Bahamas Living Conditions Survey 2001

Department of Statistics

2004

Nassau, The Bahamas

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This report is dedicated to the memory of Portia E. Johnson, whose untimely death in 2003 represents an irreparable loss for the Department of Statistics and the Commonwealth of The Bahamas. Portia's statistical research and analytical skills, proven leadership, creativity, and tireless dedication to her country's people were critical in launching this first-ever Bahamas Living Conditions Survey. Her colleagues and friends pay her homage.

Contents

Foreword . . . xiii
Preface . . . xv
Acknowledgments . . . xvii
Abbreviations and Acronyms . . . xix
Key Numerical Codes . . . xix
Notes to the Tables . . . xix

Who are the poor in The Bahamas? . . . xx

Executive Summary . . . xxi

Chapter 1. Population Patterns: Regional Distribution and Migration . . . 1
Underlying Patterns . . . 1
Regional Population Distribution . . . 1
Age and Sex Distribution . . . 2
Nationality . . . 4
Distribution by Household Characteristics . . . 4
Migration Overview . . . 8
Direction for Policy and Research . . . 11
References . . . 12
For Further Reading . . . 12

Chapter 2. Poverty Estimates and Policy Issues . . . 13
Welfare Measure and Poverty Line . . . 13
Estimates and Indicators . . . 14
Poverty Profile: Household Characteristics . . . 14
Characteristics of Household Head . . . 18
Expenditure Level and Composition . . . 20
Access to Social Programmes . . . 22
Children's Health and Schooling . . . 23
Adult Education and Training for Non-heads . . . 25
Housing Characteristics . . . 26
Key Results and Policy Implications . . . 28
Appendix: Method for Calculating the Poverty Line . . . 31

Chapter 3. Household Expenditure Data: Patterns for Analysis . . . 35
Issues for Data Interpretation . . . 35
Data-collection Methods and Categories . . . 36
Findings: Food Expenditure Patterns . . . 37
Findings: Non-food Expenditures . . . 39
Findings: Food and Non-food Expenditures . . . 49
Conclusions . . . 52
Looking Ahead: Conditions for Data Application . . . 53
Appendix . . . 54

Chapter 4. Health Status: Socioeconomic Analysis . . . 61
Self-reported Health Status . . . 61
Child Health . . . 65
Nutritional Status of Children . . . 68

Nutritional Status of Adolescents 70
Nutritional Status of Adults 71
Breastfeeding 73
Female Reproductive Health 74
Health-services Use and Expenditure 76
Health Insurance Coverage 81
Conclusions and Policy Recommendations 82
References 85
For Further Reading 85

Chapter 5. Educational System: Achievements and Challenges 87
Government Initiatives and Their Implementation 87
Survey Context 88
Enrolment 89
Distance Traveled 92
Mode of Transport 94
School Attendance in Last Five Days 96
Grade Repetition 98
Selected Outcomes by Schooling of Mother 98
Unenrolled Youth 100
National Educational Expenditure 102
Financial Assistance 105
Conclusions 107
Meeting the Challenge: Policy and Research Recommendations 107
For Further Reading 108

Chapter 6. Employment Data Analysis: Toward Equitable Planning 109
Target Population 109
Unattached Youths 112
Children 10–14 Years of Age 114
Employment Characteristics 115
Employment Status 120
Employed Persons by Industry 120
Employed Persons by Occupation 123
Mode of Transport 126
Time Spent En Route 126
Hours Worked 127
Conclusions and Policy Implications 127
References 129
For Further Reading 129

Chapter 7. Community Services and Social Programmes: Accessibility Analysis 131
Access To Community Services 131
Access to Social Programmes 137
Appendix 141

Chapter 8. Housing Variables for Policy Formulation 155
Dwelling Type 155
Construction Materials 156
Tenure Type 158
Water Supply 158
Sanitary Facilities 162
Lighting and Cooking Fuels 163
Telephone Service 163
Garbage Disposal 164
Household Expenditure on Utilities and Services 165
Selected Indicators 169
Summary of Findings 172
The Challenges Ahead 173
References 173

Technical Appendix 175
A. Survey Design and Methodology 175
B. Other Technical Considerations 179
For Further Reading 188

About the Authors 189

Map 193

Tables

1-1. Population Distribution, by Region and Quintile . . . 2
1-2. Population Distribution, Showing Within-region Quintile Distribution . . . 3
1-3. Population Distribution; by Age, Sex, and Region . . . 3
1-4. Sex Ratios, by Age Group and Region . . . 4
1-5. Population; by Nationality, Region, and Quintile . . . 4
1-6. Household Size; by Sex of Head, Region, and Quintile . . . 5
1-7. Characteristics of Heads of One-person Households . . . 5
1-8. Mean Household Composition; by Age, Sex of Head, and Region . . . 6
1-9. Selected Characteristics of Household Heads, by Region and Quintile . . . 7
1-10. Household Characteristics, by Sex of Head . . . 8
1-11. Recent Immigrants, by Place of Birth and Sex . . . 9
1-12. Recent Immigrants, by Place of Birth and Region of First Entry . . . 9
1-13. Distribution of Recent Immigrants, by Age and Sex . . . 9
1-14. Reasons for Immigration (%), by Place of Birth and Quintile . . . 10
1-15. Recent Immigrants, by Place of Birth and Quintile . . . 10
1-16. Recent Immigrants, by Place of Birth and Quintile Distribution within Immigrant Group . . . 10
1-17. Age Group of Recent Internal Migrants, by Sex . . . 11
1-18. Quintile of Recent Internal Migrants, by Sex . . . 11
1-19. Reasons for Internal Migration, by Quintile . . . 11
1-20. Current Region of Residence of Recent Internal Migrants, by Sex . . . 11
2-1. National and Regional Poverty Indicators, by Population Characteristic (%) . . . 15
2-2. Poverty Rates, by Household Characteristic (%) . . . 16
2-3. Household-level Poverty Rates . . . 17
2-4. Dependency Ratios, by Poverty Status . . . 17
2-5. Economic Activity, by Poverty Status . . . 18
2-6A. Poverty Rates, by Household Head Schooling . . . 19
2-6B. Poverty Rates, by Household Head Gender . . . 19
2-7. Economic Activity of Household Heads, by Poverty Status . . . 20
2-8. Mean and Distribution of Per-capita Household Expenditure . . . 21
2-9. Expenditure and Budget Shares, by Poverty Status . . . 21
2-10. Food Expenditure and Shares, by Poverty Status . . . 22
2-11. Access to Social Programmes, by Poverty Status . . . 22
2-12. Participation in National School Lunch Programme . . . 23
2-13. School Outcomes for Children Ages 0–18 . . . 23
2-14. Health Outcomes for Pre-school Children . . . 24
2-15. Education and Training of Non-head Adults, Ages 25–65 . . . 25
2-16. Education and Training of Young Adults, Ages 19–24 . . . 26
2-17. Housing Characteristics, by Poverty Status . . . 27
2-18. Leakage Rates for Various Beneficiary Selection Mechanisms (%) . . . 30
2-A1. Caloric and Cost Distribution of Low-cost Food Basket, by Major Food Group . . . 31
2-A2. Items in Low-cost Food Basket . . . 32
2-A3. Diet of Composition of Low-cost Food Basket . . . 33
2-A4. Poverty Lines and Rates for Selected LAC Countries and U.S. . . . 33

3-1. Average Household Food Expenditures, Share in Total, and Household Consumption . . . 37
3-2. Mean Individual Expenditures on Food Eaten Away from Home . . . 39
3-3A. Mean Shares of Food Groups in Total Food Expenditure, by Various Factors . . . 40
3-3B. Mean (Nominal) Expenditure on Types of Food, by Various Factors . . . 42
3-4. Average Household Non-food Expenditures, Share in Total, and Household Consumption . . . 44
3-5A. Mean Share of Non-food Groups in Total Non-food Expenditure . . . 45
3-5B. Mean Annual Expenditure (B$) on Non-food Items . . . 47
3-6A. Shares of Food and Non-food Items in Total Expenditures . . . 50
3-6B. Total Annual (Nominal) Expenditures . . . 51
3-A1. Average Household Food Expenditures, Share in Total, and Household Consumption . . . 54
3-A2. Average Household Non-food Expenditures, Share in Total, and Household Consumption . . . 57
4-1. Ill Residents Who Sought Care (%), by Population Characteristic . . . 62
4-2. Proportion of Respondents with a Disability or Injury in Past 12 Months . . . 63
4-3. Self-reported Diabetes and Hypertension and Proportion Treated . . . 64
4-4. Proportion of Children Five Years and Younger with Common Illnesses in Past Four Weeks . . . 66
4-5. Immunization Coverage Amongst Children 0–71 Months . . . 67
4-6A. National Immunization Coverage Levels, 1997–2000 . . . 68
4-6B. Vaccine-preventable Cases Reported, 1997–2000 . . . 68
4-7. Low and High Z-scores for Children 2–10 Years of Age . . . 69
4-8. Body Mass Indices for Adolescents, Ages 11–20 Years . . . 70
4-9. Body Mass Indices for All Persons, Ages 21–60 Years . . . 72
4-10. Body Mass Indices of Males, Ages 21–60 Years . . . 72
4-11. Body Mass Indices of Females, Ages 21–60 Years . . . 73
4-12. Breastfeeding Incidence and Median Months of Exclusive Breastfeeding . . . 74
4-13. Percentage of Females, 10–49 Years of Age, Who Have Ever Been Pregnant . . . 75
4-14. Outpatients (during Past Four Weeks) and Inpatients (during Past 12 Months) . . . 76
4-15. Outpatient Visits to Health Facilities in Past Four Weeks, by Facility and Sector . . . 77
4-16A. Average Expenditure on Outpatient and Inpatient Care . . . 78
4-16B. Average Annual Health Expenditure and Percentage Distribution, by Expenditure Type . . . 79
4-17. Proportion of Respondents with Medical and Dental Coverage . . . 81
4-18. Average Medical Insurance Payments . . . 82
5-1. Characteristics of Individuals 0–24 Years of Age . . . 89
5-2. Enrolment Rates for Individuals 0–24 Years of Age . . . 90
5-3. Type of School, by Age (Those Currently Enrolled) . . . 91
5-4. Current Public-school Enrolment, by Type and Level (Ages 0–24) . . . 92
5-5. Distance (Miles) to School, by Level . . . 93
5-6. Mode of Transport to School, by Level of Schooling . . . 95
5-7. Attendance in Last Five Days, by Level of Schooling . . . 96
5-8. Percentage Who Did Not Attend All Five Days, by Level and Reason . . . 97
5-9. Grade Repetition (%) (Currently Enrolled Students) . . . 99

5-10. Selected Schooling Outcomes, by Schooling of Mother 99
5-11. Reported Reasons for Unenrolment (ages 5–16 years) 100
5-12. Education of Youth Not in School (ages 16–24) 100
5-13. Qualifications of Youth Not in School (ages 16–24) 101
5-14. Educational Expenses of Those Enrolled (Ages 0–21), by Level 103
5-15. Net Expenditures for Enrolled Children (Ages 0–21) 106
5-16. Financial Aid Received (Enrolled Children, Ages 0–21) 106
6-1. Population Profile: Individuals 15 Years and Older 110
6-2. Labour-force Participation of Persons 15 Years and Older, by Selected Variables 111
6-3. Labour-force Characteristics, Persons 15 Years and Older 111
6-4. Labour-force Participation of Persons 15 Years and Older, by Age Group and Region 112
6-5. Status of Youths 16–24 Years Old 113
6-6. Educational Status of Total and Unattached Youths, 16–24 Years of Age 113
6-7. Labour-force Profile, Persons 10–14 Years of Age 114
6-8 Unemployed Persons 15 Years and Older, by Selected Variables 114
6-9 Characteristics of Unemployed Persons, Ages 15 Years and Older 115
6-10. Percentage Distribution of Labour Force of Persons 15 Years and Older 115
6-11. Quintile Distribution of Employed Persons, by Region 116
6-12. Regional Distribution of Employed Persons 15 Years and Older, by Nationality and Sex 117
6-13. Quintile Distribution of Employed Persons 15 Years and Older, by Nationality 117
6-14. Educational Status of Employed Persons 15 Years and Older, by Sex 117
6-15. Educational Status of Employed Persons, by Sex Within Regions 118
6-16. Educational Status of Employed Persons, by Sex Within Quintiles 119
6-17. Educational Status of Employed Persons, by Sex Across Quintiles 119
6-18. Primary Employment Status of Employed Persons, by Sex within Regions and Quintiles 121
6-19. Occupational Distribution of Self-employed Persons, by Region and Sex within Quintile 122
6-20. Primary Industry of Employed Persons, by Sex 123
6-21. Primary Industry of Employed Persons, within Region and Quintile 124
6-22. Primary Occupation of Employed Persons, by Sex 124
6-23. Primary Occupation of Employed Persons, by Region and Quintile 125
6-24. Primary Occupation of Employed Persons, Across Regions and Quintiles 125
6-25. Transport Method and Time for Employed Persons 15 Years and Older 126
6-26. Mean Weekly Hours in Primary Activity, by Selected Demographic Characteristics 127
6-27. Mean Weekly Hours in Primary Occupation and Industry, by Sex 128
7-1. Median Household Distance to Facilities, by Region 132
7-2. Median Distance to Facilities, by Quintile 133
7-3. Household Ownership of Cars, by Region and Quintile 133
7-4A. Households' Mode of Transport (%) To Access Facilities, by Region 134
7-4B. Households' Mode of Transport (%) To Access Facilities, by Quintile 134
7-5. Summary of Travel Costs to Access Selected Facilities, by Region 135
7-6. Summary of Median Distances and Time Required To Access Facilities, by Region 136
7-7. Median Time to Access Facilities, by Quintile 136

