



*Annual
Report
2002-2003*

Developing Safe, Reliable & Quality Roads



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PERSPECTIVES



Hon. Robert Dickersgill
Minister of Transport and Works

The 2002-2003 financial year represents the second year since the National Works Agency assumed full responsibility for the functions that were previously executed by the Public Works Department.

In less than eighteen months, the Agency, having been given the challenge to implement a number of programmes, has already clearly demonstrated that it possesses the capacity to creditably fulfill its mandate.

Over the course of the period under review, all parishes have been impacted by a variety of road infrastructure programmes that include:

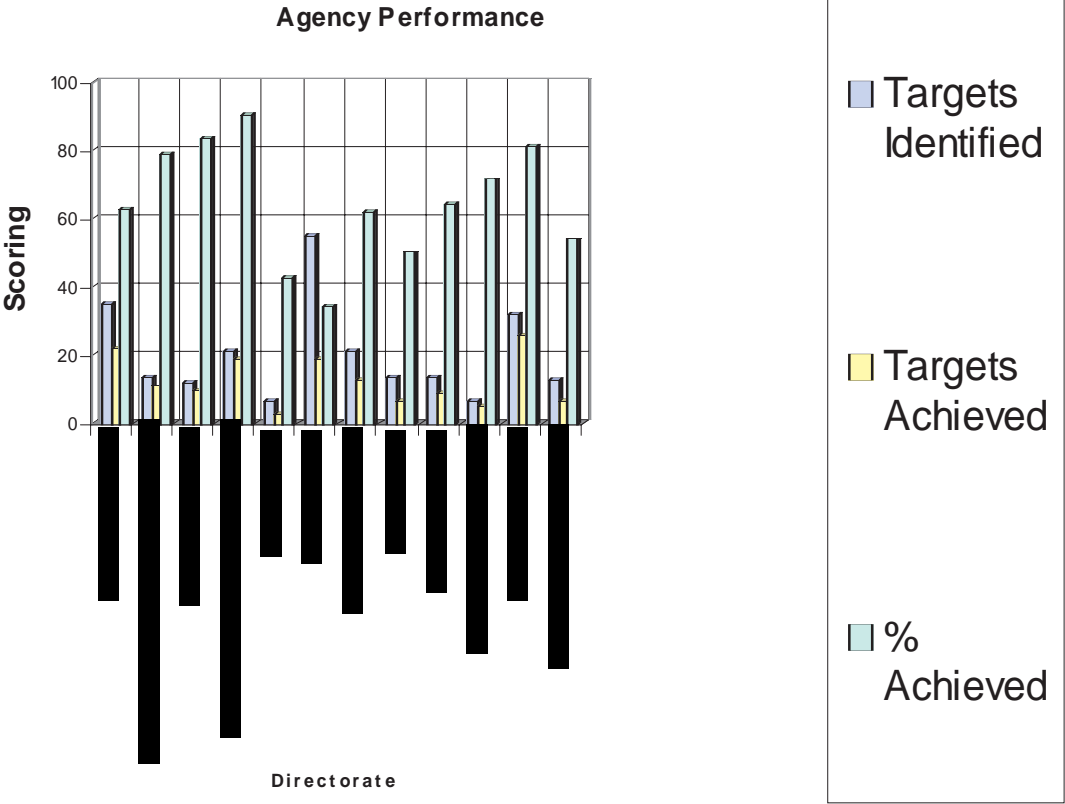
- The National Road Improvement Programme (NARIP);
- The Major Patching Programme and;
- The Urban/Rural Township Rehabilitation & Maintenance Programme.

A number of projects were also designed and implemented, to increase the free movement of people, goods and services across the island.

The National Works Agency is proving equal to the challenge of embarking on plans which are unprecedented in their scope, to improve the roads and road infrastructure in Jamaica.

My congratulations to the Chief Executive Officer and his team, the consultants, contractors and workers who are all playing an integral part in the overall effort to provide the Country with the road infrastructure that is required to underpin a modern economy.

Key Performance Indicators



FINANCE AND ACCOUNTS

Accounts payable includes an amount of approximately **\$192,000,000.00** which represents 50% of Gross Revenue earned but uncollected to be paid to GOJ.

The receivables account created because of NWA's indebtedness to contractors was set off against the Client deposit account. Therefore \$119,606,635.00 is the net position being reflected as current liability for Clients Deposits as the Agency ended the year with outstanding Accounts Payable on contracts entered into on its client's behalf of approximately \$18,916,161.00.

Note 6 Income and expenditure Account –Staff costs

The required disclosure of Employees in receipt of emoluments of over J\$1 million per annum is provided hereunder:

NUMBER OF EMPLOYEES	SALARY RANGE (\$Million)
8	1.00 - 1.25
7	1.26 - 1.50
15	1.51 - 1.75
3	1.76 - 2.00
6	2.01 - 2.25
6	2.26 - 2.50
2	2.51 – 2.75
Nil	2.76 – 3.00
Nil	3.01 – 3.25
Nil	3.26 – 3.50
Nil	3.51 – 3.75
Nil	3.76 –4.00
2	4.01 – 4.25

PERSPECTIVES



Hon. Dr. Fenton Ferguson

Minister of State, Ministry of Transport and Works

The parliamentary year April 2002 to March 2003 witnessed the assumption of my new portfolio as Minister of State in the Ministry of Transport and Works with special responsibility for the National Works Agency. The primary objective of the National Works Agency is the management of the main road network which is comprised of some five thousand (5,000) kilometres of class A, B, and C roads.

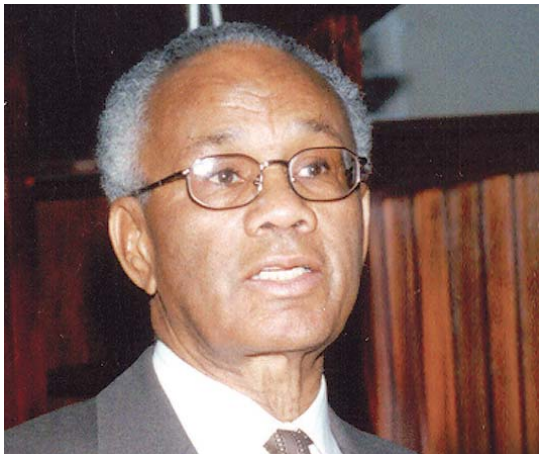
During 2002/2003, however, we partnered with the Local Authorities in the rehabilitation of some additional roads in parish capitals, as well as other towns under the urban/rural roads programme.

Additionally, the Agency managed the flood rehabilitation programmes for roads, bridges, retaining walls, sea defence and drains, financed by the Caribbean Development Bank, the Inter-American Development Bank and the Government of Jamaica.

Other programmes managed during 2002/2003 included the Kuwaiti Fund for Arab Economic Development, covering roads in Manchester, St. Elizabeth and Westmoreland. At the same time, the NWA undertook engineering oversight responsibility for segment 2 of the overall Northern Coastal Highway Improvement Project, whilst managing the Mabey & Johnson and R.A. Murray Bridge programmes. The most challenging of all, however, must have been the extensive programme of rehabilitation of some 150 road sections managed under the National Road Improvement Programme (NARIP). In this milieu the NWA had to contend with the May-June flood rains rehabilitation.

In closing, I pay tribute to the Chief Executive Officer, his Management team, Consultants, Project Managers and the entire Staff body of the NWA, the Hon. Minister, Permanent Secretary and Staff of the Ministry of Transport and Works, the multi-lateral and bi-lateral funding agencies, the Most Hon. Prime Minister, P.J. Patterson and the Government of Jamaica, for their vision and industry in improving the conditions with which the traveling public had to contend, as "The Road to Development is the Development of Roads".

PERSPECTIVES



Hon. Dr. Carlton Davis
Cabinet Secretary

I congratulate the Chief Executive Officer and his staff for what has been achieved to date and wish the Agency, continued success in the future.

The National Works Agency has continued to live up to the high expectations we had for the organization when it was made an Executive Agency of the Government of Jamaica.

Apart from a more business-like approach to the management of the construction, repair and maintenance of roads, bridges and drains, the Agency has been doing a very good job of communicating with the public.

FINANCE AND ACCOUNTS

Note 4 – Debtors

Accounts Receivable	\$371,419,886.75
Prepayment and advances	2,444,672.36
Client Deposits	<u>138,522,796.00</u>
Total	\$512,387,355.11

Accounts receivable is stated after a provision for doubtful debt of \$Nil for this year. The major portion of the receivables represents amounts outstanding from the Ministry of Transport and Works' Capital A&B as well as its deferred financed projects for Project Management Fees.

Client Deposit

At the end of this period the Agency had short - term Deposits totaling \$138,522,796.00 on behalf of its clients. The Agency has no beneficial interest in the application of these funds. Accordingly only the net balances if any, due on these accounts are disclosed.

