the reasons for the transition from the Public Works Department to Fiji Roads Authority.</p>	<p>Fiji Roads Advisory Committee that was chaired by PS PMO, Mr Tikoduadua met on 16/12/11 advised the member that the FRA Decree 2012 has been gazetted and that it will exist from 1<sup>st</sup> January, 2012. The PS in PMO is responsible for the DNR.</p> <p>The Secretariat role will be provided by the Ministry of Public Enterprises.</p> <p>It was at the stage that MWH Global had been appointed by the Government to carry out the transition of DNR to the establishment of a statutory body that may be named FRA how, the actual form and name of the new body will be firmed by the Advisory Committee at later stage.</p>

		The Decree establishes that MWH Global will be the Change Manager (executive management of transitional FRA and the Director DNR reports to MWH Global) in accordance with paragraph 37 of the FRA Decree 2012.																																				
18.	<p>Page 20 of Annual Report (Table 3 – FRA Management Costs):</p> <p>a. Explain the increase in the revised budget for Salaries to \$2,940,606 in the January - July 2016 period (2015: \$2,796,214). What was the staff composition in each financial period?</p>	<p>More staff were recruited, thus increasing the salary cost. This was done to complete the transition of all client functions and activities from PESA (Principle Engineering Service Advisor - MWH) to FRA which will put FRA in the appropriate position to re contract PESA functions at the end of 2016.</p> <p>However, on 23/09/2016 MWH terminated their contract which led to setup of new organizational structure for FRA in the coming years.</p> <p>No Staff –2015:35 2016:52</p>																																				
	<p>b. Provide details of the current staff composition at FRA according to hierarchy and gender.</p>	<table><tr><th></th><th>M</th><th>F</th><th>Total</th></tr><tr><td>Level 1</td><td>7</td><td>1</td><td>8</td></tr><tr><td>Level 2</td><td>8</td><td>0</td><td>8</td></tr><tr><td>Level 3</td><td>26</td><td>4</td><td>30</td></tr><tr><td>Level 4</td><td>23</td><td>5</td><td>28</td></tr><tr><td>Level 5</td><td>81</td><td>38</td><td>119</td></tr><tr><td>Level 6</td><td>26</td><td>7</td><td>33</td></tr><tr><td>Student</td><td>6</td><td>6</td><td>12</td></tr><tr><td></td><td>177</td><td>61</td><td>238</td></tr></table>		M	F	Total	Level 1	7	1	8	Level 2	8	0	8	Level 3	26	4	30	Level 4	23	5	28	Level 5	81	38	119	Level 6	26	7	33	Student	6	6	12		177	61	238
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	<p>c. Provide a breakdown of how funds were utilised for the following activities:</p> <ul style="list-style-type: none"><li>▪ Insurances</li><li>▪ Legal Fees</li><li>▪ Archives – Storage</li><li>▪ Communications</li><li>▪ Training &amp; Development</li></ul>	<ul style="list-style-type: none"><li>▪ Insurances – relates to various insurance policies for FRA assets and to cover unforeseen risk. Some examples of insurance policies in place are Motor vehicle insurance, workmen’s compensation, travel insurance, material damage and business interruptions and all risk</li><li>▪ Legal Fees – relates for payment to Senior Legal Counsel (Squire Patton Boggs) to look at reviewing</li><li>▪ of FRA contract documents. Also some costs relate to Chapman Tripp who were hired to en-cash the performance bond that FRA had for northern maintenance contract after Blacktop went into receivership.</li><li>▪ Archives – Storage – payments to Williams and Goslings for storing DNR. Also FRA documents that were archived from 2013 are stored here as well.</li></ul>																																				



		<ul style="list-style-type: none"> <li>▪ Communications – relates to payment to upgrade FRA website, media monitoring software, monthly maintenance &amp; support fees for Customer service system, Vodafone &amp; telecom chargers and data and internet links.</li> </ul> <p>Training &amp; Development – for staff training like FRA &amp; ADB procurement workshop, various congress (CPA,IIA,FIA,AG), project management.</p>
19.	In light of the recurring potholes, what efforts are being made to ensure greater resilience of roads to wet weather?	<p>The problem in Fiji is that repetitive pothole repairs have been used as an interim measure too many times and for too long. Being a temporary repair there is a limit to the number of times it can be done in the same location. Once that limit has been reached the road requires major rehabilitation to bring it back to a serviceable condition. The Authority is taking steps to deliver rehabilitated sections of road throughout the country. This will provide a durable, long-life solution; minimizing future repair. This has been done successfully, between May and July 2019, along Princes Road, Ratu Mara, Ratu Dovi Road in Suva. The amount of rehabilitation that can be undertaken as a proactive measure is dependent on Budget allocations.</p>
20.	Page 21 of Annual Report - Explain the Budgetary variance in Table 4 under Professional and Technical Services.	<p>The initial budget was done for 12 months but after government announce a change in financial year, FRA aligned its financial year with that of the government, thus a revised budget was done for 7months.</p> <p>The variance from revised budget vs expenditure was due to a savings on WHT. This was caused by less NZ based technical support engaged by MWH as per directive from FRA.</p>
21.	<b>Page 22 of Annual Report (Table 5 – Maintenance of Assets):</b>	
	a. Provide details of the outer islands road maintenance works carried out together with a breakdown of the costs involved. How does FRA prioritize road maintenance in the outer islands?	<p>Most of the works on outer islands were done by MINISTRY OF RURAL MARITIME AND DEVELOPMENT under the signed MOU that FRA has it with the ministry. FRA reimburses the cost on monthly basis.</p>
	b. Provide further details of the following maintenance works carried out and a breakdown of the costs involved: <ul style="list-style-type: none"> <li>▪ Jetties</li> <li>▪ Other Government Agencies Maintenance</li> </ul>	<ul style="list-style-type: none"> <li>▪ Jetties <ol style="list-style-type: none"> <li>1. Totoya Jetty - Causeway Repair &amp; Maintenance works - \$206,033</li> <li>2. Natuvu Jetty Repair - \$31,328</li> </ol> </li> </ul>

- Other Government Agencies Maintenance – sealing and road maintenance works were carried on the below location

Vodafone Arena Entrance road leading to damodar city & fiji netball centre	13,236
RFMF Access	20,611
Lakena Station Rd	2,722
Presidents Compound (Structural Repairs)	20,700
FEA Kinoya Entrance	4,395
Vunimono Hall Warehouse	25,647
Nayala Secondary School	48,993
Sila Central High School	16,919
Tamavua Hospital Rd	25,542
St Giles - Reinstatement	3,628
NAWAI JUNIOR SECONDAY SCHOOL	89,016
NATABUA HIGH SCHOOL	86,255
	<b>357,663</b>

22.	Has FRA managed to work with relevant Government Departments to ensure the timely issuance of gravel extraction licenses?	<p>In terms of securing the extraction license there has been great support in regards to FRA securing potential sites. Delays in securing Potential aggregates sites are predominantly due to;</p> <ul style="list-style-type: none"> <li>Obtaining Land Owning Units 60 % consent</li> <li>Multiple Approving Agencies (DoE, MRD, DoL, TLTB and DTCP)</li> </ul> <p>FRA continues to work closely with approving agencies to close out issues and expedite approvals.</p>
23.	Elaborate on the fatality rate in each of the Divisions, reasons for the increase in fatalities, and the solutions implemented by FRA in partnership with other stakeholders to reduce road fatalities and serious injuries.	<p>As detailed in the 2016 Annual Report, there has been an increase from 2013 to 2016 in fatal casualties per 100,000 population per division although it is noted that the overall rate has reduced in 2016.</p> <p>FRA cannot provide conclusive data on the reasons for in the increase as there are many contributing factors. FRA notes the high fatality rate in the Western Division and is addressing this with safety improvements where funding allows. For example, the N2 four lane project will separate traffic and restrict pedestrian crossing to specific locations. Together with footpath and streetlight improvements it is believed that this will dramatically reduce the number of accidents on this black spot. FRA works closely with the LTA and Local Police to implement engineering solutions where possible to increase the safety for drivers and pedestrians. Notable safety improvement measures include footpaths, streetlights and speed bumps where appropriate. The vast majority of accidents (91% in 2016) were caused by poor driver behavior (speeding, hit and run, drunk driving, dangerous driving) which are cultural factors that are difficult for FRA to address.</p>



24.	<p>Pages 24 to 28 of Annual Report - Provide a status update on whether renewals and replacements of roads, bridges, and jetties as highlighted in Tables 7, 8 and 9 have been completed or are pending completion and if so, the expected completion period.</p>	<p>The following projects have been completed:</p> <ul style="list-style-type: none"> <li>▪ Vunidilo Bridge</li> <li>▪ Vunivaivai Bridge</li> <li>▪ Lomawai 1 Bridge</li> <li>▪ Cogeloa FSC 1 Bridge</li> <li>▪ Vuma Box Bridge</li> <li>▪ Naganivatu Bridge</li> <li>▪ Levuka Market Bridge</li> <li>▪ Nasogo Bridge</li> <li>▪ Savu 4 Bridge</li> <li>▪ Wainasusu Bridge</li> <li>▪ Stinson Bridge</li> <li>▪ Vatuwaqa Bridge</li> <li>▪ Denarau Bridge</li> <li>▪ Taveuni Bridge</li> <li>▪ Namuavoivoi Bridge</li> <li>▪ Nadelei Bridge</li> <li>▪ Nabena Bridge</li> <li>▪ Nakama Bridge</li> <li>▪ Nakorosule Crossing</li> <li>▪ Wauosi Replacement Crossing</li> <li>▪ Balili Crossing</li> <li>▪ Waimari Crossing</li> <li>▪ Waivaka Crossing</li> </ul> <p>Feasibility studies programmed for Taveuni Bridges for 2019-20.</p> <p>Construction programmed for the following crossings for 2019-20:</p> <ul style="list-style-type: none"> <li>▪ Matewale Replacement Crossing</li> <li>▪ Solovi 1 &amp; 2 Crossings</li> <li>▪ Rabaraba Replacement Crossing.</li> <li>▪ Nasese Bridge</li> </ul>
25.	<p>Pages 30 to 33 of Annual Report - Table 10 (New Capital Programme):</p> <p>a. Provide the progress on the implementation of all the new capital projects and what were the major challenges and how were they addressed.</p>	<p>Major Capital Projects around Fiji include:</p> <p>NASRUP N2 – Improvement works and 4-laning in Nadi. This project is complete.</p> <p>SARUP 1 – Arterial Road upgrades on Suva. This project is complete.</p> <p>NASRUP S3 – Improvement works and 4-laning on Kings Road, Suva. This work will be completed by end-July 2019.</p> <p>Critical Bridge Projects for the Central, Northern and Western Divisions. These projects commenced in May 2019 and are currently on track.</p> <p>The challenges faced in delivering these works are generally consistent across all of the projects:</p> <ol style="list-style-type: none"> <li>1. Stakeholder Management</li> <li>2. Land Acquisition</li> <li>3. Change Management</li> <li>4. Logistics and Traffic Management</li> </ol>

	b. What were the main reasons for the expenditure shortfall?	The shortfalls are from Sawani-Serea and Nabouwalu Dreketi project. Though the works have been completed the final payment certificate was yet to be approved. The other shortfall was in S3 project and this was due to contractor not progressing well. FRA has terminated this contract and awarded to Higgins and Dayals. The works will be completing in 2019.
26.	Page 38 of Annual Report (Table 13 – Asset Stewardship – Outcomes) – Explain the reasons for the partial achievement of items 2A.2 and 2B.1.	We were under resourced to deliver the allocated budget outcomes.
27.	Provide confirmation on whether the Nadi 2 NASRUP and Suva 3 NASRUP projects have been completed. In light of the previous delays in the completion of some of the capital projects, what measures has FRA put in place to ensure the timely completion of future projects?	NASRUP N2 is complete. NASRUP S3 is in progress and is scheduled to be completed by end-July 2019. The Authority is working closely with Contractors, adopting a partnering approach, to highlight the consequence of delays to the works. We also have a Conditions of Contract for all works that is very clear on failure to meet timescales, and the commercial consequences should this eventuate.
28.	Has FRA implemented the enterprise management system to enable greater scrutiny and allow for a higher level of detailed reporting on programme delivery?	FRA has implemented the Primavera Enterprise Management System which is used to provide project control for all programme delivery.
29.	What is FRA doing to reduce road congestion in Fiji and how is it working with other agencies such as LTA, Police, Ports Authority and Town and Country Planning to manage congestion in urban areas?	The Authority has taken many steps and introduced many initiatives to alleviate congestion in Urban areas: 1. Introduction of peak hours work prohibitions for major projects. 2. Training programmes for all Traffic Managers. 3. Creation of additional lane-space. 4. Introduction of Clearways. 5. Introduction of Bus Lanes. In addition to these introductions we have also worked closely with all other authorities on: 1. Overloading management. 2. Vehicle dimension restrictions 3. ITS The Authority is wholly focused on managing congestion but it requires a similar level of focus from all other stakeholders. Currently there is a significant lack of car parking available in all Urban centres, this is exacerbating the congestion problems.
30.	The committee notes that the next revaluation of FRA's assets was scheduled to be carried out in 2018. Has this been done and what is the current value of FRA's assets?	The revaluation of asset was not done and this will be happening in 2019 if available budgetary requirements are there. The reason for change is to align it with new financial year. The depreciated value of assets as at 31/07/2018 is \$9,024,705,421.



31.	What are FRA's plans with respect to jetty renewals and replacements in the outer islands?	<p>The Authority is currently carrying out delivery work on Savusavu and Nabouwalu Jetties.</p> <p>For the 2019-20 FY there is a contract to design major upgrades to 6 Island Jetties.</p> <p>The Authority is also working closely with ADB and the World Bank on a proposal to design and deliver the complete replacement of the Natovi, Nabouwalu and Savusavu Jetties over the next 5 years.</p> <p>It is planned that the maintenance and upgrade of the Outer Islands Jetties will be delivered through a Capital Works and Maintenance contract for the Islands.</p>
32.	<p>Pages 45 &amp; 46 of Annual Report – Table 18 (Specific Tasks for January to July 2016): Explain the non-achievement of some of the specific performance targets under the four classifications (Governance, Technical, Financial, General Management) and the progress made on the on-going performance targets.</p>	<p><b><u>Governance</u></b></p> <p>The MOA with the municipal council was signed On 16 January, 2014. Financial matters are still being discussed and no agreement has been reached by both parties.</p> <p><b><u>Technical</u></b></p> <p>The new Roads Classification System and is included in the FRA Standard Document was finalised in June 2019.</p> <p>2.2.2 Road Classification</p> <p>FRA uses a functional classification system for its arterial road network.</p> <p>For rural roads, five classifications are provided which include M1, M2, S, C and R. The classification reflects both the function and standard of the road.</p> <div data-bbox="874 981 1337 1144" style="border: 1px solid black; padding: 5px;"> <p>M1 Roads are highways connecting the major cities and major provincial centres;</p> <p>M2 Roads serve the same role as M1 roads but carry less traffic and connect to large towns and provincial centres.</p> <p>S Roads provide the primary link between towns and villages and also support tourism areas.</p> <p>C Roads provide access for abutting properties to towns and villages.</p> <p>R Roads connect properties to the network.</p> </div> <p>For urban roads, three classifications are provided which include Arterial, Collector and Local Roads. The classification reflects both the function and standard of the road.</p> <div data-bbox="874 1234 1337 1346" style="border: 1px solid black; padding: 5px;"> <p>Arterial Roads have a predominant function to carry traffic but also serve other functions. They form the primary road network and link main districts of the urban area</p> <p>Collector Roads are local streets that have a greater role than others in connecting contained urban areas (e.g. residential areas, activity areas) to the arterial road system.</p> <p>Local Streets are intended exclusively for access with no through traffic function.</p> </div> <p>FRA continues to meet with the Land Transport Authority and other stakeholders to address the serious damage of overloading. Signage with legal weights on key bridges.</p> <p><b><u>General Management</u></b></p> <p>Operations Manual review not done.</p> <p>Staff manual currently under review.</p> <p>Risk management framework updated to ISO31000:2018.</p>
33.	Have all the repair works to FRA's road systems in the Western and Northern Divisions as a result of the damages sustained from tropical cyclone Winston been completed?	All repair works to the assets damaged in the Western and Northern Division have been completed.
34.	The committee notes that FRA's operating deficit for the seven months period ended 31 July 2016 was \$24,155,755. Explain why and provide a breakdown of the operating deficits together with the implications these operating deficits have had in the achievement of FRA's targets.	The operating deficit is due to non-cash item of depreciation. This doesn't have major implications as it doesn't affect the normal operations of FRA. The depreciation in financial statements is there as FRA accounts are prepared on IFRS standards.

