National Roads Authority

370 North Sound Road PO Box 10426 Grand Cayman KY1-1004 CAYMAN ISLANDS

# ANNUAL REPORT

# NATI2004-2005ADS AUTHORITY

## **Our Mission**

To contribute to sustainable transport and land development in the Cayman Islands by building and maintaining a safe and efficient network of national roads, in partnership with Cabinet and the Private Sector, having regard to national and economic growth strategies.

### Vision of the National Roads Authority

Commitment to our mission will enhance the quality of life, promote economic prosperity, and improve access and mobility for all residents and visitors of the Cayman Islands. We will be a recognized leader in the Caribbean for providing high quality roads and transport related infrastructure.

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#### NATIONAL ROADS AUTHORITY

#### FIRST ANNUAL REPORT FISCAL YEAR July 2004 – June 2005

The beginning of the fiscal year in July 2004, saw the formation of the National Roads Authority, (NRA) (formerly the Roads Section of the Public Works Department) with offices located on the PWD compound on North Sound Road.

The National Roads Authority was established 1<sup>st</sup> July 2004 by the National Roads Authority Law (2004). It was created to administer, manage, control, develop and maintain the Islands' public roads and related facilities, such as signals, storm water facilities, roadway lighting, and roadway directional signage.

Its first Board Meeting was held Friday, August 20th 2004 with opening remarks from the then Minister Hon. Min. Gilbert McLean, the Chairman Mr. Lemuel Hurlston and reports from the Chief Engineer Mr. Colford Scott, the Chief Financial Officer of the Ministry Mr. Daniel Rattan and Ms. Debra Welcome of the Treasury Department. Members of the Board were as follows:

Messrs	J. Lemuel Hurlston	Chairman
	Troy Whittaker	Deputy Chairman
	Rollin Jackson	
	Carson K. Ebanks	
	A. Steve McField	
	Justin Woods	
	Dan Tibbetts	
Mrs.	Marilyn Conolly	
Mrs.	Debra Welcome	
Mrs.	Gina Ebanks-Petrie	

With

Mr. Colford Scott	Chief Engineer	In attendance
Mr. Edward Howard	Deputy Chief Engineer	In attendance

Board meetings were held on the third Thursday of each month.

Following the change of Government after the May, 2005 general elections, the NRA was placed under a new Ministry headed by the Hon. Minister Arden McLean, effective July, 2005.

#### 1. CHAIRMAN OF THE NRA BOARD OF DIRECTORS REPORT

The first year in the life of this new statutory authority was mixed with promise as well as with challenge.

The promise was that of transitioning to an enhanced and dynamic public entity to plan, build and maintain our roads, signals and drains to a higher and more professional standard than heretofore, to sustain our transportation network and thereby our economic development.

The Government is to be congratulated for the level of funding and development support provided to facilitate and accomplish the many new projects undertaken and completed, some in record time.

At the commencement the NRA had 107 employees, including 90 field staff, five part-time workers and three summer interns and a budget of almost \$7 million.

We also had eighty (80) pieces of plant, vehicles and equipment, fifty percent of which had passed their economic life.

We inherited 80 miles of paved (hot-mixed asphalt) roads, 144 miles of chip and spray roads, 8 traffic signals and 8 roundabouts and who could forget the two mini roundabouts, over 4,300 street lights, almost 600 vertical drain wells, and 12 banks of horizontal drain pipes.

Roads in the Sister Islands are also part of the responsibilities of the NRA.

Our first tasks included the setting up of the organizational structure and the recruiting of the senior management staff, the taking over of assets vested and the assumption of full responsibility for advisory services as well as those responsibilities provided for in the law.

It is true to say that our transportation capacity, especially in Grand Cayman, has lagged much behind our development and that we are consequently engaged in a catch-up scenario.

The following chart shows our demographic growth in key areas to illustrate the point:

# Why Plan Roads?

Over the past two decades, Grand Cayman has seen a development boom coupled with a tremendous growth in the number of vehicles on its roads. While certain sectors grew absence of a comprehensive transportation plan has created a hosts of problems.



We were challenged in terms of our youth and inexperience but also in terms of the size and scope of the assets requiring ongoing upgrades and maintenance while also planning and building some relatively large new road projects.

