



2016/17

# Annual Report for National Roads Authority



For the 2016/17 Financial Year  
(18 months)



National Roads Authority

P.O. Box 10426  
Grand Cayman, KY1-1004  
Cayman Islands

Tel: (345) 946 7780

Fax: (345) 946 4151

Email: [nra@nra.ky](mailto:nra@nra.ky)

Website: [www.caymanroads.com](http://www.caymanroads.com)

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## Section 1 – Foreword

This annual report is for the National Roads Authority of the Cayman Islands ('The NRA'). The report outlines the NRA's performance during the 2016-17 fiscal year and compares it to the budgeted performance for the corresponding period.

The requirement for an annual report is prescribed under Section 52 of the Public Management and Finance Law (2013 Revision) (PMFL) Section 52 states:

*In respect of each financial year, each statutory authority and government company shall prepare an annual report.*

*An annual report shall report the performance of the authority and compare it with that proposed in the ownership agreement for that financial year and shall include:-*

A summary of the nature and scope of the activities of the authority or company during that financial year;

A summary of the extent to which the strategic goals and objectives of the authority or company described in the annual ownership agreement were achieved;

A summary of the extent to which the ownership performance targets set out in the authority's or company's annual ownership agreement for that financial year have been achieved in that financial year;

The amount of any **equity investment** made by the Governor in Cabinet in the authority or company during the financial year;

The amount of any **capital withdrawals** made by the Governor in Cabinet from the authority or company during the financial year;

The amount of any **dividends or profit distributions** paid by the authority or company during the financial year;

The amount of any **loans** to the authority or company by the Governor in Cabinet during the financial year; and

Details of any **guarantees** relating to the authority or company made by the Governor in Cabinet during the financial year.

The financial statements referred to in subsection 2(d) shall be prepared within two months of the end of the financial year. The financial statements referred to in subsection 2(d) (ii) shall be submitted to the Auditor General for auditing, and the Auditor General shall express and opinion within two months of receipt of the financial statements.

The annual report shall be presented to the Governor in Cabinet by the relevant minister or official member no later than four months after the end of the financial year.

This annual report complies with the requirements of the PMFL and covers three main areas;

Service delivery

Financial performance

Governance

The service delivery section outlines the contributions made by the NRA in furtherance of the Government's policy outcome goals. It also provides commentary which explains material variances in performance when compared to budget.

The financial performance section shows the financial resources the NRA was afforded in the 2016-17 budget and the inputs purchased to provide services.

The financial performance is presented in the form of financial statements prepared in accordance with the Public Sector Accounting Standards (IPSAS) and the



supporting notes to those financial statements.

The report also includes a section on Governance which outlines the NRA's

efforts in the areas of risk management, and compliance with various statutory requirements.



## *Message from the Minister*

The NRA is a key policy instrument of this administration's goal to build modern smart infrastructure. I am therefore pleased to present this 2016-17 annual report which outlines the Authority's achievements during the year; and provide an account for its use of public funds.

The Government has galvanized its commitment to continued investment in improving Grand Cayman roads by earmarking some \$50M in revenue for the five year period 2015 to 2020.

Infrastructure investments which facilitate trade and interconnectivity are a key component of a thriving economy; indeed, the role of the road network as the backbone of commerce is more evident in the Cayman Islands than in many other countries.

Our roads connect our children to schools; workers to their jobs; and efficiently moves goods and services across the Island. It facilitates our power, water and telecommunication infrastructures while providing hundreds of jobs through its continual maintenance and expansion.

Through road infrastructure investment, opportunities are created for new communities, economic development, a more efficient workforce and a greater sense of well-being among the Islands' population. The road network is the single largest, and



most valuable man-made asset owned by the people of the Cayman Islands.

It therefore gives me great comfort to have a team of highly skilled, committed and capable individuals at the helm managing this important asset and delivering this important work. Through our policy framework, the Government will continue to support the creation of modern, smart infrastructure as a key to future growth and prosperity.

Yours sincerely,

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**Hon D Kurt Tibbetts OBE JP**

Minister for Planning, Lands, Agriculture,  
Housing & Infrastructure

First Elected Member of George Town

## *Message from the Chairman*

2016-17 was a successful year (18 month fiscal period) for the NRA. The Board's main focus during the period was to ensure stability, focus, and direction as the organization delivered on its legislative mandate while supporting the Government's policy outcome goals. Through a robust recruitment process, we identified and appointed Mr. Paul Parchment as the new Managing Director to provide stable leadership for the foreseeable future. Working with management and staff, the Board hopes to continue to support the NRA as it seeks to adhere to the goals and targets established in the recently developed Corporate Strategic Plan. The CSP is a tangible means of focusing the Authority while demonstrating its readiness to effectively manage and account for public resources.

The Board was also pleased to support a capital investment plan which will modernize the fleet, heavy equipment and tools of the NRA over a five-year period. The asset replacement programme will invest in modern and efficient equipment which will enhance the Authority's service delivery capabilities and operational efficiency.

We firmly endorse the NRA's proactive strategy for the management of the road network. The development of a long range (25 to 30 year) road corridor map along with a 3-year roads development programme stipulated by the NRA Law ensures that the NRA makes sound strategic planning and investments in projects that will ensure sustainable development in these islands for decades to come. Another area that the Board is intently focused on is the maintenance programme for the road network. As we build more roads we inevitably have more



to maintain. The Board is elated that the NRA already has a fully developed pavement management system that catalogues and forecasts future maintenance requirements both time-wise and budget-wise. The pavement management system is most effective in helping Government to reduce future road maintenance costs by proactively forecasting repair needs and recommending repair strategies or countermeasures for key sections of the network before they reach the point of critical failure.

The Board is grateful to our private sector partners and to the management and staff of the NRA for the excellent work carried out in 2016-17 which made possible the achievements highlighted in this report. We would also like to recognize the support of the Government in providing the policy framework and resources necessary to do our work. The Board remains committed to the continued development of the NRA, and reaffirm its support for the organization and its efforts to deliver the best transportation infrastructure to the people of the Cayman Islands.

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**Donovan Ebanks**

Chairman, NRA Board of Directors

## ***Message from the Managing Director***

I am pleased to present the National Roads Authority (NRA) Annual Report 2016-2017. I would also like to thank the Board and Minister for the confidence entrusted in me to lead the Authority.

There is no doubt that roads contribute greatly to the economic stability of the country by providing both access and mobility options for all of us whether it be for housing, work, recreation and commerce. We have significantly contributed to the overall economic stability of the country by opening new avenues of competitive regions for growth and development.

Given the pace of change going on around us, we have, during this fiscal year 2016-17, taken the time to review our strategic goals and targets established in the NRA Strategic Plan to ensure alignment with our new business model; the expectations of our Parent Ministry; the Cayman Islands Government, and the needs of the people of the Cayman Islands.

The Corporate Strategic Plan 2015-2020 is structured upon our core business areas: Maintain, Manage Trips, Build, and Enable.

Everything we do contributes to our core business. Our budget allocations are channeled to the highest priorities, to



ensure that we remain focused on achieving our vision. Improving the trips and journeys that our customers - the road users - take is also a key priority area for us.

We intend to focus more acutely on customer satisfaction by optimizing the experience of their daily travel on the road network. As we deliver on these commitments, we will keep all vested parties engaged by creating a service charter which specifies our commitment to our customers. We will endeavour to create a Customer Action Plan to fulfil these commitments and keep the community informed on our progress through regular public reports demonstrating our performance. I look forward to working with my colleagues and stakeholder partners to deliver these commitments for the people of the Cayman Islands.

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**Paul Parchment**  
Managing Director



## Section 2 - Nature and Scope of Activities

The NRA's primary function is the provision of a safe and efficient network of public roads. It has overall responsibility for the planning, construction, and maintenance of public roads. In addition, the NRA has a number of specific functions under the National Roads Authority Law 2004, including:

- Provision of medium to long term plans for road development referred to as a National Roads Plan to be updated every four years.
- Implementation of a management system for planning, organizing, directing and controlling routine and periodic maintenance activities performed by employees of the Authority or through independent contractors.
- Carrying out of construction improvements and maintenance works on national roads.
- Carrying out necessary engineering, traffic, and economic studies that it may consider necessary for the maintenance and improvement of public roads.
- Training, research, or testing activities in relation to any of its functions.
- Additionally, the National Roads Authority provides support services to:
  - Public Works Department to enable that Department to provide an appropriate response to Hurricanes and other national emergencies, and
  - Planning Department for the review of planning applications involving storm water and road related matters and site inspections of constructed projects.

### **Mission of the National Roads Authority**

To provide sustainable transport and promote land development in the Cayman Islands for all stakeholders while having regard to the delivery of the National Roads Plan element of the National Development Plan 1997.

### **Vision of the National Roads Authority**

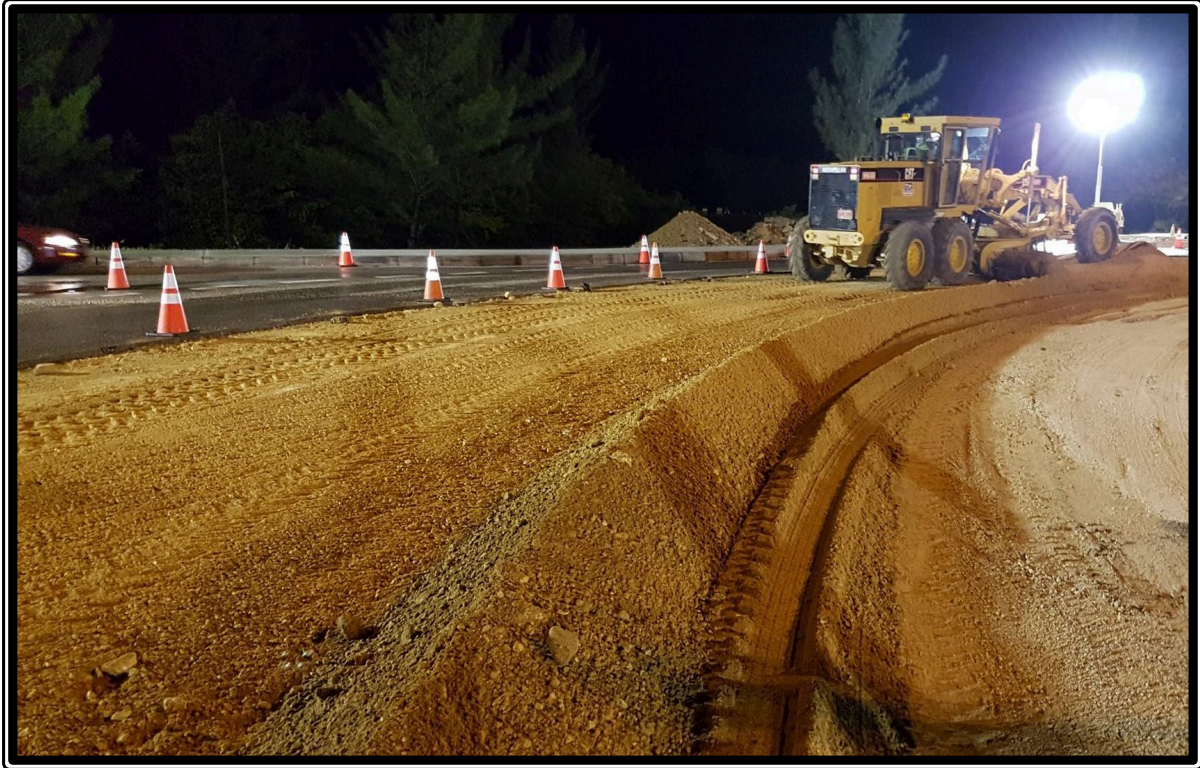
Commitment to our mission will enhance the quality of life, promote economic prosperity, and improve access and mobility for all residents and visitors of the Cayman Islands. We will be a recognized leader in the Caribbean for providing high quality roads and transport related infrastructure.

### **Customers and Location of Activities**

Road users are the primary customers of the National Roads Authority. Income is generated by providing engineering, construction, and maintenance services for fund-holding Government Agencies, approved private sector clients, and any other entity that the Authority agrees to provide services to. Services are provided only in the Cayman Islands.

### **Compliance during the Year**

The NRA operated in general compliance with the Nature and Scope of Activities specified in the 2016/17 Ownership Agreement for the year.





## Section 3 - Strategic Goals and Objectives

### **3.1 Approved Strategic Goals and Objectives**

The key strategic goals and objectives for The National Roads Authority for the 2016/17 financial year as stated in the Ownership Agreement were as follows:

1. Continue establishment of the Authority, develop and implement effective administrative, financial and information management systems,
2. Identify and seek approval for strategies for financing future road development,
3. Continue the Traffic Improvement and Roads Development Programmes.

### **3.2 Compliance with Strategic Goals and Objectives**

During the fiscal year 2016/2017 the NRA complied with the above approved strategic goals and objectives with the completion of one major construction project along the Linford Pierson Highway, as well as preliminary planning and design work for the CNB Roundabout to Mango Tree Connector. The NRA also completed the Crewe Road widening project between Tropical Gardens and Navis Close and the reconstruction of the junction of Smith and Crewe Road.

Revenue from Cabinet for FY2016/17 being an *eighteen month* budget cycle was approximately \$22M. Capital projects (Executive Assets) accounted for \$7.0M and \$15M came from the Road Fund as Recurrent Revenue that was used for the day to day operations and routine road maintenance of the NRA over the 18 month period. Other revenue sources included a \$120K from Dart Development for construction of a private road related works contract, and \$150K from the National Community Enhancement Project completed on directive of the Ministry of CPI.

**Goal: Continue establishment of the Authority, develop and implement effective administrative, financial and information management systems.**

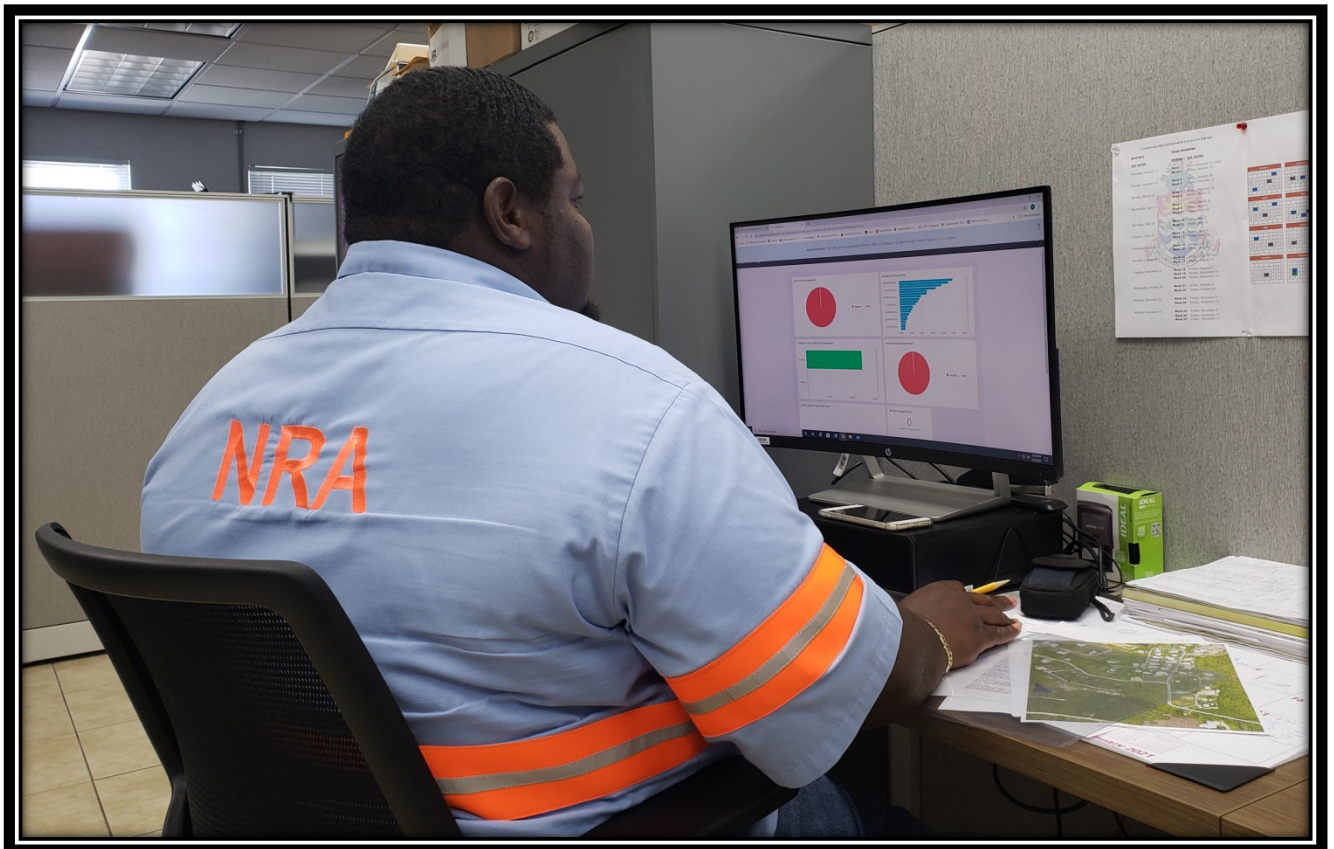
The NRA Management team supported by the Board continue to strive for betterment in the areas of administrative, financial and management information systems.