## Notes To and Forming Part of the Financial Statements

35. The questions below relate to the notes to and forming part of the financial statements for the 7 months period ended 31 July 2016:

Note	Issues
3(b) – Consultancy costs	Provide a breakdown of the consultancy costs incurred seven months period.
5 – Receivables	Provide a breakdown of the accounts receivable and whether FRA has recovered the outstanding amounts.
12(b) – Contingent liabilities	With respect to FRA's Memorandum of Agreements with the municipal councils, the committee notes that no contributions were received from the councils and likewise no claim for reimbursement in relation to works carried out by council on behalf of FRA were received at the time of the compilation of the Annual Report. Inform us on whether this issue has been resolved and the outstanding contributions from Municipal Councils received.
13 – Key management personnel	Provide a breakdown of the total remuneration paid to management personnel for the seven months period ended July 2016.

### 3(b) Consultancy Costs

- MWH - \$6,680,614 – for Various work as they were Principle Engineering Service Advisor for FRA.
- WOOD & JEPSEN CONSULTANTS LTD – \$24,300 - Cadastral Survey
- CHAPMAN TRIPP - \$38,518 –for Legal matters against Blacktop Construction Northern road
- MORRISON LOW CONSULTANTS PTY LTD - \$461,568 – for asset management support, transition program manager, organization model review and implementation
- WORK OVERFLOW - \$237,101 for procurement services
- SQUIRE PATTON BOGGS - \$173,862 for FRA Contract Review & Proforma Contract
- CALIBRE CONSULTING LIMITED \$83,163 for FRA bridges & road contracts
- ERASITO BECA CONSULTANTS LTD -\$131,421 for road assets valuations and other professional services work
- BRIAN SHARPLIN LTD – \$99,308 for consultancy services and audit and review of FRA manuals
- PEMBROKE ADVISORY SERVICES LTD - \$57,670 Advisory services to CEO

### 5-Receivables

Telecom (Fiji) Limited	63,869.16
FLETCHER BUILDING (FIJI) LIMITED	1,700.00
Water Authority of Fiji	2,922,123.70
Energy Fiji Limited	115,632.55
Fulton Hogan Hiways JV	36,400.00
Ba Town Council	30,422.57
Nausori Town Council	163,837.19
Lautoka City Council	416,593.22
Airports Fiji Limited	104,765.00
OPUS International Consultants (Fiji) Ltd	34,836.90
Fiji Revenue & Customs Services	45,306.16
	<b>3,935,486.45</b>

12 (b) – contingent liabilities - FRA is working toward terminating this MOU

13 – Key Management personnel – the names of the staff to whom this is paid is reflected on pg 68



## Other Financial Information

36.	Page 75 of Annual Report (Table 21 – Loan Funding) – Provide confirmation on whether the road upgrading and flood damage repair projects as stated in the Table have been completed and the contractors responsible for each project. In addition, what other projects have been undertaken as part of this loan funding?	The roads, crossings projects that were destroyed have been repaired and accessible within ten days after the cyclone.
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## 2015 ANNUAL REPORT OF THE FIJI ROADS AUTHORITY

37.	What measures are in place to ensure that contractors satisfactorily complete all work undertaken within the approved scope and according to the specified technical standards? In the event of a breach of contract, delays in project completion, or when a contractor withdraws, what arrangements are in place to ensure that outstanding work is completed?	<p>All the work done by the contractor is independently verified by the Engineer to Contract who is directly involved in the project from its inception to completion. In the event of a delay in completion, the contractor is penalized for each day of delay by having to pay liquidated damages to FRA which accrues on a daily basis after the original timeline.</p> <p>If a contractor unlawfully reaches/terminates the contract, then the FRA uses the provision in the contract which allows FRA to engage another contractor to complete the works and all the costs incurred in completing the outstanding works through the new contractor is backcharged to the original contractor.</p>
38.	<p>Page 17 of Annual Report:</p> <ol style="list-style-type: none"> <li>How has work under the New Capital (Community) programme under the ADB loan facility progressed with respect to the installation of streetlights?</li> <li>What is the Authority's plans on installing streetlights in all towns and cities in Fiji and provide further information on which areas have yet to be installed with streetlights and the expected completion period.</li> <li>Considering the huge demand for streetlights, has FRA considered installing solar powered streetlights?</li> </ol>	<ol style="list-style-type: none"> <li>The FRA 15/84 Western Village Streetlight project under the ADB loan was completed on 10.11.17. A total of 381 streetlights have been installed.</li> <li>There are ongoing streetlight projects along King's Road, Queen's Road, Wainibokasi, Labasa-Savusavu and Suva Street lighting (Part of Queen Elizabeth drive, Gladstone Road, Cakobau Road &amp; Edinburgh drive that will be completed around September this year. This is by far the largest streetlight project to be undertaken by the FRA. Upon completion of this project there will be a total of 3,736 streetlights installed around the country.</li> <li>Apart from this the FRA has put out a tender FRA 19/15 Installation of Streetlights in Fiji which is presently being evaluated. The areas in this project that is expected to be completed in 2021 include the following: <p><b>Central Division</b></p> <ol style="list-style-type: none"> <li>Suva CDB</li> <li>Nabua</li> <li>Cunningham Road</li> <li>Tacirua Subdivision</li> <li>Suva – Nausori corridor</li> </ol> </li> </ol>

		<p><b><u>Western Division</u></b></p> <ul style="list-style-type: none"> <li>f. Lautoka CDB</li> <li>g. Tavakubu Road</li> <li>h. Vutualevu Subdivision</li> <li>i. Sigatoka CBD</li> <li>j. BA CBD</li> <li>k. Tavua Hospital</li> </ul> <p><b><u>Northern Division</u></b></p> <ul style="list-style-type: none"> <li>l. Vunivau – Residential Area</li> <li>m. Savusavu CDB</li> <li>n. Lesiaceva/Buca bay Rd Junction – Airport Rd</li> </ul> <p>25 Solar streetlights were installed in Nailaga village in Ba in 2018. A tender has been awarded for the installation of another 49 solar streetlights along King's. Queens, Labasa-Savusavu rd and Nabouwalu jetty. The solar streetlight requires a significant capital investment as it's around 5 times as expensive as normal power grid connected streetlights.</p>
39.	Update us on whether the Savusavu Jetty replacement project and Vunisea Jetty renewal project have been completed.	<p><b><u>Savusavu Jetty</u></b></p> <p>Replacement of jetty will be undertaken after completion of full design in the coming financial year. Construction is programmed on 2020-2021</p> <p><b><u>Vunisea 2 Jetty</u></b></p> <p>Is under feasibility study and design. Will be completed by end of this year. Construction is programmed on 2021-2022.</p>
40.	The committee notes that FRA was seeking to take back in-house a number of key functions which had been outsourced since 2012. Provide more information on which key functions were outsourced and whether these are now with FRA.	<p>Between 1999 and 2015 the cost of Staff as a % of CAPEX averaged at 13.8%. In 2018/19 this has been reduced to 4.7%.</p> <p>Much of this reduction has been the result of a deliberate intention to remove consultant staff whilst deploying directly hired employees.</p> <p>Historically much of the Design function for Capital work was outsourced, now this arrangement applies only to specialist needs. The Authority has grown, and continues to grow, its design team with an intention that within 2 years all design will be in-house.</p>
41.	What are the reasons for the shortage in gravel supply in Fiji and how has FRA collaborated with relevant authorities to address the shortage of high quality gravel for road building and maintenance? What procedural change has FRA sought to address this issue?	<p>There are adequate aggregate resources available in Fiji however there is a shortage of quarry sites that produce quality sealing chips. This is due to the quality of material and specialist equipment needed to crush to small chips. In addition, there are only a few Asphalt plants that have been established in Fiji. There are 9 quarry sites capable of producing sealing chips and 5 asphalt plants.</p> <p>FRA has worked closely with all relevant authorities to secure hard rock and river gravel sites to enable a greater supply of sealing chips and high quality aggregate material.</p>

		<p>As recommended in the mineral baseline studies that was facilitated by UNDP, FRA is intending to move in the direction of land-based extraction rather than river gravel extraction because of environment and social impacts. FRA will be implementing this change as soon as sufficient hard rock sources are available to meet the demand. The FRA strategy is to obtain quarry licenses and then manage the rock extraction and crushing activities under third parties operation. FRA has taken the initiative in identifying potential aggregates sites all throughout Fiji. This process commenced in the Northern division. This strategy will be continued in the Central Eastern and Western Division.</p>
42.	Page 22 of Annual Report (Table 5 – Maintenance of Assets) – Provide a breakdown of the activities carried out under the 'Fast Response' work category.	Refer to Attachment III
43.	Are there plans to replace the single line old bridges along the Nabouwalu - Labasa road or to construct new bridges instead?	The work to replace these single lane bridges is in progress, the work should be completed by mid-2020.
44.	Page 14 of Annual Report – Identify which projects fall under the respective contractors' and sub-contractors' areas of responsibility.	<p><b><u>Contractors</u></b></p> <ul style="list-style-type: none"> <li>▪ <b><u>Maintenance:</u></b> <ul style="list-style-type: none"> <li>▪ Central/Eastern – Fulton Hogan Hiways Joint Venture</li> <li>▪ Northern – Fulton Hogan Hiways Joint Venture</li> <li>▪ Western – Higgins Contractors Ltd.</li> </ul> </li> <li>▪ <b><u>Bridges</u></b> <ul style="list-style-type: none"> <li>▪ Fulton Hogan Hiways Investment</li> </ul> </li> <li>▪ <b><u>Capital Works</u></b> <ul style="list-style-type: none"> <li>▪ Cyclone Kofi (TD15F) – RPA and Faizal Buldozing</li> <li>▪ Naiborebore &amp; Kasavu Slip Repair – Fulton Hogan Joint Venture</li> <li>▪ Lomaloma Slip – China Railway First Group</li> <li>▪ Rakiraki Bridge – China Railway No. 5</li> <li>▪ Four Long Bridges – Fletcher Construction</li> <li>▪ Six Short Bridge – Fulton Hogan Investment</li> <li>▪ China Railway 14 – Vatuwaqa and Stinson Parade Bridges</li> <li>▪ Nasese Bridge – China Railway No. 5</li> <li>▪ Denarau Bridge – Pacific Marine Civil Solution</li> <li>▪ Nakorosule Crossing – Naboutini Transport Limited</li> <li>▪ Rabaraba Replacement Crossing – Concrete Solution</li> <li>▪ Matewale Replace Crossing – Fletcher Construction</li> <li>▪ Wauosi Replacement Crossing – Lomanitoba Company Limited</li> <li>▪ Balili Crossing- Beca International</li> <li>▪ Waimari Crossing- Lomanitoba</li> <li>▪ Waivaka- Lomanitoba</li> <li>▪ Navouwalu Jetty renewal (interim solution)- Hall Contracting</li> <li>▪ NASRUP Nadi 1- China Railway No.5</li> <li>▪ Coasta Protecion – Ovalau Cawaci &amp; Vuma- FHH Joint Venture</li> </ul> </li> </ul>



		<ul style="list-style-type: none"> <li>▪ Savusavu Bay Coastal Protection Works- Faizal Bulldozing works ltd</li> <li>▪ Rewa Delta Flood Resilience Implementation - Erasito Beca Consultants</li> <li>▪ Extension Street Link – FRA 15/27- Erasito Beca Consultants</li> <li>▪ NASRUP Suva 1- China Railways No.5</li> <li>▪ NASRUP Suva 3- China Railway 1st Group</li> <li>▪ Lami Right Turn Bay – FHH Joint Venture</li> </ul>
45.	Page 36 of Annual Report – Table 14 (Health and Safety – Other Outputs and Outcomes): What were the reasons for some of the targets not being achieved, partially achieved, or not measured and how were they rectified?	<p>The table states that there was a 2015 target of no lost time incident to occur on FRA sites. The report also states on page 37 that this is what FRA seeks to achieve and is an aspirational target.</p> <p>It is observed internationally that obtaining zero lost time incidents for a highway agency is incredibly difficult to achieve and FRA is not aware of any such agency that has ever achieved this. Despite this, it remains FRA's aspiration that we work with contractors and other stakeholders to reach this target through a programme of continuous improvement that FRA plans to implement.</p>
46.	Pages 35 and 36 of Annual Report – As per Figure 5 and Figure 6, what is the correlation between road casualties and the quality of the road?	Poor road condition can lead to accidents due to sudden breaking, poor driver behavior and even mechanical failure. Similarly, good quality road condition can lead to accidents due to poor driver behavior and increased speeding occurrence. There are many causal factors that lead to road casualties and looking at past statistics, poor driver behavior is the leading cause regardless of road condition.
47.	What are the safety improvement projects that have been undertaken to help reduce the road casualty toll?	<p>A widescale project across Fiji has been undertaken as of 2019 to install footpaths and streetlights across the country to assist in the reduction of road casualties. In addition, FRA installs speed bumps on villages next to major highways, as well as outside schools and civic centres.</p> <p>FRA also plans to install fencing on all dual carriage way sections to limit pedestrian crossing to specific locations. As part of the future plan to upgrade Traffic Signals, many of the Amber-flashing lights at particularly heavily used crossing will be changed to 'Red/Green' signals.</p>
48.	Elaborate on the effectiveness of the speed cameras.	Traffic Cameras are a highly effective deterrent against speeding and have been proven to be effective in other countries. FRA is in full support of the continued roll of traffic cameras that not only reduce vehicle speed, but also capture important data regarding traffic volume.
49.	Page 38 of Annual Report – Table 17 (Asset Stewardship – Outcomes): Explain the reasons for the non-achievement of the target for the annual reduction in the number of pothole complaints.	The reason why the number of pothole complaints, and by extension the number of potholes, did not reduce is because the Highway Network is in such a degraded condition that the deterioration is accelerating. Working under such conditions it is practically impossible to predict pothole occurrence with any degree of certainty.

50.	How has the 'Building Local Capacity through Knowledge Transfer' programme helped build local skills and capacity? Provide relevant examples.	<p>There are a number of highly qualified and experienced expatriate members of staff within the FRA. Each is work within a very technical aspect of the work (Pavement Design, Traffic Engineering, Planning and Programming, etc). We have a forward looking plan to deploy graduates to each of these teams to learn the skills necessary for their own progression within the FRA.</p> <p>The Authority is also making it mandatory for any external agency or consultant to include knowledge transfer into the service that they are providing.</p> <p>Funding Agencies, such as ADB and the WB are also assisting the Authority with relevant training.</p> <p>Knowledge transfer within the Authority has been successful.</p> <p>The current Expatriate General Manager for the Central Division will be leaving the Authority at the end of July. This is only possible because, over his tenure, he has successfully trained and passed on his knowledge to the team; he will be replaced by a Fijian, trained from within the Central team, from August.</p>
51.	Page 43 of Annual Report – Table 18 (Asset Provision, Development, Maintenance and Renewal) – Explain why the non-achievement of the targets and what were the challenges in meeting these targets.	<p>The key challenges facing the Authority are:</p> <ol style="list-style-type: none"> <li>1. Asset deterioration as a result of Historic under-funding and mis-management</li> <li>2. Vehicle Overloading</li> <li>3. Resource Availability</li> <li>4. Design and Construction Capability and Capacity</li> <li>5. Uncontrolled Urban Development</li> </ol>
52.	Page 44 of Annual Report – The committee notes that around 5km of intended sealed road rehabilitation was not delivered in 2015 due to a large package being tendered outside of maintenance contracts. As the tender took a longer time to be awarded, no significant work was undertaken on this contract. Why was the tender process prolonged and has all outstanding works been completed?	<p>The project Sealed Road Rehabilitation project was not tendered out, as the plan was to include the sites in Suva Arterial Road Upgrade Project (SARUP 1), which was tendered in June 2016.</p> <p>This project was funded by Asian Development Bank (ADB). ADB has extended tender process as lot due diligence is done before tender is advertised to the market. All the sites under this project is complete.</p>
53.	Inform us on the total number of bridges under FRA's stewardship together with their priority classification. What are the Authority's plans in terms of reducing the number of high priority bridges through repair or replacement?	<p>There are currently 608 Bridge in the Authorities Asset bank; 57 of these are considered to be critical.</p> <p>The most critical seventeen of these Critical Bridges are being replaced in contract that are currently in progress. We have a proposal to replace the remaining 40 Critical Bridges over the next 5 years.</p> <p>Over this period there will be a need to maintain all bridges in a serviceable condition. This will be ensured through our maintenance programme.</p>