7-A1. Distance to Nearest Health Facility, by Region and Quintile 141
7-A2. Means of Transportation to Nearest Health Facility, by Region and Quintile 141
7-A3. Average Cost of Travel to Health Facility 142
7-A4. Travel Time to Nearest Health Facility, by Region and Quintile 142
7-A5. Distance to Nearest School, by Region and Quintile 143
7-A6. Means of Transportation to Nearest School 143
7-A7. Average Cost of Travel to School 144
7-A8. Travel Time to Nearest School 144
7-A9. Distance to Nearest Post Office or Police Station 145
7-A10. Means of Transportation to Nearest Post Office or Police Station 145
7-A11. Average Cost of Travel to Post Office or Police Station 146
7-A12. Travel Time to Nearest Post Office or Police Station 146
7-A13. Distance to Nearest Mail Boat or Government Complex 147
7-A14. Means of Transportation to Nearest Mail Boat or Government Complex 147
7-A15. Average Cost of Travel to Mail Boat or Government Complex 148
7-A16. Travel Time to Nearest Mail Boat or Government Complex 148
7-A17. Distance to Nearest Grocery Store or Banking Facility 149
7-A18. Means of Transportation to Nearest Grocery Store or Banking Facility 149
7-A19. Average Cost of Travel to Facility 150
7-A20. Travel Time to Nearest Grocery Store or Banking Facility 150
7-A21. Responses to Survey Question: “Ever Heard of Social Program?” 151
7-A22. Receipt of Social Benefits 151
7-A23. Beneficiary Characteristics for All Social Programs 152
7-A24. Participation in National School Lunch Programme, by Selected Variables 153
7-A25. Participation of Children Ages 5–16 in National School Lunch Programme 154
7-A26. Responses to Question: “What Does Child Usually Have for Lunch?” 154
8-1. Percentage Distribution of Dwelling Type 156
8-2. Percentage Distribution of Outer-wall Construction Materials 156
8-3. Percentage Distribution of Roofing Materials 157
8-4. Percentage Distribution of Flooring Materials 157
8-5. Percentage Distribution, by Tenure Type 158
8-6. Percentage Distribution of Type of Dwelling, by Tenure Type 159
8-7. Percentage Distribution of Bathing Water Source, by Region and Quintile 161
8-8. Percentage Distribution of Source of Drinking Water, by Region and Quintile 161
8-9. Percentage Distribution of Sanitary Facility Types 162
8-10. Comparison of Indoor and Outdoor Toilet Facilities, by Region and Quintile (%) 162
8-11. Percentage Distribution of Lighting Source, by Region and Quintile 163
8-12. Percentage Distribution of Cooking Fuel Use, by Region and Quintile 163
8-13. Percentage Distribution of Household Telephone Access, by Region and Quintile 164
8-14. Percentage Distribution of Household Disposal Type, by Region and Quintile 164
8-15. Mean Monthly Expenditure on Utilities and Services (B$) 165
8-16A. Mean Monthly Expenditure on Shelter Costs and Real Property Tax (B$) 166
8-16B. Expenditure on Shelter Costs and Real Property Tax (% Total Monthly Expenditure) 166
8-17. Mean Monthly Expenditure on Other Household Operational Expenses 167
8-18. Percentage Distribution of Durable Goods Ownership, by Region and Quintile 169
8-19. Percentage Distribution of Consumer Durables Ownership 170

8-20. Ranking of the 10 Most Commonly Owned Durable Goods, by Region and Quintile 170
8-21. Housing Quality Index, by Region 171
8-22. Housing Quality Index, by Quintile 171
8-23. Percentage Distribution of Crowding, by Region and Quintile 172
A-A1. Systematic Selection of Enumeration Districts 177
A-A2. Non-response Distribution 178
A-B1. Island Deflators Used, BLCS 21751 179
A-B2. Items Included in Commodity Groups and Subgroups, BLCS 21771 180
A-B3. Contents of Dataset AGGREGATES.dta, BLCS 21781 181
A-B4. Data Sets, BLCS 2001 182
A-B5. Variables Used To Construct Consumption Expenditure Aggregates, BLCS 2001 183
A-B6. Estimation of Consumption Expenditure Aggregates, BLCS 2001 185
A-B7. Definition of Quintiles and Deciles, Showing Per-capita Expenditure Ranges 186
A-B8. Number in Sample, Mean, and Standard Error of Estimates of Per-capita Consumption 186
A-B9. Mean and Standard Error of Household Size and Adult Males, Adult Females, and Children 186
A-B10. Results of Tests of Significance, by Region, BLCS 2001 (mean per-capita consumption) 187

Figures

1-1. Population (%) in Selected Age Groups, by Region 3
1-2. Household Distribution, by Size and Selected Quintiles 6
3-1. Food Groups as Share of Total Food Expenditure 38
3-2. Shares of Non-food Items in Total Non-food Expenditure 44
3-3. Shares of Food and Non-food Items in Total Annual (Nominal) Expenditures 49
4-1. Prevalence of Disability, by Type and Age Group 63
4-2. Distribution of Injuries, by Type (%) 63
4-3. Vaccination Coverage Amongst Children 0-71 Months, by Vaccine 66
4-4. Children 0–71 Months Not Vaccinated or Behind Schedule (%) 67
4-5. Common Contraceptive Methods Women Used, by Age and Type 75
4-6. Medical Insurance Payers 82
6-1. Labour-force Participation, by Age Group and Sex 111
6-2. Rate of Labour-force Participation, by Quintile 112
6-3. Employed Persons, by Region and Poorest and Wealthiest Quintiles 115
8-1. Distribution of Outer-wall Construction Material, by Consumption Quintile 158

Boxes

1-1. Distribution Disparities of the Bahamian Population 2
3-1. Key Terms and Definitions 36
5-1. Evolution of Bahamian Education 88
7-1. Making the Case for Equitable Access: Hospital Facilities 132
7-2. National Lunch Programme Targets Neediest Schoolchildren 138

Foreword

In response to the Government of the Commonwealth of The Bahamas' directive to measure poverty, the Department of Statistics, along with the Ministry of Health, conducted the first-ever Bahamas Living Conditions Survey (BLCS). Carried out in late 2001, the BLCS—a multitopic household survey—builds on the experience of similar surveys conducted throughout the world over the past 20 years. Although such surveys are often expensive and time-consuming, requiring a high level of technical capacity, the data they provide are indispensable tools in the analysis of a country's socioeconomic conditions and the formulation and assessment of policy initiatives.

The BLCS instruments, based on a wide body of global research, have been carefully tested in the Bahamian context. The amassed data reveal the social landscape of the country—from shifting population patterns and household expenditures; to health and education; to employment, community and social services, and housing access. The data patterns that emerge are rich in content and can provide a quantitative benchmark useful to researchers and policymakers both within the country and across the region.

Considerable effort was made to seek advice from local subject-matter experts, regional and international counterparts, and international organizations, in researching this project. This resulted in the hiring of a team of expert consultants in survey execution, sample design, questionnaire design, software development, and report editing.

It is hoped that the BLCS findings and recommendations will help policy planners, researchers, and other public- and private-sector organizations to make better-informed decisions that will result in the implementation of initiatives that improve quality of life for all Bahamians, especially the country's poorest citizens.

—Charles Stuart
Director of Statistics
Department of Statistics
Ministry of Finance
Nassau

Preface

This report is the product of the first-ever Bahamas Living Conditions Survey (BLCS), which was conducted in late 2001. This type of comprehensive household survey has become an indispensable tool for understanding development and providing the necessary data for implementing, monitoring, and assessing socioeconomic programmes and policies. Such surveys—more commonly identified with developing countries—provide a compendium of reliable socioeconomic data on the living conditions of a populace. They also assist in identifying the poor and providing a wealth of information on their characteristics. In short, living conditions surveys offer comprehensive, reliable, and timely information critical to effective planning.

Such surveys are relatively new to the Caribbean region. Jamaica—indisputably the region's leader in this regard—has conducted living conditions surveys annually since l988. The Jamaican government has used the survey findings to initiate and monitor programmes aimed at improving the living standards of its people and to develop and assess poverty eradication strategies. Belize has completed its second such survey, while other countries, including The Turks & Caicos Islands, have recently completed their first. Still others have yet to initiate the exercise.

Aware of the critical data that a living conditions survey can provide, the Government of The Bahamas determined the absolute necessity of conducting one immediately following the 2000 Census. Thus, in late 2000, the Department of Statistics, the agency charged with chief responsibility for the BLCS, began the groundwork. From the outset, the Department recognized the need for an intersectoral approach, given the diverse yet interconnected body of information that had to be collected. The Ministries of Health, Education, and Social Services were considered major stakeholders and thus played an integral role in shaping the study. The Department of Statistics collaborated closely with the Ministry of Health in the Survey's planning and execution.

This report reflects the culmination of all these efforts. Along with an accompanying Executive Summary and Technical Appendix, each of the eight chapters includes an introduction to its respective topic; in-depth data analysis, incorporating tables and charts; and a concluding section that outlines policy implications and recommendations for further research. In all chapters, the data are analysed by region and quintile.

Chapter 1 sets the tone by providing background information on population distribution—both across and within regions—and composition, including age, sex, marital status, and nationality. Households are also examined in the light of their composition and characteristics of household head. Finally a brief profile of immigrants and internal migrants is provided.

The centerpiece of the report, chapter 2, constitutes the driving force behind the study—namely, poverty. It presents the poverty line and proportion of individuals and households falling below it. It further examines the poverty gap, Gini coefficient, and population characteristics. In addition, it thoroughly examines individual and household characteristics of the poor. A supporting appendix details the method for calculating the poverty line.

Chapter 3 examines expenditure data. The information is not restricted to out-of-pocket expenditures but also includes the estimated value of household-owned goods and services, household production, and gifts received. As the chapter unfolds, a comprehensive analysis of food expenditure patterns (both at and away from home), as well as non-food expenditure patterns, is provided.

Chapter 4 focuses on health, providing data on both medically diagnosed and self-reported illnesses. The major topics covered include child immunization, nutritional status of children and adults, and female reproductive health. Health insurance coverage, expenditure on health, and use of health facilities are also presented.

Education is the focus of chapter 5. An overview of school attendance and completion is presented, followed by an examination of school absenteeism, grade repetition, and the time and distance involved in traveling to school. School expenses are also analysed in detail.

Chapter 6 explores the employment status of the Bahamian population. An overview of those 15 years of age and older is presented, focusing on individuals engaged in the labour force, particularly the employed; for this segment of the population, detailed data is provided on educational achievement, occupation, industry, number of hours worked, and mode of transport to work.

Chapter 7 then examines the population's access to community services and social programmes. Individual

and household access to such facilities as hospitals, schools, banks, and police stations are examined in terms of both distance and the cost involved. Public awareness of social programmes is explored, and an analysis of programme beneficiaries is presented.

Finally, chapter 8 focuses on housing. Dwelling type, number of rooms, construction material used, toilet facilities, and other basic indicators of living standards are examined. Shelter costs, including mortgages and rents, and utilities are also analysed.

Acknowledgments

The Bahamas Living Conditions Survey (BLCS), the first survey of this type conducted in the Commonwealth of The Bahamas, is the most ambitious project ever attempted by the Department of Statistics. Its success is the result of the committed involvement and cooperation of a broad cross-section of individuals and agencies. The Department is truly grateful to all who have participated in one form or another.

Our sincerest gratitude is conveyed to those individuals and institutions whose support, encouragement, and technical expertise were provided throughout the project. First and foremost, we thank the **Inter-American Development Bank (IDB)** and its officers, whose valuable contribution spanned all aspects of the study. The Department especially thanks **Oscar Spencer**, **Jorge Torres**, **Dougal Martin**, **Jose Antonio Mejia**, **Andres Montes**, **and Sudhanshu (Ashu) Handa**. To the latter, Ashu, a mentor par excellent, we convey our deepest thanks for the dynamic role he played, including the writing of chapter 2. We extend our thanks to the IDB mapping design unit, particularly **Eduardo Ramirez**, for preparing the country map included in this book.

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Finally, to any individual or organization who may have been inadvertently overlooked, please forgive us and be assured that we are grateful for whatever role you played in this important exercise.