The NRA is nevertheless dedicated and committed to accomplishing its duties and responsibilities prescribed by statute and the future challenges will be met with fortitude and resolve for the benefit of the Islands.

### J. Lemuel Hurlston

Chairman NRA Board of Directors

### 2. ADMINISTRATIVE REPORT

With the formation of the NRA the Chairman of the Board indicated that a subcommittee comprising of himself, the Deputy Chairman, the representative from the Ministry and the representative from the Treasury Department would have the responsibility for overseeing the matter of personnel issues in relation to administrative staff for the NRA.

Organizational structure of staff at the formation of the NRA continued until it was restructured and a Managing Director, Mr. Colford Scott appointed January 2005 and Deputy Managing Director, Mr. Edward Howard appointed November 2004. The Assistant Director of Finance Mr. Michael Barnett commenced his contract December 2004. Assistant Director for Road Engineering Mr. Paul Parchment was appointed September 2004 and Mr. Denis Thibeault, Assistant Director of Transportation & Planning appointed July 2005. The position of the Executive Secretary Ms. Sherilyn Eden was also appointed, but was unable to take up the position. This position was again advertised in March 2005. The new Executive Secretary, Michele Rochester was appointed June 2005. Staff is comprised of both group (bi-weekly) and monthly paid employees.

### NRA ORGANIZATIONAL CHART



By February 2005 uniforms (shirts) displaying the NRA logo were ordered for members of staff and all plant, equipment and vehicles were re-branded with the NRA logo.

#### Hurricane Ivan

In September 2004 after an unwanted and devastating visit from Hurricane Ivan, an emergency Board Meeting was held to report on the assessment of damage. It was noted that many of the one hundred and five employees of the NRA had suffered loss of their homes and cars etc. A meeting was scheduled with The Chairman and Director A. Steve McField and all NRA staff to discuss how the NRA can best assist the staff affected to help themselves with urgent recovery needs. It was also noted that the offices of the PWD and NRA were damaged and temporary offices for the staff were urgently needed.

The Senior Engineer and some other management staff were housed in two trailers and some of the accounts personnel accommodated upstairs in the PWD building and in shelters at the rear of the compound. In June 2005 the Managing Director and the Executive Secretary relocated to the new Annex which housed the office facilities. The Assistant Director of Finance was expected to do so shortly with the Human Resource Manager and other accounting personnel later on the following month.

### 3. OPERATIONS REPORT

At the first Board meeting of the new NRA it was reported that eight major traffic signals had been installed and the department had moved to constructing roundabouts which was a more cost efficient method than installing traffic signals. The department also manages and monitors the importation of explosives and there are three main importers: one in Cayman Brac and two in Grand Cayman. With respect to the Transportation Planning Unit, the focus will be on long range planning and development of roads which is generated by the flow of traffic. The first major project of this planning unit was the West Bay Bypass Project.

In September 2004 a visit by Hurricane Ivan brought revised damage estimates of \$9.8 million for roads, \$3.1 million for vehicles and equipment, \$1.2 million for traffic signals, \$400K for signage, \$75K for lab testing equipment and \$190K for drainage clearing and re-drilling, a grand total of \$14.9 million.

NRA ACCOMODATIONS - The offices on 370 North Sound Road sustained moderate damage to the roof with ceilings partially collapsed. The building experienced leaky roofs, and water intrusion into the ground floor at an average depth of eight (8) inches. A total of five (5) PCs and computer workstations were lost along with approximately 1,000 dollars worth of engineering reference books and materials. The building section suffered even greater damage to its architecture wing with the loss of a computer, copier and drafting equipment numbering well over \$50,000. PWD commenced with internal and external renovations to the building that included extensive roof repairs, new ceilings, replacement of carpeting with tiles, and a complete restructuring of internal partitions. This led to great inconvenience to the NRA staff as only two of fifteen computer terminals were operational. The lack of air conditioning compiled with the construction dust made it impossible for the NRA to function administratively from this location. The other added concern was that the new PWD internal renovations proposed an inadequate amount of space to house the proposed new employees such as the Assistant Director of Finance & Administration, Deputy Managing Director, Managing Director, Human Resources Manager, and Executive Secretary. was strongly recommended lt that adequate accommodations be found elsewhere (outside of PWD) for the National Roads Authority.