54.	<p>Explain whether the physical work for the following 4 jetties were carried out in 2015:</p> <ul style="list-style-type: none"> <li>▪ Yasawa-I-Rara Jetty</li> <li>▪ Natuvu Jetty</li> <li>▪ Totoya Jetty</li> <li>▪ Nabouwalu Jetty</li> </ul>	<p><b><u>Yasawa-i-Rara</u></b> The following works were carried out: Top brackets for the bracing system have been installed as specified. Marine growth has been removed on the grids, beams at the jetty head have been lifted and welded, small debris have been removed from the sea bed. All caisson lids have been re-connected.</p> <p><b><u>Natuvu jetty</u></b> Pedestrian jetty landing has been rebuilt. This jetty will be replaced by a new jetty located within Buca Bay. Currently under feasibility study. Design of the new jetty is programmed in the next financial year.</p> <p><b><u>Totoya jetty</u></b> works carried out included causeway repair, dolphin access ladder repair and minor repairs to waiting shed</p> <p><b><u>Nabouwalu jetty</u></b> physical works were carried out which included mooring dolphin installation, dredging of berth area, causeway repair and concrete ramp overlay. Currently undergoing widening of the causeway with installation of streetlights</p>
55.	What has FRA done to improve the quality of its service delivery and strengthen its data collection mechanism?	FRA has established a Service Request system where all service requests are logged, assigned to an engineer for resolution, tracked and ultimately closed out. FRA measures performance and levels of service against this.
56.	Has the road user satisfaction survey been carried out and if so, what was the outcome? How reliable are these surveys in gauging the quality of service rendered?	A road user survey has not been conducted since the deferral in 2015 when a household travel survey was conducted by the Ministry of Infrastructure. In general, FRA believes that road user satisfaction has improved in recent years.
57.	How has FRA progressed in synchronizing the legislative changes in the establishment of FRA and other subsequent legislative change?	Not sure what this question means. FRA governs its operations through the FRA Act, which has only twice been amended and both amendments are being complied with. Aside from that, the FRA Act does not have interphase with any other legislation so subsequent changes in other legislation does not directly affect FRA.
58.	What are the Authority's views on the budgetary allocation held under RIE in regard to the achievement of its work targets? How has the Authority's work been impacted as a result?	The funds held under RIE have been released late which affects the cash flow requirements for FRA. This leads to delay payment to contractors affecting the timely delivery of projects.
59.	What is the criteria used to engage consultants and contractors?	<p>The major criteria are:</p> <ol style="list-style-type: none"> <li>1. Capability</li> <li>2. Experience</li> <li>3. Capacity</li> <li>4. Best Value</li> </ol>
60.	Explain why some of the companies contracted by FRA did not fully see through their periods of engagement for example, MWH (New Zealand) Ltd, Blacktop Construction Limited, etc.	Significant overcharging by MWH was uncovered by the FRA team. A request was made to redress this situation, it was at this point that MWH decided to leave Fiji and frustrate the contract. We are unable to provide more detail as this case is in litigation. Blacktop Construction Limited went into receivership.



**IRISH CROSSINGS RE-INSTATED IN 2016**

	<b>Name of Structure</b>	<b>Reinstatement Cost (\$)</b>
1	BUREWAI CROSSING	2,606.03
2	CAWACI IRISH CROSSING	1,735.12
3	DAVUILEVU FARM ROAD CROSSING	4,404.07
4	DAWAKOTO CROSSING	3,338.45
5	DELASUI CIRCULAR CULVERT	1,115.86
6	DEVODEVO CREEK CROSSING	15,594.63
7	DOGO CROSSING	12,941.11
8	GANILAU CROSSING	6,493.02
9	LOGANISEBI CROSSING	350,551.31
10	LOMATI CULVERT	1,621.82
11	LOVONI 1 CROSSING	1,415.63
12	LUTU CROSSING	378.12
13	MADO DEEP GORGE	52,509.43
14	MATAINASAU 2 CROSSING	2,994.27
15	MATAINASAU CULVERT	47,742.42
16	MONA 1 CROSSING	25,011.85
17	NABAITAVO 1	2,188.95
18	NACOKAIKA NATOAIKA CROSSING	20,314.29
19	NADOVU 1 CROSSING	20,896.52
20	NAITAUVOLO CROSSING	2,190.67
21	NAIVUCINI IRISH CROSSING	86,547.71
22	NAKAVIKA 1 CROSSING	24,693.08
23	NAKOROSULE CROSSING	2,888.22
24	NAMATADAMU CROSSING	647.00
25	NAQELEWAI 3 CROSSING	5,416.17
26	NAQELEWAI CROSSING	99.36
27	NAQIRI CROSSING	2,157.94
28	NASALIA 1 CROSSING	3,409.00
29	NASAU 1 BOX CULVERT	23,260.02
30	NASI CROSSING	4,715.20
31	NASIRITI CROSSING	3,295.66
32	QELE CREEK CROSSING	1,682.37
33	QELEKURO CROSSING	15,160.27
34	RUKURUKU CROSSING	9,451.80
35	SAWANIKULA 2 CROSSING	73,241.14
36	SAWANIKULA CROSSING	10,980.73
37	SECTOR 6 CROSSING	459.70
38	SOA CROSSING	6,623.36
39	TABARUA 3/6 CROSSING	24,684.62
40	TAVIYA CROSSING	1,578.32
41	TOGA CULVERT	13,698.43
42	VAGADACI BOX CULVERT	939.19
43	VATUDEDE (DELAKADO)	38,494.40
44	VIRO 1 CROSSING	15,984.62
45	VIRO 2 CROSSING	136.20
46	VOROVORO CIRCULAR CULVERT	6,628.83
47	VUMA BOX CULVERT	4,404.47

	Name of Structure	Reinstatement Cost (\$)
48	VUNANIU CROSSING	397.71
49	VUNIVISAVU CROSSING	937.96
50	WAIBALAVU LILAI CULVERT	60,507.73
51	WAIDAU CROSSING	2,679.25
52	WAIDRADRA CROSSING(NAQALI)	8,316.72
53	WAIKAVIKA CROSSING	1,831.06
54	WAILOA 1 CROSSING	283.81
55	WAIMA CROSSING	4,198.86
56	WAIMALUA CROSSING	11,389.10
57	WAIMOLI CIRCULAR CULVERT	2,721.60
58	WAINABUA CROSSING	19,681.61
59	WAINAVIDA CROSSING	131,415.48
60	WAINAVUTOVUTO CROSSING	8,541.85
61	WAINIBUKA CROSSING	116,483.38
62	WAINIKATAMA 17/4 CROSSING	6,210.58
63	WAINIKAVOU 23/1 CROSSING	20,284.32
64	WAINIKOVU CROSSING	8,278.59
65	WAINIMAKUTU CROSSING	13,927.85
66	WAINIVESI CROSSING	3,500.00
67	WAINIYAVU 1 CROSSING	74,747.38
68	WAIDROKADRA 0/4 CROSSING	1,650.00
69	WAIRUA CROSSING	1,170.43
70	WAISA CROSSING	146,995.54
71	WAISOMO CROSSING	19,578.02
72	WAIVAKA 2/6 CROSSING	28,019.39
73	WAIVAKA CROSSING	1,740.65
74	WAIWAU CROSSING	2,744.19
75	ABACA ROAD	1,626.00
76	BABRIBAN	51,793.50
77	BALATA ROAD	5087.445
78	BAROTU ROAD	686.307
79	BUABUA ROAD	3,332.00
80	BUKUYA ROAD	62,456.76
81	DRAMASI ROAD	24,470.65
82	EBUTO ROAD	36,069.00
83	GANILAU (WESTERN)	13,826.68
84	KABISI LOOP ROAD	3,216.75
85	KINGS ROAD (YAQARA-BOUNDRY)	550.00
86	KOROBOYA	2,170.42
87	KOROTALE VALLEY ROAD	1,866.14
88	LAKALAKA	16,694.09
89	LAU RD	43,108.00
90	LAWAKI RD (DAWA OR NASAU)	311,097.57
91	LEWA	2,022.00
92	LOLOLO ROAD	3,893.00
93	LUBULUBU	10,568.52
94	MALELE	304.38
95	MASI	61,909.99

	Name of Structure	Reinstatement Cost (\$)
96	MATACAWA	4,879.56
97	MATAWALU RD	2,052.00
98	MATE	3,790.00
99	NABALABALA	22,413.00
100	NACOCOLEVU ROAD	3,034.75
101	NADARIVATU	2,194.52
102	NADELE	100.00
103	NADELEI	2,262.11
104	NADELEI ROAD	2,706.64
105	NADROUMAI RD	3,075.80
106	NAILUVA	555,275.95
107	NAKOROTUBU ( NAMARAI COASTAL P	10,502.11
108	NARARA	990.00
109	NARENDRA SINGH ROAD	4,555.13
110	NARIKOSO VILLAGE ROAD	31,594.05
111	NASESEVIA RD	1,574.32
112	NASEYANI	1,541.80
113	NASIVIKOSO RD	10,916.04
114	NAURIA	2,286.04
115	NAUSORI	70,582.15
116	NAUSORI HIGHLAND ROAD	19,354.70
117	NAVALA ST	7,613.39
118	NAVUNIYAUMUNU	35,193.16
119	NAWAICOBIA RD	22,982.92
120	NAYAULEVU	38,880.18
121	PATUKASAU 2	1,399.75
122	QALELA	11,069.69
123	QERELEVU RD	4,886.10
124	RAVIRAVI	7,840.83
125	SABETO RD	24,479.46
126	SARU BACK RD	6,733.95
127	SAVALAU 3RD CROSSING	8,581.50
128	SAVALAU RD	3,410.00
129	SOLOVI RD	8,235.67
130	SOROKOBA	1,510.31
131	TOGE ROAD	1,440.00
132	TUNALIA RD	9,437.60
133	UCIWAI	6,763.70
134	ULUISILA RD	3,137.80
135	UNKNOWN_03268	119.37
136	UNKNOWN_03279	1,029.50
137	VAIVAI ROAD	3,042.75
138	VAKABULI IND SCH RD	15,635.96
139	VAKURU ROAD	10,370.50
140	VALLEY RD	107,673.08
141	VATUKACEVACEVA	5,253.25
142	VATUKOULA INDUSTRIAL RD	27,431.95
143	VUDA BACK RD	3,679.00



	Name of Structure	Reinstatement Cost (\$)
144	VUNSBITU RD	9,995.88
145	VUTUNI RD	35,282.25
146	WAILOKO RD	9,817.30
147	WAIMARI	7,040.00
148	WAINIVOCE WEST ROAD	4,877.90
149	YALADRO	367.50
150	YALAVOU STATION RD	1,377.50
151	NAMULOMULO VILLAGE ACCESS	28,864.55
152	KORO RD	29.75
153	KORO ROAD	7,499.25
154	MARE VILLAGE ROAD	2,464.00
155	MATANIWAI ROAD	1,135.19
156	NAWAIRUKU ROAD	37,315.50
157	NAMADA BENAI LINK ROAD	1,266.00
158	RAVIRAVI ROAD	4,647.00
159	NAYAULEVU ROAD	57,224.00
160	SAVALAU ROAD	1,703.00
161	TIVORO LANE	6,596.38

WESTERN DIVISION FAST RESPONSE PROGRAM	
Road	Feature
NAVALA ST	Koronubu Sangam School Access
NAVALA ST	Koronubu Sangam School Access
SOROKOBA	RATU FILIMONI MEMORIAL SCH ACCESS WAY
SOROKOBA	RATU FILIMONI MEMORIAL SCH ACCESS WAY
MUKTA ROAD	Namuka Bay Rd.
MUKTA ROAD	Namuka Bay Rd.
NAVUTU ROAD	
NAVUTU ROAD	
NAVUTU ROAD	
NAVUTU ROAD	
NAVUTU ROAD	
NAVUTU ROAD	
NAVUTU ROAD	
NAVUTU ROAD	
NAVUTU ROAD	
NAVUTU ROAD	
NAKAVIKA VILLAGE ROAD	NAKAVIKA VILLAGE ROAD
NAKAVIKA VILLAGE ROAD	NAKAVIKA VILLAGE ROAD
NAKAVIKA VILLAGE ROAD	NAKAVIKA VILLAGE ROAD
NAKAVIKA VILLAGE ROAD	NAKAVIKA VILLAGE ROAD
NAKAVIKA VILLAGE ROAD	NAKAVIKA VILLAGE ROAD
VANUAKULA ROAD (TAVUA)	VANUAKULA ROAD
VANUAKULA ROAD (TAVUA)	VANUAKULA ROAD
VANUAKULA ROAD (TAVUA)	VANUAKULA ROAD
VANUAKULA ROAD (TAVUA)	VANUAKULA ROAD
NABOUTINI VILLAGE ACCESS ROAD	Naboutini Village Access Road.
NADARIVATU	Balata Primary School Driveway
NADARIVATU	Balata Primary School Driveway
NADARIVATU	Balata Primary School Driveway
NADARIVATU	Balata Primary School Driveway
NADARIVATU	Balata Primary School Driveway
NADARIVATU	Balata Primary School Driveway
NADARIVATU	Balata Primary School Driveway
CATHOLIC MISSION ROAD	ST.FRANCIS COLLEGE ACCESS
CATHOLIC MISSION ROAD	ST.FRANCIS COLLEGE ACCESS
CATHOLIC MISSION ROAD	ST.FRANCIS COLLEGE ACCESS
NALABA SCHOOL ROAD	
NALABA SCHOOL ROAD	
NALABA SCHOOL ROAD	
VOTUA ST	WAILAILAI SETTLEMENT ROAD
VOTUA ST	WAILAILAI SETTLEMENT ROAD
VOTUA ST	WAILAILAI SETTLEMENT ROAD
VOTUA ST	WAILAILAI SETTLEMENT ROAD
VANUAKULA ROAD (TAVUA)	VANUAKULA ROAD
NABOUTINI VILLAGE ACCESS ROAD	Naboutini Village Access Road.
NABOUTINI VILLAGE ACCESS ROAD	Naboutini Village Access Road.
VISEISEI BACK RD (WEST)	
VATABALAVU RD	20m past 2nd Rest Place.
VATABALAVU RD	20m past 2nd Rest Place.
VATABALAVU RD	20m past 2nd Rest Place.

[illegible]



[illegible]

VAVINAQIRI ROAD	
VAVINAQIRI ROAD	
VAVINAQIRI ROAD	
VAVINAQIRI ROAD	
VAVINAQIRI ROAD	
NAVUNITAWA VILLAGE ROAD	Navunitawa Village Rd.
NAVUNITAWA VILLAGE ROAD	Navunitawa Village Rd.
NAVUNITAWA VILLAGE ROAD	Navunitawa Village Rd.
NAVUNITAWA VILLAGE ROAD	Navunitawa Village Rd.
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NAVUNITAWA VILLAGE ROAD	Navunitawa Village Rd.
NAVUNITAWA VILLAGE ROAD	Navunitawa Village road
NAVUNITAWA VILLAGE ROAD	Navunitawa Village road
NAVUNITAWA VILLAGE ROAD	Navunitawa Village road
YALAVA PL	
YALAVA PL	
YALAVA PL	
YALAVA PL	
YALAVA PL	
YALAVA PL	
YALAVA PL	
YALAVA PL	
VALLEY RD	QEREQERE VILLAGE RD
VALLEY RD	QEREQERE VILLAGE RD
CIRI ROAD	NALELE VILLAGE ACCESS 3
CIRI ROAD	NALELE VILLAGE ACCESS 3
CIRI ROAD	NALELE VILLAGE ACCESS 3
CIRI ROAD	NALELE VILLAGE ACCESS 3
CIRI ROAD	NALELE VILLAGE ACCESS 3
CIRI ROAD	NALELE VILLAGE ACCESS 2
CIRI ROAD	NALELE VILLAGE ACCESS 2
CIRI ROAD	NALELE VILLAGE ACCESS 2
CIRI ROAD	NALELE VILLAGE ACCESS 2
CIRI ROAD	NALELE VILLAGE ACCESS 1
CIRI ROAD	NALELE VILLAGE ACCESS 1
CIRI ROAD	NALELE VILLAGE ACCESS 1
CIRI ROAD	NALELE VILLAGE ACCESS 1
NAVUTU RD	NAVUTU RD
NAVUTU RD	NAVUTU RD
NAVUTU RD	NAVUTU RD
NAVUTU RD	NAVUTU RD
NAVUTU RD	NAVUTU RD
NAVUTU RD	NAVUTU RD
NAVUTU RD	NAVUTU RD
NAVUTU RD	NAVUTU RD
NAVUTU RD	NAVUTU RD
NAVUTU RD	NAVUTU RD
NAVUTU RD	NAVUTU RD
Namotomoto Village Access Road # 4	Namotomoto Village Access Road # 4

Namotomoto Village Access Road # 4	Namotomoto Village Access Road # 4
Namotomoto Village Access Road # 4	Namotomoto Village Access Road # 4
off Queens Road - Namotomoto Village Access # 3	off Queens Road - Namotomoto Village Access # 3
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off Queens Road - Namotomoto Village Access # 3	off Queens Road - Namotomoto Village Access # 3
UNKNOWN_03435	branch off Goundar Road.
UNKNOWN_03435	branch off Goundar Road.
UNKNOWN_03435	Goundar Road.
UNKNOWN_03435	Goundar Road.
MALOLO STABLE	Malolo Stable
SABETO RD	
SABETO RD	
SABETO RD	Nagado Village Road.
SABETO RD	Nagado Village Road.
SABETO RD	Nagado Village Road.
SABETO RD	Nagado Village Road.
SABETO RD	Nagado Village Road.
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SABETO RD	
SABETO RD	
QARA SETTELEMENT ROAD	CH90 TO CH1200
NAUSORI HIGHLAND ROAD	Farid drive away.
NAUSORI HIGHLAND ROAD	Farid drive away.
NAVUNITAWA VILLAGE ROAD	Navunitawa Village Rd.
NAVUNITAWA VILLAGE ROAD	Navunitawa Village Rd.
NAVUNITAWA VILLAGE ROAD	Navunitawa Village Rd.
NAVUNITAWA VILLAGE ROAD	Navunitawa Village Rd.
VANUAKULA ROAD (TAVUA)	VANUAKULA ROAD
NABOUTINI VILLAGE ACCESS ROAD	Naboutini Village Access Road.
NABOUTINI VILLAGE ACCESS ROAD	Naboutini Village Access Road.
VISEISEI BACK RD (WEST)	



## Appendix Two

### Supplementary Response

## **Fiji Roads Authority (FRA) 2015 and 2016 (January-July) Annual Reports**

### **Supplementary Questions**

#### **Resources Availability**

##### **Quarries in the maritime islands**

1. How can FRA justify that developing a hard rock quarry and material extraction conducted in the maritime islands is safe? Whilst assessments by experts, monitoring made by respective stakeholders and mechanisms are stipulated in contracts to avoid exploitation, still how can FRA know that this will be controlled to avoid over exploitation of resources (Human resource change – leads to change in the decision made)?