- Sound administration is important as it functions as a connecting link between the senior management and the employees. To that end the NRA continues to strive to provide adequate administrative staffing levels along with the tools and techniques required to ensure that the administrative arm of the Authority is able to carry out its role in achieving a high level of workplace productivity and efficiency. NRA management began in 2016/17 actively seeking firms to provide solutions for automating the current paper-based leave tracking system. NRA is also planning to implement a new electronic time recording system (TRS)

On the finance side the NRA plans to upgrade or replace the current accounting software package which does not fully serve the needs of the Authority in several key areas. The current system has several shortfalls which result in unnecessary manual time consuming production of financials and forecasts.

Another important information system that the NRA seeks to implement is a GPS fleet tracking system. The advantages to having such a system include:

- Helps to reduce insurance costs
- Helps to locate vehicles at any given time.
- Tracks driver behavior and vehicle performance
- Helps to improve safety of vehicle and operator



## **HUMAN RESOURCES**

The NRA boasts an all Caymanian staff complement of 90 employees. The average employee length of service with the NRA is 15 years.

Six percent of staff is educated to a graduate level, a further six percent hold undergraduate degrees, and 87% are educated to a high school diploma level. 93% of all employees have been with the authority for at least 6 years, with 65% having a tenure of 11 years or more. Average annual take home pay for NRA employees is approximately \$42,000, however, the average total annual compensation cost for each employee is approximately \$59,000. This reflects the fact that over 19% of the average employee emoluments go towards healthcare premiums.



## ***Management Team Profile***



Name: Paul Parchment

Title: Managing Director

Qualifications: Bachelor's Degree in Engineering- Florida A&M University; Masters Degree in Roads Management & Engineering- University of Birmingham UK



Name: Edward Howard

Title: Deputy Managing Director

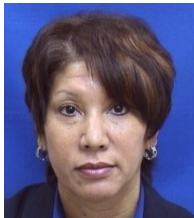
Qualifications: Bachelors in Civil Engineering - Howard University; Masters in Civil Engineering (Transportation) – University of Illinois Urbana Champaign; MBA (Corporate Finance) – University of Leicester, UK more than twenty (20) years of educational experience and practical know-how in urban and regional planning, transportation engineering.



Name: Olsen Bush

Title: Chief Financial Officer

Qualifications: Masters in Business Administration- International Collage of the Cayman Islands more than 30 years of experience in the financial industry



Name: Julie Campbell

Title: Human Resources Manager

Qualifications: Masters in Human Resource Management- University of Portsmouth Over 10 years of local and international Human Resources experience, Ms. Campbell holds the dual role of HR and Office Manager and is a certified Freedom of Information Manager.



Name: Brian Chin Yee

Title: Works Manager, Engineering & Operations

Qualifications: Bachelors in Electrical Engineering B.Sc. – Florida Institute of Technology University (1993 -1997) 20 years of engineering experience.



Name: Denis Thibeault

Title: Assistant Director, Transportation & Planning

Qualifications: Bachelor of Environmental Studies in Urban & Regional Planning - University of Waterloo over 10 years experience in transportation and planning

**Goal: Identify and seek approval for strategies for financing future road development.**

Accomplishments:

The revenue and resources of the Authority comprise of the following:

Monies directed by Law to the Roads Fund, as well as services purchased by Cabinet for the purposes of capital roads improvements. Other revenue sources may include:

- Road user charges collected by the Authority;
- Gifts or bequests received by the Authority;
- Other monies paid and property provided to the Authority by way of grants, rent, interest and other income derived from the investment of the Authority's funds.

Appropriation made by the Government for capital road improvement projects is based on service based budgeting. The Minister of Commerce, Planning and Infrastructure (CP&I) will purchase the services of the Authority (called executive assets) as agreed upon in the Purchase Agreements. The service of the Authority is not only measured in terms of input cost but also in quantity, quality, timeliness and location.

**Goal: Continue the Traffic Improvement and Roads Development Programme.**

Accomplishments:

Transportation Planning Activities:

**3.1 Transportation Planning Activities:** The NRA employs a small core of transportation engineering and planning professionals who report to the Deputy Managing Director and Managing Director and advise on all matters relating to transportation planning, traffic, and roads development and funding.

One of the main tasks of the NRA's transportation unit is to assist in the development of a long term (20-25 yr) national roads plan. From the long term plan a short term plan is developed; this short term plan consists of roads and roads improvements that are deemed as critical within 3 to 5 years.

3.1.1 Recurrent Activities – Some of the main activities of the transportation unit for FY2016/17 (18 months covering period of July 1 2016 to December 31 2017) were as follows:

- i. In addition to numerous meetings and site inspections with various land developers to advise them on roads and drainage requirements, the transportation unit prepared assessments and provided commentary to the Central Planning Authority on three-hundred and eighteen (318) planning



applications during the six (6) quarters period between July 2016 and end of December 2017.

- ii. The following table provides a breakdown by quarter for the current Fiscal Year:

Quarter	Month	Plan Reviews	SWM/ Drainage Plan Reviews	Inspections
1	July	14	4	7
	August	14	2	4
	September	28	2	15
<b>Sub-Total</b>		<b>56</b>	<b>8</b>	<b>26</b>
2	October	19	1	5
	November	15	3	6
	December	9	3	6
<b>Sub-Total</b>		<b>43</b>	<b>7</b>	<b>17</b>
3	January	9	5	2
	February	33	4	2
	March	13		4
<b>Sub-Total</b>		<b>55</b>	<b>9</b>	<b>8</b>
4	April	16	7	0
	May	26	14	7
	June	32	12	2
<b>Sub-Total</b>		<b>74</b>	<b>33</b>	<b>9</b>
5	July	16	11	0
	August	10	7	2
	September	20	3	4
<b>Sub-Total</b>		<b>46</b>	<b>21</b>	<b>6</b>
6	October	14	3	2
	November	14	1	0
	December	16	7	2
<b>Sub-Total</b>		<b>44</b>	<b>11</b>	<b>4</b>
<b>Total</b>		<b>318</b>	<b>89</b>	<b>70</b>



- iii. The following table provides a breakdown of the type of developments since July 2016.

Development Type	Plan Reviews	SWM/ Drainage Plan Reviews	Inspections
Commercial	45	15	11
Government	15	2	1
Hotel	4	1	1
Industrial	29	11	1
Institutional	17	7	2
Residential	78	36	25
Subdivisions/ Road Base	92	14	28
Mixed-Used Development	6		
Miscellaneous	32	3	1
<b>Running Total</b>	<b>318</b>	<b>89</b>	<b>70</b>

- i. One hundred and one (101) due diligence letters were written in response to enquiries from attorneys and real estate agents dealing with land purchases;
- 3.1.2 Road Gazette Plans (Roads Law 2005R) were either started and/or completed for the following:
- Proposal to declare Sea Spray Drive as a public road;
  - Gazette Scheme for new road at Public Beach off of the West Bay Road connector to the ETH. This road scheme is part of the NRA/Dart Agreement
  - Linford Pierson Highway Widening (BP 592)
  - Entrance for Mangrove Pointe Development on parcel 20E85REM1;
  - New roundabout at Alamo Drive and an access scheme for parcels 20D171, 20D172, 20D173, 20D174REM1, 20D175 and 20D452.(BP 600)
  - Widening and formalization of an unnamed road off of Genevieve Bodden Drive in the vicinity of 5C60

- g) Widening of ETH South of Lawrence Boulevard to the Future Airport Connector - per the signed NRA/Dart Agreement
- h) Airport Connector Rd - Update to already drawn Boundary Plan 588
- i) Gazette Scheme to make private portion of Ebanks Roads (1D612) public
- j) High Rock Drive Terminal Extension to parcel 66A59 on instructions from the Ministry.
- k) Proposed widening of at intersection of Rev Blackman Road and Stadium Drive
- l) Gazette for additional widening along ETH for Access Scheme to 13D426 and 13D445;
- m) Gazette Scheme for Truncation at 38C51 - Shamrock Road at Concord Rd (west terminal of Anton Bodden Road)

### 3.1.3 Section 5 – Declaration and Scheduling of Public Road

- a. Declaration of Sea Spray Drive as a public road.
- b. Declaration of part of Conch Point Road which was declared a public road by BP12 in the vicinity of 3D104 which was never surveyed.
- c. Declaration of the widening of Smith Road to be included in the road definition.
- d. Declaration of Sunnyfield Road connection to Austin Conolly Drive.

### 3.1.4 Section 14 – Discontinuance of Roads (Close and Vest)

- e. Scheme to close and vest a section of Myles Lane at the rear of One Capital Place off of Shedden Road;
- f. Proposed Close and Vest of footpath in vicinity of Block 4E Parcels 80 and 621 off of Stadium Drive.

## 3.2 Traffic Data Collection Program

Following the comprehensive 2016 Traffic Data Collection program, NRA staff carried out a traffic data collection program at eighty-three (83) locations on Grand Cayman's arterial and collector road network between February 12th and April 8th 2017 - this time period of the year corresponded to the High Tourism Season on Grand Cayman. The survey collected traffic data typical of weekday traffic conditions along the Seven Mile Beach Corridor, George Town and the eastern portion of the Bodden Town district.



### **Weekly Average Daily Traffic Volumes**

There were twenty (20) road segments with Average Weekday Daily Traffic (WADT) volumes of over 20,000 vehicles per day (vpd), all located in the George Town District.

- Shamrock Road (near the Grand Harbour development), Crewe Road as it connects to the Linford Pierson Highway) experienced traffic volumes well over 30,000 vpd.
- Shamrock Road just west of Selkirk Drive continues to be the busiest roadway on Grand Cayman with an average of 39,100 vpd, and saw a 3.25% increase over 2016 traffic conditions.
- Four other road segments experienced WADT demand of between 25,000 and 29,999 vpd; namely North Sound Road / Thomas Russel Way in the vicinity of Shedden Road (ATR501 and ATR524 respectively) and the Esterley Tibbetts Highway south and north of the Camana Bay development (ATR312 and ATR208 respectively). Compared to 2016 traffic volumes, those four (4) roadways saw traffic demand increases of between 5.5% and 13.3%.
- The top 20 roadways overall experienced traffic volume increases of about 2.46%.

- In comparison to 2016 traffic volumes, the overall traffic growth for the 83 ATR count stations was in the order of about 1.24%. The average growth of traffic by road classification was observed to be follows:
  - Primary Arterial Roadways: 4.46%;
  - Secondary Arterial Roadways: -1.04%; and
  - Collector Roadways: 3.35%.
- A total of 36 roadways had weekly average daily trips (WADT) observed in the range of 10,000 – 19,999 vehicles per day; 19 roadways had WADT observed in the range of 5,000 – 9,999 vehicles per day and a total of 8 roadways had WADT observed in the range of 1,695 – 4,999 vehicles per day.

## **Analysis of Screen Line Traffic Data**

### **1) North-South Screen Line**

The North-South screenline tabulates hourly traffic volumes on West Bay Road and the Esterley Tibbetts Highway in the general vicinity of the Snug Harbour area. Traffic data show that southbound traffic demand generally peaks about 1,600 vehicles per hour (vph) during morning rush hours with a general decrease of demand until the mid-day hours where traffic demand increases again to these same levels for the evening peak conditions.

For the northbound traffic direction, traffic demand of about 1,000 vph during the morning rush hours were observed and gradually increases to about 1,900 vph in the evening. In comparison to 2016, the traffic data shows a consistent increase of about 200 vph directional traffic demand in 2017 compared to the year 2016.

### **2) East-West Screen Line**

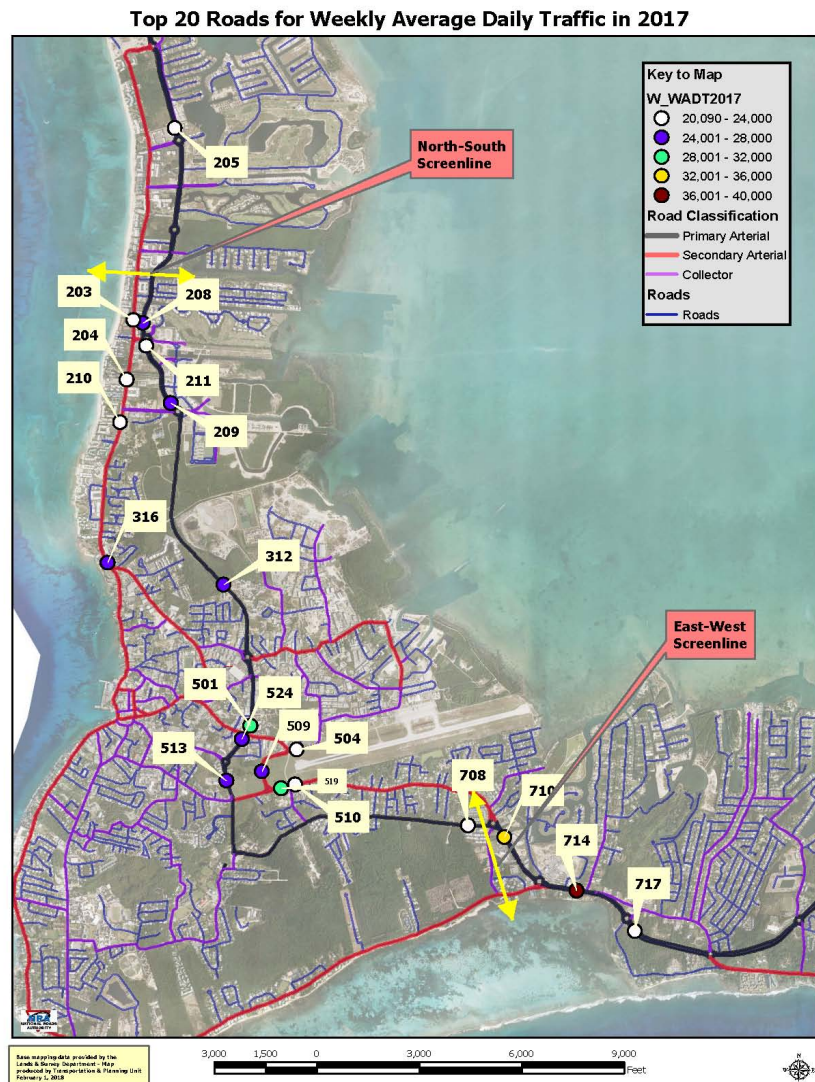
For the tabulation of the East-West Screenline, traffic volume data from South Sound Road, west of Shamrock Road, Linford Pierson Highway west of Crewe Road and Crewe Road northwest of Tropical Gardens Road were converted to hourly traffic volumes and summed up. Historical traffic data from 2009 were also used to assess the East-West Screenline data demand. The traffic shows a clear difference between Eastbound and Westbound traffic with distinct peak directional flows. For the westbound traffic, peak conditions are experienced in the morning between 7 and 10am with traffic demand of almost 3,000 vph in 2017 and 2016, and an increase of about 300 vph compared to the year 2009. After the morning peak conditions, hourly westbound traffic demand quickly drops to about 1,000 – 1,200 for most of the day with a gradual increase about 1,400 vph around 5pm.