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Abbreviations and Acronyms

BGCSE	The Bahamas General Certificate of Secondary Education
BLCS	Bahamas Living Conditions Survey
BMI	Body Mass Index
CHP	Child Health Passport
COB	College of The Bahamas
CPI	Consumer Price Index
FAO	Food and Agriculture Organization of the United Nations
FHH	Female Headed Household
GCE	General Certificate of Education
GDP	Gross Domestic Product
GOBH	Government of the Commonwealth of The Bahamas
HAZ	Height for Age
HQI	Housing Quality Index
LAC	Latin America and the Caribbean
LPG	Liquefied Petroleum Gas
MHH	Male Headed Household
MOE	Ministry of Education
MOF	Ministry of Finance
MOH	Ministry of Health
NHNS	National Health and Nutrition Survey
NSLP	National School Lunch Programme
PG	Poverty Gap
SES	Socioeconomic Status
SLC	School Leaving Certificate
SPG	Squared Poverty Gap
THE	Total Health Expenditure
UNDP	United Nations Development Programme
WAZ	Weight for Age
WHO	World Health Organization
WHZ	Weight for Height

Key Numerical Codes

Geographical Regions

1 = New Providence and Grand Bahama
2 = Abaco, Andros, and Eleuthera
3 = Exuma and Long Island
4 = Other Family Islands

Consumption Quintiles	Expenditure Ranges (per capita)
1 = lowest (poorest)	$0.00–3,967.99
2 = next to lowest (or poorest)	$3,968.00–5,947.99
3 = middle	$5,948.00–8,523.99
4 = next to highest (or wealthiest)	$8,524.00–13,446.99
5 = highest (wealthiest)	$13,447.00–infinity

Notes to the Tables

Throughout the chapter tables, the abbreviation *N* equals number of observations. Unless otherwise indicated, the numbers in the body of the tables represent percentages of *N*.

Who are the poor in The Bahamas?

The face of Bahamian poverty is largely masked by the country's low poverty rate of about 9%; indeed, only some 5% of households fall below the annual poverty line of $2,863 per person. Distribution and rates of poverty vary dramatically throughout the archipelago. While most poor people—nearly 76%—live in the densely populated, urban areas of New Providence and Grand Bahama, the poverty rate there is less than the national rate. By contrast, in the sparsely populated region known as Other Family Islands, where less than 6% of the poor live, the poverty rate is nearly 21%. Moreover, poor rural residents struggle harder than the urban poor to meet basic human needs (see chapter 2).

FACTS ON BAHAMIAN POVERTY

- Nearly 75% of all poor Bahamian households have five or more members.
- Households headed by widows, females, Haitian nationals, and those in common-law relationships have poverty rates above the national average.
- Households headed by single female parents comprise 45% of all poor households.
- Poor people are more likely to be employed in private enterprise or the informal sector.
- About 42% of poor household heads have completed some secondary schooling.
- Older, retired household heads on a pension or who receive remittances from non-residents are vulnerable to poverty.
- About 34% of poor youth, ages 19–24, are out of school and unemployed.
- More than 50% of the country's poor are children 14 years of age or younger.

Poor children are. . .

- Less likely to have an early childhood education.
- More likely to repeat a grade in primary school.
- Less likely to attend college or university.

Housing conditions

- 58% of poor families rent, rather than own, their homes.
- 54% has no piped water.
- 33% lacks access to a flush toilet.
- 50% crowds more than three people into each bedroom.

Executive Summary

OVERVIEW

Quality of life in The Bahamas is an intricate balance of social, economic, cultural, and geopolitical factors. The dynamic interplay of demographic, health, and educational characteristics influences access to the country's community and social services, housing, and employment opportunities. Participation in these sectors, in turn, affects expenditure and living standards, thereby determining households' relative wealth or poverty and societal cohesiveness.

To better understand how the interplay of socioeconomic forces affects residents' well-being and to bring about improvements for the country's poor, The Government of the Commonwealth of the Bahamas (GOBH) undertook the first-ever Bahamas Living Conditions Survey (BLCS). Conducted in 2001 by the Department of Statistics and Ministry of Health, the Survey analysed both monetary and non-monetary factors that determine overall household well-being. Taken together, the findings that emerge from these analyses provide an overall picture of the state of living conditions in The Bahamas.

Utilizing the results of the 2000 Census as the bases for a sample frame,[1] The BLCS aimed at slightly more than 2,000 households, randomly selected throughout the country, representing about 2% of total households. The islands of the archipelago were grouped, by population size, into four regions. Per-capita expenditure was categorized into quintiles and deciles (see Technical Appendix). The quintiles were utilized in the analysis presented in this report.

The Survey focused on eight interrelated issues: demography and migration, poverty, household expenditures, health, education, employment, access to community services and social programmes, and housing.

HIGHLIGHTS OF THE FINDINGS

Demography and Migration

As discussed in chapter 1, The Bahamas is characterized by extreme regional disparities in population distribution, which mirror large regional disparities in living standards. Residents of New Providence and Grand Bahama (Region 1), who enjoy the highest standard of living, comprise 85% of the country's population of just over 300,000. Sixty-nine percent of the population live in New Providence alone. Of those in the wealthiest expenditure quintile, some 91% live in Region 1, compared to 7% in Region 2 (Abaco, Andros, Eleuthera) and only 1% each in Regions 3 (Exuma and Long Island) and 4 (Other Family Islands). Whilst 77% of persons in the poorest quintile—those whose per-capita expenditure is less than $3,968—live in Region 1, their proportion is lower than that of the overall population (85%). Conversely, in the other three regions, the proportion of persons in the poorest quintile is higher than their share of the overall population. For all regions except Region 1, at least 50% of the population—more than 59% in Region 4—have a per-capita expenditure of less than $5,948.

Standard of living varies greatly amongst nationalities. Bahamians, who represent 89% of the population, comprise nearly 88% of those in the wealthiest quintile and just over 84% in the poorest quintile. Haitians, who represent only slightly more than 6% of the total population, account for more than 14% of those in the poorest quintile and only about 1% of those in the wealthiest (i.e., those whose per-capita expenditure is $13,447 or higher). Within recent immigrant groups, nearly 84% of Haitians have a per-capita expenditure of less than $8,524, whilst 91% of those from the UK, U.S., or Canada and 56% of those from other Caribbean countries have a per-capita expenditure of $8,524 or higher.

Forty-five percent of households in the poorest quintile have six or more members, compared to slightly more than 1% of those in quintile 5. Female headed households (FHHs) account for a greater proportion of households with six or more members than do male headed households (MHHs). Moreover, the share of FHHs is highest in the poorest quintile (50%) and lowest in the wealthiest (33%). As mentioned in chapter 2, female heads require higher levels of schooling than their male counterparts to reduce the risk of poverty.

Poverty

The poverty line represents the minimum expenditure necessary for an individual to satisfy basic needs over a specific reference period (e.g., per day). This cost is estimated in two stages. In the first stage, the minimum expenditure needed to purchase a nutritionally adequate diet is calculated. This amount is often referred to as the *food poverty line*. In the second stage, the minimum required cost of non-food items, such as clothing and shelter, is estimated. The sum of these two estimates equals the poverty line. In chapter 2, the minimum amount of money necessary to purchase an adequate low-cost diet with allowances for non-food needs was estimated at $7.84 per person per day, which translates into an annual poverty line of $2,863 per person.

On this basis, the national poverty rate for The Bahamas is 9.3%, which is lower than Barbados (13.9%) and the United States (12%). The rate is slightly lower in Region 1 (8.3%), but significantly higher in the other regions, with the highest rate found in Region 4 (21%). Notwithstanding this finding, given the distribution of the population, 76% of all poor people live in Region 1.

Nearly 75% of all poor households have five or more members, and 45% of all poor households are headed by single female parents. Moreover, 50% of the country's poor are children, 14 years of age or younger.

Household Expenditure

As discussed in chapter 3, the average per-capita food expenditure is about $8.41 per day, of which 34% is spent on food eaten away from home. Food expenditures vary with living standards in predictable ways—that is, the share of total expenditure on food items declines as living standards rise. Rent (actual or imputed) represents the largest non-food expenditure and is uniformly above 32% for households across the spectrum of economic well-being.

Housing

Chapter 8 highlights that households in the lowest quintile, whose average monthly housing expenditure is $1,374, have a housing quality index (HQI) of only 69; by contrast, those in the highest quintile, with an average monthly expenditure of $4,393, have an HQI of 86. Households in the two poorest quintiles have significant levels of overcrowding. In terms of construction materials, the wealthiest and poorest quintiles differ significantly. In quintile 5, 81% of dwellings are made of concrete block or slab, compared to only 43% of those in quintile 1, which are more likely made of wood or stucco. Ninety-six percent of households in the wealthiest quintile live in dwellings with running water, compared to only 62% of those in the poorest quintile.

Shelter costs (mortgage and rent), along with real property tax, account for the highest percentage of expenditure on household operations across all regions and quintiles. Shelter costs represent more than 61% of household operating expenses and more than 24% of total consumption expenditure. Households in the poorest quintile spend nearly 67% of household operating costs on shelter, whilst those in the wealthiest quintile spend more than 60%. Households in quintile 1 have an average mortgage expense of about $474, compared to nearly $1,440 for those in quintile 5. Households in the poorest quintile spend more than 26 cents out of every consumption dollar on mortgage or rent, a higher proportion than for any other quintile.

Health

With regard to chronic and non-communicable diseases, The Bahamas has characteristics similar to those of industrialized countries. As discussed in chapter 4, the prevalence of self-reported diabetes outside Region 1 is of special concern and may be related to elevated levels of adult obesity and low consumption of complex carbohydrates. Nearly 1 out of every 10 persons has a self-reported history of hypertension. The proportion of self-reporting increases by quintile—from 6% in the lowest to 13% in the highest—which may reflect a tendency of wealthier individuals to seek health care.

The Survey found that 14% of children 2–10 years of age are overweight and 6% are underweight. As mentioned in chapter 2, the policy response to this phenomenon depends on its underlying causal mechanism. Adolescents (individuals 11–20 years of age) living in households with overweight adults are four times more likely to be overweight or at risk of becoming overweight than those not living in such households. Overweight and obesity problems worsened progressively with age. Amongst adults 21–60 years, 34% are overweight and a further 32% obese. Overweight prevalence is higher amongst males (37%) than females (32%). Conversely, obesity is more prevalent amongst females (37%) than males (24%).

As wealth increases, the proportion of visits to public-health facilities decreases, whilst visits to local private practitioners or those abroad increase, indicating that private providers are the preferred choice. In terms of health insurance, about 51% of respondents report having coverage; only 20% of those in the poorest quintile have coverage, compared to 75% of those in the wealthiest quintile.

Education

The developed region of New Providence and Grand Bahama is the seat of tertiary education, as well as the majority of the country's pre-schools. As chapter 5 highlights, students from outside Region 1 depend almost entirely on Government-operated schools for their education. They are typified by lower attendance records and higher repetition rates, particularly in Regions 2 and 4. As discussed in chapter 2, high rates of repetition represent a significant cost to both society and individuals. Students from the poorest quintile have considerably lower representation in pre-school, are less likely to attend tertiary schools, and are more likely to exit the educational system without qualifications.

For enrolled children between the ages of 0 and 21 years, uniforms represent less than 8% of total educational expenditure for those in the wealthiest quintile, compared to more than 34% for those in the poorest. Uniforms are a substantial burden for households in Regions 3 and 4, where they account for more than 41% of total educational expenditure, compared to about 22% for the country overall.

Employment

The Bahamas is a country of extreme worker inequality, both across and within regions. As discussed in chapter 6, the socioeconomic status of Region 1 workers outstrips that of all other regions. Not surprisingly, Region 1 workers' educational level and academic qualifications also surpass those of the other regions. With regard to overall living standard, low levels of academic achievement typify workers in the two lowest quintiles. Workers in quintiles 4 and 5 have the lowest unemployment rates, whilst their level and nature of participation in the labour force are higher. Employment opportunities outside Region 1 are more limited, with a significant proportion of self-employment in Regions 2, 3 and 4 at the subsistence level. Education at the tertiary level is needed to allow people from lower quintiles to move into the highest quintile, suggesting that action is required to ensure that tertiary-level education is made accessible and affordable to all.

Access to Services and Programmes

As discussed in chapter 7, the archipelagic nature of The Bahamas makes it difficult to develop community services and social programmes that serve everyone equally. Uneven distribution of population and transportation—within and between islands—exacerbates the difficulty. To reach a hospital—located only on the two islands in Region 1—more than twice as many lower-expenditure residents (26%) as higher-expenditure ones (12%) must travel over water.

Whilst children from the lower-expenditure groups and households outside of Region 1 participate in the National School Lunch Programme (NSLP), coverage is low. As mentioned in chapter 2, at its present coverage level, the NSLP is unlikely to have a major impact on the poor.

LOOKING AHEAD

The BLCS 2001 findings chart the difficulty of servicing all of the Commonwealth's residents evenly, given the archipelago's highly uneven distribution of population. Indeed, concentrated population patterns affect the cost-effectiveness of social policies. Given that 76% of all poor people live in Region 1, for example, serious efforts aimed at alleviating or reducing poverty must focus there; the data also reveal, however, that the proportion and depth of poverty are greater in more sparsely populated, rural areas. Thus, the challenge for policy planners is to avoid marginalizing any particular group while ensuring that the neediest are provided a social safety net. The mean gap or shortfall of a poor person from the poverty line is approximately $873 annually, meaning that $24 million will be required to lift all poor people to the line and eliminate poverty.

Across health, education, and housing sectors, similar data patterns emerge; that is, as household-expenditure quintiles rise, residents tend to shift from public to private or foreign health care and from Government-funded to private schools; they also tend to own, rather than rent, their homes. That the socioeconomic status of Region 1 workers far surpasses that of all other regions underlines the need to improve accessibility and affordability of services and programmes. Moreover, grappling with the social causes of low coverage rates for well-targeted programmes, such as the NSLP, call for further research. Finally, many successful programmes, such as the National Breastfeeding Campaign, have failed to influence the social behavior of citizens outside Region 1 on a large scale.