The Fiji Roads Authority has a detailed plan for material provision and the selection of which route to procurement is used depends upon, mainly, Environmental considerations, Social and Cultural consideration and Best Value. In summary:

1. The intention of the FRA is to ban the use of river gravels and non-hard rock materials in all new contracts from 01 January 2020. This will place a greater reliance on the managed extraction from hard-rock sources (quarries) and the quantities of hard rock required will increase.
  2. Sources of hard rock have been identified on some of the Maritime Islands that could be used it support our works on the Islands, however, this is only one possible solution to the material supply issue.
  3. Our Maritime Islands General Manager has identified a work programme for the Maritime Islands over the next 5 years. From this information the she is in the process of identifying the quantities of materials that will be required for each island to support this work.
  4. Throughout the process we are consulting with all Government Stakeholders and local communities.
- 
2. Developing a hard rock quarry and extraction site can lead to the island being a flat land with no high rise mountains for people to use as an escape route in case of tsunamis and sea level rise. Please explain what other alternative is in place for maritime islands if this scenario does happen.  
The Fiji Roads Authority is acutely aware of the vulnerability of some of the Islands. If we do proceed with managed hard-rock extraction part of the review process is to consider such issues and concerns. The quantity of extraction would be strictly limited to only what would be required within the 5-year plan, and once the required quantity had been extracted and stockpiles the area would be returned to a rehabilitated condition.  
In addition to limiting the quantity of material extracted to be only what is actually needed we also take very seriously the need for recycling and reuse in all our works. Wherever possible this sustainable approach will be adopted on the Maritime Islands.  
It is also the intention of the FRA to not wantonly destroy the natural beauty of the Maritime Islands and we seek to maintain a safe existence for the Island Residents. There is no way that the FRA would allow the extent of any hard-rock extraction on the Islands to result in denudation or removal of whole hills or mountains.



## **Fiji Roads Authority (FRA) 2015 and 2016 (January-July) Annual Reports**

### **Supplementary Questions**

It is perhaps an opportune time to update the Committee on other options, currently under review, that could mitigate, or at least reduce, the need to carry out hard-rock extraction on the Maritime Islands. We are currently concerned about the quality of material being used in a number of our projects and we are considering taking over the material procurement and supply ourselves, rather than the current practice of having the contractors directly procure the material themselves. Under such an arrangement, and under the correct transportation arrangement, it may still be possible to utilize hard-rock material extracted on Viti Levu or Vanua Levu, for use in the Maritime Islands.

Under the current arrangement (procure by the contractor) the shipping of material to the Islands is cost-prohibitive; we believe that it could be made cost-effective under direct procurement. This proposal will need FRA Board approval but the management team see this proposal as a very effective means of obtaining the highest quality material and end-product at the Best Price

3. Explain how is FRA going to maximize the employment of local contractors to undertake projects and other road works?

The Fiji Roads Authority sees the way to maximizing the employment of local contractors is to make the tendering process accessible to all contractors in Fiji. We can achieve this in a number of ways:

1. We issue open tenders
2. We ensure that there is a range tender sizes – tenders up to \$1 Million, \$1-3 Million, \$3-5 Million, \$5-10 million, etc.
3. The FRA is holding frequent consultations with contractors to assist them in understanding the requirements of the contracts, we are also explaining the consequences of over-ambition or over-extending themselves. In the past there have been situations where contractors have failed to meet contractual requirements and have been penalized accordingly; we do not want this to happen.

Success of the local contracting community is critical to the success of the FRA, the 'pool' of local contractors is very small in Fiji and we need to support and assist them wherever we can.

### **Urban Development**

4. How does FRA collaborate with other stakeholders to ensure that a holistic approach is taken in relation to urban development and addressing the key challenges faced?

The Fiji Roads Authority liaises on a regular basis with all government stakeholder and we have written frequently in the past regarding our concerns over issues such as TIA requirements and Car Parking provision. It is our view that both issues are presenting a serious threat to transportation needs around the major Urban Centres in the future and we have requested that all stakeholders come together to plan appropriately.

### **Design and Construction Capability and Capacity**

5. How is FRA planning to prioritize the replacement of 'Irish Crossings' with more durable crossings?

## **Fiji Roads Authority (FRA) 2015 and 2016 (January-July) Annual Reports**

### **Supplementary Questions**

The order of precedence over the selection of Crossings to be replaced is:

1. Existing condition and extent of deterioration (hence a public safety consideration)
2. Population served
3. Funding availability

6. Can FRA clarify whether an underground road construction can be an alternative to access roads?

No, there is no currently consideration on the basis of cost/benefit and logistics.

7. How is FRA working to improve the issue of road drainage in Fiji?

In the past the management of road drainage was included in the overall road maintenance programme and budget; being 'part' of a greater piece of work it may not have received sufficient focus. Going forward road drainage has its own line item in the work programme for each sub-division and within the budget tracker so the performance on drainage is monitored on a monthly basis, in this way short-falls can be addressed early.

8. Are all government roads surveyed and pegged?

No, there is a multitude of outstanding survey stretching back over decades. Going forward we intend to establish the reserve boundaries by fixing GPS stations and using Drone Survey equipment. Each time we work on road upgrades we carry out surveys to establish the Highway right-of-way and reserve boundaries.

Once sections are completed we will hand the detail over to the Ministry of Lands for registration.



## Appendix Three

### Verbatim Report

**STANDING COMMITTEE ON**  
**SOCIAL AFFAIRS**

**Submittee: Fiji Roads Authority (FRA)**

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*[Verbatim Report of Meeting]*

**HELD IN THE**  
**COMMITTEE ROOM (EAST WING)**  
**ON**  
**TUESDAY, 9TH JULY, 2019**

**VERBATIM NOTES OF THE MEETING OF THE STANDING COMMITTEE ON SOCIAL AFFAIRS HELD IN THE SMALL COMMITTEE ROOM (WEST WING), PARLIAMENT PRECINCTS, GOVERNMENT BUILDINGS, ON TUESDAY, 9TH JULY, 2019 AT 1.19 P.M.**

**Interviewee/Submittee:        Fiji Roads Authority (FRA)**

In Attendance:

- |                            |   |   |
|----------------------------|---|---|
| 1) Mr. Jonathan Moore      | : | Chief Executive Officer;                            |
| 2) Mr. Robert Sen          | : | Chief Financial Officer;                            |
| 3) Ms. Sainiana Rokovucago | : | Acting Manager, Communication and Public Relations; |
| 4) Ms. Zafiya Shamim       | : | Communications and Public Relations Officer.        |

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MR. CHAIRMAN.- Thank you, Honourable Members, and once again, welcome back. On behalf of the Standing Committee on Social Affairs, I would also like to welcome the officials from the Fiji Roads Authority.

*(Mr. Chairman introduced Team from Fiji Roads Authority)*

Sirs and Madams, welcome.

On behalf of the Standing Committee, and as you are aware, you are here to present to the Committee in regards to the 2015 and the 2016 Annual Reports.

For your information, as a Committee, we have gone through page by page in regards to the Reports and then we formulated the questions, which you have also sent the answers back to the Committee.

I will give you the opportunity to do your presentation and also take us through your comments and the questions that were raised. After the presentation, we will allow Honourable Members for supplementary questions.

So the time is yours, Sir.

MR. J. MOORE.- Thank you, Sir. Mr. Chairman and Honourable Members of the Committee, thank you for inviting us today. We forwarded our response to the questions that were issued to us yesterday so do you want me to run through each one of the questions or do you want me to pick on things that you have got particular concerns over, or how do you want to do this?

MR. CHAIRMAN.- If you can take each question and be very brief on that.

MR. J. MOORE.- All right, we can do that. Just before we commence, I just have to say I am roughly losing my voice, I have got a bit of a virus at the moment, if I lose my voice half way through, I will ask Robert to take over. My apologies for that.

**Question No. 1: Brief the Committee on the functions of the Fiji Roads Authority:**

The first question was regarding the functions of Fiji Roads Authority. I think, our function is actually to manage the vested assets to the FRA and certainly relate to roads, streetlights, traffic signals, bridges, crossings and jetties throughout the islands. I think it is actually quite important to say at this time that not all roads in Fiji are vested to the FRA.

We have around 8,000 sealed and unsealed roads vested to us: 600 bridges, 550 crossings and almost 40 jetties. But, there are assets around the country that are almost to a similar number that are not vested to the FRA - there are either private, agricultural or cane roads. There are many different owners of these assets, so we only deal with the assets that are actually vested to the Fiji Roads Authority, as well as expand in the network and maintain them. We are trying to improve the capacity as well right now as it grows on to the capacity of lane space in Fiji. Over the past several years, the amount of traffic on the roads has increased enormously and the lane space has not increased together with this.

We have got projects like Nadi Martintar Namaka Project - the four (4) lane road; and there is the four (4) lane of Kings Road as well. All those projects are there to expand the length, capacity and reduce congestion.

Mr. Chairman, do you want me to stop after every answer to each question or carry on?

MR. CHAIRMAN.- When you finish then we will ask the Honourable Members to ask their supplementary questions.

MR. J. MOORE.- All right, fine.

**Question No. 2: Inform the Committee of the key challenges the Authority faces whilst trying to achieve its strategic objectives and how it is planning to overcome these challenges.**

Frankly, there are multitude of challenges that we face, but I think what we are trying to do in our response was itemise in very general terms the major challenges that we face. The deterioration there now has accelerated quite rapidly.

We have got situations and I will give an example of Kings Road (between Korovou and Rakiraki), where the road condition maybe 6 months, 12 months ago was just uncomfortable and with several potholes in deteriorated areas. In the space of three months, that road deteriorated to be very seriously damaged, deterioration had started 20, 30 years ago, what is happening now, it is now manifesting itself in accelerated deterioration and that is probably the single, biggest physical problem right now. But all those physical problems we have are exacerbated by vehicle overloading, which is the second one on the list.

We are trying to bring that under control, we are working with LTA to do that and we are in a degree of success but the overload has been going on for many years now and the effect of overloading is that, it rapidly deteriorates the road. Studies worldwide have been carried out to show that, for example, if you increase the load by 30 percent (which is not uncommon in Fiji), you are taking the life of the road 25 years down to 7 or 8 years and what that means is, you have to replace it twice as often, say two times or more often than you need to, so that is a major problem for us right now.

Another issue is resource availability in Fiji. We have a lot of work to do, but with very small islands with very scarce resources, we are constantly on the lookout for new resource sites.

Quarries have been our major mission right now. Over the last six months, we have got a team out in the various parts of the country looking for new quarry sites. For us to progress and maintain the roads in a healthy state, we need new quarry sites and we have found four to have across the islands, so that should help us going forward in the future.

The other issue we raised in our response was around the designed capacity and social capacity of the industry in Fiji. There is a very small group of contractors that have worked with a group of designers, and we are not keen on bringing in overseas consultants and contractors all the time because it is very expensive, and



frankly, it is not a guarantee of better quality either. We have great success with a lot of our local contractors and we want to continue doing that, but there is a very very low capacity right now.

Capability is good, but we want to improve the capability and everything that we do, not just of our own FRA team but also the local contractors as well.

Our mission is to take the local contractors that are small right now and turn them into major main contractors to take on the big jobs.

Right now, there seems to be a ceiling of around about \$20 million contract that local contractors will take on.

If we manage all of our improvements going forward, the \$20 million contract is going to be very inefficient and very expensive, so we want some of the larger contractors now to take on the \$40 million, \$50 million, \$60 million contracts going forward.

The fifth one that we raised is a very serious one in the urban centres where development is very challenging right now. There seems to be a lot of rounding process that has been accepted in the past whereby there is little control over the submission of traffic impact assessments by developers. There is complete inadequacy of parking throughout the country in the urban centres and what it is causing now is major congestion, so as we improve the roads, and as we make nice four lane highways into the cities, the congestion moves from the outer circles of the cities into the inner circle of the city because people arrive there and they try and find a place to park. They get there quicker, efficiently and faster but there is no where to go once they have arrived there, so our efforts to improve congestion need to be supported by increased parking, not only that, it needs to be increased by the means of transportation as well, like Park and Ride Schemes and Ferry Services, and that sort of thing. They will all help with the congestion around the major cities.

**Question 3: How does the Authority ensure that both male and female employees are treated equally in recruitment, training, hiring and promotion?**

We have no gender discrimination in the Fiji Roads Authority, we go for the best candidate for the job. We are working very closely with the Asian Development Bank (ADB) right now because we want to put social safeguards on gender equality right at the forefront of our plans going forward.

Under our arrangements for the work we do with ADB and the World Bank, it is a mandatory requirement to consider social safeguards and gender equality and we see no reason why that kind of extends to all the works that we do, not just the ones that we do with ADB and the World Bank, so that going forward, there will be a major focus of ours to make sure we achieve all the social safeguards required in the gender equality.

**Question 4: Does the Authority align itself to any of the Sustainable Development Goals? If so, can you further enlighten the Committee on this?**

With regards to sustainability goals, we do align ourselves to the same Sustainability Development Goals and in particular, I think it is Item 9 on the Goals' list by trying to build resilient infrastructure. We are also making it more habitable and better connected, so I think in terms of our sustainability, in terms of those goals, yes, we are compliant.

On a wider space for sustainability, we need to be sustainable. We cannot afford not to be, with the cities' scarce resource allocation around the country, we have to have to re-use old materials as example, so when we do a road project, we take off the top surface, we do not discard the lower surfaces. You cannot re-use asphalt effectively because it has been mixed with bitumen and it is just not really recyclable, but everything beneath is

recyclable, so wherever we can, we recycle and stabilise the base to get the right quality of the end-product, not only that it saves us money, it also stops having to exploit various scarce resources around the country.

**Question 5: Update the Committee on the Fiji Roads Authority's future plans and initiatives:**

I will be honest, we have multitude of future plans, all governed by resource allocation and funding allocations, but our chief focus right now, we still have communities within Fiji with no access to major highways, so our principal focus on some of the Rural Roads Schemes we are doing now, is to make sure that all villages and settlements get access to a highway.

We are also looking to improve beyond that by making a lot of the unsealed roads sealed, that is not only more efficient and effective for transportation, but it is also a health consideration as well. The amount of dust that can be generated by some of these unsealed roads can be difficult in the summer. The more we can seal near populated areas, the better for everyone, I believe.