For the eastern traffic demand, hourly volumes during the morning peak conditions hover at about 800 vph and gradually increase to about 1,200 – 1,300 vph during midday hours and then rapidly peaks to about 2,500 vph. Evening peak conditions for 2017 appear to be more spread out than



conditions observed in 2016 and 2009 with a marked increase of about 200-500 vph of additional hourly traffic demand.





### 3.3 Traffic Demand and Operational Model

The National Roads Authority at the beginning of the fiscal year (July 2015) began the process of developing a traffic model for the island of Grand Cayman. Such a model is necessary to:

- Substantiate the NRA's current and long term planning efforts made under the National Roads Plan;
- Assess the merits of future road network proposals, and,
- Assess the traffic impact of future development proposals.

The National Roads Plan (NRP) is a strategic plan consisting of three parts:-

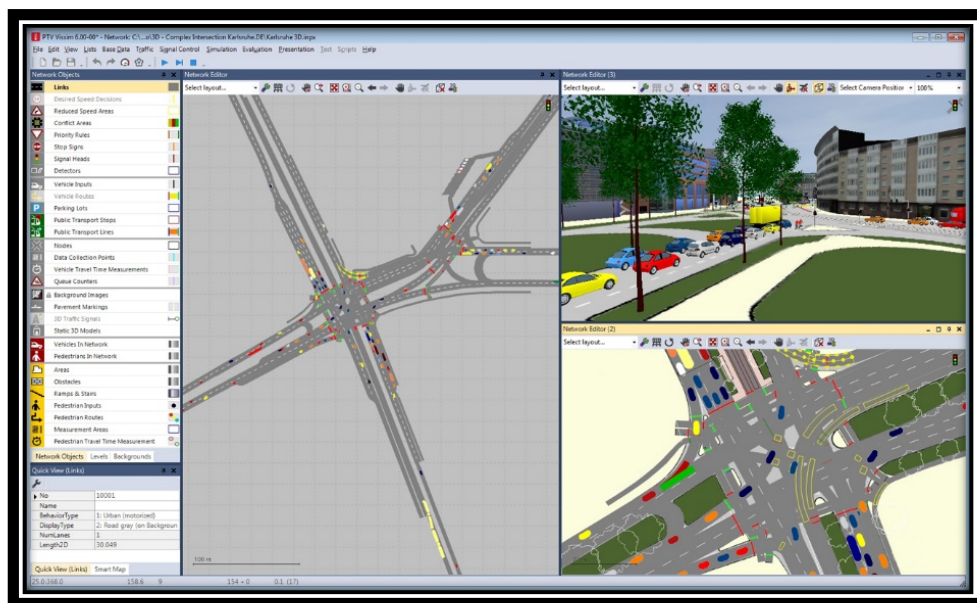
1. A 25-year road corridor plan (Section 26, Roads Law (2005)). This should be updated every five years.
2. A transportation management strategic document that highlights the NRA's short to long term focus on access management, road safety, mobility, interconnectivity, smart growth, etc.



3. NRA funding mechanisms – this includes focus on the structure of NRA through a look at business process re-engineering, a road financing plan (for both maintenance and new construction); alternative revenue streams, etc.

The traffic model is a key assessment tool in the development of items 2 & 3 of the NRP. The traffic model is comprised of two distinct computerized models; the first being a travel demand model (macro level) and the second being a traffic operations model/simulation package (micro level).

The travel demand model will be used to predict travel requirements for a future time period (as much as 30 years) based on a set of socio-economic trends and assumptions. The travel demand model predictions guide policy and investment in roads and road related infrastructure. The 2010 Census and subsequent employment and labour surveys provide the bulk of the input data needed for this model. Current traffic counts and other related data will help to refine or calibrate the predictive capabilities of the travel demand model.



Sample traffic operations model user interface

The traffic operations model will be used to analyze and predict current and future traffic behaviour and characteristics on sub-areas of the road network. The operations model can be used for example, to analyze the performance of a single particular intersection or a whole network of intersections simultaneously. Network areas such as the Central business district (CBD) or the ETH & E-W arterials can be analyzed to determine current performance as well as future performance based on future traffic volume predictions. The model can also test improvement alternatives such as lane expansion, intersection upgrades, bypass roads, new corridor alignments, etc.

The NRA Traffic model was put out to tender in November 2016 with Pennsylvania based firm Whitman Requardt & Associates (WRA) having been selected as the successful Consultant in March 2017. All tender

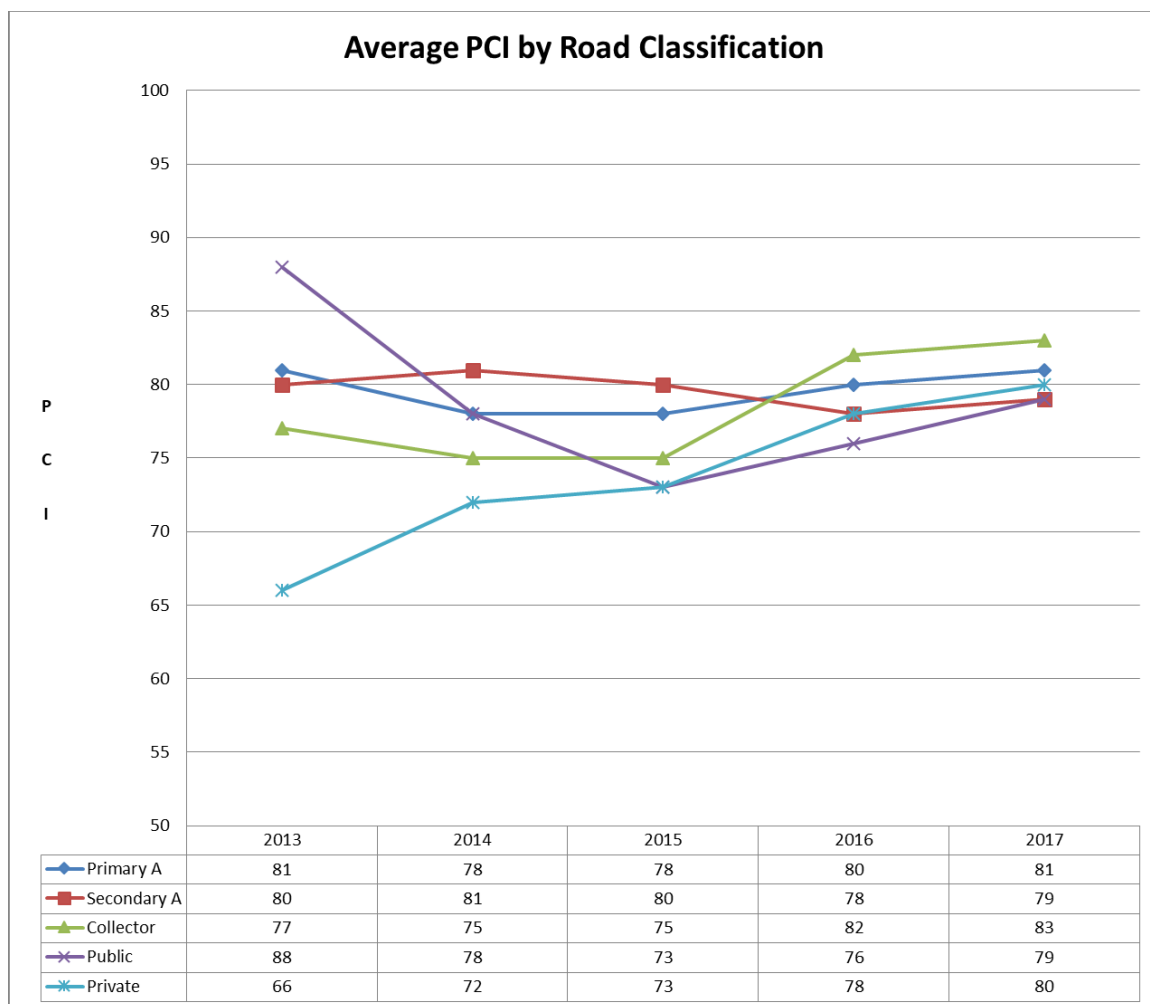
proceedings have been completed and the actual work on the model started in August 2017.

The selected modelling platform is PTV ViSUM/Vissim.

- 3.4 Public Relations with Government Information Services - press releases were prepared and circulated within various local media. Some of the more significant press release topics included:
  - 3.4.1 August 18th 2016 – Back to school insert
  - 3.4.2 Dr T Roundabout Closure – August 2016
  - 3.4.3 LPH – Starting construction July 2016
  - 3.4.4 LPH – Billboards in July 2016
  - 3.4.5 LPH – ran quarter page ads in both the Compass and Reporter for 3 weeks (twice a week) in July 2016
  - 3.4.6 Crewe Road and Smith Road Junction ad ran on June 30th, 2017
  - 3.4.7 Crewe Road widening ad ran on July 7th, 2017
  - 3.4.8 Esterley Tibbetts Highway new configuration - assisted with organizing content regarding the three lane roundabout advertisement with DART
  - 3.4.9 Linford Pierson Highway Widening project:
    - 3.4.9.1 Westbound Lane closure PR on April 9th 2017
    - 3.4.9.2 Westbound Lane closure PR on March 15th 2017
    - 3.4.9.3 Road diversion ad – April 7th 2017

#### Pavement Management :

The aim of the NRA's pavement management programme is to monitor and to prescribe maintenance strategies to pavements of varying classifications in the Grand Cayman road network. Primary Arterials are those main roads which carry the majority of roadway traffic throughout the island and as such are prescribed a higher maintenance protocol.



Historical Average Pavement Condition Indices by Road Classification							
Road Classification	Chart Colour	Number of Sections	Average PCI By Year				
			2013	2014	2015	2016	2017
Collector		129	77	75	75	82	83
Public		401	88	78	73	76	79
Private		679	66	72	73	78	80
Primary		58	81	78	81	80	81
Secondary		67	80	81	80	78	79

The above chart shows that at the end of FY 2016/17 all pavement types on Grand Cayman are in an overall 'good' to 'very good' condition. The goal for primary and secondary pavements is that of an average PCI of no less than 80.

Since 2012 the NRA has concentrated on local privately built subdivision roads in an effort to raise the pavement condition index (PCI) from an unsatisfactory level of 65 to above 75 which is representative of 'good' condition. In essence, concentrated efforts on subdivision roads has been effective in raising the average PCI level of these roads from fair to good. The term local private road, however, is a bit

misleading as under the Roads Law these roads (with the exception of a few) do not involve restriction of access to the public as a right.

The majority of subdivision roads built by private developers in Cayman offer unrestricted public access, however, the official ownership of the developed roadway is often not 'transferred' to the Crown; the NRA prefers to classify these not as private roads but as 'unscheduled public roads'. It is important to add this brief explanation because the distinction between public roads and private roads have been blurred by actions of the Government who over the years has cleaned, repaired, installed streetlights, speed humps, and other street furniture without regard to their status. The challenge going forward is to keep the average PCI of private (unscheduled) roads at fair and good levels.

#### Engineering and Operations Activities :

Three engineers, two superintendents, and a fleet controller make up the management staff of the Engineering and Operations unit. They are responsible for engineering design; project budgeting, resource reporting, project costing, fleet operations, and completion of all road construction projects and maintenance undertaken by the NRA. They utilize an equipment fleet worth over \$2 million. Capabilities include sign making and pavement markings, traffic signal maintenance, survey crews with GPS and total station equipment, and computer aided design and drafting (CADD).

In addition to their road construction and maintenance responsibilities, they regulate the importation, transportation, and use of explosives in the Cayman Islands on behalf of the Managing Director in accordance with the Explosives Law and Regulations.



- Executive Assets: Capital Works & Road Surface Upgrades

New Capital Works and rehabilitation of roads surfaces on major arterials are systematically funded via Cabinet as “Executive Assets”. This year’s list of EA’s funded via Cabinet include:

Road Projects Included:

**1. Linford Pierson Highway (~\$6.0M)**

The Linford Pierson Highway Widening Project is approximately one (1) mile in length and runs from the Silver Oaks Roundabout (near to the First Assembly of God Church) to the intersection with Agnes Way. The scope of works for the project mainly involved widening the road from two (2) lanes to four (4) lanes and also included the installation of a median.

A roundabout was constructed at the Agnes Way Intersection and at Alamo Drive. Street lighting and drainage were improved. The works also included the relocation of major utility infrastructure such as CUC poles, and Water Authority mains.





## 2. Improvements at Smith Road and Crewe Road Intersection (~\$50K)

Preliminary roadworks were carried out at this intersection that included regrading, paving and the construction of concrete curbs to form the new island layout. Motorists who approach the junction from the north, travel eastbound and those who intend to travel along Agnes Way keep right and negotiate the mini-roundabout. Those who approach the junction from the north and are traveling eastbound onto Crewe Road, keep left to avoid the mini-roundabout and continue onwards.

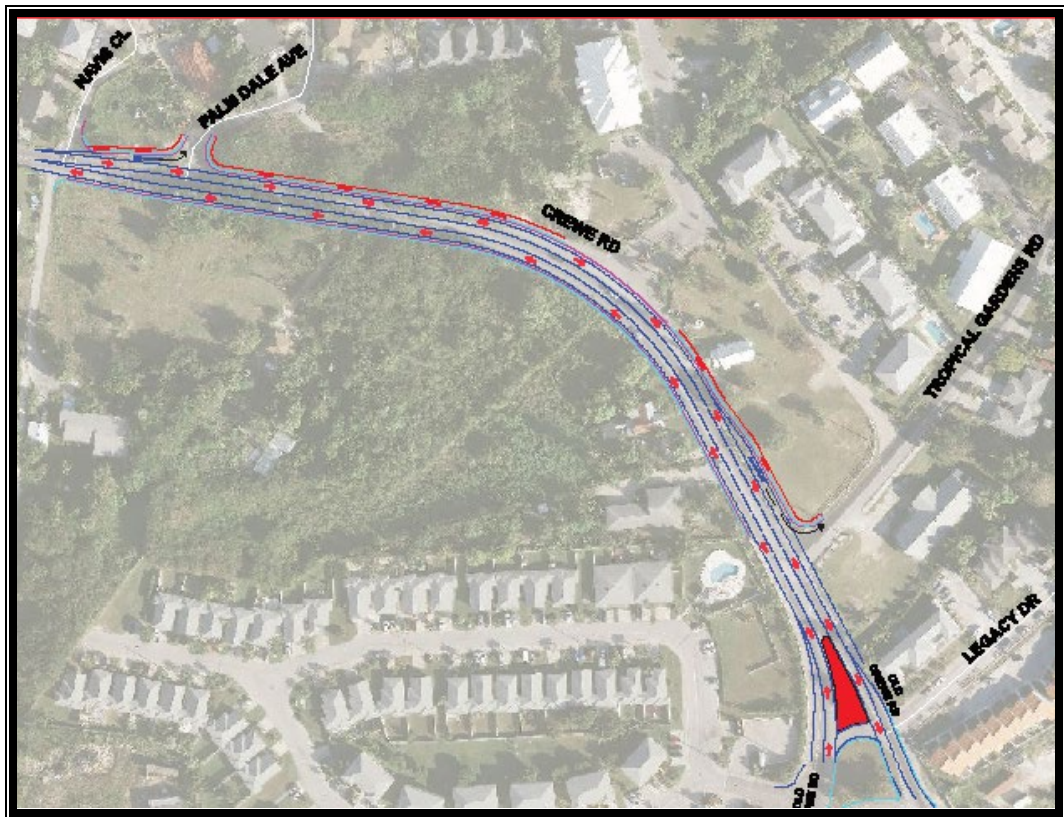




### 3. Improvements on Crewe Road between Navis Close and Silver Oaks Roundabout (\$240K)

These road works included drainwell drilling and construction, road re-grading and the construction of new curbs and sidewalks.