Clearly, to empower more citizens to assume greater responsibility for their health, the BLCS data imply that promotional campaigns must be targeted more evenly across all four regions. Similarly, the educational findings imply that new, more flexible ways of expanding education and training opportunities outside of Region 1 should be emphasized. Distance learning and adjusting academic calendars to enable rural children to participate in their families' seasonal businesses are two such examples.

Effective follow-on research and policy solutions will require forging appropriate linkages across and within sectors. For example, national occupational health-safety initiatives must include labour, education, and other social agencies and should require linkages to the workplace and school environment. Similarly, developing appropriate training programmes or other interventions oriented to the labour market will require coordinated research on the quality and relevance of secondary education. Finally, how welfare policy addresses the issue of affordable housing is critical to how the country addresses poverty and equity. The in-depth analysis of the social safety net called for in chapter 2 requires building on this study and conducting intersectoral analyses to assess the suitability of current programs, target populations, criteria, and benefit levels.

CHAPTER 1

Population Patterns: Regional Distribution and Migration

Kelsie Dorsett

Population size, composition, and distribution are vital to a country's policymakers, planners, and researchers. Moreover, such information is integral to any survey of a country's living conditions. The Bahamas Living Conditions Survey (BLCS) baseline data focused on an array of population variables: age and sex distribution, nationality, household composition, and basic migration patterns. This chapter presents the results of Survey analyses, by both region and quintile, highlighting findings that merit further investigation and implications for policymakers.

UNDERLYING PATTERNS

This analysis has revealed major demographic features involving 1) the ongoing pull of outlying rural populations to the more developed urban areas and 2) immigration. Individuals from the Family Islands continue to move into the urban region, apparently because of better employment opportunities and lack of economies of scale in the other three regions. In recent decades, Haitian migrants, who tend to enter the country en masse, have outnumbered all other immigrant groups.[1] This large influx of immigrants—both documented and undocumented—presents major challenges to the country's social and economic fibre, as it diverts precious resources toward detaining, maintaining, and repatriating such individuals.[2]

REGIONAL POPULATION DISTRIBUTION

The Bahamas is characterized by extreme regional disparities in population distribution (Box 1-1). As Table 1-1 illustrates, these differences reflect extreme regional disparities in standard of living, clearly showing that residents of Region 1 (New

[1] Except for a short period during the early l990s, The Bahamas has had relatively large inflows of migrants from North America, Great Britain, and the Caribbean.

[2] The International Organization for Migration (IOM) has initiated a study, still in its preliminary stages, on the dimension and impact of Haitian migration in The Bahamas; the study will collect and analyse existing data and conduct surveys of migrant households.

BOX 1-1 Disparities of the Bahamian Population

The Bahamian population, counted at 303,611 in the 2000 Census (DOS 2002), is widely and unevenly dispersed amongst the island groups. The overwhelming majority live in Region 1 (New Providence and Grand Bahama), whilst only 10% reside in Region 2 (Abaco, Andros, and Eleuthera) and a mere 5% in Regions 3 and 4 combined (Exuma and Long Island and Other Family Islands, respectively).

Sixty-nine percent of the population live on the island of New Providence alone—with 2,635 persons per square mile (sq. mi.)—even though the island accounts for only 1.5% of total land mass. By stark contrast, Andros, the country's largest island, representing 43% of its land mass, boasts only 3% of its population—with 3 persons per sq. mi. Consecutive censuses have shown that New Providence, together with Grand Bahama, the country's second largest population centre, continues to increase its population share at the expense of the other islands.

Providence and Grand Bahama) enjoy a standard of living far surpassing that of the other three regions.

Whilst Region 1's share of total population was smallest in the poorest quintile (77%), this share increased as living standards rose, reaching a high of nearly 91% in the wealthiest quintile. What stands out is that, in quintiles 1 and 2, the proportion of persons from Region 1 (77% and 84%, respectively) was lower than their overall share of the population (85%); however, in quintiles 3–5, their proportions were higher. In the other three regions, the situation was virtually reversed, as they were over-represented in the poorest quintile; this was further exaggerated by their consistent decline in population share as living standards rose.

Regional differences in well-being are further illustrated in Table 1-2, which shows that, in New Providence and Grand Bahama, unlike the other three regions, the quintiles were fairly evenly distributed. For example, in Other Family Islands (Region 4), 35% of the population represented the poorest quintile, whilst less than 10% were in the wealthiest. For all regions except Region 1, at least 50% of the population were in the two poorest quintiles.

AGE AND SEX DISTRIBUTION

The Bahamian population is predominantly young, with nearly one-third of its citizens under 15 years of age. Survey results showed little regional variation, except for Exuma and Long Island, where the proportion of those under age 15 was 27%. Persons 65 years or older comprise 5% of the country's population. Within all Family Island regions, the Survey showed that the proportion of senior

TABLE 1-1 Population Distribution, by Region and Quintile

	Data source		Quintile				
Region	BLCS	2000 Census	1	2	3	4	5
1	85.1	84.9	77.0	84.4	86.3	87.0	90.7
2	10.4	10.5	15.4	10.6	9.6	9.3	6.9
3	2.1	2.2	3.2	2.0	2.1	1.9	1.2
4	2.5	2.4	4.3	3.0	2.1	1.8	1.2
N	6,330		1,560	1,325	1,248	1,177	1,020

TABLE 1-2 Population Distribution, Showing Within-region Quintile Distribution

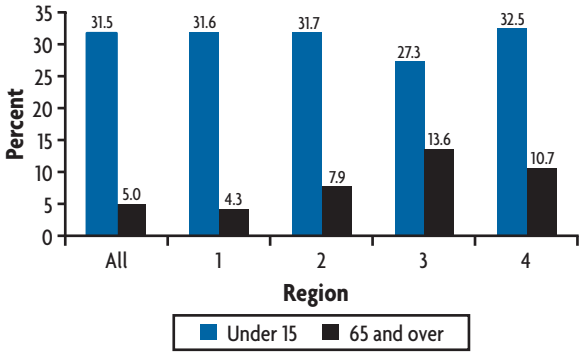
	Quintile					
Region	**1**	**2**	**3**	**4**	**5**	***N***
All Bahamas	20.0	20.1	19.9	20.0	20.0	6,330
1	18.2	19.9	20.2	20.5	21.3	3,366
2	29.8	20.5	18.4	18.0	13.3	1,745
3	30.9	19.6	19.9	18.4	11.2	620
4	35.0	24.3	16.9	14.1	9.8	599

citizens was noticeably higher than in New Providence and Grand Bahama.[3]

Census data have shown that most Family Islands have experienced declining populations, resulting largely from migration to either New Providence or Grand Bahama. The majority of migrators are young adults, with young children and the elderly left behind. Exuma and Long Island (Region 3) stands out as having the largest proportion of older persons (13.6%), more than three times that of New Providence and Grand Bahama (4.3%) (Figure 1-1).

[3] These findings confirm results of the last three national censuses. For example, in 1980, the proportion of elderly in New Providence and Grand Bahama was 3.3%, compared to 7.9% in the Family Islands. In 2000, the proportions were 4.6% and 8.7%, respectively.

FIGURE 1-1 Population (%) in Selected Age Groups, by Region



Sex differentials were more extreme amongst the elderly. For every 1,000 females, there were only 708 males—not a surprising finding, given that life expectancy is higher for females. As of 2001, life expectancy for females was 76 years, compared to 70 for males (DOS 2004). With the exception of Region 2, males outnumbered females amongst persons under 15 years of age. Nationwide, there were 1,128 males for every 1,000 females in this age group. Overall, for every 1,000 females in the country, there were 952 males (Tables 1-3 and 1-4).

Nearly two-thirds of the population was between the ages of 15 and 64—the potentially economically active population. Distribution of persons in this age group was

TABLE 1-3 Population Distribution; by Age, Sex, and Region

	Data source		Sex		Region			
Age factor & sex ratio	**BLCS**	**2000 Census**	**Male**	**Female**	**1**	**2**	**3**	**4**
Age group								
0–14	31.5	29.4	34.3	28.9	31.6	31.7	27.3	32.5
15–64	63.3	65.3	61.2	65.2	63.9	60.1	59.1	56.8
65 and over	5.0	5.2	4.2	5.7	4.2	7.9	13.6	10.7
Age dependency ratio (per 1,000 population)*	620.8	530.4	648.3	595.0	562.6	667.6	696.7	763.8
Median age	26.0	28.0	24.0	28.0	26.0	28.0	33.0	29.0
Proportion of male	48.8	48.6	-	-	48.6	48.6	50.3	53.1
Sex ratio (males per 1,000 females)	952.4	947.4	-	-	947.0	944.0	1,012.1	1,132.2
N	6,414	303,611	3,152	3,262	3,413	1,775	621	605

* Ratio of population 0–14 and 65 and older to population 15–64 years of age.

TABLE 1-4 Sex Ratios, by Age Group and Region

Age group	BLCS ratio	Region 1	2	3	4
0–14	1,128.1	1,162.4	890.6	1,024.3	1,175.2
15–64	894.0	877.0	978.0	998.4	1,143.2
65 and over	707.8	630.6	913.3	1,048.3*	966.0
N	6,413	3,405	1,780	621	607

* This ratio varies from that of the 2000 Census.

highest (64%) in the more developed region of New Providence and Grand Bahama and lowest (57%) in the least developed region of Other Family Islands.

The age dependency ratio,[4] estimated at 621, is an indicator of the degree to which younger and older persons depend economically on the working-age population. In New Providence and Grand Bahama, this dependency was significantly lower (563) than for all the other regions (the highest ratio of 764 was found in Other Family Islands).

NATIONALITY

The Bahamian share of population was 89%, far outweighing that of any other nationality group. A distant second was Haitian, representing 6%. These figures compare favourably with those of the 2000 Census (DOS 2002), which showed shares of 87% Bahamian and 7% Haitian. Bahamians were proportionally lowest (83%) in Region 2, where both Haitians and North Americans had their highest share.

Standard of living varied greatly amongst nationalities. Most striking was the status of Haitians, who were disproportionately represented in the poorest quintile, accounting for more than double their share of the total population. Their numbers progressively decreased as living standards increased, diminishing to 1.4% in the wealthiest group. As Table 1-5 shows, North Americans and other nationalities were more heavily concentrated in the wealthiest groups.

DISTRIBUTION BY HOUSEHOLD CHARACTERISTICS

Household Size Distribution

Survey results show that All Family Island regions had smaller households than did New Providence and Grand Bahama. Region 3 claimed the smallest households, with a mean of 3.1 persons. One-person households were more prevalent in Regions 3 and 4, accounting for 26% and 30% of households, respectively (Table 1-6).

[4] *Age dependency ratio* is defined as the ratio of population under 15 and over 64 years of age per 1,000 persons between 15 and 64 years of age.

TABLE 1-5 Population; by Nationality, Region, and Quintile

Nationality	Total	Region 1	2	3	4	Quintile 1	2	3	4	5
Bahamian	89.0	89.5	82.7	93.4	94.3	84.2	90.2	91.6	91.4	87.6
Haitian	6.2	5.8	11.3	3.4	1.1	14.3	7.8	5.1	2.7	1.4
Other Caribbean	1.9	2.0	1.5	1.4	1.5	0.5	1.1	2.6	2.9	2.4
North American (U.S. & Canadian)	1.9	1.8	3.0	1.2	2.8	0.2	0.6	0.6	1.9	5.7
Other	1.0	1.0	1.5	0.7	0.3	0.8	0.2	0.2	1.1	3.0
N	6,425	3,413	1,784	621	607	1,560	1,325	1,248	1,177	1,020

TABLE 1-6 Household Size; by Sex of Head, Region, and Quintile

	Data source		Sex of head		Region				Quintile				
Size factor	BLCS	2000 Census	M	F	1	2	3	4	1	2	3	4	5
Mean	3.5	3.4	3.5	3.5	3.5	3.3	3.1	3.2	5.8	4.6	4.1	3.1	2.1
No. members													
1	20.0	21.0	19.6	20.7	19.1	23.2	25.6	30.3	3.8	4.8	9.0	13.6	43.1
2	19.2	20.0	19.0	19.7	18.4	23.9	27.5	20.2	6.9	13.4	12.1	25.3	26.7
3	16.2	16.8	16.0	16.5	17.0	12.3	11.0	11.0	12.1	16.6	15.0	21.4	14.8
4	17.2	15.8	19.0	14.2	17.7	14.5	15.3	13.7	11.2	17.6	20.8	25.3	11.0
5	12.9	11.3	13.2	12.6	13.2	12.8	8.4	11.2	21.0	17.6	27.0	8.8	3.4
6 or more	14.4	15.2	13.2	16.3	14.6	13.4	12.1	13.6	45.0	30.0	16.2	5.5	1.1
N	1,878	87,742	1,238	640	955	533	200	190	288	308	330	404	528

Nationwide, one-person households comprised 20% of all households, a finding consistent with that of the 2000 Census. As Table 1-7 indicates, slightly more than 30% of the heads of one-person households in Regions 3 and 4 were 65 years of age or older. Because of the limited number of observations, further analysis could not be made to determine whether these elderly persons were poor or vulnerable. (These findings suggest the need for further research in this area.)