Note 5- Creditors

Accounts Payable	\$229,889,281.10
NWA Contracts	18,916,161.00
Other Current Liabilities	122,902,306.39
Total	\$371,707,748.49

FINANCE AND ACCOUNTS

Note 2 –Depreciation

Fixed Assets are depreciated by the straight line method at annual rates estimated to write off the difference between cost or valuation and estimated residual value over the following estimated useful life of the asset:

Plant, Machinery and Equipment	not exceeding	10 years
Furniture fixtures and Fittings	"	10 years
Computers Office Equipment	"	5 years
Motor Vehicles	"	5 years
Specialist Assets	"	20 years

Depreciation has been provided for all Assets including those transferred from the Ministry of Transport and Works; those purchased directly by the Agency as well as on donated assets acquired during this year. Actual Depreciation applied to the assets transferred from the Ministry has had an adjusting effect on the provisional amounts charged of approx. 90% increase over the previous financial year.

Note 3 Bank Balances

Operational Bank Account	\$13,737,588.85
Appropriations – in –Aid Bank Account	128,815.33
Total	\$13,866,404.18

PERSPECTIVES



Mr. Ivan Anderson
Chief Executive Officer
"CREATING A WORLD CLASS NETWORK"

The National Works Agency has just completed its second year as an Executive Agency. As anticipated, the year brought its fair share of challenges. Challenges, which provided opportunities for increased growth, in every aspect of our operations and some exceptional successes. Indeed, we have made significant strides in improving the main road network across the island, and learnt some important lessons during the process.

We vigorously pursued the systematic, yet radical

approach adopted last year, to transform the main road network to world class standards, by implementing major road rehabilitation programmes, supported by routine maintenance. In fact, never before in the history of our country, has such an assault been made to arrest the poor road conditions that had threatened to stifle the free movement of people, goods and services.

OUR ACHIEVEMENTS

Through the National Road Improvement Programme (NARIP) and Kuwait Assisted Road Rehabilitation Programme, we targeted rehabilitation of over 1,000 of the 2,900 kilometres of the main road network, which was in poor condition. We enjoyed some success in implementing these programmes, valued at just over J\$5B. The implementation of NARIP, was monumental, as it was the largest road infrastructure project ever attempted in the history of Jamaica. In September, we completed and opened Segment one of the Northern Coastal Highway, which links Negril to Montego Bay.

Concurrent with the huge investment in road infrastructure, we embarked on a series of activities to boost staff morale and equip team members to be multi-skilled, thus improving efficiency within the organization. Out of this process, the Training and Development Unit was established. Already, the Unit has overseen 1,700 man hours of training in key areas, such as Highway and Rural Road

Construction, Pavement Technique and Road Rehabilitation and Maintenance.

We also invested heavily in improving our systems of checks and balances. Our Quality Assurance team has provided strong support for the projects we managed this year. In addition, we began the process of certification by ISO. The ISO principles guide the implementation of a Quality Management System that defines the way we plan, control and manage our road projects. As we standardize the existing processes, we are simultaneously augmenting those activities we consider best practices.

Flood rains in May and June 2002, as well as the effect of the passage of Hurricanes Lili & Isidore in September and October 2002, somewhat retarded our progress. When the clouds had dissipated, the damage to the infrastructure was extensive, particularly in the parishes of Manchester, Clarendon, St. Elizabeth, St. Catherine and St. Thomas. Once again, the team was called upon to spearhead the emergency response and restore access to the many affected communities. I must salute those team members who displayed exemplary leadership in this regard. Of the damage, some forty-nine roads were identified for rehabilitation. Both the Inter-American Bank (IADB) and Caribbean Development Bank (CDB) were instrumental in assisting the country to rebound after the disaster. The IADB provided J\$607M, whereas an additional US\$10M was made available by the CDB.

NEW CHALLENGES

The year 2003/2004 beckons new challenges.

- We must create a culture of excellence within the organization and among our suppliers, so that we can meet our customers' demand for more value from every tax dollar.
- The scope of maintenance activities has to be increased to support the improvements in the road conditions. The Upper and Lower Houses of Parliament, in October 2003, passed a bill to effect the creation of a dedicated Road Maintenance Fund. We look forward to the benefits to be derived from its implementation.
- To complement these activities we must continue to focus on Flood Mitigation and Drainage Improvement Works, so that we are better able to preserve the road infrastructure.

As we face the year ahead, we are unwavering in our commitment to create and maintain the main road network island-wide, to world class standards, so that every Jamaican can reap the real benefits of development.

FINANCE AND ACCOUNTS

FIXED ASSET SCHEDULE FOR YEAR ENDED March 31, 2003						
	Plant, Machinery & Equipment	Computers & Office Equipment	Furniture, Fixtures & Fittings	Motor Vehicles	Specialist Assets	TOTAL
Initial Cost/ Balance as at 01/04/2002	137,118,474.39	15,242,400.68	18,638,354.86	36,044,353.82	157,850.00	207,201,433.75
Purchases/ Disposals/ Prov Bal adj	7,019,795.00 (1,086,200.00)	8,825,152.18 (4,485,345.10)	4,579,023.52 (12,882,789.88)	4,260,000.00 (7,837,651.00)	38,070.00 9,668,686.82	24,722,040.70 (16,623,299.16)
BALANCE	143,052,069.39	19,582,207.76	10,334,588.50	32,466,702.82	9,864,606.82	\$ 215,300,175.29
Depreciation Balance as at 01/04/2002	13,263,342.88	2,355,598.76	1,859,560.85	6,224,896.26	39,462.48	23,742,861.23
Expense	32,823,508.16	3,899,480.80	314,513.30	9,642,893.68	1,255,328.85	47,935,724.79
Balance as at 31/03/2003	46,086,851.04	6,255,079.56	2,174,074.15	15,867,789.94	1,294,791.33	71,678,586.02
NET BOOK VALUE	96,965,218.35	13,327,128.20	8,160,514.35	16,598,912.88	8,569,815.49	\$ 143,621,589.27

FINANCE AND ACCOUNTS

The significant accounting policies follow:

Note 1-Fixed Assets

The previous year's opening balances relating to the various categories of fixed assets have been adjusted consequent on the Ministry of Finance's Approval of the actual assets to be transferred to the Agency from the Ministry of Transport and Works. This resulted in a net decrease of \$16,623,299.16 in the Government of Jamaica Investment for this financial year.

The agency acquired additional computer hardware, office equipment and furniture, motor vehicles and heavy equipment for the amount of \$9,407,626.00 for this year. The agency also brought into its inventory of fixed Assets an additional 3" Dura Patchers" (pot hole patching units acquired through the Ministry of Transport and Works .The total value of this acquisition – \$(6,953,100.00) has been treated as Donated Assets from GOJ. Additionally, 80 Dell Computers were received through the Public Sector Modernization Programme amounting to \$8, 061,600.00. . In accordance with FIEA 11.14.4, the Donated Asset Reserve reflects the net book value of the assets. The value of this reserve at the end of the financial year stands at \$24,050,169.80.

(Fixed Assets Schedule attached.)

REHABILITATION

URBAN RURAL REHABILITATION & MAINTENANCE PROGRAMME

In our continued effort to address poor road conditions islandwide, contracts were signed in the Central, North-Eastern and Western regions in March and April 2001 to rehabilitate roads in major townships. The \$1.2B Urban Rural Rehabilitation and Maintenance Programme was designed to improve some 193 kilometres on 226 road sections. The three-tiered programme included rehabilitation in the first year, and maintenance of roadways, over the remaining 5 years. The maintenance component was deemed as critical in preserving the road network, while reducing the levels of expenditure, as in the long run, it costs less to maintain roads than to rehabilitate them. A patching component valued at \$90.6M was also introduced to improve roads in these townships, which were in need of minor repairs.

The programme was carried out on schedule. Sixty percent of rehabilitative works was completed at a cost of \$553M. Approximately \$79M was spent on the patching component.



Rehabilitation of road and drainage systems underway on Dalling Street, Westmoreland.

FLOOD DAMAGE

The island experienced unusual weather conditions for the past two years. This resulted in instances of heavy and continuous rainfall which resulted in excessive flooding, particularly during the ten day period, May 22 to June 2, 2002. A few months later, in September, we had similar conditions during the passage of Hurricanes Lili and Isidore when the entire island experienced severe flooding. It wreaked havoc on the main road network, rendering some communities inaccessible. Damage to the infrastructure was extensive and five

parishes were declared disaster areas.

Responding to the devastation, the Agency carried out extensive restoration activities. These included clearing of landslips, reconstruction of retaining walls, patching of potholes and road rehabilitation. A total of \$552.7M was spent on these activities islandwide.