The scope of works included the construction of a three lane carriageway, with one traveling lane eastbound, one lane travelling westbound and a central turn lane. Other works included addressing drainage by re-grading the roadway and the installation of new curbs and drainwells to improve drainage capacity. Pedestrian accessibility and safety was also address by the provision of a continuous sidewalk along the northern side of Crewe Road.



- NRA 6: District Roads Programme – NRA completed spray ‘n’ chip upgrades on 94 road segments across all five districts for a total amount of \$2.9M

Spray n Chip is used extensively by road agencies worldwide as:

1. A semi-permanent surface for minor roads, and
2. A preventative maintenance (surface treatment) for existing paved roads.

Typically roads having low daily traffic volumes (less than 5,000 ADT) will be prime candidates for spray n chip. Some jurisdictions however have experimented with spray n chip (aka Chip Seal) on roads with daily volumes of up to 20,000 ADT.

The most significant benefit of spray n chip is that is between 20% to 25% of the cost of hot mix asphalt so governments are able to get more roads done utilizing spray n chip methods. If done correctly and/or if good quality gravel ('chips') can be sourced then spray n chip roads can last between 5 to 7 years.

- The following district roads were reconstructed and/or resurfaced with surface treatments under this programme. The MicroPAVER pavement management database was used to select the roads to be worked on and what type of work would be performed. Explanations of the abbreviations are given below:

Abbreviations:      R&R = Rip and Relay (Reconstruct the Road Base)  
                             Reconst = Reconstruction  
                             SC = Spray and Chip (Surface Treatment)  
                             2<sup>nd</sup> App = Second Application of Spray and Chip  
                             (Surface Treatment)



The NRA's policy is to apply spray n chip surfacing to local access/subdivision roads with low traffic and posted speeds of no more than 25 mph. Spray n Chip application may be applied to primary arterial roads but only as a temporary measure during major construction. Below is a snapshot of road improvements completed in FY 2016/17 for the district of George Town;

No.	GEORGE TOWN	Road Class	Approx Repair Cost	PCI Prior to Repair	Type of Work
1	GRAND PALM LINK	Public	\$4,322.00	0	R&R
2	MANGROVE AVE	Public	\$150,778.00	8	R&R
3	DERBY LINK	Public	\$3,198.41	9	S&C
4	WAHOO CL	Collector	\$6,949.00	9	S&C
5	SLATE DR	Public	\$8,028.39	10	R&R
6	SNUG HARBOUR DR	Public	\$5,964.17	18	S&C
7	POND RD	Public	\$7,409.99	20	S&C
8	ROCK HOLE RD	Public	\$17,066.67	20	R&R
9	CAMELOT DR	Public	\$4,146.15	22	S&C
10	MIDDLE RD	Public	\$1,269.60	22	R&R
11	STEWART LN	Public	\$3,996.24	22	S&C
12	AUTUMN LN	Public	\$8,615.95	23	R&R
13	BEBEE CL	Public	\$5,196.09	23	S&C
14	CHRISTINA CL	Public	\$2,511.69	23	S&C
15	GREENWOOD DR	Public	\$19,862.00	23	S&C
16	JACADA CL	Unscheduled Public Rd.	\$2,454.00	23	S&C
17	WOODLAKE DR	Unscheduled Public Rd.	\$7,841.00	23	S&C
18	BREEZY WAY	Public	\$9,314.00	30	R&R
19	WREN LN	Unscheduled Public Rd.	\$7,904.47	30	R&R
20	ANDREW DR	Public	\$57,976.00	31	R&R
21	TALBOT LN	Public	\$1,986.17	33	S&C
22	BIRDHOUSE CL	Unscheduled Public Rd.	\$4,376.83	38	S&C
23	PARROT AVE	Public	\$10,046.00	41	R&R
24	PARKSIDE CL	Unscheduled Public Rd.	\$13,879.90	42	R&R
25	COMPASS DR	Unscheduled Public Rd.	\$2,103.18	44	S&C
26	SELKIRK DR	Public	\$121,226.67	49	R&R
27	BUCKBOARD CL	Unscheduled Public Rd.	\$4,138.96	52	R&R
28	CRUZ LN	Unscheduled Public Rd.	\$2,134.87	54	R&R
29	CARNATION LN	Public	\$2,089.90	55	S&C
30	JERSEY LN	Unscheduled Public Rd.	\$4,491.00	55	R&R
31	EMERALD LN	Public	\$4,933.35	56	S&C
32	LANTANA WAY	Public	\$5,823.39	56	S&C
33	PARKWAY DR	Unscheduled Public Rd.	\$17,043.30	56	R&R
34	ANTHONY DR	Unscheduled Public Rd.	\$84,775.67	57	S&C
35	HIBISCUS LN	Unscheduled Public Rd.	\$4,097.59	59	S&C
36	WINDIES LN	Public	\$2,599.00	59	S&C
37	COCONUT DR	Public	\$2,610.90	60	R&R
38	HICKORY DR	Public	\$2,730.20	60	S&C
39	PRINCESS ST	Unscheduled Public Rd.	\$2,392.00	61	S&C
40	SPINNAKER RD	Unscheduled Public Rd.	\$30,300.00	62	R&R
41	CANAL LN	Public	\$3,235.83	63	R&R
42	EBONY LN	Public	\$3,415.56	63	S&C
43	GRAPE AVE	Public	\$23,234.00	72	R&R
44	RIPON CT	Public	\$2,114.64	50	S&C
45	SPARROW ST	Public	\$5,650.35	50	S&C
46	MARY REID CRES	Public	\$7,282.20	52	S&C
47	LIGUINEA CIR	Public	\$14,924.38	54	S&C
48	TRANQUIL WAY	Unscheduled Public Rd.	\$4,881.53	54	S&C
49	STINGRAY DR	Public	\$2,921.19	56	S&C
50	SYMS LN	Public	\$2,242.12	56	S&C
51	TUREN LINK	Public	\$1,906.46	56	S&C
52	PROSPECT DR	Public	\$22,547.00	58	R&R



## Section 4 – Future Goals and Economic Outlook

The future goals of the NRA are not just concerned with continued compliance with the requirements of the PMFL but also with developing strategies for organizational growth going forward.

Through the development of a corporate strategic plan, the NRA can be able to identify the roads infrastructure needs that are most important to these islands. A strategic plan would also allow us to look ahead and make provisions for the necessary investments that will ensure adequate and steady source of funding and other resources necessary to achieve a sustainable road network. The local and tourism economy remain vibrant and the nation's roadways play an important part in maintaining safe and efficient movement of people, goods and services.

The NRA Board of Directors remains committed to the continued development of the NRA and to its efforts to deliver the best roads and road related infrastructure to the people of the Cayman Islands.

Key strategies for ensuring a stronger and better NRA for the foreseeable future include:

- Necessary amendments to the NRA Law and Roads Law;
- Adaptation of the organizational structure to meet future demands;
- Development of effective administrative, financial and management systems

- Attraction of young professional and technical employees that will pursue career development with the NRA;
- Dedicated funding stream for recurrent road maintenance activities;
- Commitment from Cabinet for continued investment in necessary capital road improvements (particularly roads in and around the Central Business District and roads providing mainline access between the CBD and eastern districts).



Through the development of its long range corridors plan and the strategies above NRA will be poised to deliver sustainable, reliable, safe and efficient roads for future generations of Caymanians.



## Section 5 – Executive Assets & Output Accounts

A summary of the Executive Asset and Output accounts as recorded at the fiscal year ending December 31<sup>st</sup>, 2017 were as shown below:

**NATIONAL ROADS AUTHORITY  
FUNDS AVAILABLE  
FOR THE EIGHTEEN MONTHS ENDED 31 DECEMBER 2017  
18MONTH BUDGET JUL16-DEC17**

	Services to be provided from NRA Road Fund	Budget 2016/2017 \$	First Supplemental \$	Current Budget \$	Amount Invoiced B/F \$	Amount Invoiced This Month \$	Total Invoiced To Date C/F \$	Funds Available \$
Planning & Development of New Public Roads	NRA 5	808,540.00	-	808,540.00	388,540.57	439,121.00	827,661.57	(19,121.57)
Grand Cayman District Roads Programme	NRA 6	3,450,000.00	(650,000.00)	2,800,000.00	2,929,740.08	44,932.96	2,974,673.04	(174,673.04)
Policy Advice on Road Related Matters	NRA 7	115,000.00	-	115,000.00	32,540.73	-	32,540.73	82,459.27
Storm Water Drain Wells	NRA 8	159,135.00	-	159,135.00	185,045.08	17,712.09	202,757.17	(43,622.17)
Routine Maintenance of Public Roads	NRA 9	7,001,940.00	-	7,001,940.00	7,561,883.59	391,584.38	7,953,467.97	(951,527.97)
Government Street Lighting Programme	NRA 10	1,758,539.00	-	1,758,539.00	1,635,116.51	(20,880.31)	1,614,236.20	144,302.80
Pavement Management & Other Roads Asset Mangt. Programmes	NRA 11	150,000.00	-	150,000.00	116,095.16	-	116,095.16	33,904.84
Road Safety & Roadside Guard Rail Installation Programme	NRA 12	478,846.00	-	478,846.00	101,211.26	-	101,211.26	377,634.74
Explosive & Blasting Management	NRA 13	60,000.00	-	60,000.00	46,067.63	1,137.43	47,205.06	12,794.94
Arterial Road Surface Rehabilitation	NRA 14	563,000.00	-	563,000.00	924,006.83	45,396.31	969,403.14	(406,403.14)
Provisions for Other Costs	NRA 15	455,000.00	650,000.00	1,105,000.00	160,748.70	-	160,748.70	944,251.30
		15,000,000.00	-	15,000,000.00	14,080,996.14	919,003.86	15,000,000.00	(0.00)
		Budget Approved 2014/2015 \$	First Supplemental \$	Current Budget \$	Amount Invoiced B/F \$	Amount Invoiced This Month \$	Invoiced To Date C/F \$	Available \$
	<b>EA's</b>							
Miscellaneous Road Surface Upgrades	EA36	-	-	-	-	-	-	-
Various District Roads hot mix overlay		1,000,000.00	(500,000.00)	500,000.00	-	-	-	-
EA36GT031-Crewe Rd widening Tropical Gardens - Navis Close					240,945.61	-	240,945.61	
EA36BT-Bodden Town Pease Bay Shoulders					199,537.70	-	199,537.70	59,516.69
Asphalt Paving in Cayman Brac - (Minsitry DAT&T) 42062	EA55	180,000.00	-	180,000.00	200,931.14	11,427.61	212,358.75	(32,358.75)
Miscellaneous District Projects-DEH CLEANUP		-	-	-	-	47,536.00	47,536.00	
Miscellaneous District Projects-NICE PROJECT					-	38,388.79	38,388.79	
					-	-	-	
	EA142	6,900,000.00	(675,000.00)	6,225,000.00				
EA142GT02-South Sound Boardwalk					22,161.13	-	22,161.13	
EA142GT04-Linford Pearson Highway widening					5,310,464.20	480,621.00	5,791,085.20	
EA142GT05-CNB RAB to Mango Tree Connector					24,805.00	-	24,805.00	
					-	-	-	433,914.80
EA147GT01-Spotts Public Beach parking lot upgrading					70,162.41	-	70,162.41	
		8,080,000.00	(1,175,000.00)	6,905,000.00	6,069,007.19	577,973.40	6,646,980.59	27,157.94

## Balance Sheet

as at December 31 2017

	<u>2016/17</u>	<u>2015/16</u>
<b>ASSETS</b>		
<b>Current Assets</b>		
Cash and cash equivalents	3,639,860	3,887,910
Accounts receivable and prepayments	1,221,730	1,609,009
Inventories	66,751	45,951
<b>Total Current Assets</b>	<u><b>4,928,341</b></u>	<u><b>5,542,870</b></u>
<b>Non-Current Assets</b>		
Property, plant and equipment	<u>2,876,708</u>	<u>1,734,336</u>
<b>Total Assets</b>	<u><b>7,805,049</b></u>	<u><b>7,277,206</b></u>
<b>LIABILITIES AND EQUITIES</b>		
<b>Current Liabilities</b>		
Accounts Payable and accrued liabilities	1,711,188	1,397,260
Employment entitlements	47,361	133,784
<b>Total Current Liabilities</b>	<u><b>1,758,549</b></u>	<u><b>1,531,044</b></u>
<b>Non-Current Liabilities</b>		
Pension Liability	1,151,000	2,870,000
Post-retirement health liability	16,510,000	15,039,000
<b>Total Non-Current Liabilities</b>	<u><b>17,661,000</b></u>	<u><b>17,909,000</b></u>
<b>Total Liabilities</b>	<u><b>19,419,549</b></u>	<u><b>19,440,044</b></u>
<b>Net Assets</b>	<u><b>-11,614,500</b></u>	<u><b>-12,162,838</b></u>
<b>Net Worth</b>		
Contributed Capital	4,541,535	4,541,535
Accumulated Deficits	-16,156,035	-16,704,373
<b>Total Net Worth</b>	<u><b>-11,614,500</b></u>	<u><b>-12,162,838</b></u>

**National Roads Authority**  
**Operating Statement**  
**31-Dec-17**

		<u>2016/2017</u>	<u>2015/2016</u>
SALES			
	Sales of services to Cabinet	7,506,994	3,673,124
	Sales of services to other government agencies	330,427	316,360
	Sales of services to third parties	15,392,521	10,213,506
		<u>23,229,942</u>	<u>14,202,990</u>
COST OF GOODS SOLD			
	Labor	3,461,395	2,171,233
	Materials	3,842,000	1,455,748
	Subcontractors	6,443,326	3,814,493
	Hired Equipment	53,908	3,778
Total Cost of Sales		<u>13,800,629</u>	<u>7,445,252</u>
NET REVENUE		<u>9,429,313</u>	<u>6,757,738</u>
OPERATING EXPENSES			
	Personnel Costs	5,207,828	3,304,701
	Post Retirement health liability	2,704,000	1,501,000
	Utilities	1,693,715	1,186,304
	Motor Vehicles Expenses (including insurance)	834,568	565,168
	Depreciation	745,466	439,416
	Past service pension	611,000	231,545
	Computer maintenance and fees	189,263	138,874
	Professional Fees	184,951	94,298
	Building maintenance	90,965	60,632
	Telephone	54,833	34,789
	Supplies and consumables	42,270	34,374
	Advertising and promotion	27,313	7,575
	Bank Charges	26,012	8,683
	Insurance	21,560	12,332
	Travel & Subsistence	10,231	0
	Doubtful Debt Expense	0	489,848
	Office rental	0	6,366
Total Operating Expenses		<u>12,443,975</u>	<u>8,115,905</u>
DEFICIT		<u>-3,014,662</u>	<u>-1,358,167</u>

	2016/17	2015/16
<b>CASH FLOWS IN OPERATING ACTIVITIES</b>		
<b>Deficit</b>	<b>-3,014,662</b>	<b>-1,358,167</b>
Adjustment for non-cash transactions:		
Depreciation	745,466	439,416
Doubtful Debts	0	-489,848
Gain on disposal of property, plant & equipment	-185,497	-41,949
Total	-2,454,693	-1,450,548
Net change in working capital		
Decrease/(increase) in accounts receivable and prepayments	387,280	-277,896
(Increase)/decrease in inventories	-20,800	98,838
Increase/(Decrease) in accounts payable and accrued liabilities	-20,495	5,824,114
<b>Net cash flows (used in)/ from operating activities</b>	<b>-2,108,708</b>	<b>4,194,508</b>
 <b>CASH FLOWS USED IN INVESTING ACTIVITIES</b>		
Purchase of property, plant & equipment	-1,887,523	-897,826
Proceeds on sale or disposal of property, plant & equipment	185,181	47,450
<b>Net cash flows used in investing activities</b>	<b>-1,702,342</b>	<b>-850,376</b>
 <b>CASH FLOWS FROM FINANCING ACTIVITIES</b>		
Remeasur	2,330,000	-1,424,000
Remeasurements of post-retirement health obligations	1,233,000	-2,087,000
<b>Net cash flows from financing activities</b>	<b>3,563,000</b>	<b>-3,511,000</b>
 Net decrease in cash and cash equivalents during the year	-248,050	-166,868
Cash and cash equivalents at the beginning of the year	3,887,910	4,054,778
<b>CASH AND CASH EQUIVALENTS AT END OF YEAR</b>	<b>3,639,860</b>	<b>3,887,910</b>



**Capital Maintenance**

<b>Human Capital Measures</b>	<b>2016/17 Actual</b>
Total full time equivalent staff	90
Staff turnover (%)	-
Average length of service (Number)	
Senior management	14.33(3)
Professional staff	14.71(28)
Administrative staff	13.22(50)
Significant changes to personnel management system	None

Note 1: Length of service is calculated based on time of employment with NRA and formerly with PWD.