TABLE 1-7 Characteristics of Heads of One-person Households

		Region		
Head characteristic	Overall	1	2	3 & 4
Male	61.0	60.4	61.5	66.9
Marital status				
Married/common law	14.3	13.4	17.4	18.7
Divorced/separated	25.4	27.4	16.1	19.2
Widowed	15.4	14.3	21.7	17.2
Never married	44.9	44.9	44.8	44.8
Age group				
20–44	48.4	51.1	38.9	34.8
45–64	36.7	36.7	38.1	34.8
65 and older	14.9	12.2	23.0	30.4
Median age	47	44	49	52
Quintile				
1 & 2	5.9	5.0	8.0	13.1
3	7.5	5.6	14.4	16.5
4	15.2	13.1	23.4	23.8
5	71.4	76.3	54.3	46.7
N	406	176	122	108

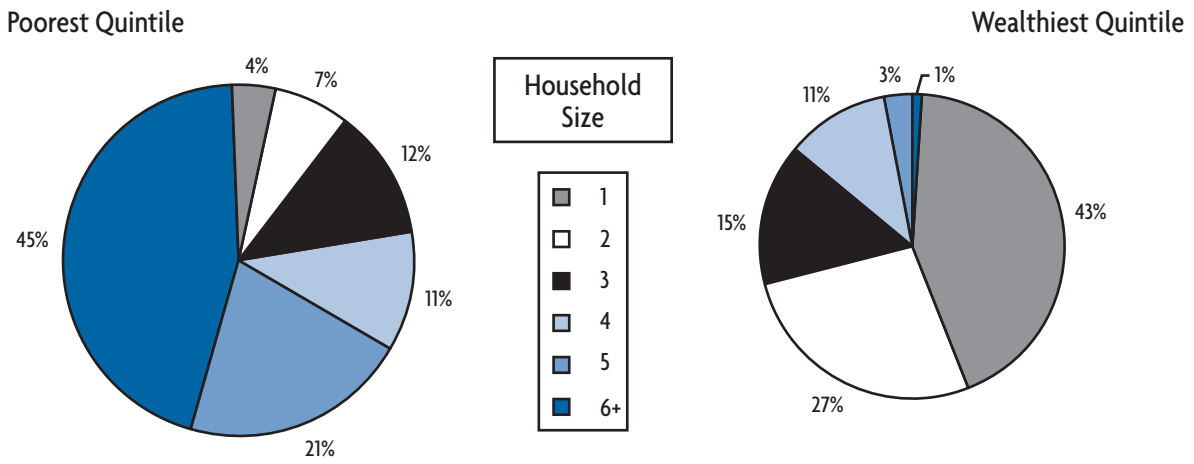
Examined by household size and quintile, the data revealed no surprises. Mean household size—largest (5.8 persons) in the poorest quintile—declined as wealth increased, reaching a low of 2.1 persons in the wealthiest quintile (Table 1-6). Most striking is that 45% of households in the poorest quintile had six or more members, compared to 1% of those in the wealthiest quintile (Figure 1-2).

Although mean household size (3.5 persons) did not vary by sex of head, female headed households (FHHs) accounted for a greater proportion of larger households (6 or more members) than did male headed households (MHHs) (16.3% versus 13.2%). The data further indicate that FHHs had a greater proportion of dependents than did MHHs. The dependency ratio for FHHs was 328, compared to a considerably lower MHH ratio of 282 (Table 1-8).[5]

The underlying pattern that emerges from this analysis is sex disparities. Females headed approximately 38% of all households, a proportion that varied noticeably by region

[5] The BLCS, like other household surveys conducted by the Department of Statistics (DOS), defines *household head* as that person who is acknowledged as such by the other household members. The household head is usually the person who bears greatest responsibility for economic maintenance of the household.

FIGURE 1-2 Household Distribution, by Size and Selected Quintiles



and quintile. In Regions 2, 3, and 4, share of FHHs varied little, peaking at 29% in Region 3. However, this proportion was 10 percentage points lower than that of Region 1 (Table 1-9).

Household inequalities based on sex of head are evident in that the share of FHHs was highest in the poorest quintiles. In quintiles 1-3, their share was larger than their overall share of total households (Table 1-9). In the poorest quintile, female headship was about equivalent to that of males; however, in contrast to MHHs, FHHs declined as living standards rose, reaching their lowest share in the wealthiest quintile (33%). In short, one half of the households in the poorest quintile were headed by females, compared to one third of those in the wealthiest quintile.

Approximately 43% of household heads were married, with an additional 25% never having married. Regional extremes were evident amongst married, never-married single, and widowed heads. With respect to the

TABLE 1-8 Mean Household Composition; by Age, Sex of Head, and Region

Age factor	BLCS mean	Sex of head		Region			
		Male	Female	1	2	3	4
Age group							
0–4	0.35	0.34	0.37	0.36	0.32	0.19	0.30
5–14	0.75	0.71	0.81	0.76	0.72	0.65	0.73
15–19	0.27	0.24	0.32	0.27	0.25	0.28	0.20
20–34	0.86	0.81	0.92	0.90	0.64	0.49	0.57
35–54	0.90	0.99	0.74	0.91	0.83	0.78	0.81
55–64	0.18	0.19	0.18	0.17	0.25	0.27	0.21
65 and older	0.18	0.19	0.17	0.16	0.27	0.42	0.35
Dependency ratio* (per 1,000 population)	299	282	323	289	338	380	375
N	1,878	1,238	640	955	533	200	190

* Proportion of household members 0–14 years of age and 65 and older to the total population.

TABLE 1-9 Selected Characteristics of Household Heads, by Region and Quintile

Head characteristic	All Bahamas	Region				Quintile				
		1	2	3	4	1	2	3	4	5
Female	37.7	39.6	27.1	29.3	28.2	50.0	38.4	40.9	35.9	32.9
Nationality										
Bahamian	84.0	84.4	77.8	90.1	92.6	75.7	82.2	88.0	87.4	83.6
Haitian	8.1	7.7	13.4	4.7	1.5	21.6	14.7	7.6	5.6	2.3
Other	7.9	7.9	8.8	5.2	5.9	2.7	3.0	4.4	7.1	14.0
Marital status										
Married	43.4	41.7	53.7	51.2	48.1	33.4	46.9	49.8	47.7	38.4
Common law	8.5	8.9	7.2	6.0	3.8	20.2	14.0	7.6	4.8	5.1
Divorced	7.3	7.8	4.5	3.0	4.4	2.4	2.4	3.5	7.1	13.3
Separated	6.8	7.2	4.6	5.7	5.5	6.1	8.7	7.1	3.3	8.7
Widowed	9.8	9.7	9.4	15.9	10.9	10.2	8.2	10.6	13.5	7.9
Never married	24.2	24.7	20.7	18.2	27.2	27.7	19.8	21.5	23.5	26.7
Age group										
20–34	22.2	23.1	17.4	12.4	21.4	21.9	21.1	19.3	25.5	22.0
35–44	30.0	30.6	28.1	20.6	25.8	32.6	29.2	35.6	28.4	27.4
45–54	23.9	24.9	19.2	20.6	15.0	21.2	24.1	19.8	21.5	28.4
55–64	12.7	12.2	16.5	15.8	12.2	9.1	13.0	13.5	13.2	13.6
65 and older	11.2	9.2	18.7	30.6	25.6	15.2	12.6	11.8	11.4	8.7
Median age	44	43	46	52	47	43	44	43	43	45
N	1,881	955	535	200	191	288	308	330	403	528

latter, Region 3 had the largest proportion of widowed persons (16%), well above the national average of 10%, and also the greatest proportion of household heads over 64 years of age. The median age of the household head in Region 3 was 52, six years older than the national average (Table 1-9).

With regard to household living standard, according to the marital status of household heads, those headed by individuals in a common-law relationship were worse off than all others (Table 1-9). Perhaps the reason is that a significant proportion of male partners in common-law relationships in The Bahamas tend to have families elsewhere; thus, their resources are spread more widely. Female partners are, in many cases, single individuals whose children have been fathered by their partners and largely depend on them for their well-being. In the poorest quintile, households headed by individuals in a common-law relationship accounted for 20% of households; this share declined to 5% in the wealthiest quintile. Households headed by married or divorced persons were better off than those in other groups.

Regarding marital status of household head by sex of head, the most striking finding was that 74% of MHHs had a partner, compared to only 15% of FHHs (Table 1-10). MHHs were more likely to have partners because men, more so than women, tend to remarry after being divorced or widowed, and they tend to die earlier than women. In the case of The Bahamas, what is most striking is the vast difference between the two: FHHs with no partner totaled more than three times the number of MHHs with no partner.

Similarly, 43% of female heads were never-married single heads, compared to only 13% of male heads. Given these results, it is not surprising that the female share of households was highest in the poorest quintiles (Table 1-9). Data provided in Table 1-10 show that, of the total households, 12% were in the poorest quintile; however, for FHHs, a larger proportion fell into this quintile (16%),

TABLE 1-10 Household Characteristics, by Sex of Head

Characteristic	Total	Male	Female
Mean household size	3.5	3.5	3.5
Dependency ratio (per 1,000 population)	299	282	328
Marital status			
Married	43.4	63.5	10.2
Common law	8.5	10.6	5.0
Divorced	7.3	5.6	10.0
Separated	6.8	3.7	12.0
Widowed	9.8	3.5	20.3
Never married	24.2	13.0	42.6
Partner lives in household	47.2	69.5	10.2
Age group			
20–34	22.1	22.5	21.6
35–44	30.0	32.4	26.0
45–54	23.9	22.6	26.1
55–64	12.8	12.0	13.9
65 and older	11.2	10.5	12.5
Region			
1	83.9	81.4	88.2
2	11.0	12.9	7.9
3	2.3	2.6	1.8
4	2.7	3.1	2.0
Quintile			
1	12.1	9.7	16.0
2	15.3	15.2	15.5
3	16.9	16.1	18.3
4	22.4	24.0	21.3
5	33.4	36.0	29.0
N	1,878	1,238	640

compared to (12%) for MHHs. In the wealthiest quintile, the situation was reversed; that is, FHHs were over-represented in the poorest quintile and under-represented in the wealthiest.

In light of the above discussion, it is clear that FHHs are vulnerable, a situation that must concern policymakers. These households tend not to have a male spouse, are larger, have a larger proportion of children and/or dependents, and are poorer.

Nationality of Household Head

Predictably, the overwhelming proportion of households was headed by Bahamians (84%). Of the balance, Haitians accounted for 8%, a percentage equal to that of all other non-Bahamian nationalities combined. Region 2 stands out as the region in which Bahamian headship was at its lowest (78%), whilst that of both Haitians and "Other" nationalities were at their highest (Table 1-9).

When living standards of household heads were examined by nationality, it was found that, within the poorest quintile, Haitian-headed households accounted for 22%, a share that declined with rising living standards, reaching a low of 2% in the wealthiest quintile. The reverse was true for other nationalities, whose share of households increased with a rise in living standards, from 3% in the poorest quintile to 14% in the wealthiest. In short, Haitian-headed households were, by a wide margin, less affluent than all others.

MIGRATION OVERVIEW

Throughout most of the twentieth century, The Bahamas experienced a net inflow of migrants.[6] The age, sex, and socioeconomic status of immigrants are vital information that planners need in order to determine how immigration affects their country. For this reason, the BLCS included a brief section on recent immigration. It should be emphasized that BLCS data and subsequent analysis be used cautiously, owing to the small number of immigrants covered (167 observations). When these observations are further disaggregated (e.g., by place of birth, sex, or age), the numbers within cells become even smaller, which affects data reliability. This analysis, therefore, aims to present a general overview of Bahamian immigrants—their status and overall well-being—to provide planners a much needed immigrant profile.

Recent Immigrants

During the five-year period prior to the BLCS, Haitians comprised the single largest immigrant group, accounting for about 33% of recent immigrants.[7] For all recent immigrants, Region 1 (New Providence and Grand Bahama) was the overwhelming region of choice. This is no surprise, given that work-related reasons are major motives for migration; thus, Region 1, being the most

[6] Whilst the 1990 Census showed that slightly more people were leaving than entering the country (DOS 1996), the 2000 Census again recorded a net inflow (DOS 2002).

[7] *Recent immigrants* are defined as those persons who immigrated to The Bahamas within five years prior to the 2001 BLCS.

TABLE 1-11 Recent Immigrants, by Place of Birth and Sex

Country or region of birth	All immigrants	Male	Female
Haiti	33.1	40.0	26.2
UK, U.S., or Canada	18.4	28.4	8.6
Other Caribbean	26.2	18.4	33.9
Other	22.3	13.2	31.2
N	167	82	85

TABLE 1-12 Recent Immigrants, by Place of Birth and Region of First Entry

	Region of first entry				
Place of birth	1	2	3	4	*N*
All immigrants	85.7	11.9	1.6	0.8	164
Haiti	85.3	13.9	0.4	0.4	63
UK, U.S., or Canada	91.5	4.4	2.6	1.4	29
Other Caribbean	87.8	7.5	3.7	1.0	43
Other	79.2	20.2	0.0	0.6	29

developed, is more likely to meet this demand (Tables 1-11 and 1-12).

Amongst immigrants, both sexes were equally represented; however, variations were apparent amongst migrant groups. For example, 75% of immigrants from "UK, U.S., or Canada" were male, as were 60% of Haitian immigrants. By sharp contrast, migrants from "Other Caribbean" and "Other" country categories were predominantly female (Table 1-13).