CARIBBEAN DEVELOPMENT BANK (CDB) FLOOD DAMAGE PROGRAMME:

Representatives from the Economic Commission for Latin America (ECLAC) and the Caribbean visited Jamaica, on the request of the Jamaican Government to assess the damage resulting from the May/June 2002 flood rains. The team produced a Damage Assessment Report, which enabled the Government to apply to the Caribbean Development Bank for an additional loan of US\$10M to assist with financing a programme to facilitate the rehabilitation of damaged infrastructure islandwide. The total programme cost is now at US\$38,951,000 of which the CDB's contribution is US\$34,872,000 and the GOJ US\$4,079,000. The GOJ's component was used to cover the cost of consultancy and project management fees, as well as, drainage restoration works. Disbursement from the loan totaled US\$4,792,749. See table 1 below for a breakdown of the activities completed.

In addition, just under 30 road rehabilitation contracts were tendered and awarded. The works are expected to cost JA\$600M. The pace of works in the programme is expected to increase in the coming year, as the NWA has received approval from the GOJ for an accelerated award of contracts for projects valued at up to JA\$15M.

FLOOD DAMAGE REHABILITATION WORKS

ACTIVITY	EXPENDITURE JA\$M
Drainage Restoration (gullies)	60
River Training	25
Construction of Retaining Walls	45
Rehabilitation of Bridges	47
Purchase of Gabion Basket	2
Road Rehabilitation	35
Total	214

Table 1

FINANCE AND ACCOUNTS

NOTES TO THE FINANCIAL STATEMENTS

Year ended March 31,2003

Basis of preparation and significant accounting policies

The financial statements have been prepared under the historical cost convention modified for the inclusion of some fixed assets at valuation and in accordance with the Jamaica Generally Accepted Accounting Principles (GAAP), which is based on statements of Standard Accounting Practice (SSAP) issued by the Institute of Chartered Accountants of Jamaica (ICAJ). Any departure from GAAP is only as it relates to specific instructions by GOJ Financial Instructions to Executive Agencies (FIEA).

The financial statements have been prepared on the basis of fundamental accounting concepts identified by SSAP 2: Going concern, Accruals, Consistency, Prudence and Materiality.

The reporting currency is Jamaican Dollars.

FINANCE AND ACCOUNTS

STATEMENT OF CHANGES IN NET ASSETS/EQUITY					
Financial Year 2002 /2003					
(in thousands of dollars)					
	Contributed Capital	Revaluation/ Donated Asset Reserve	Translation Reserve	Accumulated Surpluses/ (Deficits)	Total
Balance as at April 01, 2001	183,563				\$ 183,563
Restated balance					
Surplus on revaluation of property					
Currency translation differences					
Net gains and losses not recognized in the statement of financial performance		12,837		81,950	
Net surplus/deficit for the period		12,837		81,950	94,787
Balance as at March 31, 2002	183,563	12,837		81,950	278,350
Deficit on revaluation of property/valuation of fixed assets transferred from MTW	(16,623)				
Surplus on revaluation of investments					
Net gains and losses not recognized in the statement of financial performance		11,214		25,227	
Net surplus/deficit for the period	(16,623)	11,214		25,227	19,818
Balance as at March 31, 2003	166,940	24,051		107,177	298,168

MAY/JUNE IADB FLOOD DAMAGE REHABILITATION PROJECT:

The five parishes of Manchester, Clarendon, St. Elizabeth, St. Catherine and St. Thomas were extensively damaged during the flood rains of 2002. The Inter-American Development Bank's component of the flood damage project aims at restoring 178 kilometres of the main road network in these five parishes, over a four month period, at a cost of JA \$607M. Seventeen roads have been identified for rehabilitative works, which include major drainage improvement, rehabilitation of road surfaces, as well as reconstruction of retaining walls. Work is underway on all control sections.

DIRECTORATE OF REGIONAL IMPLEMENTATION:

The directorate of Regional Implementation is primarily responsible for the maintenance of the 5,000 kilometres of main road network. This maintenance is carried out through its Regional Offices. They have the responsibility to plan and implement road rehabilitation and improvement projects, utilizing the Agency's equipment and other resources. The fleet of equipment assigned to each region combined with those of Maintenance Contractors also enables the Directorate to respond to emergencies in a timely manner.

ACHIEVEMENTS:

The Directorate employed many road management strategies to maintain and improve the main road network. These include the following projects:

- a. Spray Patching

b. Major Patching

c. Periodic Maintenance
- d. Routine Maintenance

e. Flood Damage (Emergency) Rehabilitation

f. National Road Improvement Programme (NARIP)- Force Account

a. Spray Patching

Under this programme, some 187,555m² of patching was carried out across the island, employing the newly acquired extrusion technology.

b. Routine Maintenance Programme

The 5, 000 kilometres of the main road network was maintained under this programme utilizing, maintenance contractors. All roads were bushed, drains cleaned and road surfaces patched.

c. Major Patching

The Agency undertook a major patching programme in March 2002, which involved local rehabilitation to 467,748 m² on 52 roads in 11 parishes across the Western, North Eastern and Central regions. Works included rehabilitation of localized failure of the respective road sections as well as drainage improvement where necessary. The programme costed approximately \$310M. The works were expected to be completed in 30 weeks, however due to flood rains in June and November 2002 the completion dates were revised. Patching activities were done in the Central Region by December 2002. Approximately 423,000 m² of patching has been in total.

d. Flood Damage (Emergency) Repairs

During the year the road network sustained damage from three major flood events. The Agency's response to these events was quick and decisive in restoring access to roadways for the nation's motoring public. The repair activities included the patching of scoured road sections, as well as construction of retaining walls. Some 417,208 m² of patching was carried out and 144 retaining walls constructed.



Alley Bridge, Clarendon after flood rains in May 2002.

e. Periodic Maintenance Programme

Asphaltic Concrete Enterprise was awarded a contract amounting to approximately J\$86M to undertake this programme. Some 13 kilometres of arterial roads were resurfaced or overlaid with Asphaltic Concrete in three parishes:

St. Catherine:	Bog Walk to Linstead
Manchester:	Spur Tree to Gutters
St. Elizabeth:	Rocky Hill to Santa Cruz & Glenco to Wilton

f. National Road Improvement Programme (NARIP)-Force Account

The Central and Western regions combined, rehabilitated a total of 26 kilometres of roadways under NARIP using the Agency's resources. Eight roads were completed under this programme in the parishes of St. Elizabeth, Clarendon and Westmoreland.

FINANCE AND ACCOUNTS

NATIONAL WORKS AGENCY STATEMENT OF CASH FLOW For year ended March 31,2003		
	Financial Year 2002/003	Financial Year 2001/2002
	\$	\$
Net Expenditure	(169,226,710.09)	(162,078,212)
Adjustments		
Depreciation	47,935,725.00	23,742,861
(Gains)/ losses on investments	-	-
Donated Asset Revenue	(4,100,881.52)	(1,067,195)
Interest paid to GOJ	2,193.70	-
Other Amounts paid to GOJ	(191,847,172.32)	(138,506,642)
(Gains)/Lossess on Sale of Fixed Assets	-	-
Foreign Currency gain/(loss)	-	-
Increase/(Decrease) in Current Liabilities	274,107,813.49	97,599,935
(Increase)/Decrease in Current Assets	(330,424,179.11)	(181,963,176)
Total Adjustments	(204,326,500.76)	(200,194,217)
Net Cash provided by Operating Activities	(373,553,210.85)	(362,272,429)
Investing Activities		
Capital Expenditure	(9,407,626)	-9,734,330
Proceeds from Sale of Fixed Assets	-	-
Payments to/from EAIF	-	-
Net Cash Flow from Investing Activities	(9,407,626)	-9,734,330
Finance		
Loans from GOJ	-	-
Loan Repayments	-	-
Net Financing	-	-
Recurrent Financing from Consolidated Fund	386,299,000	382,535,000
Increase in Cash and Cash Equivalents	\$ 3,338,163	\$ 10,528,241
Opening Cash Balance	10,528,241	-
Increase in Cash and Cash Equivalents	3,338,163	10,528,241
Closing Cash Balance	\$ 13,866,404	\$ 10,528,241

FINANCE AND ACCOUNTS

NATIONAL WORKS AGENCY INCOME AND EXPENDITURE STATEMENT FOR THE PERIOD ENDING MARCH 31, 2003			
	Notes	March 2003 \$	March 2002 \$
Income			
Management Fees		315,698,709	203,236,293
Motor Vehicles & Equipment Hireage		65,328,558	71,197,866
Technical Services		298,470	184,000
Others		8,601,687	2,395,125
Total Income		389,927,423	277,013,284
Expenses			
Staff cost	6	361,494,429	303,844,286
Goods and services		96,187,271	63,974,295
Premises related expenses		47,696,991	40,115,715
Other Costs		5,610,604	7,414,339
Depreciation		47,935,725	23,742,861
Interest and charges		229,113	
Total Operating Expenses		559,154,133	439,091,496
Operating Deficit		(169,226,710)	(162,078,212)
Loss/profit on disposal of fixed assets		-	-
Interest expense		-	-
Interest income		2,194	-
GOJ(50%) Gross Revenue collected		191,847,172	138,506,642
Net Deficit before GOJ Financing		(361,071,689)	(300,584,854)
GOJ Financing from Consolidated Fund		386,299,000	382,535,000
Retained Surplus after GOJ Financing		25,227,311	81,950,146

QUALITY ASSURANCE

A key element of project management is ensuring that the processes involved in the delivery of services are documented and meet the required standards of quality. In 2002/2003 the Agency intensified its efforts to improve the Quality Management System and become complaint with ISO 9001 Quality Management Standard.