<b>Physical Capital Measures</b>	<b>2016/17 Actual \$</b>
Value of total assets	2,876,708
Asset replacements: total assets	Nil
Book value of depreciated assets: initial cost of those assets	
Depreciation: Cash flow on asset purchases	745,466
Changes to asset management policies	None

## Section 6 - Summarised Financial Statements

*A full set of audited financial statements for The National Roads Authority is provided in the Appendix to this Annual Report.*

A summary of those is as follows.

<b>Operating Statement</b>	<b>2016/17 Actual \$</b>
Revenue	23,229,942
Operating Expenses	26,244,604
Net Surplus(Deficit)	(3,014,662)

<b>Balance Sheet</b>	<b>2016/17 Actual \$</b>
Assets	7,805,049
Liabilities	19,419,549
Net Worth	(11,614,500)

<b>Statement of Cash Flows</b>	<b>2016/17 Actual \$</b>
Net cash flows from operating activities	(2,108,708)
Net cash flows from investing activities	(1,702,342)
Net cash flows from financing activities	—

### a) Equity Investments

<b>Transaction</b>	<b>2016/17 Actual \$</b>
EI 8: Equity Investments into National Roads Authority	Nil

### b) Capital Withdrawals

<b>Transaction</b>	<b>2016/17 Actual \$</b>
Capital Withdrawals from National Roads Authority.	Nil

**c) Dividends or Profit Distributions**

Transaction	2016/17 Actual \$
Dividend or Profit Distributions to be made by National Roads Authority.	Nil

**d) Loans**

Transaction	2016/17 Actual \$
Government Loans to be made to National Roads Authority.	Nil

**e) Guarantees**

Transaction	2016/17 Actual \$
Government Guarantees to be issued in relation to National Roads Authority.	Nil

**f) Other Financial Information**

Detailed below is information about specific financial transaction required to be included in the Ownership Agreement by the Public Management and Finance Law (2005 Revision).

Related Party Payments (Non Remuneration) made to Key Management Personnel	Nil
Remuneration Payments made to Key Management Personnel	968,618
Remuneration Payments made to Senior Management	622,345
No of Key Management Personnel	14
No of Senior Management	3

Key management includes all of the senior management plus the Board of Directors.

Senior management posts include: Managing Director, Deputy Managing Director, and Chief Financial Officer.



## **National Road Authority**

### **Audited Financial Statements**

**December 31, 2017**



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National Roads Authority  
Financial Statements  
31 December 2017

STATEMENT OF RESPONSIBILITY FOR THE FINANCIAL STATEMENTS

These financial statements have been prepared by the National Roads Authority in accordance with the provisions of the *Public Management and Finance Law (2017 Revision)* and referenced to Section 26 (1b) of the *National Roads Authority (2016 Revision)*.

We accept responsibility for the accuracy and integrity of the financial information in these financial statements and their compliance with the *Public Management and Finance Law (2017 Revision)*.

As Chairman and Managing Director, we are responsible for establishing; and have established and maintain a system of internal controls designed to provide reasonable assurance that the transactions recorded in the financial statements are authorised by law, and properly record the financial transactions of the National Roads Authority.


As Chairman and Managing Director we are responsible for the preparation of the National Roads Authority financial statements and for the judgements made in them.

The financial statements fairly present the statement of financial position, statement of financial performance, statement of cash flows and statement of changes in net worth for the 18 month financial period ended 31 December 2017.

To the best of our knowledge we represent that these financial statements:

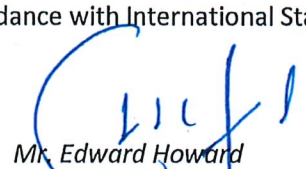
- (a) are completely and reliably reflect the financial transactions of National Roads Authority for the 18 month period ended 31 December 2017;
- (b) fairly reflect the financial position as at 31 December 2017 and performance for the 18 month ended 31 December 2017; and
- (c) comply with International Financial Reporting Standards under the responsibility of the International Public Sector Accounting Board. Where guidance is not available, the financial statements comply with International Accounting Standards issued by the International Accounting Standards Committee or accounting practice that is generally accepted in the United Kingdom as appropriate for reporting in the public sector.

The Office of the Auditor General conducts an independent audit and expresses an opinion on the accompanying financial statements. The Office of the Auditor General has been provided access to all the information necessary to conduct an audit in accordance with International Standards on Auditing.



Donovan Ebanks  
Chairman  
National Roads Authority

Date- 02 Nov. 2018



Mr. Edward Howard  
Acting Managing Director  
National Roads Authority

Date- 2<sup>ND</sup> NOVEMBER 2018

## AUDITOR GENERAL'S REPORT

To the Board of Directors of the National Roads Authority

### Opinion

I have audited the financial statements of the National Roads Authority (the "Authority"), which comprise the statement of financial position as at 31 December 2017 and the statement of financial performance, statement of changes in net worth and statement of cash flows for the 18 month period from 1 July 2016 to 31 December 2017, and notes to the financial statements, including a summary of significant accounting policies as set out on pages 4 to 34.

In my opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Authority as at 31 December 2017 and its financial performance and its cash flows for the 18 month period from 1 July 2016 to 31 December 2017 in accordance with International Public Sector Accounting Standards.

### Basis for Opinion

I conducted my audit in accordance with International Standards on Auditing (ISAs). My responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of my report. I am independent of the Authority in accordance with the International Standards Board for Accountants' *Code of Ethics for Professional Accountants (IESBA Code)*, together with the ethical requirements that are relevant to my audit of the financial statements in the Cayman Islands, and I have fulfilled my other ethical responsibilities in accordance with these requirements and the IESBA Code. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

### Emphasis of Matter

Without qualifying my opinion, I draw to your attention Note 14 of the financial discloses that the employment of the Managing Director of the Authority was terminated with effect from 31<sup>st</sup> October 2018, as a result of misuse of the Authority's resources.

### Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation of the financial statements in accordance with International Public Sector Accounting Standards and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Authority's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Authority or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Authority's financial reporting process.

## AUDITOR GENERAL'S REPORT (continued)

### Auditor's Responsibilities for the Audit of the Financial Statements

My objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with ISAs, I exercise professional judgment and maintain professional skepticism throughout the audit. I also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Authority's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause the Authority to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

I have undertaken the audit in accordance with the provisions of section 60(1)(a)(ii) of the Public Management and Finance Law (2017 revision). I communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.



Sue Winspear, CPFA  
Auditor General

2 November 2018  
Cayman Islands






**National Roads Authority**  
**Statement of Financial Position**  
**As at 31 December 2017**  
**(Stated in Cayman Islands Dollars)**

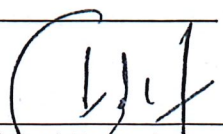
	Note	2016/17 \$	2015/16 \$
<b>ASSETS</b>			
<b>Current Assets</b>			
Cash and cash equivalents	3	3,639,860	3,887,910
Accounts receivable and prepayments	4	1,221,730	1,609,009
Inventories	5	66,751	45,951
<b>Total Current Assets</b>		<b>4,928,341</b>	<b>5,542,870</b>
<b>Non-Current Assets</b>			
Property, plant and equipment	6	2,876,708	1,734,336
<b>Total Assets</b>		<b>7,805,049</b>	<b>7,277,206</b>
<b>LIABILITIES AND EQUITY</b>			
<b>Current Liabilities</b>			
Accounts payable and accrued liabilities	7	1,711,188	1,397,260
Employee entitlements	8	47,361	133,784
<b>Total Current Liabilities</b>		<b>1,758,549</b>	<b>1,531,044</b>
<b>Non-Current Liability</b>			
Pension liability	11	1,151,000	2,870,000
Post-retirement health liability	12	16,510,000	15,039,000
<b>Total Non-Current Liabilities</b>		<b>17,661,000</b>	<b>17,909,000</b>
<b>Total Liabilities</b>		<b>19,419,549</b>	<b>19,440,044</b>
<b>Net Assets</b>		<b>(11,614,500)</b>	<b>(12,162,838)</b>
<b>Net Worth</b>			
Contributed capital	9	4,541,535	4,541,535
Accumulated Deficits		(16,156,035)	(16,704,373)
<b>Total Net Worth</b>		<b>(11,614,500)</b>	<b>(12,162,838)</b>

The accompanying notes on pages 8 - 34 form an integral part of these financial statements.

Approved on behalf of the Board on the \_\_\_\_\_ of \_\_\_\_\_ 2018

  
Donovan Ebanks  
Chairman

02 Nov. 2018

  
Mr. Edward Howard  
Acting Managing Director

2 Nov. 2018





National Roads Authority  
Statement of Financial Performance  
For the 18 month period ended 31 December 2017  
(Stated in Cayman Islands Dollars)

	Note	2016/17 \$	2015/16 \$
<b>REVENUE</b>	14	<b>23,229,942</b>	<b>14,202,990</b>
<b>COST OF GOODS SOLD</b>			
Subcontractors		6,443,326	3,814,493
Materials		3,842,000	1,455,748
Labour		3,461,395	2,171,233
Hired equipment		53,908	3,778
<b>Total Cost of Sales</b>		<b>13,800,629</b>	<b>7,445,252</b>
<b>NET REVENUE</b>		<b>9,429,313</b>	<b>6,757,738</b>
<b>OPERATING EXPENSES</b>			
Personnel costs	10	5,207,828	3,304,701
Post- retirement health liability	12	2,704,000	1,501,000
Utilities		1,693,715	1,186,304
Motor vehicle expenses (including insurance)		834,568	565,168
Depreciation	6	745,466	439,416
Past service pension	11	611,000	231,545
Computer maintenance and fees		189,263	138,874
Professional fees		184,951	94,298
Building maintenance		90,965	60,632
Telephone		54,833	34,789
Supplies and consumables		42,270	34,374
Advertising and promotion		27,313	7,575
Bank charges		26,012	8,683
Insurance		21,560	12,332
Travel & Subsistence		10,231	-
Doubtful debt expense		-	489,848
Office rental	18	-	6,366
<b>Total Operating Expenses</b>		<b>12,443,975</b>	<b>8,115,905</b>
<b>DEFICIT</b>		<b>(3,014,662)</b>	<b>(1,358,167)</b>

The accompanying notes on pages 8 - 34 form an integral part of these financial statements

**National Roads Authority**  
**Statement of Changes in Net Worth**  
**For the 18 month period ended 31 December 2017**  
**(Stated in Cayman Islands Dollars)**

	Note	Accumulated Surplus (deficits) \$	Contributed Capital \$	Total \$
<b>Balance at 30 June 2015 (Note 13)</b>		<b>(11,835,206)</b>	<b>4,541,535</b>	<b>(7,293,671)</b>
15/16 deficit, as restated		(1,358,167)	-	(1,358,167)
Remeasurement of employment benefit obligation, as restated (Note 13)	11	(1,424,000)	-	(1,424,000)
Remeasurement of post-retirement health obligation, as restated (Note 12)	12	(2,087,000)	-	(2,087,000)
<b>Balance at 30 June 2016</b>		<b>(16,704,373)</b>	<b>4,541,535</b>	<b>(12,162,838)</b>
16/17 deficit		(3,014,662)	-	(3,014,662)
Remeasurement of employment benefit obligation	11	2,330,000	-	2,330,000
Remeasurement of post-retirement health obligation	12	1,233,000	-	1,233,000
<b>Balance at 31 December 2017</b>		<b>(16,156,035)</b>	<b>4,541,535</b>	<b>(11,614,500)</b>

The accompanying notes on pages 8 - 34 form an integral part of these financial statements.



National Roads Authority  
Statement of Cash Flows  
For the 18 month period ended 31 December 2017  
(Stated in Cayman Islands Dollars)

	Note	2016/17 \$	2015/16 \$
<b>CASH FLOWS USED IN OPERATING ACTIVITIES</b>			
Deficit		(3,014,662)	(1,358,167)
Adjustment for non-cash transactions:			
Depreciation	6	745,466	439,416
Doubtful debts		-	(489,848)
Gain on disposal of property, plant & equipment		(185,497)	(41,949)
Total		(2,454,693)	(1,450,548)
Net change in working capital			
Decrease /(increase) in accounts receivable and prepayments		387,280	(277,896)
(Increase)/decrease in inventories		(20,800)	98,838
Increase/(decrease) in accounts payable and accrued liabilities		(20,495)	5,824,114
<b>Net cash flows (used in)/ from operating activities</b>		<b>(2,108,708)</b>	<b>4,194,508</b>
<b>CASH FLOWS USED IN INVESTING ACTIVITIES</b>			
Purchase of property, plant & equipment	6	(1,887,523)	(897,826)
Proceeds on sale or disposal of property, plant & equipment		185,181	47,450
<b>Net cash flows used in investing activities</b>		<b>(1,702,342)</b>	<b>(850,376)</b>
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>			
Remeasurements of employment benefits obligations		2,330,000	(1,424,000)
Remeasurements of post-retirement health obligations		1,233,000	(2,087,000)
<b>Net cash flows from financing activities</b>		<b>3,563,000</b>	<b>(3,511,000)</b>
Net decrease in cash and cash equivalents during the year		(248,050)	(166,868)
Cash and cash equivalents at the beginning of the year		3,887,910	4,054,778
<b>CASH AND CASH EQUIVALENTS AT END OF YEAR</b>	3	<b>3,639,860</b>	<b>3,887,910</b>

The accompanying notes on pages 8 - 34 form an integral part of these financial statements.



**1. Establishment and Principal Activity**

The National Roads Authority ("NRA" or "Authority") is an independent Statutory Authority which was created on 1 July 2004 by the National Roads Authority Law, 2004. The Authority reports on its operations to the Ministry of Planning, Lands, Agriculture, Housing and Infrastructure (PLAH&I) of the Cayman Islands Government.

The NRA was created to administer, manage, control, develop and maintain the Island's public roads and related facilities, such as signals, storm water facilities, roadway lighting, and roadway directional signage. The scope of activities of the NRA include providing policy advice, publication of a National Roads Plan, provision of project and construction management services for the delivery of new road-works and the maintenance and management of the existing road infrastructure.

Section 19 of the *NRA Law 2006 Revision* was repealed effective on July 1, 2014 to make provision for the Authority to be funded from the Roads Fund. The substitution to the section of the law makes way for the Cabinet to authorize the transfer of revenue, not exceeding ten million dollars, to the Authority, via the Road Fund, for the purpose of funding the Authority's annual operating costs, in particular, the construction, upgrading, rehabilitation and maintenance of public roads.

As at 31 December 2017, the NRA had 90 employees (30 June 2016: 88 employees). The NRA is located at 342B Dorcy Drive, P.O. Box 10426, Grand Cayman KY1-1004, Cayman Islands.

**2. Significant Accounting Policies**

*(a) Basis of preparation*

These financial statements have been prepared in accordance with International Public Sector Accounting Standards (IPSAS) issued by the International Federation of Accountants and its International Accounting Standards Board using the accrual basis of accounting. For periods up to and including June 30, 2016, the NRA prepared its financial statements in accordance with International Financial Reporting Standards (IFRS). The continued existence of the NRA is contingent on Government Funding. As management considers that this support will be ongoing and there are no indications that suggest otherwise, after an assessment it was determined that NRA does not meet the criteria of a Government Business Enterprise which requires the preparation of financial statements in accordance with International Financial Reporting Standards. As a result, it was appropriate to change the financial reporting frameworks from International Financial Reporting Standards (IFRS) to International Public Sector Accounting Standards (IPSAS).