<u>ROAD REPAIRS</u> - The National Roads Authority (NRA) worked non stop to complete post-Ivan road repairs and to begin new road works, including the Hyatt roundabout. The Authority completed 28 of 39 post-Ivan road projects with 11 partially completed projects underway at the beginning of 2005.

Deputy Managing Director Edward Howard said "With the passage of Ivan our National Roads Development Programme for the island was put on hold somewhat. We spent the majority of the year focusing on maintenance and what we called Ivan recovery maintenance to the harder hit areas of the island specifically to South Sound, Bodden Town and East End." Nine of the eleven partially completed projects were in those hard hit areas.

A list of outstanding project highlights:

- 1. Repairs to South Sound Road, Prospect Point Road and Bodden Town Road;
- 2. Hot mix overlay at Midland Acres and Breakers;
- 3. Base repair to road shoulders at Breakers;
- 4. New seawall for road and shoreline protection at Clarinda Beach;
- 5. Gabion wall for road and shoreline protection at the Blow Holes in East End;
- 6. Road and shoreline protection walls from Ironshore Gardens to East End;
- 7. Road and shoreline protection walls at the area near Warren Conolly residence;
- 8. Spray & chip repairs to the road from East End to Colliers;
- 9. Road and shoreline protection at Colliers Pond area washouts;
- 10. Preparation of road for hot mix asphalt from East End to Colliers;
- 11. Shoulder repair at Ironshore Gardens and East End Guard rail.

Emphasis with this next phase of work was on road repair, including resurfacing and providing shoreline protection to the most vulnerable areas particularly Breakers and the East End. "We are looking at building seawalls and other types of shoreline protection that will minimize any impacts that could occur in another hurricane," said Mr. Howard.

The NRA appealed to the public to be patient while the post-lvan recovery work continued on the island's roads.

NRA had been established only two months when Hurricane Ivan struck the island, causing damage to at least 39 sections of the island-wide road network, cutting off some districts completely and damaging East End's roads the most severely during a strong storm surge. South Sound Road also suffered severe wash out and the rupture of underlying utilities.

The storm further damaged 50 percent of the NRA's vehicles and equipment, making work especially challenging for the NRA. In April 2005 new replacement equipment costing Cl\$1million arrived on-island, allowing the authority to forge forward with repairs, but even so, the maintenance burden for the NRA, with total emergency road repairs and cleanup, came close to costing Cl\$15 million, with the road damage alone costing Cl\$10 million.



With Hurricane Ivan storm surge removed part of the asphalt on West Bay Road north of Public Beach.



Before repairs - Sea View Road – After repairs - Sea View Road -Clarinda Beach (looking East). Clarinda Beach (looking west).



(Left) Strong storm surge and battering waves removed a section of the asphalt along South Sound Road.

(Right) Spotts Straight, along Shamrock Road, shows damage from storm surge during Ivan.



Boggy Sand Road - washout



North of the Marriot Courtyard – October 5, 2004. NRA facilitated road clearance and temporary patch



North of the Marriot Courtyard – shortly after initial road clearing



Emergency Patch – installed by NRA pending permanent repair work



West Bay Road – Sink Hole North of Canal Point

After months battling equipment shortages, the recent arrival of brand new gear worth over CI\$1 million enabled the situation at the National Roads Authority (NRA) to finally return to normal. Two mobile office trailers included in the shipment afforded NRA staff the luxury of a clean and dust free workplace for the first time since Hurricane Ivan.

"The arrival of new trucks, heavy duty equipment, and the office trailers has been a tremendous boost to staff morale. We are finally approaching some semblance of normalcy and have a place we can call home," said NRA Managing Director Colford Scott.

All eight signalized intersections sustained some measure of physical damage to the signal hardware and Hurricane Ivan impacted over 500 vertical drain well systems. This placed a tremendous maintenance burden on the NRA.

Even with these odds stacked against them, the employees of the NRA rose to the challenge. Within a day and a half of the storm, staff, assisted by private sector colleagues, had made all public roads accessible for emergency vehicles.

"I am extremely proud of my staff," said Mr. Scott. "Despite many of them suffering great personal losses, they continued to work with limited resources. Two days after the storm everyone was back at work."

One of the most inspiring aspects of human nature is that when faced with danger, good always emerges.

