# Communication vital part of plan

FRA is gearing up for extensive road work to be carried out on more than five kilometres - some of the busiest in Suva - during the months of September and October.

For these repairs to take place safely, efficiently, and with a minimum of disruption to people's lives, the Authority is implementing a comprehensive communications strategy, utilising all media: print, radio, television, internet, and face-to-face briefings with stakeholders.

Stakeholders include the Suva City Council, the Suva Retailers Association, Telecom Fiji Ltd, Fiji Electricity Authority, Water Authority of Fiji, Fiji Ports Corporation Limited, the Taxi Operators Association and the Fiji Bus Operators Association.

As part of the face-toface communication effort, FRA staff took information flyers door-to-door and spoke with retailers and business proprietors in the areas to be rehabilitated.

"The main objective of FRA's communication strategy for the Suva City road work is to create awareness that allows even the most remote citizen to know what is happening, and to provide regular, updated progress reports that will benefit the travelling public of Fiji who are directly affected by this work," said FRA CEO Neil Cook.

The public will be kept informed of what to expect and what processes are taking place during the rehabilitation work,



FRA's Onarina Umu (right) and Marylyn Ram (FNU student left), explain the rehabilitation process to Suva stallholder, Katalina Qiolevu.

much of which will employ foamed bitumen modification machinery brought in especially for the project.

Foamed bitumen modification is a road pavement rehabilitation process in which foamed bitumen is mixed with either a new or existing pavement to produce a long-lasting and high quality road.

The roads that will be included in this rehabilitation programme are Victoria Parade - from Loftus to Thomson Streets and from Ratu Cakobau to Loftus Street - Rodwell Road, Scott Street, Harris Road, Thomson Street, Renown Street, Gladstone Road, Knolly Street, Thurston Road, and the Queens Road, by the Novotel Lami Bay hotel.

# PM opens new Higgins Depot





(Left) The Honourable Prime Minister, Commodore Voreqe Bainimarama, declares the Depot open, while Tui Nadi, Ratu Sailosi Dawai (centre) and Sir Patrick Higgins look on. (Right) The new Depot at Navakai Road.

AT the opening of the Higgins Depot at Navakai Road, Nadi, the Honourable Prime Minister, Commodore Voreqe Bainimarama acknowledged the work already carried out by the company, particularly in more remote areas, as well as the investment made in bringing in road maintenance vehicles to fulfill their

contractual obligations.

"Working with the private sector brings in the specialised training, skills and knowledge that increases efficiency and improves results. It allows us to right-size Government, leading to a more streamlined and cost effective civil service," said the Prime Minister.

In response, Higgins Board

Chairman,
Sir Patrick
Higgins,
said, "We
pride
ourselves
upon being
able to make
a difference
to those

people that we work with," and pledged to "deliver the improvements that everyone is waiting for as quickly as possible."

The improvements taking place are making it possible for people to have better access to schools, markets, and health services, with road access being restored, in some cases

after three years, to villages such as Vunatovau, Yaloku, Rara and Navidili.

Also in attendance at the opening were Higgins Managing Director, Bernard Higgins, and Higgins CEO, David George.

The Depot is the sixth established in the Western Division by Higgins, with others at Rakiraki, Tavua, Ba, Lautoka and Sigatoka.



# Fiji's first foamed bitumen



FOR the first time in Fiji, a process called foamed bitumen modification is being used in the rehabilitation work around Suva and Nadi. Roads treated with this process are expected to last for at least 20 years.

Peter Watts, General Manager, Fulton Hogan Hiways JV said that the process employs stateof-the-art technology and special machinery that has been brought into the country for a limited period for the rehabilitation work.

"The process has only been in use in New Zealand since 2006 where it is used on motorways and main arterial highways. It is a really appropriate treatment for Fiji, particularly on high-priority, heavy traffic roads, and allows for the use of recycled pavement material," said Mr Watts.

The electronically controlled process involves adding a small amount of heated water that is injected into the mixing chamber of the foamed bitumen modification machinery. The water vaporises on contact with the bitumen, which foams, expanding by 15 times its original volume.

The foamed bitumen is then thoroughly mixed inside the machinery's rotor chamber with the pavement material, before it applied to the road, where it is graded and compacted.

## What causes potholes?

POTHOLES in sealed roads are most commonly caused by water getting under the surface and eroding away the layers underneath.