Also in line with the erosion of congestion attempts we are having right now, the lane space increases, we are looking to do various parts of the urban centres. It is a challenge because there is a very narrow right-of-way for us to work in. We do not want to go to the extreme expense, disruption and inconvenience of acquiring land from private landowners, and so we try wherever we can to work within the lane spaces available, but it is a challenge. But it is important we do that because we want to promote things like Park and Ride Schemes, and we can only promote Park and Ride Schemes if we have a dedicated lane for buses, and that means we have to have four lanes in Kings Road between Nakasi and Rewa Bridge, which is a good example. That was up to recently two lanes, a very congested and a very busy road. It is now becoming four lanes, but one of those lanes in the peak hours will be dedicated to buses. We cannot achieve that unless we have four lanes, so we have to increase the lane space accordingly.

The other initiative regarding lane spaces is that we are looking at three-lane roads as well. This is something I have used and worked with in the past in other parts of the world where you have three asphalted lanes on the road and you alternate the use of the central lane depending on the time of day.

A good example would be Princess Road in Suva from FNU down to the Australian High Commission. That is wide enough to accept three lanes, so what you would do is you would hatch out with paints the middle lane maybe different colour - green, purple or whatever, it does not really matter. You would hatch out the middle lane and during the morning rush hour, that middle lane would be an incoming lane to assist the traffic flow into the city.

It also means that only peak hours you can make the lane closest to the walkway, a bus lane, if necessary. And then in the evening you reverse the flow of that central lane so on the way out of the city, it becomes an outgoing lane, and you have a bus lane on the inside. These are all fairly significant cultural changes and behavioural changes as well. But they do greatly help on congestion, so that is the plan we are looking at to trial in probably in the early part of next year because there are still some improvements to be made on Princess Road and there is no real point in actually carrying out these trials until the improvements are complete.

So looking at early 2020, we are trying a three-lane exercise on Princess Road. On probably the safety aspect, we regard things like traffic signals and streetlights as high priority, so there is an increasing urban-centre-streetlights program and also we are rolling out in the future the solar streetlights program for the rural areas.

Many in the villages are not close to a main supply of power and we have great success in the Ba Region with the trial on the solar power streetlights, so we are extending that out into the more remote communities so that they have the benefits of streetlighting as well.

A major focus going forward is on quality of work and providing durable solutions to the problems that we have, and there are many problems that we have right now. We have to do durable solutions to these problems because if we do not, then we will continue to be chasing the maintenance and that is not good for anyone, it is not good for the budget, not good for the allocation of resources and not good for the public either.

In line with the climate change requirements, we are designing bridges now that have the life of 100 years and our discussions with the consultants from Japan tell us that in 100 years' time, sea level will be very high, compared to what it is now. So, we are in our bridge designs and our crossings designs and, in fact, all structural designs, we take into consideration projected global warming effect on the sea level rise and increasing levels of all the bridges. I will give you an example of Tamavua Bridge which is being built now. When you see Tamavua Bridge when it is finished, it will be, at least, 1.2 metres higher than the existing bridge. Now, it is purely to accommodate climate change effects. It is not just sea level rise, it is increase rainfall up in the hills, it is going to get even wetter and the frequency of heavy storms is going to increase as well. So, we have a situation now, in fact, the perfect storm when we have a high tide, heavy rain in the hills, it all comes down into Tamavua River and it would wash out the current bridge in a few years' time. So, we take in those climate change resilience programmes very seriously.

I had mentioned before our Park and Ride Schemes. That is another very good way of supporting the movement of people around the country and there removing congestions, a major focus for us.

We are very keen on doing this, we just need support from other entities to come along with us as well because we need things, like car parking facilities and more efficient bus services as well. So, when we all get together and we achieve our goals, it will work.

One of the major issues we have around in the cities is vehicle dimensions. There are some huge vehicles on the roads. They have incentives particularly, they have got decades old networks and they have got the right-of-way that are very narrow and they just cannot accommodate some of these vehicles that are going around the cities right now.

Probably later this year (before the new year), we will be imposing vehicle dimension restrictions on the roads as well in the urban centres, not just Suva, all the urban centres because all the urban centres are similarly affected by this.

The last major initiative we are looking to do over the next few years is the introduction of the Intelligent Transportation Systems (ITS). We are working with LTA on that right now to put things, like weighbridges. As an example, we can actually put the weighing facility into the road. It is called the Weigh-In-Motion (WIM), where the vehicle goes over the top and its weight that it is travelling in, the camera photographs and relay the information to a central control centre to make sure we get these things under control.

We can also link in all of our signals and traffic lights as well to one control centre so we can adjust the sequence into the traffic signals, for example, during peak hours. Right now, we are doing major road improvements and as we are doing those improvements, we are actually installing the infrastructure now. The roads have got some chambers that will us to do this in the future. It is a massive task and it will need more than just the FRA involved in this. So, we are working very closely with the police and I will tell you right now, to make this thing happen in a few years' time.

**Question No. 6: The Committee notes from the Annual Report that as at July 2016, a total of 5,696 km of roads in the four Divisions were unsealed. What is the Authority's future plans with respect to the sealing of some of these roads and how does it prioritise which roads to seal?**

We do actually have a budgetary constraint right now on how much we can allocate to the unsealed to sealed programme. But we allocate wherever we can to target the civic amenities first. So, with a village or a school and maybe a health centre where we can, we will seal the road in front of the school and the health centre.

As time goes on and more funding becomes available, we will then join up the sealed sections so the entire villages become sealed. It is very successful over the past few years over in the West. We are going to bring that into the Northern and the Central Divisions as well.

The problem we have is that the total length of roads that need to be sealed is in the thousands of kilometres and the cost of sealing all the unsealed roads in Fiji is several billion dollars and we just do not have the funding to do that right now, but we do prioritise. The next question is about the criteria to prioritise and how we do the sealed upgrades.

**Question No. 7: What is the criteria used to prioritise the sealing of roads?**

Basically, there are two criteria; one is the civic amenity criteria; and the second is the population served criteria. We will target schools and amenities first and when we do major upgrades from unsealed to sealed for the entire roads, we will actually look at where the biggest population being served is. So, we are looking at places like the Nausori Highlands Road, Nasau Road, Sigatoka Valley Road, Kavanagasau Road, et cetera. There are some roads where there are thousands of people living in communities of unsealed roads and those would be the ones we will target first.

As another forward looking plan, we are talking to the Asian Development Bank and the World Bank right now about a scheme in the future to start on the major upgrade programme for unsealed to sealed roads and that would cover many roads over the contracts, again the focus on maximising the population served by road.

**Question No. 8: Elaborate on the Agreement for the Development of Rural Roads for the four Divisions which was signed on 2nd February 2016, and how this has been monitored. How many rural roads have been developed as part of this Agreement and how does the Authority identify and prioritise the development of such roads? Is there a mechanism in place through which individuals can request to have roads developed?**

We have just listed the rural roads that have been upgraded.

Since 2015, over the last four years, 142 road projects have gone through the consultation process:

54 in the Eastern Division;  
48 in the Central Division;  
20 in the Western Division; and  
20 in the Northern Division.

We will link our work in the rural areas to the discussions we have with the Divisional Commissioners. We have a regular monthly meeting with all the Divisional Commissioners and they give us a list of their priorities and we work very closely with them to achieve what we can.

There is a budget constraint and we do as much as we can in the time available, but we do need to increase the focus on that so going forward, all of our work. Previously, the Commissioners' lists were only part of our decision-making process on rural roads. We have put changes on our policy over the last few months whereas now the Commissioners' lists are actually the plan we have, going forward.



We believe the Commissioners in the Divisions have a clearer view of what is necessary in those Divisions than we do in some cases. We work closely with them to discuss and debate what needs to be done, take their advice and then that comprises our list of Forward Work Programme, to make sure we cover all the roads that are necessary for upgrade.

The next question is regarding Irish Crossings.

**Question No. 9: The Committee is concerned with the frequent washing away of Irish Crossings by strong currents resulting in high replacement costs. Are there plans to improve the engineering design of these structures or to replace them with bridges so as to make them more resilient to floods?**

Irish Crossings are a bit of a passion of mine to be honest because I think they have no place in any infrastructure network at all, and we are seeking to change them all out into more durable crossings. We have situations and the example I gave in the response was Vakabuli/Paipai Crossing. I have been here for nearly two years and in my first 12 months in Fiji, that crossing was washed out, at least, four times. Every time it gets washed out, I have to go in there and repair it, we lose two, three or four days of access for the public. There is a school on the other side of the crossing so it is not a good situation at all.

Every time it gets washed out, we spend from \$10,000 to \$50,000 each time it is repaired. It is not cost effective and it is not practical. Last year we decided no more would we do Irish Crossings. We are now doing full size crossings, so Vakabuli/Paipai was one of the first five that we have done. We have changed it from being a low level crossing made out of pipes and concrete to an actual concrete structure which is two metres higher than the original crossing.

We were there on the opening day and with torrential rain in the afternoon, and we noticed that the original crossing was under a metre of water and the new crossing is 100 metres away, was a metre above the water. We no longer have to do these expensive and repetitive repairs to crossings so going forward, all our crossings will be done to the new standard.

**Question No. 10: Provide a list of all the Irish Crossings in Fiji together with the names of the crossings that have had the most number of reinstatement works carried out from 2015 to date and a breakdown of the costs incurred.**

We sent that out through an attached list. If you want, I can go through it, if necessary, but I think you have it on your packs.

Honourable Members, 161 crossings were worked on for reinstatement over the last four years. Honestly, the cost on average was around probably \$20,000 each time we worked on it. That is a phenomenal amount of repair work that going forward with the new crossing design, will not be necessary.

**Question No. 11: How has FRA managed to work with the Government to address the problem of overloading in Fiji? What is the mandated weight limit of vehicles in Fiji as comparable to other countries; and has consideration been given to construct roads which can sustain heavy truck traffic in turn allowing for the vehicle weight limit to be increased?**

This response relates to your question on overloading in Fiji, I mentioned this earlier, it is a major problem and we are seeking to control it. We are working together with the Fiji Road Haulage Association (RHA). We had a few discussions with the cane industry as well recently. They were given a concession. RHA's work include standards that we have agreed with the LTA. We hope that within the next 12 months, that everyone will be able to control and we are back to normal loading conditions because it is a dangerous situation. It is a very expensive situation if it is prolonged.

**Question No. 12: FRA's Supply Chain:**

- . **Update us on the progress made in expanding the role of Fijian involvement and Fijian companies in FRA's supply chain.**
- . **How does FRA encourage the entry of new and high quality participants, both local and international, into its supply chain?**
- . **Page 14 of the Annual Report - How have foreign companies contracted by FRA such as those mentioned in Figure 3, included locals in their workforce?**

The FRA supports local companies as much as it possibly can, and 76 percent of our contracts right now are allocated to local companies.

I think one of the problems we face is that, we have a lot of work to do, a lot of contracts to issue and the capacity of the local companies is a challenge right now. Some of them take on too much work and inevitably they fail. So we are now trying to work with the contractors to not fail, not get too ambitious, we have had full, frank and open discussions with the contractors about, "Are you actually able to do this work?" They are being honest with us and some would say, "No, I can't." When we appreciate that and it is encouraging that some are being honest with us about it as well because it does not do them any good and it does not do us any good either.

On the entry of new contractors, we are breaking down the contract values on the projects we issue. We recognise that there are a group of contractors in Fiji that can do around about \$1 million to \$2 million of the contract value. Some can do \$5 million, some can do \$10 million, very few can do about \$10 million. So what we are trying to do to encourage them to grow and to do decent work is, we are making the contract sizes at variable, and it gives them a lot of opportunities.

We are also working with one specification now. In the past, when I first looked through the specifications, there was a multitude of different specifications. Even for gravel on roads, there was probably four or five different specifications, so we are now standardised to one. And we are also standardised to recognise condition of contracts, so everyone is on the same page, everyone understands and we can train these people to actually understand what the contract means and they do not get caught out.

The last thing we want to do is to be fair to the contractors because if the contractors fails, we fail. So we are very fair to contractors and we are very open with contractors and we will help them where we can within the confines of the contract.

For a contractor not to understand the conditions of the contract is not a good thing so I would rather invest time with the contractors, explaining it, than catch him how he uses his time and penalise him for it, because it does not do any good to anyone if you do that kind of thing.

**Question No. 13: Page 11 of the Annual Report (Table 1 - FRA's Assets) - Explain the reduction in the total length of sealed and unsealed roads in the four divisions to 7,416km (2015: 7,525km).**

The fact is that, we have 7,525 kilometres of sealed and unsealed roads and that is where we are right now. I do not know why there was a mistake in that new Report, but the actual number is 7,525.

**Question No. 14: What kind of quality measures does FRA engage in to ensure high quality roads in light of the frequent road maintenance works that are carried out?**

A major focus of ours is quality. There has been a lot of excuses made in the past about poor quality being done to poor materials. Yes, you could say that with some respects but not in all respects. There are good materials in Fiji, they are treated well and there are contractors who do the job well, there are contractors who do the job badly.

The issue is not around people not wanting to do things properly or materials being wrong or inappropriate, the issue is around control and assurance. So what we are doing now is we are putting in measures in place internally with our own team, forming our own quality team to actually manage the quality assurance. But in doing that, we are also forcing the contractors to put in decent quality control measures.

One of the simplest things that we have done recently is to make sure that any laboratory that is being used is actually an accredited laboratory. It has not been in the past and it does not make any sense to me at all that we do not have accredited laboratories in the past, now, it is a mandatory requirement. So we have something to fall back on if they fail - if the materials fail or the tests that are being carried out fail.

**Question No. 15: Provide us with a list of names of the existing roads, bridges and jetties that have repeatedly undergone maintenance works.**

Again, it is all in the attachment that was in the pack.

**Question No. 16: What is the standard of materials required for road renewal and maintenance works? Are the materials supplied from quarries around Fiji of the required standard?**

I will just say in response that there are suitable materials available, we just do not have enough right now. We have had teams going out to find the right materials and I still get instances when I go out to the field myself, when I see the raw material being used so the quality teams are out there checking constantly to make sure that those things do not get through.

**Question No. 17: Explain the reasons for the transition from the Public Works Department to Fiji Roads Authority.**

My understanding of the reason why the transition is there, it is for efficiency reasons. It is a worldwide standard now to outsource this kind of work and I think it was brought into Fiji for the same reason. I do believe it is more efficient and more effective and you can plan the work properly if you carry that out if you have an outsourcing programme to do this kind of thing.

I will just save my voice for a while, and let Robert answer Question 18, if you do not mind. My apologies.

MR. R. SEN.- Question 18 relates to the revised budget of salaries of \$2.9 million for January to July 2015, 2016 period, the amount of \$2.7 million. The reason for those years is the increase in the number of staff from 35 in 2015 to 52 staff in 2016. The reason for the increase in staff is due to the termination of MWH contracts and FRA's new organisation structure was in place.

Part (b) provides the details of the current staff composition by the gender hierarchy. Level 1, we have got 7 males compared to 1 female, a total of 8 staff. This is the highest level of managers reporting to the CEO. You can see in total, we have got 61 females compared to 177 males.

The breakdown of funds were utilised between activities of insurance, legal fees, archive - storage, communications, training and development. Insurance relates to various insurance policies for FRA assets to

cover for unforeseen risks. These are motor vehicle insurance, workmen's compensation, travel, material damage and BI claims.

Legal: this relates to payment to our Senior Legal Counsel (Squire Patton Boggs) for reviewing the FRA contract documents cost relating to Chapman Tripp to look at the performance bond for FRA for northern maintenance contract after Blacktop went into receivership.

Archiving: these are the storage from the DNR at Williams and Goslings stores.

Communications: this relates to all the payments that we put to our website, media monitoring software, monthly maintenance and support fees for customer service and telecommunication charges and internet link.

Training and development relates to staff training like FRA & ADB Procurement Workshops and various congress (CPA, IIA, FIA and AG) and project management conference.

**Question No. 19: In light of the recurring potholes, what efforts are being made to ensure greater resilience of roads to wet weather?**

MR. J. MOORE.- (Sorry, I am back, my apologies for my voice.) Question 19 relates to potholes and what we can do to ensure greater resilience. Unfortunately, in the Fijian network, there are too many potholes and we speed on to recovery by just doing and concentrating on pothole repairs. So going forward and you may have seen it in sections of Suva such as Princess Road, Ratu Mara Road, Ratu Dovi Road and soon to be Queen's Road in Lami as well, we are taking our entire carriageways now and rebuilding them.

The reason for that is that, those areas were considered to be beyond pothole repair. You cannot repair potholes within potholes within potholes. It cannot happen anymore, so we stripped out the entire carriageway, we re-used and stabilised the sub-base and then we put a new asphalt layer on top. The average life for a pothole in Fiji right now is round about 15 to 20 days during the wet season and maybe 30 or 40 days during the dry season. When we do a carriageway repair, the life span of that piece of work we do is 15 to 25 years with maintenance. The maintenance you do is generally cleaning and maybe after 8 or 10 years you will strip off the surface. But what you do in there is you are getting away from the issues of localised potholes and that has got to be a successful mission for us going forward.