Although the NRA managed to complete all Ivan-related repairs, and even started work on the new Hyatt roundabout, the equipment situation had bordered on critical, explained Mr. Scott. "It was therefore heartening when the Authority managed, with the help of our Minister, Permanent Secretary and Chief Financial Officer, to secure supplementary funding for much needed equipment."

Inspecting the new NRA arrivals on site, Minister for Works, the Hon. Gilbert McLean noted that the many projects slated for the NRA made the replacements extremely necessary. The Minister stated "The development of a decent road system is integral to sustainable development. With this new equipment I believe we have not only replaced what was lost, but have indeed upgraded. This should also serve to boost productivity as it is always easier to do the job when you have correct and reliable tools."

In addition, the NRA is charged with collecting information on the performance of the existing transportation system; forecasting future traffic demands; and identifying possible solutions to anticipated issues in system performance and deficiencies.



NRA Director Colford Scott shows off some of the new arrivals. With him are from (L-R) NRA Assistant Director Finance and Administration Michael Barnett; NRA Board Chairman Lemuel Hurlston; Graduate Engineer Edison Jackson; Minister Gilbert McLean; DVES Director Dale Dacres; NRA Board Deputy Chairman Troy Whittaker



NRA staff show off their new offices. From (L-R) Assistant Director Finance and Administration Michael Barnett; Executive Officer Aldene Kidd-Hylton, Transportation Planners Marion Pandohie, and Denis Thibeault, Engineer: Major Projects Peter Ogden, and Graduate Engineer Edison Jackson.

### 3. TRANSPORTATION/PLANNING REPORT

The main responsibility of the Transportation Planning Unit (TPU) is to assist with the development of a long-term National Roads Plan (NRP) to be published every four years. Additionally, the TPU handles a broad range of short- and long-term planning functions, including development site plan review, assessing stormwater management plans and plan and design traffic improvement plans for existing roadways as well as prepare functional plans for new road corridors in preparation for gazette drawings for the Ministry of Works.

The NRP is a long range comprehensive transportation plan for ground transportation infrastructure and strategies to improve the operational performance of the existing road network and its future expansion. The transportation plan has been through various stages, but because of the damages caused by Hurricane Ivan, work activities for the plan were put on hold.

During FY 2004/05, the TPU helped prepare and analyze a roads assessment report which was developed to determine the damage caused by Hurricane Ivan between Sept 11 and 12<sup>th</sup> 2004 and also to evaluate the timeliness in which emergency reconstruction /repair can be carried out for various roads, signals, and drainage systems. The report identified thirty-nine (39) sections of the island-wide road network that sustained minor to major damage. A technical evaluation was performed for each of the sections with both emergency repair cost and long term cost figures tabulated for each.

During this time the TPU developed an island wide drainage map to help determine surface run-off water flows based on current and past developments. This analysis has been deemed vital in assisting with the reviews of site plans of new and redeveloping properties and the determination of stormwater management review, two vital tasks of the unit. This exercise led the TPU in developing guidelines for the preparation of Stormwater Management Plan for the development industry.

The determination of the TPU's duties were laid out during this fiscal year, some of the main outputs of the unit were as follows:

- 1. Provided Site Plan Review assessments for 224 development projects;
- 2. Assessed eleven (11) Stormwater Management Plans individual developments and comprehensive review
- 3. Prepared gazette plans for
  - a. extension of the Esterley Tibbetts Highway from the Hyatt Roundabout to Lime Tree Bay Avenue (under Section 3 of The Roads Law 2000); and,
  - b. East-West Arterial Corridor with Collector Road Connection (under Section 25 of The Roads Law 2000).
- 4. Traffic Calming MP
  - a. Thirty-One Traffic Calming Requests received
  - b. Nine total areas were assessed for Traffic Calming Measures

- c. Six Traffic Calming Plans were completed
- d. Two construction plans were completed on Beach Bay Road and the Second Frank Hall Homes (Candlewood/Elderberry Drive/Hemlock Way) area.
- 5. Road Safety
  - a. Concept plans for a road safety program was prepared
- 6. Public Relations with Government Information Services
  - a. Approximately eight Press Releases were prepared and circulated within the media.

### 4. FINANCIAL STATEMENT/AUDITOR'S REPORT

(See attached)