A second cause is when, over a period of time, the surface becomes fragile from the volume of traffic, especially overloaded vehicles, using the road. Surface cracks form, where water can enter, and loose particles get washed away.

## Potholes in unsealed roads

AGAIN, if the road surface is too flat to allow water to drain away, the pumping action of vehicle tyres passing over areas of trapped water will create potholes.

As in the case of sealed roads, potholes in unsealed roads are made worse by vehicles that are too heavy or overloaded.

In both cases, time is also a contributing factor, so prioritising road maintenance and repair is important for all roads, whether sealed or unsealed.

# Avoiding adverse impacts



KEEPING the country's network of roads safe and operational includes making sure that any activity taking place does not impact adversely upon the safety of the public, the people doing the work, or the overall efficiency of the roading network. Activities such as a march or a parade, significant roadworks or

a utility operator such as water, power or telecommunications carrying out their operations can all cause impacts,

"We have to keep an overview of what the impact will be on the network, and whether what is proposed will be carried out in a manner that protects everyone's safety, or if it will affect people's ability to travel from A to B, "said Mr Nicholls, FRA Maintenance Works Manager.

If a major disruption would result from an activity, it can usually be scheduled to take place outside of peak hours, or on a Sunday.

If any resulting disruption is considered significant, the public

is notified via the media that they should allow extra travelling time

Utility operators have to go through an approval process before any work involving digging up the road takes place. Part of the process requires liaising with other utility operators in order to coordinate work in the same area to minimise future digging up of a road.

Once work is completed, the utility operators are responsible for reinstating the road to its original condition as quickly as possible. This includes work outside the actual road, such as kerbs and drains, and from boundary to boundary.

# Jetty opens opportunities

APPROXIMATELY 5000 people now have access to a facility that can assist in the development of commercial enterprises with the opening of the \$3 million jetty on Rabi Island by the Honourable Prime Minister, Commodore Voreqe Bainimarama.

"It's not just about delivering services. It's about unlocking the development potential of our rural and small island communities to enable ordinary people to benefit economically," said the Prime Minister.

Rabi's significant natural resources provide opportunities for the development of forestry, fisheries, tourism, and transportation. The new jetty, constructed by Pacific Marine and Civil Solutions, facilitates the transportation of goods



Opening the way for potential growth. The Honourable Prime Minister, Commodore Vorege Bainimarama, cuts the ribbon at Rabi Jetty.

efficiently and cost effectively making travel to and from the island more convenient. Eight more jetties have been included in the FRA's 2013 maintenance programme.

# Strategies support FRA vision



ESSENTIAL to realising the FRA vision of an affordable, integrated, safe, responsive and sustainable network of roads, bridges and jetties, are three inter-weaving strands that support it: strategies that underpin the work on the road,

an effective asset management programme, and a performance measuring system that evaluates that what is being done, is done well.

"The strategies we are developing need to be comprehensive, so all FRA's future work can be implemented using the same guidelines already laid out," said Ms Christine Serreyn, FRA's Strategy, Planning and Performance Manager. "This first strand is based on long term planning, not only for next year, but for three and ten years ahead."

The second strand is an

understanding of the life span, or rate of deterioration, of the Authority's assets - Fiji's roads, bridges and jetties - in order to propose areas for maintenance, renewal work and new infrastructure projects. The idea behind 'asset management' is ensuring that Fiji's roads, bridges and jetties are safe to use and fit for purpose.

"The third one is performance, and that has everything to do with the contractors. FRA is a small unit that manages work through various contracts that contain performance measures that tell the story of how well

the work is being done," said Ms Serreyn.

"Communication channels, processes, procedures and guidelines are very important. We all need to be looking in the same direction and saying, 'This is where we are going' and 'this is how we are going to deliver," said Ms Serrevn.

"Once a vision is in place, it must be supported with strategies and policies to make sure the vision is realised. It is a matter of seeing what needs to be done, by whom, by when, and then measuring the results," she said.

### Naitasiri sees benefits



PEOPLE in the more remote areas of Fiji are already seeing the benefits of the work undertaken by the Fiji Roads Authority in the first six months of this year.

Staff Nurse Arieta Turaganivalu at Laselevu Medical Centre said that even though there are still some parts of the road to be attended to, the upgrading of the road is "really helping the people of the Naitasiri highlands."

"The improved condition of the road has reduced the travelling time from Laselevu to Suva, from five to three hours. Emergency cases taken to the Vunidawa Hospital now travel in greater comfort," said Staff Nurse Turaganivalu.