To achieve this, the Quality Assurance department completed the Quality Manual, drafted the Standard Operating Procedures Manual and established a Project Implementation team. The major achievements include:

1. The re-organizing of the Soils and Material Laboratory, which was renamed Materials Testing and Evaluation Unit (MTEU).
2. Training of over 25 % of staff in the implementation and documentation of ISO 9001 Quality Management Standards.
3. Monitoring and Auditing of the following projects :
 - Routine Maintenance (phases II, III & IV)
 - Northern Jamaica Development Project (NJDP) Segment II
 - Major Patching
 - National Road Improvement Programme (NARIP)
 - Urban Rural Rehabilitation and Maintenance
 - Bridges (Plantain Garden, Red Hills Road Overpass, Sandy Gully, Rochester, Merrivale, Fort George and Westmoreland)
 - Three Miles Traffic Management
 - May Pen Revenue Centre
4. Tests are now standard procedure, used to assess the quality of work carried out by contractors.

With the establishment of the MTEU and continued sensitization of staff to ISO quality management system, the Quality Assurance Department has assisted the Agency to improve the system of checks and balances on projects. This has been reflected in the improvement in value we recieve on road rehabilitation projects.



Fitzroy Cunningham; Soils, Materials Engineer Technician explains the procedures for carrying out the moisture density relationship test at the Material Testing Unit Open Day 2003.

MAJOR PROJECTS

NORTHERN JAMAICA DEVELOPMENT PROJECT:

NORTH GULLY PROJECT

A drainage and flood control project has been developed in Montego Bay primarily to mitigate frequent flooding to the downtown areas of the city. In addition, the project would help to create a sanitary environment, improve the city's aesthetics and provide a more attractive environment for visitors. North Gully, which was constructed in 1964, forms a part of this vision.

The floods rains of May 2002 did extensive damage to sections of the North Gully which stretches across the four geographical areas of Green Pond, Salt Spring, Rosemount and Upper King Street. In response, the National Works Agency developed a \$181M repair project to strengthen some of the weak sections and widen other areas of the gully. The work also included replacement and alignment of sections of the gully and construction of an additional 740 metres long U drain. Three bridges were also built. This helped to protect the communities located on the fringes of the Gully. Box Culverts and a Random Rubble Wall were also reconstructed to replace the damaged Ford. Pedestrian bridges were constructed for residents on both sides of the Gully.

NORTHERN COASTAL HIGHWAY IMPROVEMENT PROJECT

The Northern Coastal Highway extends approximately 288 kilometres along the North Coast and links Negril in Westmoreland to Fair Prospect in Portland. The improvement taking place as part of the Northern Coastal Highway Improvement project is divided into three segments for administrative purposes. Each segment is being improved with financial assistance from separate funding sources.

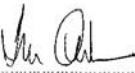
Segment 1- Negril to Montego Bay. This 71.2 kilometre stretch was funded by the Overseas Economic Corporation Fund (OECF) of Japan at a cost of US \$110,170,000. This segment was substantially completed and opened in September 2002.

Segment 2- Montego Bay to Ocho Rios. Segment two connects Montego Bay to Ocho Rios. It is 97 kilometres in length and funded by a joint venture arrangement between the Inter American Development Bank and the Government of Jamaica. The estimated cost of the project is US\$122M. The major works include overlay of 18 sections of the existing road pavement and reconstruction of the existing or new alignment. Over 130 Bus Bays and 60 right turn lanes are being provided at major intersections.

Segment 3- Ocho Rios to Fair Prospect. This phase of the project is being funded by a grant from the European Development Fund. To date, designs, tender documents and drawings have been submitted for review by the European Union.

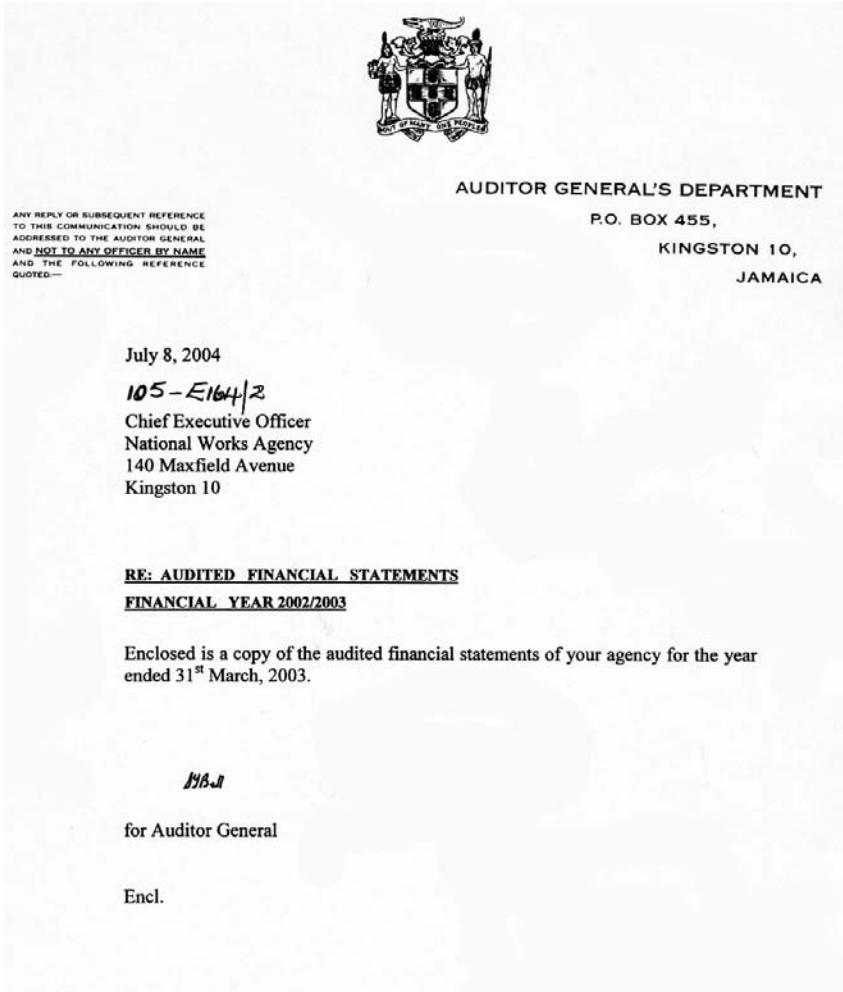
FINANCE AND ACCOUNTS

NATIONAL WORKS AGENCY			
BALANCE SHEET AS AT 2003 MARCH 31.			
	Notes	March 2003	March 2002
FIXED ASSETS			
Plant, Machinery and Equipment		143,052,069	137,118,474
Computers and Office Equipment		19,582,208	15,242,401
Furniture,Fixtures and Fittings		10,334,589	18,638,355
Vehicles		32,466,703	36,044,354
Specialist Assets		9,864,607	157,850
Total Fixed Assets	1	215,300,175	207,201,434
Depreciation Provisions	2	71,678,586	23,742,861
Net Fixed Assets		143,621,589	183,458,573
Investment in EAlF			-
CURRENT ASSETS			
Inventories		-	
Trade and other Receivables	4	512,387,355	181,963,176
Cash and cash equivalents	3	13,866,404	10,528,241
		526,253,759	192,481,417
CURRENT LIABILITIES			
Creditors	5	371,707,748	97,599,935
Net Current Assets		154,546,011	94,891,482
Provisions		-	-
NET ASSETS		298,167,600	278,350,055
Long Term Liabilities		-	-
		298,167,600	278,350,055
Financed by:			
Capital - (GOJ Investment)		166,939,973	183,563,272
General Reserve (Retained Earnings)		81,950,146	-
Revaluation Reserve		-	-
Donated Assets Reserve		24,050,170	12,836,636
Retained Surplus		25,227,311	81,950,146
		298,167,600	278,350,054


Ivan P. Anderson
Chief Executive Officer


Elaine Neita
Director Finance and Accounts

FINANCE AND ACCOUNTS



NATIONAL ROAD IMPROVEMENT PROGRAMME(NARIP):

This programme provides for the rehabilitation of approximately 1,000 kilometres of roadway on 150 road sections islandwide. The programme is sixty percent (60%) complete. Taking over certificates were issued for twenty roads, while the remaining road sections are in various stages of implementation.