Where additional guidance is required, International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board are used.

The financial statements of the NRA are presented in Cayman Island dollars and are prepared on the accrual basis under the historical cost convention.

The significant accounting policies adopted by the NRA in these financial statements are as follows:

**National Roads Authority**  
**Notes to the Financial Statements**  
**For the 18 month period ended 31 December 2017**  
**(Stated in Cayman Islands Dollars)**

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**2. Significant Accounting Policies (continued)**

*(b) Cash and cash equivalents*

This comprises cash at bank and short term investments with maturity at inception of three months or less.

*(c) Foreign currency translation*

All assets and liabilities denominated in foreign currency are translated to Cayman Islands Dollars at exchange rates in effect at the financial position date. Revenue and expense transactions denominated in foreign currency are translated to Cayman Islands Dollars at exchange rates ruling at the date of those transactions. Gains and losses arising on translation are included in the statement of financial performance.

*(d) Property, plant and equipment/depreciation*

Property, plant and equipment include motor vehicles, heavy equipment, dump trucks, furniture and fixtures and computer hardware and software are stated at cost less accumulated depreciation and impairment losses. Depreciation is calculated on a straight-line basis at annual rates estimated to write off the carrying value of each asset over the period of its expected useful life.

Annual rates are as follows:

Vehicles and Heavy Equipment	4 - 12 Years
Furniture and Fixtures	3 - 15 Years
Computer Hardware and Software	3 - 6 Years
Other Plant and Equipment	3 - 20 Years

*(e) Accounts receivables*

Receivables are stated at original invoice amounts less provision for doubtful debts.

*(f) Allowance for bad debts*

The allowance for bad debts is established through a provision for bad debts charged to expenses. Accounts receivable are written off against the allowance when management believes that the collectability of the amount is unlikely. The allowance is an amount that management believes will be adequate to cover any bad debts, based on an evaluation of collectability and prior bad debts experience.

*(g) Inventory*

Inventory is valued at the lower of net realizable value or cost, on an average basis.

*(h) Accounts Payable and accrued liabilities*

Accounts payable are recorded at the amount owing after allowing for credit notes and other adjustments.



**National Roads Authority**  
**Notes to the Financial Statements**  
**For the 18 month period ended 31 December 2017**  
**(Stated in Cayman Islands Dollars)**

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**2. Significant Accounting Policies (continued)**

*(i) Employee entitlements*

*Pension Plans*

The Authority makes pension contributions for its eligible employees to the Public Service Pensions Fund, which is administered by the Public Service Pensions Board. The Fund has both a defined benefit and a defined contribution element.

Under defined contribution plans, the Authority pays fixed contributions and has no obligation to pay further contributions if the fund does not have sufficient assets to pay employee benefits relating to employee service in the current and prior periods. The Authority recognises contributions to a defined contribution plan when an employee has rendered services in exchange for those contributions.

A defined benefit plan is one that defines an amount of benefit to be provided, usually as a function of one or more factors such as age, years of service or compensation. The asset or liability in respect of defined benefit plans is the difference between the present value of the defined benefit obligation at the financial position date and the fair value of plan assets, adjusted for unrecognised actuarial gains/losses and past service cost. Where a pension asset arises, the amount recognised is limited to the net total of any cumulative unrecognised net actuarial losses and past service cost and the present value of any economic benefits available in the form of refunds from the plan or reduction in future contributions to the plan. The pension costs are assessed using the Projected Unit Credit Method. Under this method the cost of providing pensions is charged in the statement of financial performance so as to spread the regular cost over the service lives of employees in accordance with advice of the actuary, (who is due to carry out a full valuation of the plans every year). The pension obligation is measured at the present value of the estimated future cash outflows using discount estimated rates based on market yields on high quality corporate bonds at the time of the accounting date which have terms to maturity approximating the terms of the related liability.

Obligations for contributions to defined contribution and defined benefits pension plans are recognized as an expense in the statement of financial performance as incurred. (See also Note 11).

Amounts incurred but not paid at the end of the reporting period are accrued. Annual leave due, but not taken, is recognized as a liability.

*(j) Revenue recognition*

Revenue from sale of services to other government agencies is recognised when it is earned (see also Related Party Note 14). Unearned revenue comprises amounts paid to the Authority in advance of work performed and amounts which the Authority has invoiced for in advance of work performed. These unearned amounts are recognized as revenue in the statement of financial performance as work is performed related to the amounts received or billed in advance. Investment revenue is recognised in the period in which it is earned. Donations are recognised at fair value at the time of receipt.

**National Roads Authority**  
**Notes to the Financial Statements**  
**For the 18 month period ended 31 December 2017**  
**(Stated in Cayman Islands Dollars)**

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**2. Significant Accounting Policies (continued)**

*(k) Expense recognition*

Expenses are recognised when incurred.

*(l) Financial Instruments*

*(i) Classification*

A financial asset is classified as any asset that is cash, a contractual right to receive cash or another financial asset, exchange financial instruments under conditions that are potentially favourable or an equity instrument of another enterprise. Financial assets comprise of cash and cash equivalents and accounts receivable and prepayments.

A financial liability is any liability that is a contractual obligation to deliver cash or another financial instrument or to exchange financial instruments with another enterprise under conditions that are potentially unfavourable. Financial liabilities comprise of accounts payable, unearned revenue and employee entitlements.

*(ii) Recognition*

The Authority recognises financial assets and financial liabilities on the date it becomes party to the contractual provisions of the instrument. From this date, any gains and losses arising from changes in fair value of the assets or liabilities are recognised in the statement of financial performance.

*(iii) Measurement*

Financial instruments are measured initially at cost which is the fair value of the consideration given or received. Subsequent to initial recognition all financial assets are recorded at historical cost, which is considered to approximate fair value due to the short-term or immediate nature of these instruments.

*(iv) Derecognition*

A financial asset is derecognised when the Authority realises the rights to the benefits specified in the contract or loses control over any right that comprise that asset. A financial liability is derecognised when it is extinguished, that is when the obligation is discharged, cancelled, or expired.

*(v) Credit Risk*

Cash and short term investments are held with substantial financial institutions. Receivables are short term and settled after the year-end.

*(vi) Interest Rate Risk*

The Authority's income and operating cash flows are substantially independent of changes in market interest rates.

*(m) Classification*

Certain prior year figures have been reclassified to conform to current year presentation.

National Roads Authority  
Notes to the Financial Statements  
For the 18 month period ended 31 December 2017  
(Stated in Cayman Islands Dollars)

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**3. Cash and Cash Equivalents**

	<b>2016/17</b>	<b>2015/16</b>
	<b>\$</b>	<b>\$</b>
Bank accounts	3,639,860	3,887,910
<b>Total Cash and Cash Equivalents</b>	<b>3,639,860</b>	<b>3,887,910</b>

**4. Accounts Receivable and Prepayments**

	<b>2016/17</b>	<b>2015/16</b>
	<b>\$</b>	<b>\$</b>
Receivable from Core Government	1,060,004	1,859,902
Less provision for doubtful debt	-	(489,848)
Receivables from other government agencies	9,079	138,468
Accounts Receivable Others and Prepayments	149,498	99,639
Staff Loans	3,149	848
<b>Total Accounts Receivable</b>	<b>1,221,730</b>	<b>1,609,009</b>

**5. Inventories**

	<b>2016/17</b>	<b>2015/16</b>
	<b>\$</b>	<b>\$</b>
Finished Goods - Cayman Rock	1	-
Finished Goods - AE60	19,316	1,021
Finished Goods - Crusher Run	27,863	19,508
Finished Goods - 3/8 Washed Chips	11,481	12,727
Finished Goods – Sand	399	714
Finished Goods – Concrete Stone	7,691	11,981
<b>Total Inventories</b>	<b>66,751</b>	<b>45,951</b>

National Roads Authority  
Notes to the Financial Statements  
For the 18 month period ended 31 December 2017  
(Stated in Cayman Islands Dollars)

**6. Property, Plant and Equipment**

	<b>Vehicles &amp; Heavy Equipment</b>	<b>Furniture &amp; Fixtures &amp; Office Equipment</b>	<b>IT Equipment</b>	<b>Other Plant &amp; Equipment</b>	<b>Leasehold Improvement</b>	<b>Total</b>
<b>Cost</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
Opening 2014/15	3,080,899	165,062	334,708	1,862,869	273,837	5,717,375
Additions 2015/16	629,046	-	14,534	254,246	-	897,826
Disposals 2016/17	(407,578)	-	-	-	-	(407,578)
As at 2015/16	3,302,367	165,062	349,242	2,117,115	273,837	6,207,623
Additions 2016/17	780,733	15,071	6,111	1,085,608	-	1,887,523
Disposals 2016/17	(608,282)	-	(92,964)	-	-	(701,246)
As at 2016/17	3,474,818	180,133	262,389	3,202,723	273,837	7,393,900
<b>Accumulated Depreciation</b>						
Opening 2014/15	2,759,217	137,622	309,732	1,005,557	223,820	4,435,948
Depreciation 2015/16	214,943	6,769	7,549	182,874	27,281	439,416
Depreciation on Disposal 2015/16	(402,077)	-	-	-	-	(402,077)
As at 2015/16	2,572,083	144,391	317,281	1,188,431	251,101	4,473,287
Depreciation 2016/17	344,323	7,247	17,753	353,407	22,736	745,466
Depreciation on Disposal 2016/17	(608,120)	-	(93,441)	-	-	(701,561)
As at 2016/17	2,308,286	151,638	241,593	1,541,838	273,837	4,517,192
<b>Net Book Value - 2016</b>	<b>730,284</b>	<b>20,671</b>	<b>31,961</b>	<b>928,684</b>	<b>22,736</b>	<b>1,734,336</b>
<b>Net Book Value - 2017</b>	<b>1,166,532</b>	<b>28,495</b>	<b>20,796</b>	<b>1,660,885</b>	<b>-</b>	<b>2,876,708</b>

**National Roads Authority**  
**Notes to the Financial Statements**  
**For the 18 month period ended 31 December 2017**  
**(Stated in Cayman Islands Dollars)**

**7. Accounts Payable and Accrued Liabilities**

	<b>2016/17</b>	<b>2015/16</b>
	<b>\$</b>	<b>\$</b>
Trade creditors	1,557,589	1,315,626
Accruals	153,599	81,634
<b>Total Accounts Payable and Accrued Liabilities</b>	<b><u>1,711,188</u></b>	<b><u>1,397,260</u></b>

**8. Employee Entitlements**

The leave entitlements are calculated based on current salary paid to those employees who are eligible for this benefit. During the year, accrued vacation leave amounted to \$47,361 (2016: \$133,784).

**9. Contributed Capital**

During the period the Authority received no equity injection, (2016: nil).

**10. Personnel Costs**

	<b>2016/17</b>	<b>2015/16</b>
	<b>\$</b>	<b>\$</b>
Salaries and wages	2,978,449	1,978,224
Health Insurance	1,797,578	1,025,001
Employer and Employee pension expenses	359,295	253,478
Vacation due	(86,423)	(2,602)
Other personnel costs	158,929	50,600
<b>Total Personnel Costs</b>	<b><u>5,207,828</u></b>	<b><u>3,304,701</u></b>

**11. Pensions**

Pension contributions for eligible employees of the Authority are paid to the Public Service Pensions Fund (the "Fund"). The Fund is administered by the Public Service Pensions Board ("the Pensions Board") and is operated as a multi-employer plan. Prior to 1 January 2000 the scheme underlying the Fund was a defined benefit scheme. With effect from 1 January 2000 the Fund had both a defined benefit and a defined contribution element, with participants joining after 1 January 2000 becoming members of the defined contribution element only.

Benefit obligations are estimated using the Projected Unit Credit method. Under this method, each participant's benefits under the plan are attributed to years of service, taking into consideration future salary increases and the plan's benefit allocation formula. Thus, the estimated total pension to which each participant is expected to become entitled at retirement is broken down into units, each associated with a year of past or future credited service.



**National Roads Authority**  
**Notes to the Financial Statements**  
**For the 18 month period ended 31 December 2017**  
**(Stated in Cayman Islands Dollars)**

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**11. Pensions (continued)**

The Fund has been valued by the Actuary (Mercer) to the Pensions Board. The defined contribution part of the Fund is not subject to the special actuarial valuations due to the nature of the benefits provided therein.

The Authority paid both the employee and employers contributions. The actual amount of pension expense relating to the defined benefits for staff also includes the effect of the changes in the actuarial determined liability.

In March 2005, the Financial Secretary of the Cayman Islands Government informed the Authority that the decision to keep the unfunded past service liability a central liability of the

Government has now been reversed and the Authority recognizes the unfunded past service liability as a liability in its financial statements.

*The amounts recognized in the statement of financial position is as follows:*

	<b>2016/17</b>	<b>2015/16</b>
	<b>\$000</b>	<b>\$000</b>
Defined benefit obligation	5,130	6,259
Fair value of plan assets	3,979	3,389
Funded status	1,151	2,870
Net liability (asset)	1,151	2,870

*The change in defined benefit obligation is as follows:*

	<b>2016/17</b>	<b>2015/16</b>
	<b>\$000</b>	<b>\$000</b>
Defined benefit obligation at end of prior year	6,259	4,308
Service Cost	595	278
Interest expense	319	205
Cash flows	(236)	39
Remeasurements	(1,807)	1,429
Defined benefit obligation at end of year	5,130	6,259

*The change in fair value of plan assets is as follows:*

	<b>2016/17</b>	<b>2015/16</b>
	<b>\$000</b>	<b>\$000</b>
Fair value of plan assets at end of prior year	3,389	3,093
Interest Income	180	153
Cash flows – employer and participant contributions	(113)	138
Remeasurements	523	5
Fair value of plan assets at end of year	3,979	3,389

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11. Pensions (continued)

*The net defined benefit liability (asset) reconciliation:*

	2016/17 \$000	2015/16 \$000
Net defined benefit liability as of beginning of year	2,870	1,215
Defined benefit cost included in the Statement of Changes in Net Worth	734	330
Total remeasurements included in the Statement of Changes in Net Worth	(2,330)	1,424
Cash flows	(123)	(99)
Net defined benefit liability as of end of year	<u>1,151</u>	<u>2,870</u>

*The components of defined benefit cost are as follows:*

	2016/17 \$000	2015/16 \$000
Service Cost	595	278
Net interest cost		
Interest expense on DBO	319	205
Interest (income) on plan assets	(180)	(153)
Total net interest cost	139	52
Defined benefit cost included in the Statement of Changes in Net Worth	734	330
Effect of changes in demographic assumptions	(647)	-
Effect of changes in financial assumptions	(731)	961
Effect of experience adjustments	(429)	468
(Return) on plan assets (excluding interest income)	(523)	(5)
(Return) on reimbursement rights (excluding interest income)	-	-
Changes in asset ceiling/onerous liability (excluding interest income)	-	-
Total remeasurements included in the Statement of Changes in Net Worth	(2,330)	1,424
Total defined benefit cost recognized in the Statement of Changes in Net Worth	<u>(1,596)</u>	<u>1,754</u>

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**11. Pensions (continued)**

*The sensitivity analysis on defined benefit obligation is shown below:*

	<b>2016/17</b>	<b>2015/16</b>
1. Discount rate		
a. Discount rate – 25 basis points	5,446	6,633
b. Discount rate + 25 basis points	4,837	5,913
2. Inflation rate		
a. Inflation rate – 25 basis points	4,835	5,913
b. Inflation rate + 25 basis points	5,447	6,631
3. Mortality		
a. Mortality - 10% of current rates	5,252	6,392
b. Mortality + 10% of current rates	5,018	6,137

*The expected cash flow for the following year is as follows:*

	<b>Amount (\$000)</b>
Expected employer contributions	107      154

*The significant actuarial assumptions are presented below:*

Weighted-average assumptions to determine defined benefit obligations

	<b>2016/17</b>	<b>2015/16</b>
1. Discount rate	3.80%	4.00%
2. Rate of salary increase	2.50%	3.50%
3. Rate of price inflation	2.00%	2.50%
4. Rate of pension increases	2.00%	2.50%
5. Post-retirement mortality table	RP-2014 scaled back to 2006 using Scale MP- 2014 then generationally Projected using Scale MP-2016	RP-2014 projected on a generational basis using Scale MP- 2014
6. Cost Method	Projected Unit Credit	Projected Unit Credit
7. Asset valuation method	Market Value	Market Value

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**11. Pensions (continued)**

Weighted-average assumptions to determine defined benefit cost

	<b>2016/17</b>	<b>2015/16</b>
1. Discount rate used to determine current service cost	4.10%	4.75%
2. Discount rate used to determine interest on current service cost	3.80%	4.75%
3. Discount rate used to determine interest on defined benefit cost	3.40%	4.75%
4. Rate of salary increase	3.50%	3.50%
5. Rate of price inflation	2.50%	2.50%
6. Rate of pension increases	2.50%	2.50%
7. Post-retirement mortality table	RP-2014 projected on a generational basis using Scale MP- 2014	RP-2014 projected on a generational basis using Scale MP- 2014

***Plan Assets***

The Defined Benefit assets as well as Defined Contribution assets of the Plan are held as part of the Public Service Pensions Fund ("the Fund") and managed by the PSPB. The assets of two other pension plans are pooled together to constitute the Fund. The assets are notionally allocated to each of the three participating pension plans through an internal accounting mechanism that tracks, for each accounting period, actual cash flows and allocates investment income and expenses in proportion to the opening value of assets allocated. Based on the data provided, the gross rate of return earned by the Fund for the fiscal 2017 was 13.44% and 4.89% for fiscal 2016. Similar internal accounting is used for developing each participating entity's share of the asset portfolio of the Fund.