About 67% of immigrants were 25–54 years of age, the prime working age. As Table 1-14 indicates, slightly more than half of all immigrants entered the country for working purposes. The median age of immigrants was 33, seven years older than the median age for the general population. Amongst migration groups, age structure varied widely—ranging from the Haitian median age of only 28 to the UK, U.S., and Canadian median of 47 (Table 1-13).

Survey data substantiates and underscores information already known to policymakers (Table 1-14). More than two-thirds of Haitian immigrants, in stark contrast to their counterparts from other places of birth, entered the country not to start a new job; rather, they fled a difficult geopolitical situation to look for work. For each of the other nationalities, less than 8% entered the country for this reason.

More than half of the persons from "Other Caribbean" countries migrated because a job awaited them. Most of these migrants were female, who for some years, on an ongoing basis, have been recruited by Bahamians as teachers or domestic help.

Immigrants' standard of living varied greatly. Within the three poorest quintiles, some 64% of immigrants were Haitian, whilst only 7% were from "Other" countries. The latter group comprised 36% of those in the two

TABLE 1-13 Distribution of Recent Immigrants, by Age and Sex

		Place of birth			
Age or sex factor	All immigrants	Haiti	UK, U.S., or Canada	Other Caribbean	Other
Age group					
0–14	12.2	7.5	11.3	11.7	20.5
15–24	15.7	21.1	11.2	13.9	13.1
25–44	49.3	56.1	22.9	55.0	51.3
45–54	17.9	11.9	50.0	16.6	5.6
55 and older	4.9	3.5	4.6	2.8	9.5
Proportion male	49.7	60.1	76.4	34.9	29.5
Median age	33	28	47	33	35
N	167	63	31	44	29

TABLE 1-14 Reasons for Immigration (%), by Place of Birth and Quintile

Reason	All immigrants	Place of birth				Quintile	
		Haiti	UK, U.S., or Canada	Other Caribbean	Other	1, 2, & 3	4 & 5
Parents moved/ marriage	28.7	14.8	29.2	32.1	44.4	34.2	23.3
School/schooling completed	2.0	0.6	0.0	0.7	7.5	0.9	3.0
Start new job	28.6	0.0	35.3	55.6	32.2	7.6	43.2
Look for work	24.8	67.4	7.2	6.9	0.0	46.2	10.0
Other	15.9	17.2	28.3	4.7	15.8	11.2	20.4
N	166	62	31	44	29	78	84

wealthiest quintiles, in contrast to the former, which accounted for only 10%. Immigrants from "Other Caribbean" countries were about equally represented in these two quintile groups (Table 1-15).

When living standard was examined within specific migrant groups, it was found that 84% of all Haitians were within the three poorest quintiles (Table 1-16). Only 9% of "UK, U.S., or Canada" immigrants and 13% of those from "Other" countries were part of the three poorest groups.

That Haitians comprise the largest group of immigrants and are known to enter the country—either documented or not—en masse, poses a pressing policy issue. Regardless of documentation status, most are poor, young males in search of work. This phenomenon has far-reaching implications for a small developing country with a predominantly young population and limited resources.

Internal Migrants

Individuals who migrated within the islands during the five years prior to the BLCS were young persons—about half of both male and female migrants were under 25 years of age. Males comprised 54% of internal migrants (Table 1-17). As Table 1-18 shows, male migrants were richer than their female counterparts; 14% of males were in the poorest quintile, whilst 28% were in the wealthiest. For females, proportions were higher in the lowest quintile (18%) and lower in the wealthiest (20%).

Nearly half of internal migrants were from the two wealthiest quintiles (Table 1-18). These persons indicated that the main reason for their move was to fill a job position (47%). An additional 20% moved for other reasons, which included retirement (Table 1-19).

By contrast, migrants from the poorest quintiles, who comprised 15% of all internal migrants, moved either because of marriage or relocation of parents (27%) or search

TABLE 1-15 Recent Immigrants, by Place of Birth and Quintile

Place of birth	All immigrants	Quintile	
		1, 2 & 3	4 & 5
Haiti	34.3	64.4	10.1
UK, U.S., or Canada	16.5	33	27.1
Other Caribbean	26.2	25.8	26.5
Other	23.1	6.5	36.4
N	163	79	84

TABLE 1-16 Recent Immigrants, by Place of Birth and Quintile Distribution within Immigrant Group

Place of birth	Quintile		*N*
	1, 2 & 3	4 & 5	
All immigrants	44.6	55.4	163
Haiti	83.7	16.3	63
UK, U.S., or Canada	8.9	91.1	28
Other Caribbean	43.9	56.1	43
Other	12.5	87.5	29

TABLE 1-17 Age Group of Recent Internal Migrants, by Sex

Age group	All	Male	Female
0–24	47.4	47.8	46.8
25–44	38.6	36.8	40.6
45–64	11.7	12.6	10.7
65 and older	2.4	2.8	1.9
N	314	169	145

for work (26%). Overall, nearly one-third moved to start a new job. That the largest proportion moved for job-related purposes correlates with data presented in Table 1-20, which shows that, for more than 61% of internal migrants, the industrialized region of New Providence and Grand Bahama—where jobs and educational opportunities are more abundant—was their destination.

The present migration pattern, if allowed to continue unchecked, could create serious socioeconomic problems for all of the regions affected. Thus, the lure of residents from the other regions to New Providence and Grand Bahama is a major policy issue.

DIRECTION FOR POLICY AND RESEARCH

This demographic overview conveys the picture of a small archipelago in which two major industrialized centres, New Providence and Grand Bahama (Region 1), are vital to the life stream of the country. Region 1—where residents enjoy the highest standard of living and comprise the overwhelming majority of the country's population—is also a major destination for both immigrants and internal migrants.

This sustained migration pattern has affected the size, composition, and regional distribution of the Bahamian population. As the BLCS findings show, All Family Islands, particularly Regions 3 and 4, had a larger proportion of the very young (14 years and under) and the elderly (65 years and over), and therefore significantly higher dependency ratios; moreover, these regions were poorer than Region 1.

Concentrated population patterns affect the cost-effectiveness of social policy. Due to its population size, Region 1 has the largest number of persons in all quintiles, however, proportionally it has the smallest share of persons in the poorest quintiles; by contrast, in the more sparsely populated, difficult-to-reach areas of the country, the proportion of persons in the poorest quintiles is larger. This finding is identical to that of Chapter 2, which

TABLE 1-18 Quintile of Recent Internal Migrants, by Sex

Quintile	All	Male	Female
1	15.4	13.5	17.8
2	16.9	17.2	16.4
3	17.1	16.3	18.0
4	26.4	25.3	27.8
5	24.2	27.6	20.0
N	306	169	137

TABLE 1-19 Reasons for Internal Migration, by Quintile

		Quintile		
Reason	All	1	2 & 3	4 & 5
Parents moved/marriage	20.5	26.6	27.2	13.3
School/schooling completed	14.1	16.8	17.1	11.8
Start new job	31.6	10.4	18.6	46.7
Look for work	12.0	25.9	10.8	8.6
Other	21.7	20.2	26.2	19.6
N	315	81	105	120

TABLE 1-20 Current Region of Residence of Recent Internal Migrants, by Sex

Current region of residence	All internal migrants	Sex	
		Male	Female
1	61.1	61.0	61.3
2	23.9	24.0	23.9
3	8.4	6.9	10.2
4	6.5	8.1	4.5
N	316	170	146

focuses on the poor—the lowest of the poorest quintiles. Wealthier residents tend to live in the more densely populated, urban region, where the potential for overcrowding and its accompanying social ills, stemming from unchecked growth, could have costly repercussions. In response, planners must decide on the optimum type of development policy to foster.[8]

A second major policy concern involves the vulnerability of FHHs. Intervention in some form is necessary, given that such households—which tend to be large, poor, and have more dependents—account for about one-third of all Bahamian households.

Finally, immigration data leads one to conclude that the country has two distinct migratory patterns: a poorer group in search of work and a wealthier middle-aged group taking up a job post (most likely on contract). Both types affect the country in unique ways. Poorer migrants tend to make demands on the country's social services, including Government health facilities and schools (see chapters 4 and 5, respectively); whilst wealthier migrants tend to use private facilities, but also make demands on such public resources as electric utilities and the telephone system. In addition, their presence suggests that they occupy positions for which Bahamians are either unqualified or insufficient in number to fill. Further research on the effects of both types of migrant groups is called for, including identification of manpower gaps within the country's current educational and training system.

[8] For example, a poverty map could provide useful input into the country's urban renewal programme.

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CHAPTER 2

Poverty Estimates and Policy Issues

Sudhanshu Handa

Any estimate of poverty requires two essential ingredients: a welfare measure used to rank households and a poverty line to distinguish between "poor" and "non-poor." The Bahamas Living Conditions Survey (BLCS) poverty assessment uses per-capita, household-consumption expenditure as its welfare measure.

WELFARE MEASURE AND POVERTY LINE

Theoretically, expenditure is a better measure of welfare than income because it directly measures the attained consumption of an individual or household. Conversely, income measures only potential consumption or welfare. Expenditure is also preferable from a practical perspective because households are more likely to understate income. Thus, income measurement may be problematic where unearned income, such as remittances, is significant. Finally, expenditures fluctuate less than income (i.e., savings during prosperous times and lack of savings or losses in difficult periods). For these reasons, consumption expenditure is the preferred approach to measuring welfare.

The poverty line used in this study is an absolute poverty line in that it represents the minimum amount of money necessary to purchase an adequate low-cost diet, with allowances for non-food needs.[1] Based on a minimum daily requirement of 2,400 kilocalories (kcal) for an adult, the least-cost food basket that delivers Bahamians a nutritionally adequate diet requires $2.64 per day. Including allowances for the purchase of non-food necessities, the total absolute poverty line is $7.84 per day.[2] This translates into an annual poverty line of $2,863 per person, slightly higher than the recent estimate of $2,752 for Barbados and significantly lower than the U.S. estimate of $4,525.

Since expenditures are collected at the household level, each individual is assigned the per-capita expenditure of the household in which

[1] See Appendix for details on the procedure used to estimate the poverty line for The Bahamas.
[2] New Providence prices.

s/he lives (it is assumed that resources are equally distributed within the household). It is understood that overall well-being includes access to such basic needs as clean water, good health, quality education, and freedom of speech and movement. However, this chapter focuses on monetary welfare, which complements the analyses of non-monetary well-being detailed in other chapters of this report. Taken together, these chapters offer an overall picture of the state of living conditions in the country.

ESTIMATES AND INDICATORS

National and Regional Rates

The national poverty rate for The Bahamas overall is 9.3% (Table 2-1). The rate is one percentage point lower for New Providence and Grand Bahama, but significantly higher for the other three regions, with the highest rate (nearly 21%) found in Other Family Islands. However, as Table 2-1 shows, nearly 76% of all poor people live in New Providence and Grand Bahama, whilst less than 6% live in Other Family Islands. Thus, any serious effort to reduce poverty must focus heavily on the two major islands.

Poverty Gap, Gini Coefficient, and Population Characteristics

BLCS results show that both the poverty gap (PG)[3] and squared poverty gap (SPG)[4] are larger in the Other Family Islands and Exuma and Long Island (Table 2-1). For example, in the Other Family Islands, the PG is close to 6.4%, compared to 2.8% for the entire country; whilst the SPG is 3.0%, compared to 1.3% for the country as a whole. Hence, not only are poverty rates highest in the Other Family Islands; the poor in this region are poorer, on average, than the poor in other regions.

Using the concept of the PG, it is possible to estimate the mean gap or shortfall of a poor person from the poverty line—approximately $873 per year. By multiplying this average figure by the total number of poor, one can estimate the total amount required annually to lift all poor people up to the poverty line and thus out of poverty; this is $24 million. When similar calculations are performed using the food poverty line—commonly referred to as the "line of indigency"—the mean gap is $963 and the total gap is $475,000 per year (although only 1% of the population falls below this line).[5]

The *Gini coefficient*, a commonly used indicator of inequality, can range from 0 to 1, with higher values indicating greater inequality. The Gini coefficient for The Bahamas is estimated at 0.57, which is equal to that of Brazil (Table 2-1). However, the Brazilian Gini is based on income distribution, which tends to be more unequal because of savings and seasonality, whilst the Bahamian figure is based on expenditures. This implies that true inequality is likely to be significantly higher in The Bahamas and thus probably the highest in the Caribbean. Within the region, consumption-based inequality figures are available for Jamaica (0.35), Suriname (0.46), and Guyana (0.45). Even the income-based estimates for Barbados (0.38) and Trinidad & Tobago (0.40) are significantly lower than the consumption-based estimate for The Bahamas.[6]

Estimating Bahamian poverty using the indicators of gender, nationality, and age group reveals two key points (Table 2-1). Haitian nationals (25%) is higher than the national average; however, given the population distribution of the country, 83% of the poor are Bahamian whilst only 17% are Haitian. Second, poverty rates are higher amongst younger age groups; when this factor is combined with population distribution, one sees that slightly more than 50% of the Bahamian poor are children ages 14 and under. In addition, both the PG and SPG are higher amongst children, compared to other age groups and the national average.[7]

POVERTY PROFILE: HOUSEHOLD CHARACTERISTICS

Only 5.1% of Bahamian households are poor—less than the national poverty rate of 9.3% (Table 2-2). Because

[3] *Poverty gap* is an indicator sensitive to the distance of the poor from the poverty line; a larger number indicates that the mean distance from the poverty line for the poor in that region is higher.