**Question 20: Page 21 of Annual Report - Explain the Budgetary variance in Table 4 under Professional and Technical Services.**

There is a discrepancy in the numbers in the budget because the change from within the calendar year assessment to the end of the financial year which accounts for the 7-month allocation for 2016.

**Question 21 Page 22 of Annual Report (Table 5 – Maintenance of Assets):**

**This** relates to our work in the rural maritime developments. The actually physical work around the islands is carried out by the team through our MOU with the Ministry of Rural Maritime and Development (MRMD) and they carry out the works for us in the islands under our direction.

In Table 5, we talked about Jetty Maintenance works being carried out in Totoya for \$206,000 and Natuvu Jetty with \$31,000. Throughout the area also, we did work with other agencies like the sealing and road maintenance to the tune of \$357,000.



**Question 22: Has FRA managed to work with relevant Government Departments to ensure the timely issuance of gravel extraction licenses?**

This relates to Gravel Extraction, we are trying to move away from gravel extraction going forward because we do not feel it is actually an environmentally sustainable thing to do. It damages the environment too much, so with the gravel it is going to be massively reduced if not lowered by 2020 for the FRA.

But when we do go for natural resources as supply materials for our works, we have to go through the process of obtaining landowning units' 60-percent-consent from the landowners, and we go through quite a rigorous environmental process and through all of the interested stakeholders to make sure that we are all on the same page and there are no upset people with the activity to get the gravel extraction licence.

Question 23: Elaborate on the fatality rate in each of the Divisions, reasons for the increase in fatalities, and the solutions implemented by FRA in partnership with other stakeholders to reduce road fatalities and serious injuries

This is talking about fatality rates on the roads.

We are working very closely with the Fiji Police and the LTA on generating figures for fatalities and we have now got access to the Fiji Police website that tells us the accident and incidents caused and who is involved in there. There is an increase in fatality rates, we are not entirely sure what the reason for the increase in fatality rates was.

Part of it could be the increase in traffic on the road and the number of vehicles. It could be pedestrian behaviour; there are so many parameters around fatality rates. All I can tell the Committee is that we are on a mission to reduce infrastructure by introducing safety measures through everything we do.

Recently, you will see in Martintar and Namaka in Nadi, we have installed fencing along the central median because the section of road through Namaka was in a tourist accident spot, not just for collisions but for pedestrians as well, and what we notice was that the people were crossing the road any time of the day or night, any position and location they wanted to.

Now whilst we do not want to remove people's rights to move around as they want to, we do want safe roads and so if we can get people crossing the roads at the right place, then that is a safe resort for everyone.

We are introducing traffic signals and it is not just to allow traffic out of junctions, I mean on a more evenly allocated basis, it also controls the speed of the vehicles as they move around as well, because if you set the traffic signals on a sequence of traffic signal combinations to the speed limits of the road then vehicles travelling on the speed limit can travel through the signals without stopping.

If people decide to speed down the road, they will be stopped at every other signal because it is on "red." So by sequencing the lights properly, we improve traffic flow and we also improve safety as well, and a lot of the statistics we have seen from the police right now, many drivers seem to be falling asleep behind the wheel and there is an incident of intoxication which needs to be dealt with as well; those are the predominant issues that we are finding right now.

One of the things that concerns me particularly is my teams on the road. The work from Nakasi to Rewa Bridge was extended by one month because I had to shut down night time working on the job because it was too dangerous for my guys on the road. I will not compromise their safety, so the cars were driven recklessly through the night and very close to my guys who were trying to do the job. We cannot have that, and so I just shut it down.

Question 24: Pages 24 to 28 of Annual Report - Provide a status update on whether renewals and replacements of roads, bridges, and jetties as highlighted in Tables 7, 8 and 9 have been completed or are pending completion and if so, the expected completion period.

This talks about the replacements of roads, bridges and jetties. There is a whole list of bridges that were actually changed.

**Question 25: Pages 30 to 33 of Annual Report - Table 10 (New Capital Programme):**

- a. **Provide the progress on the implementation of all the new capital projects and what were the major challenges and how were they addressed.**
- b. **What were the main reasons for the expenditure shortfall?**

Major Capital Projects around Fiji was NASRUP N2, that was completed; the SARUP 1 - Arterial Road in Suva was completed; S3 is about to be completed. This is the contract where we terminated the original contractor through non-performance, and we deployed two other contractors to finish the work in 9 months. They will probably do it in 10 months but it should be finished in mid-July and the four lanes will be open.

The challenges faced in these works, we work in very restrictive corridors around Fiji, stakeholder, management, land acquisition and change management are all challenges in every contract.

The narrowness of the corridors and the requirement to maintain traffic flow on heavily used roads create enormous logistical and traffic management problems for us. There are very few accesses from the main part of the island into Suva, in fact, there is probably only two; Princess Road and King's Road. As you work on one, the other one becomes overloaded so logistics and traffic management is a big challenge for us right now.

With regards to expenditure shortfall, those were the Sawani-Serea and Nabouwalu-Dreketi Projects. The other shortfall in spending that year was also down to S3 because this was the time when the original contractor was not performing well and ultimately it led to his termination and replacement by Dayal Quarries and Higgins to finish the work off for him.

**Question No. 26: Page 38 of Annual Report (Table 13 – Asset Stewardship – Outcomes) – Explain the reasons for the partial achievement of items 2A.2 and 2B.1.**

I think the explanation around the past achievement was around the allocation of resources to the eleventh hour - unallocated budget in that year.

**Question No. 27: Provide confirmation on whether the Nadi 2 NASRUP and Suva 3 NASRUP projects have been completed. In light of the previous delays in the completion of some of the capital projects, what measures has FRA put in place to ensure the timely completion of future projects?**

We have just talked about the NASRUP 2 and NASRUP 3 contracts and say that one is complete and 2 and 3 will be finished in July this year.

**Question No. 28: Has FRA implemented the enterprise management system to enable greater scrutiny and allow for a higher level of detailed reporting on programme delivery?**

The FRA has implemented the Primavera Enterprise Management System and is used to provide project controls and manage the delivery of the works.

**Question No. 29: What is FRA doing to reduce road congestion in Fiji and how is it working with other agencies such as LTA, Police, Ports Authority and Town and Country Planning to manage congestion in urban areas?**

Around the congestion reduction, we are trying everything possible to make sure that the traffic flows through properly.

Peak hours of work prohibitions: we do not allow work on major highways during rush hour in the mornings and the evenings. We are training all of our team and all the contractors for traffic management. There is actually a skill and knowledge-based required for traffic management, it is not just like someone will stand there and wave the flag. You have to actually know what you are doing when you do it.

To ease congestion, we are creating additional lane-space. Just recently we have introduced clearways into the urban areas of Suva. This is basically an experiment being used on Suva. If it works, we will extend it out to the other urban centres as well.

We are also working to introduce bus lanes. The first one will be down King's Road into Suva. The success of the bus lane also depends on one of the stakeholders being involved as well. So, we are working with all the stakeholders to make sure they are involved, because if they are not, there will be no point to doing it.

The second bus lane we are considering right now is from Wailoaloa Junction in Nadi through to the Votua Levu roundabout. Let us not cast on that yet, it is a consideration we are looking at the logistics around using the four-lane road there and just using the bus lane during the peak hours as well.

Also in addition, we have talked about it previously which is the overloading management and the vehicle dimension restrictions and also the ITS that we will introduce over the next few years.

**Question No. 30: The committee notes that the next revaluation of FRA's assets was scheduled to be carried out in 2018. Has this been done and what is the current value of FRA's assets?**

MR. R. SEN.- This is first for the FRA Assets, the last asset revaluation was supposed to happen in 2019, the value of the depreciation currently stands at \$9 million. We are in the process of putting a tender for the revaluation of our assets.

**Question No. 31: What are FRA's plans with respect to jetty renewals and replacements in the outer islands?**

The plans for jetty renewals and replacements for outer islands, currently, FRA is working on delivery for Savusavu and Nabouwalu jetties and in the financial year, 2019-2020, major works for the six-island jetties will be upgraded.

**Question No. 32: Pages 45 & 46 of Annual Report – Table 18 (Specific Tasks for January to July 2016): Explain the non-achievement of some of the specific performance targets under the four classifications (Governance, Technical, Financial, General Management) and the progress made on the on-going performance targets.**

MR. R. SEN.- Question 32 relates to a couple of things on governance, technical and general management.

On governance, the Memorandum of Agreement (MOA) for the municipal councils was signed in 2014. There are a couple of financial matters to be discussed and no agreement has been reached. I think both parties are willing to go on to terminate this agreement.

Technical: the Classification of Road System as per standard listed there, and General Management Operations manual review is not completed yet. Staff manual is under review. Risk Management Framework is updated.

**Question No. 33: Have all the repair works to FRA's road systems in the Western and Northern Divisions as a result of the damages sustained from tropical cyclone Winston been completed?**

This relates to repair works on FRA road systems. All the repair works done. Asset Management damaged in the Western and Northern Divisions have been completed.

**Question No. 34: The committee notes that FRA's operating deficit for the seven months period ended 31 July 2016 was \$24,155,755. Explain why and provide a breakdown of the operating deficits together with the implications these operating deficits have had in the achievement of FRA's targets.**

Note that the deficit in operating expense as at July, 2016 was \$24 million. We note that the operating deficit is a non-cash item which is the depreciation due to the FRA's accounts prepared on the standards on International Financial Reporting Standards (IFRS).

**Question 35: The questions below relate to the notes to and forming part of the financial statements for the 7 months period ended 31 July 2016:**

This relates to the notes forming the financial statement for a seven-month period.

Consultancy cost: these were the overseas consultants brought in to perform specific tasks. MWH - \$6.6 million; there is a local consulting firm, Wood & Jepsen Consultants Ltd for the survey work; Chapman Tripp for legal services; Morrison Low for Asset Management Support and Transiting Programme Manager, this is after the termination of MWH contract.

Work Overflow: this is the procurement services for the Asian Development Bank (ADB) projects; Squire Patton Boggs, the legal advice for contract review and contracts; Calibre Consulting Ltd. assists us in the procurement and design for bridges and roads contracts; Erasito Beca Consultants Ltd, for assets valuations and other professional works; Brian Sharplin Ltd. is consulting for Audit and FRA standard review; Pembroke Advisory Services Ltd, this is \$57, 000 for advisory services to the CEO.

Accounts receivables: there was just \$3.9 million outstanding. The major one was the Water Authority of Fiji (WAF), this is all the work FRA does in terms of repairs relating to damaged water pipes.

Part 12 (b) - FRA is working on the termination of this Memorandum of Understanding (MOU). Key personnel, cost, the names and staff to whom this was paid is on page 68 of the Annual Report.

Question No. 36: Page 75 of Annual Report (Table 21 – Loan Funding) – Provide confirmation on whether the road upgrading and flood damage repair projects as stated in the Table have been completed and the contractors responsible for each project. In addition, what other projects have been undertaken as part of this loan funding?

MR. J. MOORE.- This relates to funding for roads, crossings projects that were destroyed. The roads, crossings that were destroyed have been repaired and accessibility was recovered in a very short time. I think it was within 10 days after the cyclone hit.



**Question 37: What measures are in place to ensure that contractors satisfactorily complete all work undertaken within the approved scope and according to the specified technical standards? In the event of a breach of contract, delays in project completion, or when a contractor withdraws, what arrangements are in place to ensure that outstanding work is completed?**

This relates to contract measures in place to deal with contractors if they do not behave properly on the project. Many of the large projects have an independent engineering contract that is supposed to act on behalf of the contract, not individual parties, and is impartial. When we have disputes on these major contracts, he is the arbiter. In fact, he is the one who actually says what we should do in terms of the contract requirements.

If there is a delay in completion then there are penalty clauses within the contract where we can recover costs from the contractor, and if the contractor does not follow, if he reneges on the agreement or he does not perform as the way it should on the contract, there are measures and steps where we can actually terminate the contract and bring in another contractor. In the event we do that, it does not mean we pay more money out because any additional costs we pay for a replacement contractor, is recoverable through the contract, from the contract that mis-performed in the first place, so we will not pay anymore for those contracts, we will recover anything additional from the terminated contractors.

**Question 38: Page 17 of Annual Report:**

- a. **How has work under the New Capital (Community) programme under the ADB loan facility progressed with respect to the installation of streetlights?**
- b. **What is the Authority's plans on installing streetlights in all towns and cities in Fiji and provide further information on which areas have yet to be installed with streetlights and the expected completion period.**

**Considering the huge demand for streetlights, has FRA considered installing solar powered streetlights?**

FRA 15/84 was the Western Village Streetlighting Contract - 381 streetlights have been installed, that was the from ADB loan. We are working on the major highways, Queens Roads, Kings Road and Wainibokasi, up in Vanua Levu as well on Labasa-Savusavu, and we are also working in parts of Suva on streetlights upgrades as well. Once we finish all this work, there will be 3,736 streetlights installed around the country. I was saying earlier we are actually progressing with streetlights, we are serious with public safety issue and we are extending out into the rural areas and the islands as well.

We are also looking at a tender right now for streetlights under evaluation which will add to that 3,736 streetlights, and that is focused mainly in the Suva area because there is a lot of infrastructure and lighting that is not working properly in the Suva area.

In addition to the Suva area, we are also looking at the major urban centres as well for repairs. So this contract, FRA 19/15, is focused mainly on the urban centres, not the rural areas.

The experimental solar streetlights that was carried out in Nailega near Ba Town, and we are looking to expand that out into the rural areas as well.

**Question 39: Update us on whether the Savusavu Jetty replacement project and Vunisea Jetty renewal project have been completed.**

This relates to the Replacement of Savusavu Jetty. That is a long term plan. Right now we are making Savusavu jetty usable, we are doing some repair works on that. We working with ADB and the World Bank in going forward on replacing three (3) jetties, Savusavu, Nabouwalu and Natovi, and that will be over the next 5

to 6 years. Jetty replacement is quite a big task and it takes a lot of investigation, not just environmental but also ocean and graphic studies to make sure it is in the right location. Naturally, when you start from zero to get to the final jetty to be open, you are talking 4 to 5 years.

**Question 40: The Committee notes that FRA was seeking to take back in-house a number of key functions which had been outsourced since 2012. Provide more information on which key functions were outsourced and whether these are now with FRA.**

This talks about taking back in-house services into the FRA. Having the FRA as a self-sustaining entity, it is a major goal of ours. We do not want to rely on consultants all the time.

Between 1999 and 2015, the Staff cost ratio as a percentage of CAPEX was 13.8% average. It actually peaked almost 24% around 2014, when MWH came in. Currently, it stands at 4.7%, and of that, consultants are a minimal less than 1% . We do not see the need for consultancy if we can bring our own people, unless there is a very specialised reason. And so we are bringing them back in-house. The one area where we have to be very careful about bringing things back in-house is structural design. We need to make sure that our designs are safe. So we can bring design back into the FRA but we would still need to go out to a 3<sup>rd</sup> party consultant for just an independent check to make sure as long as we are okay. That is the safety consideration that we cannot ignore.

**Question 41: What are the reasons for the shortage in gravel supply in Fiji and how has FRA collaborated with relevant authorities to address the shortage of high quality gravel for road building and maintenance? What procedural change has FRA sought to address this issue?**

This relates to the shortage of gravel supply. I think, yes, there is a shortage but we are addressing that as we go forward with new sites and try to get the right materials. There are sites available in Fiji. We just have to be very careful how we extract them so that we do not destroy the environment in doing it so it is not exploitation, it is a managed extraction we are looking for.

**Question 42: Page 22 of Annual Report (Table 5 – Maintenance of Assets) – Provide a breakdown of the activities carried out under the ‘Fast Response’ work category.**

This talks about the ‘Fast Response’ work category. I think that is summarised in Attachment 3.

**Question 43: Are there plans to replace the single line old bridges along the Nabouwalu - Labasa road or to construct new bridges instead?**

This talks about the old single lane bridges between Nabouwalu and Labasa, that have actually been replaced right now. The first one to be replaced was Vesidrua, followed by Korovou and Korowiri, that was part of our critical Northern Bridges contract. It was awarded early this year, and it will be complete in the middle of next year; when all these bridges will be two lane bridges.

**Question 44: Page 14 of Annual Report – Identify which projects fall under the respective contractors’ and sub-contractors’ areas of responsibility.**

We have a whole list of contractors. This summarises who we deal with on all of our projects, local and international contractors.