The valuations are based on the draft financial statements as at 30 June 2016 as well as asset value as at 31 December 2017 provided by PSPB, along with cash flow and other supplemental asset information. The assets are held in trust by CIBC Mellon.

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**11. Pensions (continued)**

The Fund currently has investment policy with a target asset mix of 80% equities and 20% bonds. As at 31 December 2017, the Fund was invested as follows:

<b>Plan Assets by Asset Category</b>	<b>2016/17</b>		<b>2015/16</b>	
	<b>(\$000)</b>	<b>Percentage</b>	<b>(\$000)</b>	<b>Percentage</b>
Global equities securities	547,500	80%	431,083	80%
Debt securities	129,083	19%	103,167	19%
Real estate / Infrastructure	-	-	-	-
Cash	9,000	1%	2,583	1%
<b>Total</b>	<b>685,583</b>	<b>100%</b>	<b>536,833</b>	<b>100%</b>

For fiscal 2017, the Defined Contribution portion of the Fund totaled to \$303,457,800 and \$261,754,300 as at 30 June 2016 as provided by PSPB. The share of the Fund that been notionally allocated to NRA with regards to its participation in the Defined Benefit Part of the Plan is \$3.979 million as at 31 December 2017 (2016 - \$3.389 million).

*The Actuarial Assumptions*

The actuarial assumptions have been approved by the Financial Secretary, the main sponsor of the Plan. The principal financial and demographic assumptions used at 31 December 2017 and 30 June 2016 are shown in the table below. The assumptions as at the reporting date are used to determine the present value of the benefit obligation at that date and the pension expense for the period.

**Turnover Rates at sample ages:**

<b>Age</b>	<b>Males</b>	<b>Females</b>
20	7.5%	12.5%
25	5.0%	12.5%
30	3.5%	7.5%
35	2.5%	4.5%
40	1.5%	2.5%
45	0.5%	5.0%
50	0.0%	0.0%

**Retirement Rates:**

<b>Age</b>	<b>%</b>
Below 55	0%
55-59	8%
60	60%
61-64	8%
65	100%



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**11. Pensions (continued)**

<b>Measurement Date</b>	<b>2016/17</b>	<b>2015/16</b>
Discount rate		
-BOY disclosure and current year expense	4.00%	4.75%
-EOY disclosure	3.80%	4.00%
-Following year current service cost	3.85%	4.10%
-Rate used to determine interest on defined benefit obligation and plan assets for following year expenses	3.50%	3.40%
-Rate used to determine interest on current service cost for following year expenses	3.70%	3.80%
Increases in pensionable earnings	2.50%	3.50%
Rate of Pension Increases	2.00%	2.50%
Expected long-term rate of return on assets (net of expenses) for purposes of IFRIC only		5.00% per year
Mortality		
- BOY disclosure and current year expense	RP-2014 generationally projected using Scale MP-2014	RP-2014 generationally projected using Scale MP-2014
EOY disclosure and following year expense	RP-2014 scaled back to 2006 using Scale MP-2014, then generationally projected using Scale MP-2016	RP-2014 generationally projected using Scale MP-2014
Disability	None	None
Turnover Rates	See turnover rates in table above	See turnover rates in table above
Retirement	See retirement rates in table above	See retirement rates in table above
Assumed life expectations on retirement	Retiring today (member age 57) 30.24 Retiring in 25 years (at age 57): 32.51	Retiring today (member age 57) 30.21 Retiring in 25 years (at age 57): 32.40
Liability Cost Method	Projected unit credit method	Projected unit credit method

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**Pensions (continued)**

<b>Measurement Date</b>	<b>2016/17</b>	<b>2015/16</b>
Asset Value Method	Market Value of Assets	Market Value of Assets
Commutation of pension	All members commute 25% at retirement	All members commute 25% at retirement

There have been no changes in actuarial assumptions since the prior valuation other than the changes to the principal assumptions shown in the table above. The mortality assumption was updated to make allowance for future mortality improvements. In the addition, the mortality improvement scale has been updated from Scale AA to Scale BB. These are the same assumptions as approved by the PSPB for use in the January 1, 2014 funding valuation of the Plan.

**12. Defined benefit liability: Post-retirement health liability**

The National Roads Authority provides health care benefits to staff members that transferred from Public Works department in accordance to the NRA law. The benefit is in the form of continuation of their health insurance coverage on the medical plan in force for active employees. The premiums for this health insurance coverage are paid for by the National Roads Authority for all eligible retirees until the end of their lives. This coverage falls within the definition of a defined benefit by the International Public Sector Accounting Standards and as such represents a future liability of the National Roads Authority. The National Roads Authority is required to use the actuarial valuation method to determine the present value of its health insurance benefit obligations for its former workers as well as future retirees and the related current service costs. International Public Sector Accounting Standards IPSAS 25 directs that funded or unfunded post-employment benefits must be recognized in the statement of financial position (in the case of net defined liability or asset) and the statement of financial performance (for the annual expense).

These actuarial valuations use several financial and demographic assumptions to determine the liability and current expense of the benefits which will be honoured on behalf of the retirees. Financial assumptions include, the discount rate, estimated future costs of the medical premiums, and the claims rate for the medical plans. Demographic assumptions include estimated mortality and benefits levels.

The Authority commissioned Mercer Actuaries of Canada to provide this service and the results of their assessment are included hereunder. The National Roads Authority has a present value net defined benefit obligation of \$16,510,000 at the end of the financial period 31 December 2017 (2016: \$15,039,000). The details of the valuation and the assumptions used are reproduced hereunder in accordance with IPSAS 25.

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**12. Defined benefit liability: Post-retirement health liability (continued)**

A person who is a public office immediately before the 1st July, 2004 may, on or after that date, be offered employment by the Authority and, if he accepts the offer, shall become an employee of the Authority on the same terms and conditions as those applicable to him on the day immediately such date except to the extent other terms and conditions are agreed between such employee and the Authority.

There has not been any recognition of this liability or annual expense in the financial statements of the National Roads Authority before, except that the premiums paid on behalf of the retirees were included as medical costs and reported as a part of staff costs in the Statement of Financial Performance. Neither has there been any money set aside to fund this benefit. Consequently, the entire \$16,510,000 is currently unfunded. Steps will need to be taken to address this unfunded status in the coming years.

Plan Name	National Roads Authority	
	31 Dec 2017	30 June 2016
Financial year ending on	\$	\$
<i>Currency Information</i>		
1. Local currency		
2. Reporting currency		
<b>A. Change in defined benefit obligation</b>		
1. Defined benefit obligation at end of prior year	15,039,000	11,451,000
2. Service cost		
a. Current service cost	1,922,000	1,044,000
b. Past service cost	-	-
c. (Gain) / loss on settlements	-	-
3. Interest expense	843,000	559,000
4. Cash flows		
a. Benefit payments from plan assets	-	-
d. Benefit payments from employer	(61,000)	(102,000)
5. Other significant events		
6. Remeasurements		
a. Effect of changes in demographic assumptions	(2,196,000)	(638,000)
b. Effect of changes in financial assumptions	796,000	2,725,000
c. Effect of experience adjustments	167,000	-
7. Effect of changes in Foreign exchange rates	-	-
8. Defined benefit obligation at the end of year	<b>16,510,000</b>	<b>15,039,000</b>

**National Roads Authority**  
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**12. Defined benefit liability: Post-retirement health liability (continued)**

Plan Name	National Roads Authority	
	31 Dec 2017	30 June 2016
Financial period/ year ending on	\$	\$
<b>B. Change in fair value of plan assets</b>		
1. Fair value of plan assets at end of prior year	-	-
2. Interest income	-	-
3. Cash flows		
a. Total employer contributions		
i. Employer contributions	-	-
ii. Employer direct benefit payments	61,000	102,000
iii. Employer direct settlement payments	-	-
b. Participant contributions	-	-
c. Benefit payments from plan assets	(61,000)	(102,000)
d. Benefit payments from employers	-	-
e. Settlement payments from plan assets	-	-
f. Settlement payments from employer	-	-
g. Administrative expenses paid from plan assets	-	-
h. Taxes paid from plan assets	-	-
i. Insurance premiums for risk benefits	-	-
4. Other significant events	-	-
a. Increase / (decrease) due to effect of any business combinations/ divestures or transfers	-	-
b. Increase / (decrease) due to plan combinations	-	-
5. Remeasurements	-	-
a. Return on plan assets (excluding interest income)	-	-
6. Effect of change in foreign exchange rates	-	-
7. Fair Value of plan assets at end of year	-	-
<b>C. Amounts recognized in the statement of financial position</b>		
1. Defined benefit obligation	16,510,000	15,039,000
2. Fair value of plan assets	-	-
3. Funded status	16,510,000	15,039,000
4. Effect of asset ceiling/onerous liability	-	-
5. Net defined benefit liability/(asset)	16,510,000	15,039,000
<b>D. Components of defined benefit cost</b>		
1. Service cost	1,922,000	1,044,000
a. Current service cost	-	-
b. Reimbursement service cost	-	-
c. Past service cost	-	-
d. (Gain) / loss on settlements	-	-
e. Total service cost	1,922,000	1,044,000
2. Net interest cost		
a. Interest expense on Defined Benefit Obligation (DBO)	843,000	559,000
b. Interest/(income) on plan assets	-	-
c. Total net interest cost	843,000	559,000
3. Remeasurements of Other Long Term Benefits	-	-
4. Administrative expenses and/or taxes (not reserved within DBO)	-	-
5. Defined benefit cost included in Profit and Loss (P&L)	2,765,000	1,603,000

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**12. Defined benefit liability: Post-retirement health liability (continued)**

**D. Components of defined benefit cost (continued)**

6. Remeasurements (recognized in the Statement of Changes in Net Worth)		
a. Effect of changes in demographic assumptions	(2,196,000)	(638,000)
b. Effect of changes in financial assumptions	796,000	2,725,000
c. Effect of experience adjustments	167,000	-
d. Total remeasurment included in the Statement of Changes in Net Worth	<u>(1,233,000)</u>	<u>2,087,000</u>
7. Total defined benefit cost recognized in the Statement of Changes in Net Worth	<u>1,532,000</u>	<u>3,690,000</u>

**E. Net defined benefit liability/(asset) reconciliation**

1. Net defined benefit liability/(asset)	15,039,000	11,451,000
2. Defined benefit cost included in the Statement of Changes in Net Worth	2,765,000	1,603,000
	<u>(1,233,000)</u>	<u>2,087,000</u>
3. Total remeasurement included in the Statement of Changes in Net Worth	-	-
4. Other significant events	-	-
a. Net transfer in/(out) (including the effect of any business combinations/divestitures)	-	-
b. Amounts recognized due to plan combinations	-	-
5. Cash Flows	(61,000)	(102,000)
a. Employer contributions	-	-
b. Employer direct benefit payments	-	-
c. Employer direct settlements payments	-	-
6. Credit to reimbursements	-	-
7. Effect of changes in Foreign exchange rates	-	-
8. Net defined benefit liability/(asset) as of end of year	<u>16,510,000</u>	<u>15,039,000</u>

**Plan Name**

**National Roads Authority**

Financial period / year ending on

31 Dec 2017

30 June 2016

**F. Define benefit obligation**

1. Defined benefit obligation by participant status		
a. Actives	15,357,000	14,040,000
b. Vested deferred	-	-
c. Retirees	<u>1,153,000</u>	<u>999,000</u>
d. Total	<u>16,510,000</u>	<u>15,039,000</u>

**G. Significant actuarial assumptions**

*Weighted-average assumptions to determine defined benefit obligations*

Discount rate	3.85%	4.05%
Health care cost trend rates		
Immediate trend rate	5.00%	5.00%
Ultimate trend rate	5.00%	5.00%
Year rate reaches ultimate trend rate	N/A	N/A
Post- retirement mortality assumption	RP-2014	RP-2014



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**12. Defined benefit: Post-retirement health (continued)**

Plan Name	National Roads Authority	
Financial period/ year ending on	31 Dec 2017	30 June 2016
<i>Weighted-average assumptions to determine defined benefit cost</i>		
Effective discount rate for defined benefit obligation		
Effective rate for net discount	4.05%	4.90%
Effective discount rate for service cost	3.75%	4.90%
Effective rate for interest on service cost	4.20%	4.90%
Health care cost trend rates	4.24%	4.90%
Immediate trend rate	5.00%	5.00%
Ultimate trend rate	5.00%	5.00%
Year rate reaches ultimate trend rate	N/A	N/A
Post- retirement mortality assumption	RP-2014	RP-2014
<b>H. Sensitivity analysis</b>		
<i>Present value of defined benefit obligations</i>		
Effective Discount rate - 25 basis points	1,069,000	954,000
Effective Discount rate + 25 basis points	(988,000)	(880,000)
Health care cost trend rates – 100 basis points	(3,478,000)	(3,109,000)
Health care cost trend rates + 100 basis points	4,656,000	4,175,000
Post- retirement mortality assumption + 10%	(751,000)	(552,000)
<i>Weighted-average duration of defined benefit obligation (in years)</i>		
Effective discount rate – 25 basis points		24.59
Effective discount rate + 25 basis points		24.13
<b>I. Expected cash flows for following year</b>		
a. Expected employer contributions	101,000	157,000
b. Expected contributions to reimbursement rights	-	-
c. Expected total benefit payments		
Year 1	101,000	157,000
Year 2	116,000	125,000
Year 3	145,000	151,000
Year 4	176,000	188,000
Year 5	209,000	216,000
Next 5 years	1,642,000	1,791,000

**Proposed Assumptions as at 31 December 2017 and 30 June 2016.**

Economic Assumptions	Postretirement Healthcare	Basis of Development – Accounting Specific Assumptions
Discount rate (p.a)		IAS 19 para. 83 determined by reference to market yields on high quality corporate bonds (consistent with the term of the benefit obligations) at the fiscal year end date. Mercer US Above Mean Yield Curve (referencing US corporate bonds yields) used to determine discount rates due to strong economic and currency links between the US and Cayman Islands. The requirement in IPSAS 25 is that entities apply a rate that reflects the time value of money, however at the time of the actuary report the International Financial Reporting Standards was adopted by NRA.
- 30 June 2016	4.05% per annum	
- 31 December 2017	3.85% per annum	
- 30 June 2016	4.20% per annum	
- 31 December 2017	3.90% per annum	
Administrative expenses	Included in projected premiums	
Rate of Medical Inflation (p.a)	5.00%	Based on an analysis of historical claims information and long-term medical inflation expectations.