[4] *Squared poverty gap*, calculated using the square of the distance of the poor from the poverty line, gives more weight to observations that are farther away from the line. Thus, this indicator is distributionally sensitive, and tends to be larger when even a few observations are far from the poverty line (i.e., extremely poor).

[5] See Appendix for the method used to calculate the food poverty line.

[6] It should be noted that the subregional inequality estimates for The Bahamas are significantly lower than the national estimate (around 0.39 each). This means that, within each region, welfare distribution is more equal; thus, the high overall Gini coefficient stems from large differences in welfare between regions.

[7] The policy implication is that poverty-reduction efforts should focus strongly on children and families with young children.

TABLE 2-1 National and Regional Poverty Indicators, by Population Characteristic (%)

Population characteristic	Poverty rate	Proportion of population	Distribution of poor	PG	SPG	Gini coefficient
All Bahamas	9.33	100.00	100.00	2.84	1.32	0.5745
Region						
1 (New Providence & Grand Bahama)	8.33	85.06	75.88	2.58	1.21	
2 (Abaco, Eleuthera, & Andros)	13.19	10.41	14.71	3.73	1.56	
3 (Exuma & Long Island)	16.64	2.05	3.76	5.00	2.55	
4 (Other Family Islands)	20.96	2.48	5.65	6.35	3.00	
Region 1						0.3859
Regions 2–4						0.3944
Gender						
Male	9.05	48.78	47.16	2.79	1.28	
Female	9.60	51.22	52.84	2.90	1.35	
Nationality						
Bahamian	8.67	88.99	82.55	2.56	1.20	
Haitian	24.90	6.16	16.98	8.89	3.87	
U.S., UK, or Canadian	1.69	2.17	0.37	0.10	0.01	
Other	0.35	2.68	0.10	0.09	0.03	
Age group (years)						
0–4	16.61	10.14	18.01	5.99	3.04	
5–14	13.90	21.47	31.85	4.32	1.97	
15–19	9.05	7.74	7.51	2.06	0.88	
20–34	9.01	24.60	23.87	2.85	1.37	
35–54	4.90	25.79	13.46	1.26	0.51	
55–64	3.48	5.27	1.98	0.96	0.34	
65 and older	6.26	5.00	3.33	1.59	0.61	

Note: The PG measures the average shortfall of those persons below the poverty line relative to the line; it is a measure of the depth of poverty. For example, the poor in Region 1 are closer to the poverty line (PG = .0259) than those in Region 4 (PG = 0.0635). The SPG is a similar measure, except that deviations from the poverty line are squared, which gives more weight to the poorest of the poor (i.e., those farthest from the poverty line).

poor households tend to be larger than non-poor ones, when household poverty is translated into individual poverty via family size, poor households receive more weight, thereby increasing the proportion of individuals that fall below the poverty line. As Table 2-2 demonstrates, poverty rates are above the national (household) average amongst female headed households (FHHs) (7%); homes in which the household head is in a common-law relationship (13%), widowed (8%), or a Haitian national (16%); households that have five or more residents; and households in which the head is age 65 or older (7%).

The degree of usefulness of these characteristics for designing interventions or selecting beneficiaries depends on how important each type of household is within the population.[8] For example, FHHs represent 38% of households in the country, and because their subgroup poverty rate is higher than the national average, FHHs represent 55% of all poor households. On the other hand, household heads in a common-law or divorced marital status are more likely to live in poverty; however, they represent less than 40% of all poor households because the proportion of these types of households is relatively small (Table 2-2). Therefore, targeting according to these last two criteria

[8] From an operational perspective, it is also important that targeting criteria be relatively easy to verify and not fungible by the household.

TABLE 2-2 Poverty Rates, by Household Characteristic (%)

Household characteristic	Poverty rate	Distribution of households	Distribution of poor	PG	SPG
All Bahamas	5.10	100.00	100.00	1.49	0.66
Gender of head					
Male	3.70	62.31	44.94	0.98	0.37
Female	7.37	37.69	55.06	2.32	1.12
Marital status of head					
Married	2.79	43.40	23.52	0.75	0.27
Common-law	13.31	8.49	22.83	3.95	1.72
Divorced/separated	2.79	14.09	7.73	0.68	0.30
Widowed	8.32	9.88	16.25	2.53	1.07
Never married	6.26	24.13	29.68	1.95	1.00
Nationality of head					
Bahamian	4.45	84.01	73.26	1.20	0.53
Haitian	16.02	8.09	26.09	5.70	2.50
U.S., UK, or Canadian	0.00	3.23	0.00	0.00	0.00
Other	0.72	4.67	0.65	0.18	0.06
Household size (no. members)					
1	1.09	20.03	4.29	0.27	0.11
2	2.05	19.25	7.97	0.69	0.31
3	2.87	16.21	9.10	0.99	0.41
4	1.81	17.18	5.93	0.50	0.20
5	7.05	12.95	17.68	1.87	0.76
6	13.67	6.07	16.40	2.89	0.98
7 or more	23.78	8.31	38.63	7.69	3.82
Age of head (years)					
20–34	5.44	22.14	23.91	2.18	1.18
35–44	5.44	29.96	31.50	1.28	0.48
45–54	4.65	23.90	21.68	1.31	0.57
55–64	3.28	12.75	8.17	0.93	0.32
65 and older	6.73	11.25	14.74	1.71	0.66

would not be an accurate method to select beneficiaries for poverty-alleviation programmes.

Although household size is one of the most accurate predictors of poverty—nearly 75% of all poor households have five or more members—it is difficult to verify. With regard to age of household head, poverty rates for households headed by those aged 20–54 are close to the national average; given the distribution of these households, they represent 75% of all poor households in the country.

If one observes the PG and SPG for each household subgroup, one sees that both are highest amongst the largest households (7 or more members), those in which the household head is a Haitian national, and those headed by widows and FHHs (Table 2-2). All of these groups have above-average poverty rates. The high PG and SPG statistics indicate that these households are the poorest of the poor.

Additional analyses of the relationship between demographic structure and household poverty highlight the precarious situation of FHHs with children, who comprise 23% of all Bahamian households and 45% of all poor ones (Tables 2-3 and 2-4). Households without

TABLE 2-3 Household-level Poverty Rates

Household level	Poverty rate	PG	SPG	Distribution of households	Distribution of poor
All households	5.10	0.0155	0.0071	100	100
Single-parent	9.36	0.0288	0.0139	25.97	47.87
Female-headed	10.01	0.0315	0.0155	22.57	44.69
Male-headed	4.89	0.0105	0.0027	3.39	3.18
Two-parent	5.14	0.0140	0.0055	36.98	36.71
No parent	2.10	0.0077	0.0039	37.05	15.41

children have a poverty rate of only 2.1%, compared to overall household poverty of 5.1%. For single-parent households, the poverty rate is 9.4%, significantly higher than that for two-parent households (5.1%). Finally, within single-parent households, FHHs have an even higher poverty rate (10%).

Both the age dependency and youth dependency ratios are significantly higher amongst FHHs than male headed households (MMHs), whilst the old-age dependency ratio is slightly higher amongst MHHs.[9] This indicates that FHHs have more young household members, and each prime-age, economically active resident in a FHH must support more dependants relative to MHHs. This is probably one reason why FHHs are poorer than MHHs. As Table 2-4 illustrates, dependency ratios by poverty status are higher amongst poor households relative to non-poor ones; the total age dependency ratio is highest amongst poor FHHs, where each prime-age adult lives with 1.8 non prime-age household residents. It should be noted, however, that the old-age dependency ratio is highest amongst poor MHHs. In The Bahamas, as in most countries, FHHs tend to be single heads whilst male heads tend to have a partner. This fact alone reduces the overall age dependency burden amongst MHHs; the higher old-age dependency ratio amongst MHHs indicates that older parents are more likely to move in with a partnered son or daughter rather than a single one.

[9] *Age dependency ratio* is defined as the number of household members below age 15 and above age 64, divided by the number of members between ages 14 and 65. Youth and old-age dependency use only members ages 14 and under and 65 and over, respectively, in the numerator, and the same denominator as the age dependency ratio.

Amongst persons 15 years and older, 75% are employed, 4% are unemployed, and the remainder are outside the labour force (Table 2-5). Amongst the poor, however, the proportion of employed is significantly lower (58%), whilst the percentage of those unemployed (12%) and outside the labour force (30%) is significantly higher.[10] Moreover, amongst those employed, the type of

[10] Additional analysis was conducted on the characteristics of the unemployed, by poverty status. Poor, unemployed people are more likely to be female (73%) and less likely to be household heads, compared to the non-poor. However, distribution of schooling amongst the poor and non-poor is remarkably similar; 70% of the unemployed have higher secondary education, although a greater percentage of the non-poor have completed some tertiary education (11% versus 5%). Because of the small sample sizes, the tables in this chapter do not present these results.

TABLE 2-4 Dependency Ratios, by Poverty Status

Dependency ratio	All households	MHHs	FHHs
All Bahamas			
Age	0.6244	0.5717	0.7116
Youth	0.5073	0.4441	0.6135
Old age	0.0773	0.0791	0.0741
Poor			
Age	1.4831	1.0998	1.7959
Youth	1.3727	0.9198	1.7205
Old age	0.1118	0.1539	0.0795
Non-poor			
Age	0.5703	0.5410	0.6199
Youth	0.4578	0.4241	0.5159
Old age	0.0730	0.0725	0.0740

TABLE 2-5 Economic Activity, by Poverty Status

	Poor		Non-poor		All	
Employment factor	**%**	***N***	**%**	***N***	**%**	***N***
Employment status (15 years and older)						
Employed	58.14	236	75.73	3,158	74.5	3,519
Unemployed	11.53	39	3.1	131	3.58	173
Outside labour force	30.34	142	21.17	1,023	21.92	1,215
Primary employer (15 years and older)						
Government/Government corporation	15.73	41	20.62	584	20.50	647
Private enterprise	58.1	109	53.25	1,353	53.35	1,501
Private individual	15.2	49	8.83	320	9.24	384
Own account	10.97	39	17.3	606	16.91	667
Ratio of non-working to working household members (10 years and older)						
All households	0.8805	129	0.4687	1,700	0.5068	1,881
MHHs	0.7455	69	0.4473	1,133	0.4673	1,240
FHHs	0.9791	60	0.5067	567	0.5726	641

primary employer differs slightly between the poor and non-poor. The poor are more likely to work in private enterprise (58% versus 53%) or as private individuals (15% versus 9%), whilst the non-poor are more likely to work as own-account workers. This pattern is reversed for household heads.

Amongst all households, the work dependency ratio is around 0.5;[11] this means that each worker supports half a non-worker, with the ratio slightly lower amongst MHHs and higher amongst FHHs. Dependency burdens amongst poor households (0.88) are more than 50% higher than the national average; amongst FHHs, this ratio rises to 0.98, implying that, amongst poor FHHs, each worker supports about one non-worker. Clearly, this is an important causal factor in the higher poverty rates amongst FHHs.

CHARACTERISTICS OF HOUSEHOLD HEAD

Because a household head is usually the most economically important person in a household, his or her characteristics are critical determinants of overall household welfare. Tables 2-6a and b present poverty rates by the household head's schooling and gender distribution, respectively. By selecting only household heads, the analysis is done at the household level, and, as mentioned above, the proportion of poor households is lower than the population poverty rate because of the larger size of poor households.

There is a strong positive relationship between schooling of household head and probability of escaping poverty. As Table 2-6A shows, the poverty rate amongst household heads with kindergarten or less schooling is 15.4%, whilst only 2.8% for heads with higher secondary schooling. Of course, few household heads have only kindergarten schooling; when population distribution of heads is considered, one observes that 47% of poor heads have completed primary schooling. Given the country's current economic structure, merely attaining literacy and other basic skills through primary schooling is not enough to succeed economically. In fact, 40% of poor households have completed some secondary schooling, implying either a low quality of education or a mismatch between subjects taught in secondary schools and labour-market demands.

Across the Caribbean region, vulnerability of FHHs is a concern to policymakers because of women's less secure status in the labour force and because FHHs have more

[11] *Work dependency* is defined as the number of non-workers age 15 and older, divided by the number of workers age 15 and older.

TABLE 2-6A Poverty Rates, by Household Head Schooling

Schooling level completed	Poverty rate	PG	SPG	Distribution of households	Distribution of poor
All Bahamas	5.10	1.49	0.66	100	100
Highest level completed					
None/kindergarten	15.41	5.17	2.23	3.18	9.64
Primary	12.88	3.68	1.49	18.34	46.98
Lower secondary	5.98	1.65	0.70	17.59	20.96
Higher secondary	2.82	0.84	0.45	37.36	20.53
College/university	0.51	0.27	0.15	18.82	1.88
Technical/vocational	0	0.00	0.00	4.71	0

children and dependents than other family structures.[12] Amongst FHHs, the overall poverty rate is 7.4%, compared to only 3.7% for MHHs (Table 2-6B). For both groups, poverty rates decline as schooling levels increase. For women, these rates decline significantly between lower (11.4%) and higher (4.4%) secondary schooling; for men, the critical schooling occurs earlier, between primary and lower-secondary levels. Therefore, female household heads need slightly higher levels of schooling than male heads to break out of poverty. This hypothesis is borne out by the Survey results, which show that nearly 60% of poor male heads have completed only primary schooling, whilst nearly 50% of poor female heads have completed some secondary education. This finding supports the hypothesis that women require more schooling than men to reduce the risk of poverty. Alternatively, the relationship between schooling and poverty amongst female heads may occur because female heads choose lower paying, but more flexible, jobs or because of career interruptions to have and raise children.