**Question 45: Page 36 of Annual Report – Table 14 (Health and Safety – Other Outputs and Outcomes): What were the reasons for some of the targets not being achieved, partially achieved, or not measured and how were they rectified?**

This relates to health and safety. You try and minimise safety incidents and issues as much as you possibly can. We are very conscious on safety and we are also conscious on the link between safety and productivity as well. So we want to make sure that we are called international standard safety statistics because that gives you the way forward to manage safety properly. We are looking at recording loss time incidence, near miss.

We have just employed a specialist working with us for the last three months and he has set up our new safety policies and plans going forward, and it is all to the international Occupational Safety and Health standards, and so we are going forward. We are monitoring this on a monthly basis in our monthly reports and having it as our key focus on all the work we do.

We are also introducing what we call the *SIDRA regulations* (a traffic software) where right from the inception concept right through to delivery on site you have a safety consideration in everything that you do and that cause not only the permanent work, it is also the temporary works and the traffic management as well.

In addition to the safety input into the design and construction, we also carried out road safety audits on all the major works that we do which tells us if the work that we have carried out and the end product that we have achieved is a safe network.

**Question 46: Pages 35 and 36 of Annual Report – As per Figure 5 and Figure 6, what is the correlation between road casualties and the quality of the road?**

This is on road casualties and the quality of the roads. It is a very difficult link to draw between the condition of the road and accidents. In some cases, it will be quite obvious, I suppose. But we do try to keep records of where the road has caused damage because it is no denying it can cause damage to cars and can cause accidents, a deep pothole can cause someone to swerve out of the way and hit someone else, that is a fact. So we are trying to maintain a very detailed standard of record on accidents in conjunction with the Police and LTA. It allows us to plot trends and improve things going forward.

**Question 47: What are the safety improvement projects that have been undertaken to help reduce the road casualty toll?**

This again talks about safety improvement projects. We believe that safety is integral and how an efficient road system works. I think there is a lot of people who believe you can stick people on the road with flags and stop traffic moving and put speed bumps everywhere will improve safety, it has never been proven to do that. So we would rather design a safe network from the inception stage, we put in proper crossings, there is an action now to take out all the pedestrian crossing lights, the flash amber, and replace them with red and green stop lights, so people know if they can cross or not. If it is an amber light, it is a decision between the driver and the pedestrian on who is going to go first. When you have the red and green light, there is no doubt. If it is red, you stop. So we are taking steps now to change it to a more directive approach to safety rather than just leaving it to people's imagination.

We have also put in more refuges on the road, crossings as well. You will see on the section of the road between Nakasi and Rewa over the next few months, there will be several road crossings for pedestrians and each one of them will have its own STOP signals as well. So traffic will have to stop to let people cross. And we are moving people to be guided to cross at designated spaces as well which improves road safety.

**Question 48: Elaborate on the effectiveness of the speed cameras.**

This is about speed cameras. Speed cameras are phenomenally effective. We do not look at speed cameras as a revenue generation tool, we look at speed cameras as a safety tool of slowing vehicles down. I would rather see zero fines generated if I got zero accidents on the road.

Question 49: Page 38 of Annual Report - Table 17 (Asset Stewardship – Outcomes): Explain the reasons for the non-achievement of the target for the annual reduction in the number of pothole complaints.

This relates to the pothole complaints. We get multiple complaints around the same pothole, so it is difficult to actually see a sign of success in pothole reduction in terms of the number of complaints we receive. We can receive 20 complaints about the same thing, so I think it is an inaccurate analysis to think that because you get more complaints there are more potholes. It could be true but it may not be true. Our focus right now is on managing the situation by making sure potholes are minimised by doing carriageway refurbishments instead.

Question 50: How has the 'Building Local Capacity through Knowledge Transfer' programme helped build local skills and capacity? Provide relevant examples.

This relates to knowledge transfer. Knowledge transfer is a key thing for the FRA. We are trying to build that with our local staff. There are a few overseas workers, including myself, in FRA and we have a mission, each person has a three-year term and within that three years, they have to train the replacement and pass on the knowledge to their teams. That is a requirement for everyone.

Also, whenever you bring in consultants to workers, we do not just bring in consultants to design things for us, we bring in consultants to work with our team to upskill them through the design process.

We are also working very closely with ADB and World Bank now to try and bring in some more defined and more directed to qualification, training and exercises for our team as well.

**Question 51: Page 43 of Annual Report – Table 18 (Asset Provision, Development, Maintenance and Renewal) – Explain why the non-achievement of the targets and what were the challenges in meeting these targets.**

This relates to the non-achievement of Targets. This is all to do with the challenges that we are faced with - the deterioration. I think in some respects we have been fighting a losing battle on some of these challenges that we are facing within the FRA, down to the prolonged and decades of deterioration that has been faced, so there is massive challenge continually.

**Question 52: Page 44 of Annual Report – The committee notes that around 5km of intended sealed road rehabilitation was not delivered in 2015 due to a large package being tendered outside of maintenance contracts. As the tender took a longer time to be awarded, no significant work was undertaken on this contract. Why was the tender process prolonged and has all outstanding works been completed?**

This is regarding sealed road rehabilitation. In the sealed road rehabilitation, it was not tendered because the plan was to include the sites in the Suva Arterial Road Upgrade Project (SARUP) 1. It was tendered in June, 2016.

The process through ADB is a very long tendering process, we did not actually achieve that target for that year.

**Question 53: Inform us on the total number of bridges under FRA's stewardship together with their priority classification. What are the Authority's plans in terms of reducing the number of high priority bridges through repair or replacement?**



There are currently 608 Bridge in the Authorities Asset Bank; 57 of these are considered to be critical.

The most critical seventeen of these critical bridges are being replaced in contracts that are currently in progress.

We have a proposal to replace the remaining 40 critical bridges over the next 5 years.

Over this period, there will be a need to maintain all bridges in a serviceable condition. This will be ensured through our maintenance programme.

There are 608 bridges under the FRA's management: 57 are on critical right now; and 17 are in the process of being replaced right now. We are working on a plan over the next five years to replace over 40. The problem we face is that we will replace the other 40 over the next five years, but as we are replacing them, more bridges become critical because they are in a very bad state.

It is worth noting that right now bridges generally have at least the life of 80 years in their design,. Currently, we are doing 100-year designs. The average life of bridges in Fiji right now is 43 years, so all the bridges have lost half of their life and that is solely due to poor maintenance and overloading, which are the major issues here.

**Question 54: Explain whether the physical work for the following 4 jetties were carried out in 2015:**

- **Yasawa-I-Rara Jetty**
- **Natuvu Jetty**
- **Totoya Jetty**
- **Nabouwalu Jetty**

On the four jetties, yes, Yasawa-i-Rara, we replaced brackets and removed the marine growth. The Marine growth removal seems to be a very small thing to do, but very critical for jetties. If the marine growths stay on the jetty, it degrades even faster than it would normally degrade in the sea water.

Natuvu Jetty is pedestrian jetty and that is part of a scheme going forward to replace it with another jetty in Buca Bay. On the location, we have got four alternative sites for the location of the new jetty right now, and we narrow it down to prefer two, we are just going through with one of our external expert consultants to tell us which one is the best one to go with. There was a jetty built in Natuvu some years ago, it was later abandoned and I think right now that is the favourite location for the new jetty.

Totoya Jetty: Works carried out and we have repaired the causeway and we are yet to do some repairs to make accessible to the dolphins out in the water to make sure that boats can tie up properly.

Nabouwalu Jetty: Again mooring dolphins are to be put in there. We actually dredge out the berth and there is more work coming in now in Nabouwalu Jetty with infrastructure for pedestrians and streetlights going in over the next few months.

**Question 55: What has FRA done to improve the quality of its service delivery and strengthen its data collection mechanism?**

The Service Request System manages complaints and any queries from any member of the public coming in. There are time scales for response and action on those service requests. In 2017, we had 11,000 service requests that were opened and currently, we are on about 4,000 open service requests, so that has been greatly reduced from what it was over the past few years.

**Question 56:** Has the road user satisfaction survey been carried out and if so, what was the outcome? How reliable are these surveys in gauging the quality of service rendered?

The road user survey that was to be commissioned was deferred. We are looking at some new road surveys that are being undertaken right now. We will go towards the end of Suva survey, but we think we need to expand the survey to the greater Suva area because the rate of development of Suva is outpacing the infrastructure right now.

**Question 57:** How has FRA progressed in synchronizing the legislative changes in the establishment of FRA and other subsequent legislative change?

We manage our operations through the FRA Act, and it has been amended twice and we are complying with all the amendments. We are not fully sure of what the question is, maybe you can elaborate on that later on during the discussion. We are not quite sure what that question meant.

**Question No. 58:** What are the Authority's views on the budgetary allocation held under RIE in regard to the achievement of its work targets? How has the Authority's work been impacted as a result?

The funds under RIE have been released late which reflects the cash flow reconciliation of FRA and we end up with delayed payments to the contractors. It is a bit of a concern for us, it does affect the way the contractors deal with us and we need to address it going forward in future discussions.

**Question No. 59:** What is the criteria used to engage consultants and contractors? The criteria used to engage consultants and contractors are fundamentally four:

1. Capability - can they do the work?
2. Experience - have they done it before?
3. Capacity - do they have the people to do it now?
4. Best value - we do not look for the cheapest price, we look for the best value of price.

**Question No. 60:** Explain why some of the companies contracted by FRA did not fully see through their periods of engagement for example, MWH (New Zealand) Ltd, Blacktop Construction Limited, etc.

The engagements with MWH: Back in 2015, there was some overcharge and this was discovered by the FRA from MWH and MWH was requested to address the overcharging by transferring the money back. MWH decided to leave Fiji hence frustrating the contract without paying the money back, and that case is now going through litigation. I cannot really say too much about that case right now because it is actually in the courts being litigated right now. Blacktop Construction Limited went into receivership.

MR. CHAIRMAN.- Thank you, CEO, and the team, As we are going through the answers, now I will ask the Honourable Members for their supplementary questions. The Honourable Salote Radrodoro.

HON. S.V. RADRODRO.- Thank you, Mr. Chairman, and thank you, CEO and the team from FRA, for your presentation.

I think, Question No. 21 is in regards to the maintenance of roads in the outer islands and the maritime islands.

Your response in here is saying that this is being looked after by the Ministry of Rural, Maritime and Development but under an MOU with Fiji Road Authority (FRA), my question is, because I know, for example,

in Vanuabalavu, the road is very bad and I had continuously raised this in the House but with this MOU, the funding is with FRA or is it with the Ministry?

MR. J. MOORE.- The way this works is that we pay all the costs to the team. The team members are actually Ministry workers but we pay their costs on a monthly basis and any material cost is paid by the FRA. Sir, just on that point going forward, we have a plan to change the way that that work is procured by having a dedicated maintenance contract and capital improvement contract on the islands. We have the same in the Central Division, Western and Northern Divisions.

I will be honest, I have never understood why it was not the same in the Eastern Division, it is the same requirement. We have gone through a tendering process to allocate a contractor who is fulltime on that mission for the islands. I have also got a team recently deployed within the FRA dedicated to the islands.

There is one General Manager and five Programme Managers. The General Manager is based in Suva but the five Programme Managers will be based on the islands. So, there will be a Programme Manager on Rotuma, Taveuni, Ovalau, Lakeba and Kadavu. They are permanently based there going forward and we will be letting out work for contractors to go on to the islands and do the work rather than relying on doing it through this. It is kind of a difficult route to do through it, to be honest, and it is not really a sensible route to do it through either. I would rather have the contractors out there working with our guys to identify the problems and again this is where the Eastern Commissioner comes in to be very important because he has a very good angle on what is needed out there. So, we will work very closely with the Commissioner as well. We are changing the structure for the islands, I should not say this maybe but I will, they have not been served well in the past and I think they deserve to be served well and served better in the future.

MR. CHAIRMAN.- Thank you, CEO. Yes, Honourable Salote.

HON. S.V. RADRODRO.- Thank you, CEO. I am really happy to hear that because this Ministry, the Ministry of Rural and Maritime Development is one of the ministries that is very under-resourced in terms of their budgetary allocations, so I am happy to hear that if FRA could just look after roads in the maritime islands rather than this Ministry.

HON. MEMBER.- All right, thank you.

MR. CHAIRMAN.- Thank you, CEO. As said by the CEO, there are already contractors in most of the islands, people are there in Rotuma, Kadavu and other places. Even when we visited Rotuma, we saw that the contractors are there working on the road. So, this will really assist the other islands where they have problems. Yes, Honourable George Vegenathan.

HON. G. VEGNATHAN.- Thank you, Mr. Chair and thank you, CEO, for coming over. I know you have a mammoth task in trying to restrict the loads and all. I come from the Ministry of Sugar Industry, so, yes, we are working on things, restrictions on weight and so forth. But looking at the roads in some of the areas like Seaqqa, they really need upgrading. That I have raised with the Minister concerned last week and I just want to know what the progress is or what is going to happen to these roads out in the rural areas, especially where the cane belts are and where people are currently facing problems to bring the cane over. Thank you.

MR. J. MOORE.- I was in Seaqqa last week, looking at the actual sealed road through Seaqqa, parts of it are in very bad condition right now, I believe it was somewhere around September, October time. But I think more importantly in the Northern Division, it is so much better, the unsealed roads. One of the problems we are facing with the unsealed roads in the North, is this issue over materials. It seems that the limitations on material quality and availability are most pronounced in the northern part of Vanua Levu, and some of the smaller islands

so we will not be able to properly address the condition of the roads until we properly address the condition of the materials which is why my guys have been out there in Vanua Levu for many months now, checking out new sites.

There is a standard quarry site near Dreketi. It cannot cope with the volume required, it is too much. So we are looking at sites in Natewa down on the south coast as well to try and get better materials. But we also need to refocus the attention on to the simple things on these unsealed roads. One thing that has been missed in the past and is a continuous source of frustration for me, I am afraid, is the attitude towards drainage. I do not think, I wonder if people realise the link between road drainage and deterioration. Over the number of times I have gone out there, even now when I go out there and seeing the road being reinstated before the drainage is being done, that just incenses me, to be honest. You have to deal with the drainage.

I firmly believe that if we get the materials right and we get the drainage sorted out prior to doing the road surface, a lot of these issues will go away and the road will hold together far better. It is getting the right material to make it lock in together, be durable and getting the drainage sorted out to make sure that it does not flood the substructure and it is the flooding of the substructure that destroys the quality of the road. So those are the steps we are taking going forward, improving materials and improving the ways we do the work as well.

HON. G. VEGNATHAN.- I totally agree with you. Even, I am looking at the cane access roads so the first thing I tell them is that the drainage has to be done properly ...

MR. J. MOORE.- Absolutely.

HON. G. VEGNATHAN.- ... so that we can maintain the road otherwise the water just flows onto the road and it becomes another drain. Thank you, Sir.

MR. CHAIRMAN.- Honourable Dr. Ratu Atonio Lalabalavu.

HON. DR. RATU A.R. LALABALAVU.- Thank you, Mr, Chair. Thank you very much, Mr. CEO and the team. Listening to your presentation with regards to our questions, I was hearing a lot of limitations, challenges faced by the FRA. I am always a firm believer that you work within your means ...

MR. J. MOORE.- Yes, we have to.

HON. DR. RATU A.R. LALABALAVU.- and with the issues that you raised about the destruction, vehicle overloading, vehicle overloading, resource availability, and taking that into consideration in terms of the customer feedback, I come from Taveuni, I am sure your team is there and the feedback that I get from the constituents there is, sometimes the road are not done within seven months or eight months and this is just an observation and probably if you want to take it on board. I see that you have the Commissioner's list to help you out with regards to your work, if you can just go further down to the community, to the *bose vakoro* (village meeting), *Bose ni Tikina* (District meeting) and be visible there, then it is a reason why it is not been done I think they will take it from there.

MR. J. MOORE.- I think that is a good point. I mean, we are there to serve the public, to serve the people and that is our mission. Take Taveuni as an example, it is really obvious to me that Taveuni was being run from Suva in terms of road management. It does not work. Originally, they were basically three divisions to the country and three divisions with the FRA. In reality, there is four divisions to the country and there should be four divisions with the FRA.



But we have gone further than that, we have made it 17 subdivisions now. So, Central, Western and Northern have been divided in four subdivisions each. Each of the subdivisions has an office with FRA in that location, for example, Korovou has an office now. Sigatoka has an office with FRA, so we are getting out into the public more.

We have got people based on five of the islands, the five most populated islands people are based on. But the issue on the outreach to the public is very important. We did a project through the ADB which started too in Suva. I mean, it is not the islands, it is Suva but it demonstrates the case.