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**12. Defined benefit: Post-retirement health (continued)**

Demographic Assumptions	Postretirement Healthcare	Basis of Development – Accounting Specific Assumptions
Current mortality rates 30 June 2016 31 December 2017	RP-2014 RP-2014 Mortality Table scaled back to 2006 using MP-2016	Recent mortality studies in the U.S. and Canada shows that people are living longer. New mortality tables have been issued by U.S. and Canada. The mortality table has been updated to better reflect actual mortality improvement rates experienced in the US over the last 20 years.
Future mortality improvements 30 June 2016 31 December 2017	Scale MP-2014 Scale MP-2016	Broad consensus amongst longevity experts that mortality improvement will continue in the future. In the U.S, the future mortality improvement scale has been updated to Scale MP-2016.
Turnover rates	Age & gender based rates – see page 29	
Disability rates	None	
Retirement Age as per Public Service Pension Plan	Age 57 & 10 years of service	Pensionable age in the Cayman Islands
Material assumption	80% married, wife 3 years younger	
Current healthcare claims cost assumption for 31 December 2017 benefit obligation and fiscal 2018 expense	Based on CIG 2015/16 premium rates Health \$9,500 per participant Dental \$1,100 per participant	The National Roads Authority provides 100% coverage for employees, spouses and dependants and also retires and retires spouses' premiums.
Healthcare coverage – future pensioners	Male 27% single, 73% family Female 50% single, 50% family	Based on CIG experience
Healthcare utilization changes due to age	Mercer standard healthcare aging assumptions for medical and dental	Based on analysis of healthcare utilization for Mercer clients in Canada and US and by reference to Society of Actuaries studies.

Proposed assumptions as at 30 June 2016 and 31 December 2017

**Turnover Rates**

Turnover rates at sample ages

Age	Males	Females
20-24	7.5%	12.5%
25-29	5.0%	12.5%
30-34	3.5%	7.5%
35-39	2.5%	4.5%
40-44	1.5%	2.5%
45-49	0.5%	0.5%
50 +	0.0%	0.0%

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**13. Accounting for defined benefit post-retirement health liability**

The actuarial valuation results showed that a liability of \$16,510,000 existed at 31 December 2017, represented by accumulated liability of \$15,039,000 as at 30 June 2016 and service costs and adjustments totaling \$1,471,000 for the year ended 31 December 2017, resulting in a closing liability of \$16,510,000 at 31 December 2017.

**14. Related Party Transactions**

The Authority provided Services to Road Users on behalf of the Government relating to the development and maintenance of the public roads within the Cayman Islands funded through the Roads Fund which amounts to \$15 million (18 months) under the Ownership Agreement (2015/16: \$10 million). During this period the Authority also delivered Capital Expenditure Projects of \$7.5 million to the Government for the construction of roads under the Ownership Agreement. The Authority also engages the services of other government departments of the Cayman Islands Government. Such services are provided at current prevailing market prices on an arm's length basis. Sales to third parties include services for drain wells and curbs, installation of signs, paving and trench reinstatement services.

	<b>2016/17</b>	<b>2015/16</b>
	<b>\$</b>	<b>\$</b>
Sales of services to Cabinet	7,506,994	3,673,124
Sales of services to other government agencies	330,427	316,360
Sales of services to third parties	15,392,521	10,213,506
<b>Total</b>	<b>23,229,942</b>	<b>14,202,990</b>

Upon creation of the Authority on 1 July 2004, no movable properties were vested to the Authority. Henceforth, the Public Works Department (PWD) allowed the Authority to use its vehicles and heavy equipment for road construction and maintenance free of charge. As at 31 December 2017, the Authority owes PWD the amount of \$13,256 (2016: \$13,029) for support services extended to the latter such as office and workshop accommodation, tenant's requirements, utilities, accounting services, service parking and compound security.

The remuneration of directors and other members of key management personnel during the year was \$968,618 (2016: \$639,328). There were 14 personnel categorized in 2017 broken down as 5 key management personnel and 9 Directors (2016: 5 key management personnel and 9 Directors).

In April 2018 the Managing Director, who is categorized as one of the 5 key management personnel, was suspended from his duties to facilitate an internal investigation regarding allegations brought against him. The Deputy Managing Director assumed the role of Managing Director effective 24 April, 2018. Subsequently as a result of an investigation by the Board of Directors, the Managing Director's employment contract with the Authority was terminated on 31<sup>st</sup> October, 2018.

**National Roads Authority**  
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**15. Contingencies**

Under section 28(1) of the NRA Law an annual payment to the core government may be due. At the date of these financial statements there has been no request made.

**16. Financial Risk Management**

The Authority is exposed to a variety of financial risks including interest rate risk, credit risk and liquidity risk. The Authority's risk management policies are designed to identify and manage these risks, to set appropriate risk limits and controls, and to monitor the risks and adhere to limits by means of up to date and reliable information systems. These risks are managed within the parameters established by the Financial Regulations.

*Interest Rate Risk*

The Authority is subject to interest rate risk on the cash placed with a local bank which attracts interest. No interest payments are charged to customers on late payments on accounts receivable. The Authority is not exposed to significant interest rate risk as the cash and cash equivalents are placed on call and available on demand. The total interest earned during the year ended 31 December 2017 was nil (2016: nil).

*Credit Risk*

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in financial loss to the Authority. Financial assets which potentially expose the Authority to credit risk comprise cash and cash equivalents and accounts receivable.

The Authority is exposed to potential loss that would be incurred if the counterparty to the bank balances fails to discharge its obligation to repay. All bank balances are with one financial institution located in the Cayman Islands which management considers to be financially secure and well managed.

The Authority is also exposed to a significant concentration of credit risk in relation to accounts receivables, majority of which are due from other Government entities. No credit limits have been established. As at 31 December 2017, no provision for doubtful debts of was deemed necessary.

None of these assets are impaired and management considers these debts to be recoverable in full (2016: \$490k). The carrying amount of financial assets recorded in the financial statements represents the Authority's maximum exposure to credit risk. No collateral is required from the Authority's debtors.

*Liquidity Risk*

Liquidity risk is the risk that the Authority is unable to meet its payment obligations associated with its financial liabilities when they fall due. The ability of the Authority to meet its debts and obligations is dependent upon its ability to collect the debts outstanding to the Authority in a timely basis. As at 31 December 2017 and 30 June 2016, all of the financial liabilities were due within one month of the financial position dates.

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**17. Financial Instruments- fair values**

As at 31 December 2017 and 30 June 2016, the carrying amount of cash deposits, accounts receivable, accounts payables and employee entitlements approximate their fair value due to their short-term maturities.

Fair values are made at specific points in time, based on market conditions and information about the financial instrument. These estimates are subjective in nature and involve uncertainties and matters of significant judgement and therefore cannot be determined with precision. Changes in assumptions, economic conditions and other factors could cause significant changes in fair value estimates.

**18. Commitments**

The Authority entered into a five year lease with Heritage Holdings on September 1, 2009 for storage and laboratory. The annual lease payments for the period amount to \$6,366 (2015: \$29,708). The lease payments are subject to an annual increase of 3%. The total payments for the five year lease including the annual 3% increase is \$255,944. The tenant has the option to renew the lease for a further term of one (1) year or more at the expiration of the term and shall give notice in writing to that effect not less than three months before expiration of the term. At the expiration of this Lease on August 31, 2014 the NRA did not renew the Lease involving 2 warehouse units and entered a new one year agreement for a single unit. Subsequent to 2017 period -end the NRA did not renew its Lease for the single remaining unit.

**19. Events Occurring After Reporting Date (31st December 2017)**

**1. Conditions existing at reporting date**

- (a) Management is not aware of any events existing at the reporting date which will have an impact on the financial statements at 31<sup>st</sup> December 2017.

**2. Conditions after reporting date**

- (b) The Managing Director's employment contract with the Authority was terminated on 31st October, 2018, as a result of an investigation by the Board of Directors. Management is not aware of any further occurrences subsequent to the reporting date which will have an impact on the operations of the Authority or the financial statements at 31<sup>st</sup> December 2017.

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20. Explanations of major variances against budget

*Statement of Financial Position*

	2016/17	2016/17 Original Budget	Variance Budget vs Actual
	\$	\$	\$
<b>ASSETS</b>			
<b>Current Assets</b>			
Cash and cash equivalents	3,639,860	3,615,847	(24,013)
Accounts receivable and prepayments	1,221,730	557,175	(664,555)
Inventories	66,751	94,044	27,293
<b>Total Current Assets</b>	<b>4,928,341</b>	<b>4,267,066</b>	<b>(661,275)</b>
<b>Non-Current Assets</b>			
Property, plant and equipment	2,876,708	1,990,317	(886,391)
<b>Total Assets</b>	<b>7,805,049</b>	<b>6,257,383</b>	<b>(1,547,666)</b>
<b>LIABILITIES AND EQUITY</b>			
<b>Current Liabilities</b>			
Accounts payable and accrued liabilities	1,711,188	645,797	(1,065,391)
Employee entitlements	47,361	49,191	1,830
<b>Total Current Liabilities</b>	<b>1,758,549</b>	<b>694,988</b>	<b>(1,063,561)</b>
<b>Non-Current Liability</b>			
Pension liability	1,151,000	1,367,167	216,167
Post-retirement health liability	16,510,000	-	(16,510,000)
<b>Total Non Current Liabilities</b>	<b>17,661,000</b>	<b>1,367,167</b>	<b>(16,293,833)</b>
<b>Total Liabilities</b>	<b>19,419,549</b>	<b>2,062,155</b>	<b>(17,357,394)</b>
<b>Net Assets</b>	<b>(11,614,500)</b>	<b>4,195,228</b>	<b>15,809,728</b>
<b>Net Worth</b>			
Contributed capital	4,541,535	4,541,535	-
Accumulated Deficits	(16,156,035)	(346,308)	15,809,728
<b>Total Net Worth</b>	<b>(11,614,500)</b>	<b>4,195,228</b>	<b>15,809,728</b>



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**20. Explanations of major variances against budget (continued)**

**Statement of Financial Position**

**Accounts receivable and prepayments**

The increase in Accounts Receivable by \$665k when compared to budgeted directly relates to non-budgeted billings to the Ministry of Commerce, Planning and Infrastructure (CPI) as a result of Ministry directives to complete Executive Assets (EA) works fully paid by the CPI beyond the scope of NRA 18 month fiscal budget. Accordingly NRA projected outstanding Accounts Receivables at year end was expected to be in region of \$557k budgeted. The related invoices have now been settled.

**Property, plant and equipment**

Property Plant and Equipment has increased by \$886k or 45% over the budget resulting from Board of Directors approval of the need to upgrade/acquire equipment. This decision was made subsequent to Budget preparation.

**Accounts payable and accrued liabilities**

Accounts payable increase of \$1.065m relates primarily to balances of payments on goods and services delivered near year end resulting from late works performed behalf of CPI. These payments to primary vendors have been settled in unison with payment receipts from CPI subsequently.

**Pension liability**

Pension Liability experienced a positive shift based on Actuarial Report Assumptions resulting in a decrease of \$216k when compared to budget.

**Post-retirement health liability**

Post-retirement health liability was not included in prior years at time of current budget due to recent introduction of an accounting requirement, this resulted in a variance of \$16.51M when compared to the budget.

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20. Explanations of major variances against budget (continued)

*Statement of Financial Performance*

	2016/17	2016/17	Variance Budget
	\$	Original Budget	vs Actual
	\$	\$	\$
<b>REVENUE</b>	<b>23,229,942</b>	<b>15,326,184</b>	<b>7,903,758</b>
<b>COST OF GOODS SOLD</b>			
Labour	3,461,395	3,456,000	(5,395)
Materials	3,842,000	1,310,522	(2,531,478)
Subcontractors	6,443,326	1,105,654	(5,337,672)
Hired equipment	53,908	18,654	( 35,254 )
<b>Total Cost of Sales</b>	<b>13,800,629</b>	<b>5,890,830</b>	<b>(7,909,799 )</b>
<b>NET REVENUE</b>	<b>9,429,313</b>	<b>9,435,354</b>	<b>(6,041)</b>
<b>OPERATING EXPENSES</b>			
Personnel costs	5,207,828	5,180,176	(27,652)
Utilities	1,693,715	1,829,815	136,100
Motor vehicle expenses (including insurance)	834,568	582,128	(252,440)
Depreciation	745,466	778,935	33,469
Computer maintenance and fees	189,263	198,000	8,737
Professional fees	184,951	125,298	(59,653)
Building maintenance	90,965	87,308	(3,657)
Telephone	54,833	50,400	(4,433)
Supplies and consumables	42,270	74,849	32,579
Insurance	21,560	18,576	(2,984)
Bank charges	26,012	27,000	988
Advertising and promotion	27,313	7,500	(19,813)
Past service pension	611,000	456,000	(155,000)
Post- retirement health liability	2,704,000	-	(2,704,000)
Travel & Subsistence	10,231	20,000	9,769
<b>Total Operating Expenses</b>	<b>12,443,975</b>	<b>9,435,985</b>	<b>(3,007,990)</b>
<b>SURPLUS/ (DEFICIT)</b>	<b>3,014,662</b>	<b>(631)</b>	<b>(3,014,031)</b>

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**20. Explanations of major variances against budget (continued)**

Several categories were presented in summary within the Ownership Agreement whilst being presented in detailed form by NRA in their Financial Statements and throughout the course of the year. The ownership agreement figures shown below represent the budget actually approved by the Legislative Assembly, compared with the detailed Financial Statement figures. Note however the total Revenue and Expenses remained the same in both formats.

**Reconciliation of Ownership Agreement and the Statement of Financial Performance**

	2016/17 Approved Budget \$	Financial Statements 2016/17 \$
<b>REVENUE</b>	<b>15,326,184</b>	<b>15,326,184</b>
<b>COST OF GOODS SOLD</b>		
Labour	-	3,456,000
Materials	-	1,310,522
Subcontractors	-	1,105,654
Hired equipment	-	18,654
<b>Total Cost of Sales</b>	<b>-</b>	<b>5,890,830</b>
<b>NET REVENUE</b>	<b>15,326,184</b>	<b>9,435,354</b>
<b>OPERATING EXPENSES</b>		
Personnel costs	8,335,037	5,180,176
Utilities	-	1,829,815
Motor vehicle expenses (including insurance)	-	582,128
Depreciation	876,777	778,935
Computer maintenance and fees	-	198,000
Professional fees	-	125,298
Building maintenance	-	87,308
Office rental	-	-
Telephone	-	50,400
Supplies and consumables	-	74,849
Insurance	-	18,576
Bank charges	-	27,000
Advertising and promotion	-	7,500
Past service pension	-	456,000
Post- retirement health liability	-	-
Travel & Subsistence	-	20,000
Supplies and consumables	6,114,370	-
<b>Total Operating Expenses</b>	<b>15,326,184</b>	<b>9,435,985</b>
<b>SURPLUS/ (DEFICIT)</b>	<b>-</b>	<b>(631)</b>

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**20. Explanations of major variances against budget (continued)**

**Statement of Financial Performance**

**Revenue**

Revenue saw a positive increase of \$7.9M when compared to budget, the primary drivers being \$7.5M executive asset works which were completed on the directive of the Ministry of Commerce, Planning and Infrastructure (CPI), a \$120k Dart Development private road related works contract and a \$150k National Community Enhancement Project completed on directive of the Ministry of CPI.

**Cost of Sales**

The increase of \$7.910M in cost of sales are primarily driven by additional capital projects that the CPI instructed the NRA to provide in the fiscal period. These projects were not included in initial budgeted road works and hence affected the movement in cost of sales.

**Personnel costs**

Post-retirement health liability was not included in prior years/at time of current budget due to recent introduction of an accounting requirement, this resulted in a variance of \$2.704M over the budget.