KUWAIT/SAUDI/OPEC ROAD REHABILITATION PROGRAMMES

Under these programmes, we tendered and awarded contracts for rehabilitation of the Mandeville to Mark Post, Whitney Turn to Trinity and Williamsfield to Greenvale roads in Manchester, Spanish Town Bypass in St. Catherine and Stony Hill to Toms River in St. Andrew.

The contractors were mobilized and works have started. During the period, contracts were also tendered and awarded for the following road sections:

- Highgate Hall to Stettin and Ulster Spring to Albert Town in Trelawny
- Torrington to Galloway and Truro Gate to Locus Tree in Westmoreland.

BRIDGE PROGRAMMES:

Under these programmes, a number of bridges were repaired and construction of new ones started. During this period we achieved the following:

- a. Rehabilitation of the Fort George Bridge in St. Mary was completed, while work is in progress on the Styxx River and Plantain Garden River Bridges;



Newly completed Fort George Bridge, St. Mary

- b. Completed designs, awarded contracts and mobilized for rehabilitation of the Banbury, Serge Island and Black River bridges;
- c. Launched a Bailey Bridge at the Yallahs Ford;
- d. Effected critical repairs at Seven Rivers, Poormans Corner, St. Thomas and Bushy Park bridges;
- e. Procured bridge components to facilitate the planned bridge replacement programme for the next few years under the R. A. Murray and Mabey Johnson programmes.

RIVER TRAINING AND PROTECTIVE WORKS

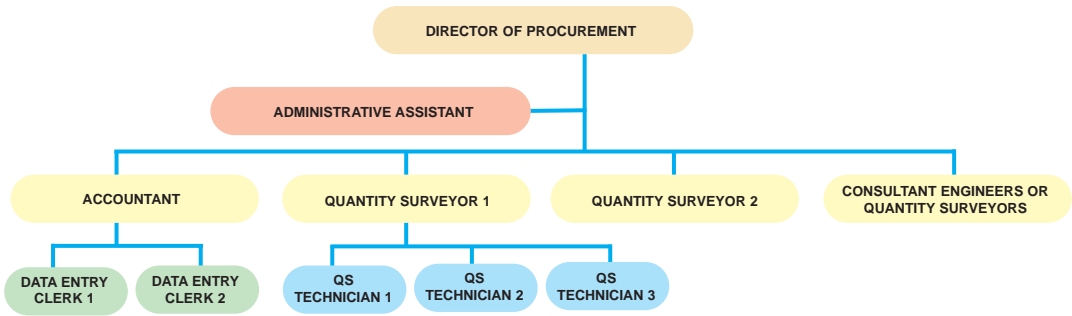
The NWA has placed great emphasis on River Training because it is one of the most effective and successful methods of flood control along our rivers. These flood control works, are primarily aimed at guiding the flow of rivers, a process which also involves protection of the bed and banks from erosion, thus ensuring efficient transportation of sediment load.

Heavy rainfall invariably leads to flooding which often results in the failure of embankments, turbulence at bridges and erosion. During the year, exceptional flooding was experienced throughout the island. This posed severe challenges to both the resources, as well as personnel dedicated to overseeing effective Flood Control. These challenges were particularly evident in Portland, St. Thomas, St. Mary and St. Catherine. Bunding works, River Training, construction of retaining walls to restore the main road and desilting of the river channel were carried out in St. Thomas, at Georgia, Trinityville, York and the Sulphere River.

In Portland, projects were undertaken in seven areas: Spanish River, Swift River, Chepstowe, Bybrook, Ann's Delight, Woodstock and Skibo. These included Gabion protective works, bunding, desilting and realigning of river channels. The works carried out in St. Mary were similar to those in Portland. These projects were undertaken at Haughton River, Brae's River and Westmoreland Bridge. Desilting and realignment of the river channel were undertaken in Bushy Park, St. Catherine.

Despite the limitations, the Agency was able to meet the challenges and effect the required flood control measures. It is anticipated that we will continue to carry out our mandate of providing assistance in disaster preparedness through technical advice and engineering support to coastal defences and river training programmes in the year ahead.

PROPOSED STRUCTURE OF THE DIRECTORATE OF PROCUREMENT



Already, the Director, Administrative Assistant and three Quantity Survey Technicians are in place. The remaining personnel will be recruited from the ranks of existing NWA officers. Due to the shortage of funds which has affected the pace of the rehabilitation at 140 Maxfield Avenue the Directorate of Procurement is currently housed in two separate offices. This hampers the operations of the directorate but it is hoped that a single location will soon be identified where the resources may be centralized.

The directorate now has financial administrative responsibility for the Flood Damage, Urban Rural Rehabilitation and Patching Programmes. Guidance on financial administration was provided to the NARIP project team. It also oversees procurement and post-contract administration for the Kuwait Fund Road Rehabilitation Projects.

Achievements:

- 150 contracts are available in electronic format
- Standard forms of contract have also been posted on the server.
- The department has also standardized valuation and variation forms.
- Agreement on types of contract for various projects.
- Establish route for all payment instruments.
- Temporary Electronic bill tracking system is being developed.

The Procurement Section of the Standard Operating Procedures Manual will be published shortly. We have developed standard forms for valuations and variations. The types of contract to be used for various projects and sizes have been agreed. The routing of all payment instruments has been agreed and a temporary electronic bill tracking system is being developed.

DIRECTORATE OF PROCUREMENT

The March 2002 staff retreat addressed several issues which affect the proper functioning of the National Works Agency. Among these was the method of procurement. During the period 2002/2003 three Directorates held this responsibility. This approach often times prevented projects from being completed on time and within budget. The establishment of this new Directorate relieved the Regional Implementation and Major Projects Directorates of the responsibility. This enabled greater focus on issues of contract management and quality control.

THE RESPONSIBILITIES OF THE DIRECTORATE OF PROCUREMENT ARE AS FOLLOWS:

- 1 Ensuring that designs and surveys are properly carried out at all stages of the project cycle.
- 2 Ensuring that the raw and processed data on which estimates are based is kept up to date and available for estimators.
- 3 Training and briefing surveyors, engineers and estimators who would carry out the functions at 1 and 2 above.
- 4 Compiling/managing estimates, bills of quantities, tender and contract documentation.
- 5 Planning and implementing a payment tracking system to cover all payments for Project Implementation.
- 6 Managing, on behalf of the Project Managers, and implementing of all procurement processes from initial budget estimate to Contract Start-up on Site.
- 7 Assisting Project Managers to manage all the financial aspects of Contracts from Start-up on Site to issue of Final Certificate.
- 8 Collecting data on contracts with a view to decreasing incidences of Final Account overruns or late completions.
- 9 Managing the negotiation of Contractual Claims.
- 10 Co-operating with and briefing the NWA's legal officers and attorneys and the Solicitor General.
- 11 In collaboration with Quality Assurance Directorate, writing a manual which will cover all project related procedures.



River Training works underway at Hopewell in St. Mary.



Gabion Basket works in progress at Haughten River, Orokage Hall Bridge, St. Mary.

TRAFFIC MANAGEMENT PROGRAMME

The volume of traffic on our roads has increased steadily in recent years. Traffic studies, carried out by the NWA, at some key intersections in the corporate area, revealed an average increase in traffic volume of 7,751 vehicles per intersection during the three year period 1999-2002 (see figure 1 below). These increases posed a challenge to the NWA, to unearth and implement strategies to reduce traffic congestion and improve the ease with which motorists use our roadways. The Agency has met this challenge by embarking on a variety of Traffic Management solutions designed to curtail traffic congestion. These solutions have been introduced incrementally. During 2002/2003 the programme focused on the dualization of roadways, signalization of intersections and alteration to road markings. These activities were carried out mainly in the Corporate Area and Montego Bay.