# Flood proofing Moto bridge

IN the past, the Moto Road bridge in Ba has experienced flooding during cyclones or other extreme weather events, as happened in 2012, when it was under nine feet of water.

FRA Assistant Capital Works

Engineer, Ripon Baral, said that in order to mitigate against future flooding, the new bridge is higher and extends further across the flood plain. It is expected that the whole Moto Road project will be completed by early 2014.



The new Moto bridge is built to withstand flooding.

# FRA and LTA unite against overloading

"NONE of our roads are built to stand up to a consistent barrage of overweight vehicles. This is nothing more than inconsiderate and illegal behaviour that needs to be dealt with through an appropriate enforcement regime," said Fiji Roads Authority CEO Neil Cook.

Roads built for light bus and vehicle use will not withstand ongoing abuse from overloaded 10-wheeler trucks, often weighing between 25-35 tonnes.

Such misuse saw the recent temporary closure of the Wailoku Road outside of Suva, and also resulted an outcry by residents of Natakeya Settlement in Cakaudrove.

In both cases, the roads were churned into a quagmire by overloaded vehicles, making it impossible for public buses or private vehicles to travel. Mr Cook said that he and the CEO of LTA are committed to working together to put in place a structured, aligned and integrated approach to addressing areas of national concern on road use, including overweight vehicles.

"The permanent fix will be for FRA, LTA and Police to work together to keep overloaded vehicles off our roads," said Mr Cook.



Overloaded and heavy vehicles need to be kept off our roads.



A geological strata survey is underway at the Stinson Road bridge to determine the type of soil in the area. This will directly influence the supporting columns that will be constructed to support a new bridge, built to last, while safely carrying vehicular traffic for years to come.

# Stinson survey Slow down, safety first

FRA wants all personnel working to improve Fiji's roads to go home unhurt at the end of each day.

Motorists need to slow down at road construction and repair sites and read the warning signs, and not drive into the areas marked off with cones.

Failure to do so puts the lives of road workers at risk.

They are working to improve the roads for everybody and deserve to work in safety.



# Wet weather advisories

FIJI Roads Authority's goal of keeping people safe becomes even more significant in times of inclement

During periods of heavy rain, such as Fiji experienced earlier this year, information on the state of roads and bridges is sent to FRA by the contractors at work in the field.

Working closely with the Ministry of Information, FRA provides the public with up-to-the-minute- details on roads and bridges that have been closed because of heavy rain and flooding.

In the same way, FRA informs the public when safe access to these roads and bridges is restored.

# Seal for Sigatoka



A sealed road and a smooth ride ahead for Sigatoka Valley Road residents.

FROM Sigatoka township, for 15 kilometres along the

of local communities as they travelled to and from Sigatoka. FRA Assistant Capital

for the first time.

Sigatoka Valley Road, it is becoming possible to enjoy a smooth ride along the road that is in the process of being sealed

This is in sharp contrast to the roughly-graded gravel road that previously served residents

Works Engineer, Ripon Baral, said that the project is almost completed and is expected to come in within budget.

layers of sealing chip.

- 3. **Re sheeting:** Applying metal gravel to an unsealed road surface.
- 4. Asphalt Concrete (AC): A road construction material of asphalt, used as a binding agent, combined with small aggregate. It is layered and compacted to give a smooth, black surface.
- 5. **Resurfacing:** To put a new chip seal or AC surface on a road



THE 10 kilometres of new road construction from Nadiri to Nagere, on Vanua Levu, is progressing well. Completion of this section of the Buca project is expected before the end of the year.

### Amazing race, amazing teams

EAT a chillie, a teaspoon of marmite and some dry weetbix, maybe wash it all down with a shot of vinegar and a whole raw egg, do a chin-up, wade in water up to your neck: these were just some of the many challenges faced by the fearless teams of FRA and MWH staff and their families who ran in the Amazing Race, on a fun-filled Saturday afternoon.

The three hour competition ended with winning team MWH Project 1 coming in with 280 points, followed by second place getters team Alpha with 279, and in third place, the Safety



#### **Definitions**

- 1. **Aggregate:** A broad term for a variety of construction materials. In road construction and repair, aggregate commonly refers to stone chips and gravel.
- 2. Chip Seal: A road surface that combines one or more layers of asphalt or bitumen with one or more

Comes First team, with 267.