We go out to talk to the public and we get incredible feedback on issues and sometimes, you are not even aware of some of the issues, so it is a very valuable thing to do. In fact, Mr. Sen said to me earlier this year, “We need to go out to do these roadshows all over the various parts of the country in the north, in the islands”, and we are going to start doing that. We just have to get our budget through to make sure we could afford to do that but it is definitely a plan going forward.

The other thing that I also say to my guys is, “You do not wait to send or formally reply through a computer system to a person, when that person has taken the trouble to write to you. He has given you his mobile number, then at least have the courtesy to call him back and talk to him. So we got a very strong emphasis on talking to the public, understanding, meeting with the public. We have a role in the office. If anyone comes into the office and meets someone from the public, they get met. They are not sent off, they are not passed to someone else, they get met by a person who can answer their questions.

Many times, I get people come to see me, they are always welcome in my office. That is what I am here for, I am here to serve the people. So if I have to sit there and talk to the public, that is my job and it is not a problem for me at all.

MR. CHAIRMAN.- Thank you, CEO.

HON. S.V. RADRODRO.- Thank you, Mr. Chairman. If I recall, one of the challenges was the gravel, the need to have that quality gravel. I have seen the damages through the other Committee on Natural Resources on this low mineral extraction, particularly on the quarries on the gravel, and now FRA is saying that you are going to be moving on to hard rock.

I have also seen a bit of that extraction in Vanuabalavu and when I inquired, I was advised that, that was to for the road use, which could have the same kind of impact in regards to climate change and in regards to the social impact. On the gravel extraction, the social and climate change impact in there could also come through the hard rock extraction, what kind of maybe strategies are in place to ensure that may be we do not over-mine, maybe the strategies with the Mineral Department or with Lands Department to, sort of, ensure the protection of the environment.

MR. J. MOORE.- That is a very good point, various responses there. When we talk about gravel, we talk about river gravel. When we talk about quarries, it is crushed stone. For road building, crushed stone is better than river gravel because of the angular nature of the crushed stone. River gravel, we do not like using river gravel for technical reasons but also environmental reasons.

The problem with river gravel, compared to quarries is randomly extracted and I hate to say, after illegally extracted. When you go to a quarry site taking hard rock, you have got your equipment there to grade the rock and break the rock down. You are fixed in that location, you do not wander off 10 miles down the road or turn around the corner and extract from there, you have got a fixed location for your extraction.

When people are taking river gravel, it could be anywhere on a river and I saw it last week when I was in Vanua Levu on the Labasa River at Korotari. The amount of river gravel extraction there is phenomenal and I question if it is right or not.

We want to move to not use river gravel. It is too destructive to the environment and it lacks any control whatsoever and, of course, it is not right. When it comes to the quarries, the way we are approaching the quarry extractions, particularly on the islands because that is very important, the islands are very small compared to Viti Levu and Vanua Levu.

If you put an uncontrolled quarry in the middle of an island, you will destroy the island and we cannot do that. So the first criteria is, I have a general manager for the islands who has assessed the work for the next five years on the islands, it is needed on the islands. With that work, she has assessed the quantity of the material required, so if her assessment comes to 10,000 cubic metres, then all we extract is 10,000 cubic metres. We do not go over the top and extract 20,000 cubic metres and move 10,000 somewhere else.

We want to stop the movement of materials from one island to other islands as much as we can. We work with the Ministry of Lands and Mineral Resources, we work with the Department of Environment, to make sure that our extraction is properly managed and controlled. We have people in the office who are actually experts in this kind of work: the Environmental Officers, we have Geologists and Gravel Managers working in the office with those direct employees of ours who are dedicated to this and make sure the work is done properly.

We are not going to exploit any quarry whatsoever and what we are planning to do in the future when we manage the extractions of these quarries for the quantity that is required, we will be having a contract with the contractors to do the work, and part of that contract will be to reinstate the land to its former look, if it is forested, we will fill the land there, put soil over the top and then plant trees. If it was grassland, they will plant grass, to return it to how it was and that will be written into the contract, and in that contract, we have bonds and we have penalties, to make sure the job is done in accordance with the contract. If they fail, we will do it ourselves and we will charge the contractor. In that way, we can use the material wisely, use it sparingly and not destroy the environment in the process.

HON. DR. RATU A.R. LALABALAVU.- You mentioned about the road capacity and its limitations, plus the ever-incoming of new cars and vehicles. Where I come from, every week when I come over, it is congested and on the other side, there are still number of cars yet to be sold. In terms of the congestion and the road capacity, how can we handle that?

MR. J. MOORE.- Well, in transportation engineering, you work out assessments of what a lane can carry and you have a great efficiency from 'a' through to 'f'. Anything worse than a grade 'c' is failing and you base your calculations on one lane being able to accommodate 1,200 cars an hour in free flow. So if you are on Queen's Road in a clear stretch with no settlements, you can do 1,200 cars an hour at the speed limit, and that is classed as free flow.

What has happened in Fiji, where I live, I overlook Suva Port, and I get depressed every time I see the huge cargo ships coming into offload yet more cars because I know that the road space has not increased to accommodate those cars, so the length between the road space and the congestion is the volume of cars, massively increased over the last few years against very little increase in lane space, that is the simple equation. So you cannot double the number of cars and not double the amount of lane space to avoid congestion. What we are trying to do now is increase lane space where possible, but that is not approaching the problem at the source, we have got to get people out of their cars.

I was on Kings Road a couple of days ago watching rush hour. It is what I do in the mornings, I am afraid, I watch the rush hour. I was on Kings Road watching the traffic coming in and I counted 32 cars that

passed me, where there was only one person in the car, 32 single occupancy cars in a lane. Outside of the 32, there may be three or four in other cars, but for that one section, 32 single occupancy cars.

A bus service could have taken all those cars off the road. If there was a car parked near Rewa Bridge and there is a bus service in the bus lane, those 32 people could have been in the bus going to their office and not on the road. There are more benefits and more actions to be taken than just mere creating more roads all over the place.

Creating more roads is not the answer. Changing attitudes and mentalities is the answer, but to do that you got to provide the facility to allow it to change. You need to have the bus lanes, you need to have the car parks and destinations to go to. Right now in Suva, there is a massive problem. When you drive down this new road that has just been finished and you sail through in 25 minutes from Nausori, where do you go? There is no car parking. So all these things have to be approached and have to be addressed. Car parking is a massive problem in Fiji right now in all the urban centres.

HON. G. VEGNATHAN.- Thank you, Mr. Chairman. I know we have problem with space on the road, I just want to take you back to the North where I come from, we are facing that problem. Is there any plans to upgrade the road or create more lanes or whatever, any plans for the North?

MR. J. MOORE.- Yes, there is. There is a mid to long term plan for resilience route from Savusavu through to Labasa, then from Labasa to Korotari, there is a road that carries on in to the hills for a short distance.

Then from Naibalebale into the hills there is a road, they meet about 12 kilometres apart. What we want to do is close the 12 kilometres and make a road through from Savusavu to Labasa. If we are going to do that, we might as well do it as a sealed road and that is an alternative.

One of the biggest concerns we have in Vanua Levu is the Lomolomo Slip. Right now it is stable, for the cyclone it might not be, so we are taking steps now to cure the Lomolomo Slip and we are also looking at alternatives for resilience bridges. The problem with Fiji right now on the two main islands in Fiji, is that there is zero resilience. Any bridge on Kings Road goes down, then you have to go all the way around to get to the other side.

In Vanua Levu, if the Lomolomo Slip did fail again, Savusavu is only accessible by going down the West Coast Road, massive detours. So we need to think in the medium to long term about improving resilience and improving the roads straight across Viti Levu. There is a road now that goes across Viti Levu from Sawani, up through Serea, over to Monasavu Dam and down to Tavua. It is there already, but it is not in a good condition right now, it is an unsealed road. But, the first 20 to 30 kilometres of the other side is okay. I think most of it is with sealed road and you have got a good resilience network there.

MR. CHAIRMAN.- CEO, do you have any plans to upgrade this road, like the Sawani Road going down to Tavua, or the road coming from Navala Road up to Nausori Highlands or going into Sigatoka?

MR. J. MOORE.- Yes, all we want to do or our resilience focus right now for the future, maybe long term maybe medium term, I will give the example of Viti Levu, is that road from Sawani through to Tavua. We use the existing unsealed road and you seal it all the way through, it opens the entire centre of the country, and when you put it through there, you are only 15 to 20 kilometres away from there and that is all right. We are only 20 kilometres away from the end of Nausori Highlands throughout. You link them through and you have got fantastic network of roads.

The problem I have with that right now is just the resources and the funding because it is a very expensive enterprise for the road through but I think in the future it is necessary to improve the centre of the country and there are some amazing things to see on the centre of Viti Levu, I mean for tourists as well as the farmers and the businessmen as well.

MR. CHAIRMAN.- CEO, in regards to the rural roads, my observation is that, there are a lot of roads, even after getting upgraded, the roads are getting narrower.

As you have mentioned regarding the drainage works, the drainage is right towards the side on both sides and while the contractors are working on the road, each time we have the problem of two vehicles passing each other. We have seen a lot of work that has already been done by FRA but there is a lot of work that needs to be done in the rural areas, I have seen that during my visits. Do you have any plans to see that drainage is done and the road goes back to where the initial road used to be before?

MR. J. MOORE.- Yes, we do. Many years ago, I am not sure how many, I am told it is 8 years or 10 years ago, there was a decision made by someone, I am not sure who it was, to narrow the widths of the roads for maintenance reasons.

For me, that is completely the wrong thing to do because what happens with that is that if you clear the drainage out, unless you are very very careful, every time you clear the drainage, you lose road width.

So, if you got already a narrow road, then as you clear the drainage, it gets narrower and narrower and it becomes impossible. So, we have recognised that and we have decided that going forward every time we re-sheet a road or we rehabilitate an unsealed road, we wanted to achieve 6 metres. In some places maybe we cannot achieve 6 metres, we will get as close as we can to 6 metres. Right now there are roads out there that are 4 metres wide and it is just not workable when you have got vehicles trying to pass each other.

If you have to do any repair work on the road effectively right now because it is 4 metres wide, we have to close the road. But if it is 6 metres wide, we can close half the road and keep it flowing. So, yes there is definitely a plan to reinstate roads to as close as 6 metres. When I say 6 metres, that is 6 metres running surface not including the drainage, that is separate.

In terms of the drainage, in the past, it is all being linked to how the work is described in the budget allocations. It is always previously described as unsealed road maintenance. So, no where did it say "drainage", so what I have done now is, I have separated that, I have got unsealed road maintenance of our drainage maintenance and now there are actual lines, there are many lines for maintenance for drainage. Every month, myself and Robert go through with all the General Managers on what they have achieved against their target for drainage just to make sure they are focussed on the drainage needs. Not just out there doing miles and miles of road rehabilitation and road repairs, they focus on the drainage.

I have also got a team of guys in there that are out there doing inspections on completed works and works in progress. They follow the rules of drainage first, vegetation control then do the road and if they see the contractors doing it the wrong way around then they get a warning. We have to get a grip of it because the fundamental problem in deterioration of particularly unsealed roads is drainage. We have to achieve that, we have to get the road pulled back to the right width and we have to make sure that the drainage is maintained as it is in a work stream, not as something included with something else. In that way, we should be able to achieve a decent surface out there.

MR. CHAIRMAN.- Thank you, CEO. I understand and you also agree that drainage is very important. We need to look after the drainage and we will have less maintenance on the roads. We have seen overgrown



drainage all around. It does not mean if you do the drainage, then the road is left with less metres of coverage, all the roads are measured to the standard size and we have seen that the drains are overgrown or all blocked and that is taking a lot of money as far as the maintenance of the road is concerned.

MR. J. MOORE.- Definitely, definitely.

MR. CHAIRMAN.- CEO, in regards to the speed cameras, are all the speed cameras around Fiji working?

MR. J. MOORE.- They are not ours, they are LTAs'. I believe they are, I am told they are, and, yes, I am told they are but they are not ours to operate.

MR. CHAIRMAN.- In regards to the Irish crossings, I am happy that you have mentioned that you have plans to maybe slowly take away these Irish crossings and have crossings a bit higher. It was raised to me recently by one of the farmer who was awarded the "Best Farmer". This is the new Moto Bridge there. This is where I come from. There is an Irish Crossing just beside this. The name of the road is Matanitawa and he is the biggest pineapple farmer.

That crossing is underwater for two, three months because of heavy rain and all his produce gets bad. They are not able to take it out and it is not just one crossing, it can be other crossings around Fiji because we have seen a lot of activities as far as agriculture is concerned and some fertile land where people are really growing. It is also affecting the movement of people when these crossings are underwater; children to schools, sick to the hospital or people getting their food and other things, but I am happy that you have mentioned that you have plans to raise these crossings so that the people can get access.

So, thank you very much for that. Honourable Salote, anything else?

HON. S.V. RADRODRO.- Just on the jetties, I believe FRA also looks after the passenger shelters. Is that FRA too?

MR. J. MOORE.- Yes, the waiting sheds.

HON. S.V. RADRODRO.- In the Natovi one, it is a very busy jetty. I was just there over the weekend and it is in a very bad condition but I notice that there are street lights there now. I also see that work is happening right now in Nabouwalu but there is a really big need for streetlights in that area.

Still on streetlights, in regards to, which I do not see on this list, the Caubati/Wainivula area, it would really ensure the safety of women and children who do not really come through the footpath, the normal crossing, they have just sort of just made their own crossing which was like maybe their traditional crossing because there are settlements in Caubati. The children and women cross over to the Christian Mission Fellowship (CMF) school. They have raised issues in regards to streetlights in that area and also in the Caubati crossing on to Kinoya which they use, particularly in informal communities.

MR. J. MOORE.- On those issues, the first one, Natovi, yes, streetlights have been installed there. The next phase is to put new waiting sheds and new toilets there. That is scheduled for the next financial year.

On the Nabouwalu Jetty, the waiting shed has been upgraded recently. There is a footpath being built right now. It goes down from the road, right to the jetty head and in that footpath, my team are installing foundations for solar streetlighting, eight or nine solar streetlights down the Nabouwalu Jetty, right down to the jetty head. I use it a lot myself and yes, you are right, at night, it is quite worrying, particularly ladies and children,

at nights in those jetties, there were no lights before. Now there will be lights in there. Nabouwalu should be complete, within the next two or three months the area of streetlighting will be resolved for Nabouwalu.

On these crossings, in the rural areas I have told my team to ensure that there are solar streetlights on each end of every crossing of the river. On the more official crossings, we will take a look at all those and if they are heavily used then we can do something similar there as well. Probably safety is our No. 1 priority. We understand the significance of streetlights and public safety. There is no question, we will deal with those things.

MR. CHAIRMAN.- Honourable Dr. Ratu Atonio, just hold on.

Just towards the end, CEO, once again in regards to the roads like in Viti Levu and Vanua Levu, the roads coming across, as I said the Koronubu Road and Nausori Highlands Road, if these roads are really done well, you can also decrease the number of vehicles on the main King's Road or the Queen's Road. Also, a lot of economic activities can be created or generated in these areas, also a lot of tourists love to travel inland as well and this is a shorter distance. So hopefully FRA will be really looking into this to see how this can be fixed.

MR. J. MOORE.- We have and we are. We generate a five-year plan. In fact, it has now gone to an eight-year plan. We are actually progressing our forward looking plan over the next eight years and within that plan, there is a line item for the actual crossing of the island, both Vanua Levu and Viti Levu as well. We see massive benefit in every respect, from security, for convenience, for tourism, for business, for farming, everything. It would benefit greatly by having cross-island links and then bring in Nausori Highlands onto it. Yes, fantastic! We are very much in favour of that.

The constraint right now is the funding but it is on our plan for the next five to eight years to do that kind of work.

MR. CHAIRMAN.- Thank you, the CEO and the team for your time. CEO, would you like to add anything else before we adjourn.

MR. J. MOORE.- No, I am happy to answer your questions and any time you want me here, just let me know, any time.

MR. CHAIRMAN.- Thank you very much, CEO and the team.

On behalf of the Standing Committee on Social Affairs, I really thank you for your time and a very informative session. You have really provided all the answers. Should we need any further clarification or any information then our Secretariat will be in touch with your staff.

As I said, we really went through every page of your Report and we made sure that we asked you the questions that needed to be answered which would really help us to report back to Parliament and if we need any other information then our Secretariat will email you, if you can respond to that.

We want to actually table these reports back to Parliament in the August sitting. As a team, we will be again going through the verbatim and then we will go through our recommendations but as I said, it was a very informative session. A lot of things that have been done and a lot of things that still need to be looked into to improve our roads. But thank you very much for your time.

MR. J. MOORE.- You are most welcome.

MR. CHAIRMAN.- Thank you.

The Committee adjourned at 3.02 p.m.