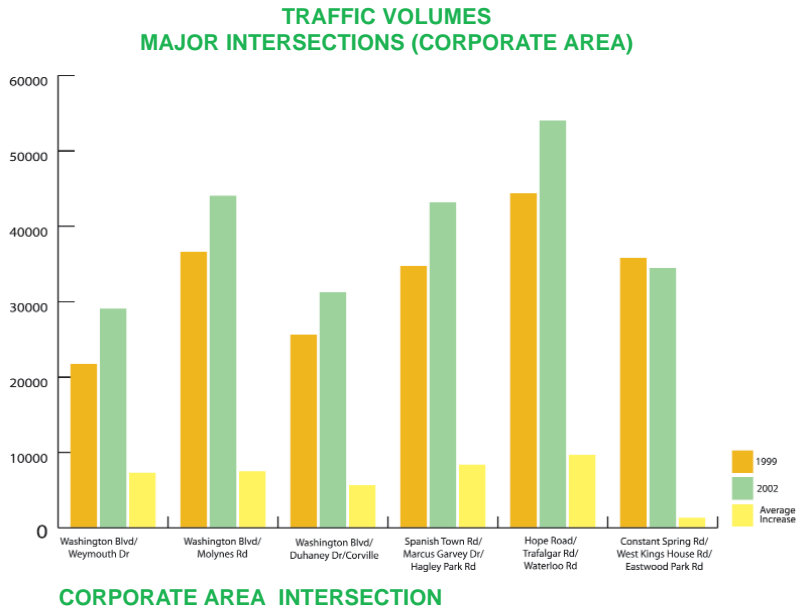


Figure 1

SENIOR MANAGEMENT



Milton Hodelin
Director - Regional
Implementation



Wain Anderson
Director - Asset Management



V. George Palmer
Manager - Communication and
Customer Services

SENIOR MANAGEMENT



Ainsworth Savage
Chief Internal Auditor

Jennifer Henry
Director - Human Resource
Management and Administration

Patrick Rose
Director - Planning and Research

The Agency has completed work on three projects which came on stream last year.

These are:

- Phase 1 of the dualization of the Washington Boulevard, which stretches 2.7 kilometres from Six Miles to Molyne's Road;
- Trafalgar Road Improvement Project; and
- Three Miles Round-A-Bout removal project.

We undertook other Traffic Management projects as well. These are long term and intended to overcome the challenges with which we have been faced, thus meeting the needs of our customers. The status of these activities is listed below:

- Completed signalization of the Spanish Town Road/Hagley Park Road and Marcus Garvey Drive intersections;
- Completed the erection of the bridge at Sandy Gully, near Market Place, Constant Spring Road, and commenced the associated road works from West Kings House to the Dunrobin /Constant Spring Road intersection. These works are nearing completion;
- Erected two bridges at the Red Hills road underpass in preparation for Phase II of the dualization of Washington Boulevard. This included the widening of the corridor from the Washington Boulevard /Molyne's road intersection to the Dunrobin/Constant Spring intersection;
- Erected the bridges for the dualization of the Howard Cooke Boulevard in Montego Bay and commenced the road works;
- Commenced works on the Spanish Town road (Waltham Park road to Darling Street) and achieved 35 % completion.

The Traffic Management team also analyzed and prepared preliminary designs for a number of other locations such as:

- Manor Park
- Upper Waterloo Road
- Old Hope Road
- Barbican Road/Russell Heights intersection

Raised Pavement Markers (RPM) and road markings were completed by Advance Technical Services, along five major corridors island wide at a cost of \$7,758,525. Road markings were also painted on 61 roadways in the corporate area by a team from the Traffic Management department. Over 30 kilometres of road markings were undertaken in other areas of the island. This improved safety on the roadways and increased awareness among road users.



Box Junction at Hagley Park Road/Maxfield Avenue intersection, Kingston

BOX JUNCTION

In November 2002 a meeting was convened between the Police and the National Works Agency to address the continuous and increased blocking of intersections in the Corporate area. Increased traffic flows, as well as pre-Christmas shopping traffic stretched the resources of the Police and their capacity to man a number of signalized intersections. Additionally the afternoon peak required greater policing to ensure better behaviour by motorists at these signalized intersection. The inability to prosecute motorists who blocked intersections due to the inadequacy of the existing law and the frequency of this violation was also discussed.

The Box Junction, a low cost traffic measure was developed and implemented prior to December 1, 2002 at the most critical intersections in the corporate area. They measure 15 x 15 metres and have diagonal grids placed approximately one metre apart. They are currently located at the following intersections:

- a. Eastwood Park Road & Molynes Road
- b. Waterloo Road & Hope Road
- c. Hope Road, Half Way Tree & Constant Spring road
- d. Hagley Park road & Maxfield Ave
- e. South Odeon Ave and Constant Spring road.

SENIOR MANAGEMENT



Roger Smith
Manager - Technical Services



Yvette Castell
Director - Quality Assurance



Anthony Gibson
Director - Major Projects

SENIOR MANAGEMENT



Ivan Anderson
Chief Executive Officer



Earl Patterson
Deputy C.E.O.



Elaine Neita
Director - Finance & Accounts

The expectation was that by December 1, 2002, enforcement would result in a modification of behavior prior to the expected increase in traffic volume during the last week before Christmas. Intersections were selected based on daily traffic volumes, incidence of blocking and the effects on adjacent intersections when these junctions were blocked for prolonged periods. Box Junctions were introduced from which a number of benefits were derived:

- The anticipated pre-Christmas increase in traffic was more manageable with less Police presence
- It provided the Police a defined area of the intersection that should be cleared of obstruction.

The increased enforcement and the introduction of Box Junctions led to reduced obstruction at intersections. The Agency has received several calls commending us for this initiative and a request for the programme's expansion.

TECHNICAL SERVICES

In accordance with its mandate to provide design inputs for programmes, the Technical Services department provided oversight for the following projects:

BRIDGE DEVELOPMENT PROGRAMME:

1. R.A MURRAY BRIDGE PROGRAMME (CANADIAN)

This is a five year programme to cover the replacement of forty (40) bridges island-wide. It was developed to provide design and procure steel girders and accessories on a yearly basis to address 8 bridge sites per year. The project support for each year is valued at Canadian \$5M. The project inputs, locally, include Geotechnical investigation, topographic survey and alignment design, hydraulic study and recommendation of bridge spans, preparation of tender documents, and design (supervision) during construction.

The list of bridges for which designs were completed and fabricated and for which shipment of materials was finalized over the period, include:

- | | | | |
|----|-------------------------------|---|---|
| 1. | Banbury Bridge, St. Catherine | - | Designs completed and approved, contracted awarded. |
| 2. | Fort George, St. Mary | - | Under construction. |
| 3. | Serge Island, St. Thomas | - | Under construction. |
| 4. | Styxx River Bridge | - | Under construction. |

2. MABEY & JOHNSON PRIORITY BRIDGE PROGRAMME

This is a £22M contract to replace approximately 44 bridges islandwide. During the period, site inspection and evaluations were initiated for selection of bridge sites for the programme; subsequent to which the supply contract was signed in August 2002. In total, 85 bridges were inspected.

3. LOCAL BRIDGE INSPECTION, REPAIR AND CONSTRUCTION

A total of 126 bridges were inspected during the period. This included those bridges inspected in conjunction with the Mabey & Johnson Programme outlined above. A total of seven (7) bridges/ culverts were identified for rehabilitation or new construction. These include Sevens River Bridge, Gordon Town bridge, Bushy Park Bridge, Devils River Bridge, Alligator Church Bridge.

4. FLOOD DAMAGE WALLS AND SLOPE STABILIZATION

During the period under review 50 projects were inspected and design works initiated.

INTERNAL AUDIT

The Internal Audit Department provides independent, strategic advice to the Chief Executive Officer on all aspects of the daily operations of the Agency. Its major focus has been to ensure compliance with existing Government laws and regulations/instructions as well as accepted accounting practices.

In order to achieve its primary responsibility of providing audit coverage for the Agency, the unit established some key performance targets against which its success should be measured.

It conducted relevant audits and reviews of existing, new and developing systems thus providing the management team with information pertaining to deviations from standards, procedures and other breaches of the Government of Jamaica's Laws. Through audit recommendations, the Agency was able to identify and implement appropriate corrective actions.

One of its priorities was ensuring that operations in the unit were standardized thus contributing to the attainment of conformity. The department published its Audit Policy and Audit Charter in January/February 2003 and its Audit Manual is now 25 % complete.

Department members attended professional conferences, workshops and seminars during the year as a means of ensuring that their current knowledge base is maintained. The unit is in the process of implementing internationally recognized audit standards such as International Accounting Standards. It has also developed a cadre of persons proficient in information technology, audit techniques and now has membership in International and local audit bodies.

ASSET MANAGEMENT

The Directorate of Asset Management comprises Properties and Equipment Management, Legal Services and Information Technology. The Directorate concentrated on achieving three main objectives for the period April 2002 - March 2003:

1. Securing office space for each directorate;
2. Upgrading physical facilities so that the working environment was safe, functional and comfortable; and
3. Ensuring the availability of reliable and efficient tools.

