BETTER ROADS, BETTER ACCESS, BETTER BUSINESS

THE OFFICIAL NEWSLETTER OF FIJI ROADS AUTHORITY

MARCH/APRIL, 2014

iii Roads Authority

Access returned to Udu Village



Mrs Mena Nukuleba and Mr Malakai Marama no longer use their horse to transport sick people to the hospital.

MR Malakai Marama and his wife Mrs Mena Nukuleba of Udu Village on the Serea-Monasavu Road in the Naitasiri highlands says the work by Fiji Roads Authority has been a "big relief that has made our lives easier, from taking our produce to market, to going to school, to taking people to the hospital."

Mr Marama, who grows and sells yaqona, said that while the road was closed by slips for two months late last year the only vehicle transport available had to be accessed at the nearest village, seven kilometres away.

The slip has been cleared, the road graded, and the surface has been resheeted with gravel. While the road was blocked,

if anyone in the village fell ill, they would have to hire a carrier to meet them at the next village, or go by boat down the river to the health centre, both expensive forms of transport.

"Sometimes, when the weather was not favourable, we would have to ride our horse with the sick person to the next village and then call the carrier to pick us from there, or use a bilibli on the river.

"But now this is a big relief having the bus coming in. We really appreciate the things that have been done by the people looking after the road."

Communicating with rural communities

KEEPING the channels of communication open between the Fiji Roads Authority (FRA) and rural communities is an on-going mission for Mr Jese Veibuli, FRA Land Liaison Officer, whose diary is kept full with meetings and discussions at the village, Tikina and Provincial Council levels.

Amongst his more recent meetings, Mr Veibuli has been involved in the compensation discussions with the Namena Tikina Council, with regard to outstanding claims from the construction of the original Natovi Jetty.

He also participated in the successful negotiation of a written agreement between

the inhabitants of Burelevu Village that allows the successful tender, local company Pacific Building Solutions, to construct their site office in preparation for the planned upgrade of the Natovi Jetty.

He has briefed the Rewa Provincial Council on the 2013 and 2014 maintenance programmes, addressing issues raised by the Council in 2013, who this year commended the work carried out by FRA.

Mr Veibuli has contributed to gaining the consent and an agreement on compensation from the Kumi Village landowners, allowing for the construction of a by-pass road at the site of the Naiborebore slip on the Kings Road.



Mr Jese Veibuli (centre) listens to community concerns at the Natewa Roadshow in Vanua Levu.

He has also met with the Naiborebore and Naisauma villagers to discuss ways in which FRA might assist in protecting their water catchment that also supplies the nearby Tai District School.

Meetings with the Tailevu, Naitasiri, Ra, Bua, Cakaudrove and Macuata Provincial Councils and Development Boards and participation in road shows have all contributed to Mr Vebuli's full schedule as he listens to people's concerns and works to keep them informed of FRA's plans for the improvement of their roads.

CEO's Message



FIJI Roads Authority is well into its second year of operation as a standalone entity that is responsible for 11,000 kilometres of roads, more than 1000 bridges, 45 jetties and for all traffic lights and streetlights throughout Fiji.

Despite the early months of the year bringing a special set of challenges with the tropical storms that lashed the countryside and severely affected our infrastructure, stretched our resources and caused damage estimated at FJ\$10 million, our contractors have worked diligently to restore access to most of the roads, bridges and crossings that were adversely affected.

The Naiborebore slip completely cut off the Kings Road, but within 48 hours, one-way traffic access was restored, with two lanes now restored. Work is continuing to build a safe, long-term solution.

Delailasakau Road leading into the Namosi highlands was another area that received extensive damage. Some 139 sites in this area alone have been identified as in need of some form of repair, including underslips and culvert washouts, varying in degree from minor to extreme.

But every day, progress is made in the on-going task of improving road conditions for the travelling public.

I urge all members of the public seeking accurate, first-hand information about what is planned for their roads to contact FRA on our Short-code number 5720.

Progress at Naiborebore



Single lane, steep access on an alternate route opened within 24 hours of the slip



The slope has been cut away to reduce the slope and two lane access is now available.

Database extended

"AS information changes, last year's work of building base information and the framework for recording that information continues to be a work in progress," said MWH Asset Management System Manager, Mr Conway Pene.

Mr Pene was referring to the work in 2013 to build the base data for Fiji's road network, bridges, jetties and associated projects, and the setting up of the framework for the Geographical Information System (GIS) and Asset Management System (AMS). GIS is computer mapping connected to a database.