MAJOR ACCOMPLISHMENTS INCLUDE:

- Refurbished offices at a cost of \$17.5M, of which over, 30% of staff benefited;
- Electronic security systems supported by security guards was introduced in 2003;
- Inspections of 27 buildings were conducted and a database is being developed;
- New parking spaces created at the Corporate Office to accommodate visitors and staff members;
- 95% availability of 4x4 vehicles and 75% availability of equipment;
- The maintenance schedule for all equipment and motor vehicles was completed and we now have full compliance for assigned vehicles;
- A limited software programme for spares inventory is now being used & a procedures manual for stores operations has been introduced;
- 30% of the required safety gear (helmet, glove, vest, etc) was distributed to staff ;
- Reverse warning devices were installed on 6 trucks;
- Acquired ten cellular phones, one power wash machine, two sets impact tools and Falling Weight Deflectometre;
- Commissioned the Local Area network at the Corporate Office and provided internet access for all offices;
- \$250,000 was spent on office equipment such as fax machines, photocopies and digital cameras.



Bushy Park Bridge, St. Catherine, approach being rehabilitated.



Styxx River Bridge, Westmorland, to be rehabilitated.

PROJECTS INSPECTED AND DESIGNED BY TECHNICAL SERVICE		
#	PROJECTS	PARISH
1	Slope stabilization - Eccleston to Fair Prospect	Portland
2	Retaining walls - Trinityville to Cedar Valley (One Gabion & One rubble stone wall)	St.Thomas
3	Retaining wall- Wire Fence to Warsop (Two Gabion walls)	Trelawny
4	Retaining wall - Trinityville to Mt. Vernon (Rubble Stone)	St. Thomas
5	Retaining wall - Williamsfield to Glengoffe (Gabion)	St. Catherine
6	Retaining wall - Guava Ridge to Silver Hill Gap (Rubble Stone)	St. Catherine
7	Slope Stabilisation - Penington to Ewarton	St. Catherine
8	Wall (rubble stone)- Devon Pen	St. Mary
9	Wall/Slope Stabilisation - Stettin	Trelawny
10	Retaining wall - Wilmington (Gabion wall)	St. Thomas
11	Retaining wall - Halberstaad to Drummond (Rubble Stone wall)	St. Andrew
12	Retaining wall - Section to Silver Hill Gap (Gabion Wall)	St. Andrew
13	Retaining wall - Potosi (Rubble Stone wall)	St. Thomas
14	Retaining wall -Bull Bay to Papine (Rubble Stone)	St. Andrew
15	Pipe Culvert at Hortley	St. Thomas
16	Retaining wall - Worthy Park to Camperdown (Gabion Wall)	St. Catherine
17	Retaining wall - Bog Walk to Santa Maria (Rubble stone)	St. Catherine
18	Retaining wall - Guava Ridge to Cooper Ridge (Rubble Stone)	St. Andrew
19	Retaining wall - Nolan Hill to Border (Rubble Stone)	St. Andrew
20	Retaining wall - Morant Crossing to White Hall (Rubble Stone)	St. Thomas
21	Retaining wall - 11 Miles (Rubble Stone)	St. Thomas

Table 2

Shingle in Road Construction, *The use of Marl in Road Construction* and *Simple Rules to teach your child about Road Safety* were developed by the Department to complement this process. The **Info Road** brochure was used to inform the public of major improvement works programmes being undertaken on roads across the island.

NWA and the MEDIA

The Department enjoyed amicable relationships with the Media. There was significant contribution in the dissemination of important information to the public through this medium. News Releases, Media Advisories and NWA's newsletter, the Roadster were used in the Department's efforts to keep the various publics constantly informed about the Agency's activities. The guiding principle being transparency, accountability and an obligation to provide service that meet the needs of our customers.



Examples of NWA Brochures

COMMUNICATIONS AND CUSTOMER SERVICES

We sustained and maintained our visible and aggressive customer service programmes. Throughout the year, the Department looked at its on-going programmes and made adjustments where these were necessary. New ones were introduced and our efforts were successful in carrying out our mandate of providing our customers with first class customer service and information.

NWA UPDATE

A new television feature, NWA Update was introduced in February 2003. This was well received by our customers and had the effect of keeping the public abreast of important weekly undertakings of the Agency.

DEDICATED CUSTOMER SERVICE LINES

The establishment of the Toll-Free customer service line, **ONE-ROAD or 663-7623** continued to play a critical role in the interaction between customers and the Agency. The line is constantly monitored and complaints documented and referred to responsible officers for investigation and action. While the number of complaints was significant, this did not hamper the speedy resolution of complaints and the addressing of the wide range of issues raised by our customers.

CUSTOMER COMPLAINTS

A major undertaking of the Department continues to be its focus on Customer Complaints and their resolution. Between November 2002 and March 2003, over 377 complaints were received. This represents an average of 63 per month with the average resolution being 49 percent. Our thrust in the ensuing period will be to increase the volume of our complaints resolution.

COMMUNITY MEETINGS

The need for information continues to be of critical importance. With this in mind the Department continued its schedule of regular meetings with its customers and stakeholders. Against this background emphasis was placed on informing our customers who occupy holdings along the Northern Coastal Highway between Ocho Rios in St. Ann and Fair Prospect in Portland about Segment III of the Northern Coastal Highway Improvement project. The interactions were fruitful and mutually beneficial.

Caring for our roads and the materials used in construction is a major contributor to developing safe, reliable and quality roads. Brochures which speak to, ***How to care for the Roads in your Community, The use of***

BUILDING SERVICES

This arm of the department coordinates and monitors the rehabilitation of Government buildings. The team is monitored by our in-house architect and electrical engineer. During the period, 32 projects were initiated. Included in that number, were the projects to refurbish, design and layout all directorates and departments.

Some of the projects handled during the period were:

- 1. National Works Agency Building renovation - \$15M
- 2. MTW Corporate Building - \$60M
- 3. Kings House Renovations - Asset Management/ Architect received Governor General's commendation for these works.
- 4. Jamaica House
- 5. Ministry of Social Security
- 6. Relocation of UNESCO's Offices to the Conference Centre
- 7. Ministry of Industry and Tourism
- 8. May Pen Revenue Center
- 9. Santa Cruz Post Office
- 10. Port Antonio Collectorate

ENVIRONMENTAL MANAGEMENT

During the period, the Environmental Policy documents were prepared to guide the Agency on implementing projects in an environmentally sustainable manner. The documents included:

- 1. Policy Statement and Strategies
- 2. Environmental Conditions and clauses for routine maintenance contracts.
- 3. Environmental monitoring plan for routine maintenance programmes.
- 4. Monitoring reports for North Coast Segment 2 project
- 5. Environmental plan of review and implementation for:
 - RA. Murray Bridge programme
 - Mabey and Johnson Priority Bridge Programme

HIGHWAY 2000

During this period designs for this project, were reviewed for approval. In excess of 50 submissions were received and reviewed.

SUB-DIVISIONS

Over thirty (30) sub-divisions were reviewed during the period.

MANUALS

The department continued its work on the following manuals:

- 1. Storm Water Drainage Designs & Construction Procedures
- 2. Road Rehabilitation Design.

INFUSION OF NEW TECHNOLOGY

The National Works Agency has been exploring alternatives in road building technology. We have been doing so in a bid to carry out our mandate of effectively maintaining the island's main road network. Very often, maintenance and rehabilitative works are delayed by lack of funding and the unavailability of resources which prevent us from effecting repairs in a cost effective and timely manner.

ROAD BOND

These investigations have led us to Road Bond, a low cost road construction alternative to existing methods of road rehabilitation. Road Bond is a chemical additive used in several countries to construct soil stabilized road pavements. The innovation was introduced to the National Works Agency by Mr. Howard Bennett, Director of the Technology Transport Centre (Department of Transport) in the Republic of South Africa. It is ideal for use on clay surfaces which have deteriorated but have a solid base. It is also suited for roads with low traffic volumes such as "C" roads. The tertiary class "C" is assigned to roads which are normally of local importance which serve traffic volumes of less than 500 vehicles per day. The main cost saving stems from the reduction in the cost involved in moving or quarrying material to construction sites. The Road Bond technique relies heavily on materials found at the site of rehabilitative works.

Before application, tests are carried out on the existing surface to ascertain the Maximum Dry Density, Optimum Moisture Content and Optimum Road Bond Dosage. The road surface is graded and the chemical is sprinkled onto the surface. The surface is graded once more and compacted. The Road Bond acts as a bonding agent, thus strengthening the roadway and improving its resistance to water.

The NWA first experimented with this technology on two roadways, in September 2002. The Road Bond application was tested on the White Hall road just outside the town of Buff Bay in Portland and Old Harbour Power Station road in St. Catherine. The results exceeded our expectations. Both surfaces have since shown very little signs of deterioration. We are now reviewing some of the badly damaged road sections across the island, with a view to extending the use of the Road Bond technology to these roadways.