With more details about road conditions, traffic use and information on road signs, markings and drainage being gained through surveys, the roads data base is being extended. Following this year's planned surveys of bridges and jetties, the bridge database is being ex-

panded with links to construction drawings, and a new jetty database will be developed.

Information is also gathered from agencies and organisations such as Municipal Councils, Provincial Development, the Ministry of W

the Ministry of Works, Transport and Public Utilities, the Fiji Water Authority, Fiji Sugar Corporation and Telecom Fiji Ltd. and should be better facilitated in the future.

"Government's initiative to have a national special information strategy that would provide an open-door data policy across utilities and key government agencies is in draft form and undergoing serious discussions," said Mr Pene.

When in place, this strategy will better facilitate the collection of relevant data for the FRA database.



Tablets allow technicians to record and transmit data from the field.

"Links to the maintenance contractors' Road Assessment and Maintenance Management (RAMM) systems, for better tracking of activities and their cost have been established," said Mr Pene.

Technicians in the field are able to record repair details and estimate costs using electronic tablets.

"Information passes between MWH and the contractors, with the main aim being a faster turnover in terms of seeing their progress and what it costs, on a geographic format," said Mr Pene.

MWH provides professional engineering services to Fiji Roads Authority (FRA).

Urban streets repaired



URBAN roads in the greater Suva area are receiving much needed attention.
Close

to the heart of the city residents and commuters

are noticing an improvement with Domain Road having

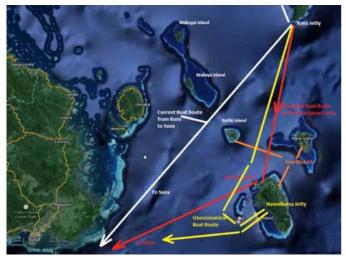
been resealed this year, and the two-year programme to upgrade roads in the Nasinu area now underway with Godfrey and Pundit Mahabu Roads already upgraded.

Improvements to Bulei Road, Laucala Beach Estate and RL Sharma Road, Nadera are planned for this year.

Qarani Jetty contract awarded

THE awarding of the Qarani Jetty construction contract to local company Pacific Marine and Civil Solutions is the first step towards unlocking potential benefits not only for the people living on the island of Gau, but also for the communities on Batiki and Nairai.

The three islands form a district in the Lomaiviti province with the Government service centre based at Qarani. Here also you will find the offices of the Provincial iTaukei Officer, the Agricultural Officer, the Fisheries Officer, the Community Police Post, Health



The Qarani Jetty will assist easier access to markets.

Centre and the Post Office. The new jetty location at the northern end of Gau is strategically placed to maximise its potential as a common distribution centre for the three islands and opens the possibility for a viable ferry service route linking Koro, Gau and Suva, thus overcoming the argument that diverting to berth at the sourthern-based Nawaikama Jetty is uneconomical for shipping companies.

It is also expected that the construction of the Gau jetty combined with a regular shipping service will assist the island communities by improving access to markets and services in Suva, thus promoting the potential for development within the mainstream economic life of the country.

FRA welcomes Zaina



Ms Zaina Khan at work in Nadi.

Fiji Roads Authority (FRA) welcomes to the team Ms Zaina Khan, Programme Engineer responsible for the Nadi and Suva Road Upgrade Project.

The more than \$200 million project, which has been in design for 18 months, will see significant upgrading and widening work carried out on the roads around Nadi and Suva international airports.

"The planned work will reduce congestion on our roads and improve travel times for local communities and commuters. Better roads and improved street lighting, footpaths and drainage will undoubtedly make roads safer for drivers and pedestrians. It will also significantly enhance the first experience of Fiji for tourists," said Ms Khan.

Ms Khan holds an Honours Degree in Civil Engineering and a Postgraduate Degree in Secondary School Physics and Science Education and has worked on many projects both internationally and in Britain, including the 2012 Olympics held in London.

"FRA is committed to upskilling the local workforce and improving the supply chain. I feel privileged to be using my engineering and teaching skills to mentor others," she said.

Although she was born in England, Ms Khan's father hails from the West of Viti Levu where her grandfather Mohammed Rafiq Khan of Sabeto was a founder of Fiji's first bus company before beginning his own business, M R Khan Buses – a family run business still in existence.

"I feel that I am following in my family's tradition as a transport pioneer in what is often seen as a male dominated profession," said Ms Khan.

NDM training for locals



Safety first was an essential part of the NDM training.

"IF we continue to get training at this level on a regular basis, then in the future, Fiji's local roading contractors will be able to compete with overseas consultants on an equal footing."

Mr Vimlesh Halka, Site Engineer (Civil) with Hot Spring Hire Services Ltd, was commenting on the recent Nuclear Density Meter (NDM) Training Workshop that he attended.

An NDM is used to test how well a road has been compacted. It uses radiation to measure the density and moisture content of the compacted material and whether or not there are air pockets that could result in pot holes after the road is completed.

Mr Timoci Makasiale, Laboratory Technician at the Fiji Roads Authority Samabula Laboratory also attended. He was equally impressed with the standard of knowledge transfer the participants received at the training organised by Fulton Hogan Hiways JV and conducted by Mr Stuart Moulding of Civiltrain, New Zealand.

"From the start of the training, the emphasis was on safe practice. Radiation is invisible and we can't see it as it transmits through space. You have to be a safe distance away from the machine while it is operating," said Mr Makasiale.

Both men agreed that learning the correct operating procedures meant that they are now better equipped to safely collect correct readings from the meter, which would contribute to better road construction.

Both Mr Makasiale and Mr Halka hold a Diploma in Civil Engineering from the Fiji National University, and Mr Halka is currently pursuing studies in Project Management at the USP.

Passionate about bridges

A passion for bridges has led Graduate Bridge & Structural Engineer, Ms Mereia Kalivakatoga, on a knowledge seeking journey that has taken her from Fiji to Malaysia to New Zealand and home again.

"My passion was always bridges, when I was a technician, a draftsperson, I loved working with bridges."

Ms Kalivakatoga, who grew up in Suva but hails from Rewa, spent time in Christchurch late last year at the New Zealand Head Office of her Fiji-based employer, MWH Global, where she worked with senior structural engineers to grow her abilities from bridge drafting to bridge design.

While in Christchurch Ms Kalivakatoga also participated in a three-day New Zealand Transport Authority (NZTA) course on Bridge Inspections.

Apart from the New Zealand-focused course material, Ms Kalivakatoga spent her time in New Zealand working on designing bridges for Fiji.

"I can now work with minimum supervision in designing a Bailey bridge to use as the quickest solution that will keep traffic flowing. I am responsible for the design, all the calculations.

"I have come back from Christchurch with my knowledge of bridges greatly improved," said Ms Kalivakatoga, who holds a Degree In Civil Engineering that she gained



Ms Mereia Kalivakatoga gathering data at the Wainalumu Bridge on Baulevu road.

after four years of study at the Malaysian tertiary institution, the Universiti Teknologi MARA (UiTM).

Prior to this, Ms Kalivakatoga had completed a Diploma and Advanced Diploma in Civil Engineering at the Fiji Institute of Technology (FITnow the Fiji National University or FNU), and worked with the Ministry of Works as a draftsperson, and as a structural engineer before joining MWH Global in April 2013.

"The purpose of going to Christchurch was to improve my skills in working on bridges. The bonus was meeting and working with engineers who are involved with Fiji projects, which makes it so much easier for me to communicate with them now," said Ms Kalivakatoga.

Good roads make a difference

"Just sending along a little thank you from the community about what access to care means to them. This project would not have been completed without the road work!

"I'm very happy the health center is here, especially for my kids," said Ms Janet Lotawa.

Ms. Lotawa's appreciative message was received by Fiji Roads Authority (FRA) following the opening of the Nalotawa



Ms Janet Lotawa says "Thank you." Nursing Station in Ba by the Honourable Prime Minister Rear Admiral Vorege Bainimarama.

Definitions

Pavement: The sealed surface of a road.

Rehabilitation:

Improvements made to an existing road pavement to extend the service life of an existing road pavement and/or improve its load carrying capability.

Compaction: Compaction is the use of compaction machinery or 'rollers' to increase the density of the road construction material as the more dense the material the stronger it is. Soil particles are pressed together, expelling some of the air and making the road material more dense, thus increasing the load-carrying capacity of the road and extend its life-span by making it less penetrable by water.

Nuclear Density Meter:

For measuring soil density, a radioactive source emits gamma radiation into soil, and a sensor measures the radiation that is reflected by the soil. By calculating the percentage of radiation that returns to the sensor, the gauge can be calibrated to measure the soil density. The sensor's measurements can be calibrated to calculate the water content of a sample. The radioactive source emits neutrons, and then measures the returning scattered neutrons as Hydrogen, a major constituent of water, slows down neutrons.

Bailey bridge: Developed by the British during the second world war, a Bailey bridge is a type of portable, prefabricated truss bridge with wood and steel components that are light enough to carry by truck to be assembled at the bridge

Commonly asked questions

How do I find out when my road will be fixed?

Call FRA on **Shortcode number: 5720** to get fast, accurate, first hand information about what is planned for your road.

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