ROAD SURFACE PROFILER (RSP)

The Road Surface Profiler is another example of new technology being acquired by the National Works Agency, in its aggressive drive to improve road rehabilitation techniques. Its primary function is to measure the roughness of road surfaces. The machine collects a wide variety of useful information during the measuring process.

This includes:

- Ride Quality
- Transversal and longitudinal inertia profile
- Geometric data relating to grade, cross fall and curve radius of roadway

4. EMPLOYEE MORALE

Employee job satisfaction stood at eighty nine percent (89%) at March 2003. This was an improvement over the job satisfaction level which was seventy five percent (75%) in March 2002. The 2003 Staff Morale Survey revealed that our employees perceive some of our main strengths to be:

- Positive public perception of the Agency;
- Good job performance of Directors/Managers;
- High team spirit;
- Employees' pride in being employed to the Agency.

ADMINISTRATION

1. RECORDS MANAGEMENT

The Agency has recognized the importance of information as a critical success factor for the realization of its mandate. During the year, the Agency continued to embark on strategies geared towards best practices in records management.

The Information Resource Centre focused on enhancing the Agency's learning culture. Employees were provided with information through the "Eat and Talk" programme, a lunch hour presentation series. Displays were also used to sensitize staff on topical issues.

The Information Resource Centre also enhanced its collection of gazettes on main roads and materials were acquired for the Technology Transfer Centre.



Some technical and professional training was done in the following areas:

- Highway and Rural Roads Construction and Pavement Techniques;
- Road Rehabilitation and Maintenance Works;
- Contamination Control;
- Auditing;
- Stress & Conflict Management.

In keeping with the Agency's philosophy of promoting the highest levels of performance through a multi-skilled staff, a Training and Development Procedures Manual was prepared. A component of this document is a comprehensive three-year Training Plan which identifies the training needs for the period 2003-2006. The implementation of the plan will begin in April 2003.

2. PERFORMANCE MANAGEMENT

The Performance Management System established in 2001/2002 was reviewed. New performance review instruments were developed, staff sensitized and supervisors trained. With the revision, we hope to ensure greater focus on the achievement of objectives.

The Performance Management System allowed the Agency to reward and encourage superior performance of employees. An incentive for good performance was paid to employees during the year.

3. STAFF WELFARE AND SOCIAL PROGRAMMES

In an effort to build employee commitment and general morale, the NWA developed Staff Welfare and Social Programmes.

These included:

- Pension Scheme- the Agency joined the Executive Agency Pensions Scheme during the period under review.
- Health and Safety- having assessed vulnerability as it relates to hazards within the working environment, a Health and Safety manual was developed and Safety officers identified and trained.
- Child Care - the Child Care facility provides after school care for the children of employees. During school holidays the facility operated as a day care centre.
- Staff Development Fund- the contributory staff fund continued to provide financial resources for sports and other social activities. The fund also made contributions to outreach programmes.

4. REWARD AND RECOGNITION PROGRAMME

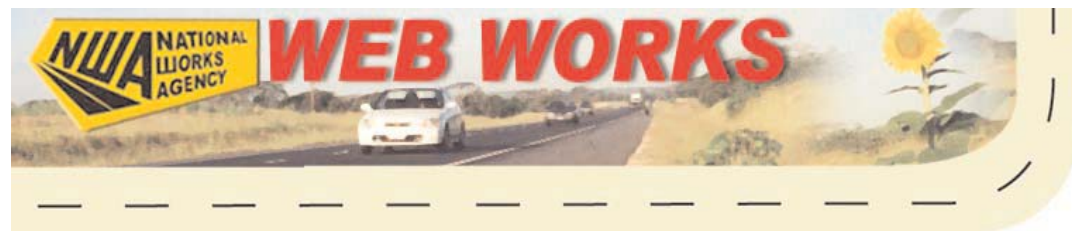
The Agency's Reward and Recognition Programme was launched in February, 2003. The objective of this programme is to motivate and encourage staff to perform at the highest levels. Effective January 2003 outstanding employees of the quarter will be selected for each region and this process culminates in the selection of an employee of year.

- Pavement texture and faulting
- Distances

The profiler utilizes a portable IBM micro computer to collect and store all measured data. The equipment is housed in a rigid, adjustable aluminum casing known as a Rut Bar. The Rut Bar is mounted on the front of the vehicle and records measurements through the use of laser or motion sensors. The Road Surface Profiler system is designed to be operated by the driver of the vehicle. It is capable of recording data at speeds of up to 110 kilometres per hour. The RSP was acquired through a lease arrangement with Dynatest, the manufacturers of the equipment. It is used extensively by the engineers on the Kuwait Funded road projects to carry out road surveys and designs. Some members of the Technical Services Department have also been trained in use of the equipment.



The Road Surface Profiler.



WEBSITE DEVELOPMENT

WW.NWA.GOV.JM

The Agency's Website was launched in June 2002 with the intention to provide another medium of access to the Agency by its customers and to establish a presence on the World Wide Web (WWW). The site is expected to pass through three developmental stages:

- **Phase one** is essentially the establishment of the Agency's presence on the Internet.
- **Phase two**, the informational stage, will provide mechanisms by which our clients will be able to search for information concerning work programmes or for any other information that resides within the Agency. This phase will become more important when the Government passes its Access to Information Act.
- **Phase three**, the transactional phase, will come into effect as part of the Government's E-governance initiative, which is currently under consideration.

We have completed phase one successfully using internal resources. An external web developer will be commissioned to complete phase two in the financial year 2003/2004.

Other notable achievements in the area of Information Technology were:

- The deployment of 250 computers, 16 Network printers; and 8 Servers;
- The establishment of Local Area Network at Head Office including email Services, Active Directory Services and Agency wide Internet Access; and
- The installation of 130 KVa of UPS backup power.

In the period 2003/2004 we intend to build on the achievements of the last period with the aim of attaining higher levels of efficiencies and accountability through the introduction of new computerized software systems.

ORGANIZATIONAL STRENGTHENING

HUMAN RESOURCE MANAGEMENT AND ADMINISTRATION

Fulfilling our mission and achieving our vision will be achieved when we have a professional, competent and committed cadre of employees. With this in mind, the Human Resource Directorate, during the year under review, focused on Training & Development, Performance Management, Staff Welfare, Rewards and Recognition, Employee Morale and Records Management.

1. TRAINING AND DEVELOPMENT

As the Agency strives to create a "Culture of Excellence" we are acutely aware that one method of achieving quality is endorsing and facilitating opportunities for continued training of our employees.

The establishment of the Training Unit is the Agency's contribution to this effort. During the year our employees benefited from over 1,700 man hours of training in several areas. The graph below highlights the areas of training:

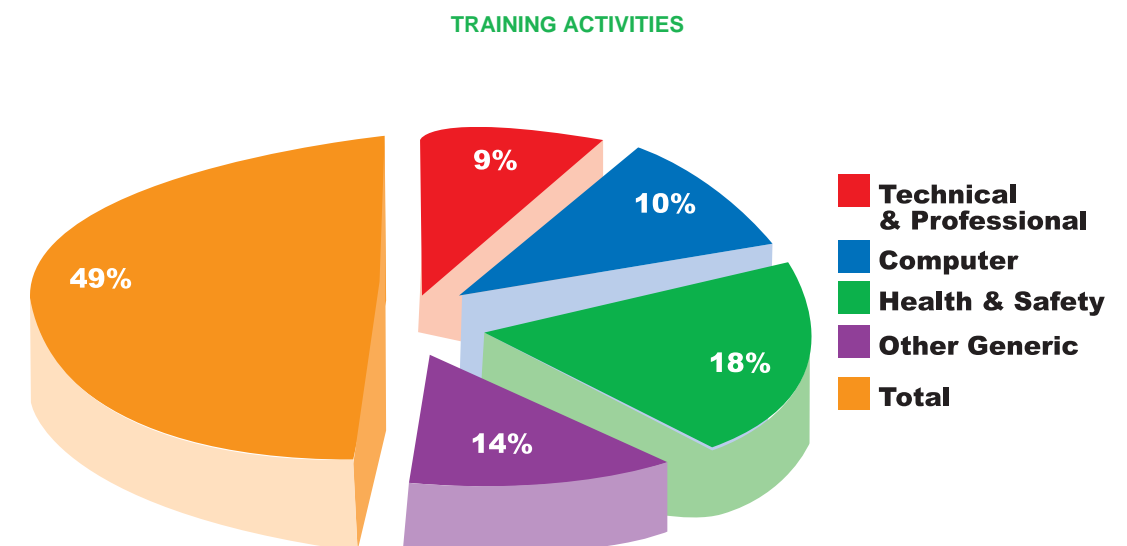


Figure 3