In terms of distribution of economic activity by poverty status, only 64% of poor household heads are employed, whilst a full 25% are outside the labour force

[12] The definition of *household head* provided by the BLCS interviewer to household respondents is "that person who is acknowledged as such by the other members, and usually the person who bears chief responsibility for economic maintenance of the household."

TABLE 2-6B Poverty Rates, by Household Head Gender

	Female		Male		Distribution of poor	
Schooling level completed	**Poverty rate**	**PG**	**Poverty rate**	**PG**	**Female**	**Male**
All Bahamas	7.37	2.32	3.7	0.98	100	100
Highest level completed						
None/kindergarten	24.93	7.02	9.57	4.04	10.73	8.29
Primary	13.26	3.85	12.60	3.56	37.18	59.07
Lower secondary	11.42	3.24	2.51	0.64	28.24	11.99
Higher secondary	4.37	1.79	1.94	0.30	20.87	20.11
College/university	1.19	0.70	0.10	0.01	2.98	0.53
Technical/vocational	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 2-7 Economic Activity of Household Heads, by Poverty Status

Employment factor	Distribution of poor	Distribution of non-poor	Proportion of population
Employment status*			
Employed	63.70	85.03	83.87
Unemployed	11.56	1.75	2.23
Outside labour force	24.74	13.22	13.90
Primary employer			
Government/Government corporation	27.57	20.03	20.36
Private enterprise	34.58	43.09	42.54
Private individual	24.15	7.90	8.46
Own account	13.71	28.97	28.65

* Based on last 7 days (not on last 12 months).

(Table 2-7). Conversely, 85% of non-poor household heads are employed. The large percentage of poor heads out of the labour force is an interesting statistic, driven by predominantly older, retired household heads who receive a pension or remittances from non-residents.

Although both poor and non-poor household heads are more likely to work in private enterprise—where most economic activity in The Bahamas occurs—employment status of poor and non-poor heads differs significantly. Non-poor heads are concentrated in private enterprise (43%) and own account (29%), whilst poor heads are concentrated in private enterprise (35%), public sector (28%), and private individuals (24%) (Table 2-7). The difference between own account and private individual may be blurred; however, the former indicates a more formal and established activity, whilst the latter implies a more informal, variable type of activity. This employment pattern is the opposite of what was discovered for all labour force participants (Table 2-5).

EXPENDITURE LEVEL AND COMPOSITION

The mean per-capita expenditure in The Bahamas is $10,111, with mean expenditures significantly lower outside New Providence and Grand Bahama (Table 2-8). Since distribution of expenditures is typically skewed because of a few large observations, a better measure is the median, which is substantially lower ($6,989). Another approach is to calculate the mean after dropping or trimming the top and bottom 1% of the distribution; this calculation yields $9,463, which is closer to the full sample mean than to the median.

Table 2-8 shows shares of total expenditure enjoyed by each decile, which are used to calculate the Gini coefficient. The top-expenditure decile (decile 10) accounts for more than 34% of total expenditure in The Bahamas, whilst the top two deciles (deciles 9 and 10) account for about half of all expenditure in the country. This unequal share of consumption is precisely what leads to the large calculated Gini coefficient for the country. Another approach to understanding consumption distribution is to compare the expenditure share of the top 20% to the share of the bottom 20%. As Table 2-8 illustrates, the top 20% consumes about 50% of the total, whilst the bottom 20% consumes about 5%, resulting in a high ratio (approximately 10:1).

In terms of household-expenditure composition by poverty status, 40% of the budget is spent on housing and 27% on food; thus, 67% of the budget is dedicated to these two basic needs (Table 2-9). For poor households, this proportion is higher (76%), largely because a higher proportion of the budget (37%) is spent on food. By regional standards, the food ratio amongst poor Bahamian households is extremely low. In most middle-income countries, the food share amongst poor households is about 50%; for low-income countries in sub-Saharan Africa and South Asia, it approaches 70%.[13] The low food

[13] In Argentina, Paraguay, and Chile, the food ratio is 50%. In Peru, the ratio is slightly higher, at 53%.

TABLE 2-8 Mean and Distribution of Per-capita Household Expenditure

Mean or share	All	New Providence and Grand Bahama	Other islands
Overall mean	$10,110.87	$10,517.03	$7,814.43
Median	$6,989.06	$7,184.79	$5,729.90
Trimmed mean	$9,463.27	$9,773.09	$7,686.90
Share (%), by decile			
1	2.08	1.77	4.40
2	3.48	3.08	6.54
3	4.40	4.13	6.47
4	5.54	5.39	6.71
5	6.31	6.32	6.22
6	7.75	7.37	10.62
7	9.37	8.88	13.10
8	11.54	11.73	10.06
9	15.51	15.61	14.74
10	34.02	35.71	21.13
Gini coefficient	0.5745	0.3859	0.3944

ratio in The Bahamas reflects the country's high standard of living, relative to other countries in the region.

In terms of composition of non-food budget items, the only significant difference between poor and non-poor households is the share of spending on recreation (2.5% versus 5.5%) and durable goods (1.9% versus 3.7%). One interesting observation is that poor households' share spent on education is slightly higher than non-poor households (4.5% versus 3.4%).

With regard to overall food distribution, the single most important food group is animal products (36%) (Table 2-10). This finding reflects the country's high stan-

TABLE 2-9 Expenditure and Budget Shares, by Poverty Status

Share per capita	Poor	*N*	Non-poor	*N*	All	*N*
Mean per-capita annual household expenditure	$1,990.26	129	$10,946.65	1,700	$10,110.87	1,829
Trimmed mean	$2,159.32	116	$10,088.29	1,671	$9,463.27	1,815
Median	$2,013.45	129	$7,571.14	1,700	$6,989.06	1,829
Expenditure Shares						
Food	37.09	129	26.16	1,700	26.71	1,829
Housing	39.22	129	40.04	1,700	40.00	1,829
Durable goods	1.87	129	3.81	1,700	3.71	1,829
Health	6.44	129	7.33	1,700	7.28	1,829
Clothing & footwear	4.87	129	4.74	1,700	4.75	1,829
Education	4.51	129	3.33	1,700	3.39	1,829
Transportation	2.86	129	4.71	1,700	4.61	1,829
Recreation	2.46	129	5.69	1,700	5.53	1,829
Other	0.67	129	4.20	1,700	4.02	1,829

TABLE 2-10 Food Expenditure and Shares, by Poverty Status

Share per capita	Poor	N	Non-poor	N	All	N
Mean per-capita household food						
Expenditure (all)	$755.09	129	$2,548.22	1,700	$2,380.89	1,829
At home	$502.92	129	$1,474.22	1,699	$1,383.52	1,828
Away from home	$252.05	129	$1,020.42	1,699	$948.59	1,828
Total Food Shares (%)						
Cereals	17.14	129	12.47	1,669	12.71	1,798
Starches	9.56	129	6.92	1,668	7.06	1,797
Sugars	8.83	129	10.34	1,668	10.27	1,797
Legumes	1.51	129	1.50	1,668	1.50	1,797
Vegetables	8.16	129	10.03	1,668	9.93	1,797
Fruits	9.61	129	12.47	1,669	12.33	1,798
Animal products	35.46	129	35.56	1,669	35.56	1,798
Fats and oils	4.80	129	3.82	1,669	3.87	1,798
Other foods	4.49	129	6.66	1,665	6.55	1,794

dard of living since meat and chicken are typically considered luxury goods, whose consumption increases with income. A major cause for concern in the Bahamian diet is the large proportion of the budget (10%) devoted to sugars; in most countries, this percentage is typically about 5% or less.

The main food-expenditure difference between poor and non-poor households is proportion of the budget devoted to starches and cereals, which typically are a cheaper source of calories and thus tend to play a more important role in the budget of poorer households. In The Bahamas, poor households spend approximately 8 percentage points more on these two groups, relative to the non-poor (27% versus 19%); this means that poorer households spend less on other foods, fruits, vegetables, and—to a lesser extent—sugars. Interestingly, both poor and non-poor households spend the same proportion on animal products—clearly the staple food for all Bahamian households.

ACCESS TO SOCIAL PROGRAMMES

In terms of awareness of the Ministry of Social Services' 10 major programmes, 59% of non-poor households, compared to 51% of poor ones, had heard of any of them (Table 2-11). However, in terms of programme participation, poor households, compared to non-poor ones, were significantly more likely to have received benefits (14% versus 4%) or to be receiving them (17% versus 3%). Despite the programmes being relatively well-targeted, overall coverage rates are extremely low and are thus unlikely to ameliorate poverty amongst the target population.

TABLE 2-11 Access to Social Programmes, by Poverty Status

Survey question	Poor	N	Non-poor	N	All	N
Heard of any of the 10 programmes?	51.18	129	58.95	1,700	58.34	1,879
Anybody ever received benefits?	14.13	129	4.23	1,700	4.63	1,879
Currently receive benefits?	16.67	129	2.8	1,700	3.42	1,879
Ever applied for assistance?	8.9	129	2.25	1,700	2.52	1,879

TABLE 2-12 Participation in National School Lunch Programme

Participation factor	Poor	*N*	Non-poor	*N*	All	*N*
Awareness of NSLP	56.89	92	47.09	798	47.74	915
School participation in the NSLP	27.27	285	14.66	1553	16.38	1,894
Children (ages 3–10)	29.82	175	14.48	850	16.54	1,051
Children (ages 11–18)	23.16	110	14.88	703	16.16	843
Children that have received lunch (ever)	17.15	285	1.36	1553	3.22	1,894
Ages 3–10	22.85	175	1.51	850	4.29	1,051
Ages 11–18	7.95	110	1.17	703	1.83	843
Children that receive lunch (currently)	12.02	285	0.62	1553	1.98	1,894
Ages 3–10	15.58	175	0.63	850	2.61	1,051
Ages 11–18	6.28	110	0.61	703	1.17	843

Note: Children currently in school.

Similar main conclusions can be drawn from analysis of the National School Lunch Programme (NSLP) (Table 2-12). Poor households are 10% more likely than non-poor ones to be aware of the NSLP (57% versus 47%). Children from poor households are 12% points more likely than those from non-poor ones to attend a school that offers the NSLP (27% versus 15%), indicating that the Programme is targeting schools appropriately. However, NSLP participation is low. For example, only 17% of poor children have ever received a lunch, and only 12% currently receive an NSLP-provided lunch. Whilst take-up rates are slightly higher amongst younger children (ages 3–10), relative to secondary-age children, coverage rates are so low that the overall effect of the NSLP on poor children may require careful evaluation (see chapters 5 and 7).

CHILDREN'S HEALTH AND SCHOOLING

As Table 2-13 shows, national school enrolment is universal amongst children 5–16 years of age, whether poor or non-poor. However, national enrolment for children ages 0–2 is only 26%, and just 14% for poor children. A simi-

TABLE 2-13 School Outcomes for Children Ages 0–18

Enrolment or attendance factor	Poor	*N*	Non-poor	*N*	All	*N*
Current enrolment (age group)						
0–2	13.68	65	28.71	309	26.06	374
3–4	51.21	47	91.17	190	84.53	237
5–10	95.73	157	99.92	687	99.34	844
11–13	96	50	100	323	99.59	373
14–16	99.06	58	96.73	308	96.73	366
17–18	10.52	20	49.88	163	49.13	183
Attendance factor						
Public school (ages 5–13)	98.42	207	67.01	1,010	70.73	1,217
Public school (ages 14–16)	96.96	58	71.58	308	74.49	366
Attendance in last 5 days (ages 5–13)	83.98	207	87.4	1,010	87.06	1,217
Attendance in last 5 days (ages 14–16)	86.91	58	85.72	308	86.4	366
Repeated a primary grade	21.93	263	11.18	1,359	12.27	1,673
Repeated a secondary grade	2.32	110	2.72	677	2.84	815

lar pattern can be observed at the pre-school level (ages 3–4), where national enrolment is an impressive 85%, but only 51% amongst the poor, versus 91% amongst the non-poor. Early childhood education is now recognized as an essential ingredient for preparing children for school; participation in such programmes has been linked to later performance on literacy and numeracy tests in primary school. To the extent that poor children may lack a stimulating family environment that encourages activities leading to school readiness, interventions to increase poor children's participation in early childhood and pre-school programmes could be a priority item on the policy agenda.

For children 17–18 years of age, universal enrolment drops off dramatically from those aged 14–16 years (from 97% to only 49% nationally, and from 99% to only 11% for poor youth) (Table 2-13). Enrolment at this level is determined by both supply-side (limited seats) and demand-side (opportunity costs, fees, and performance) factors. Poor families with tighter budget constraints may lack access at this level; however, limited supply of seats also means that competition is stiff in terms of performance. If family income buys access to the best schools, as it does in most countries throughout the Caribbean, then public policy clearly has a role to play. This topic requires more analysis to clarify the market failure and public policy motivation.

At both the primary and secondary levels of schooling, nearly 75% of children attend public school; however, public-school enrolment for poor children is virtually universal at these levels, no doubt, because of monetary constraints (Table 2-13). Interestingly, full attendance at both primary and secondary levels is about 86% nationally, regardless of poverty status. On the other hand, school performance, as measured by grade repetition, is significantly lower amongst poor children. For example, 22% of children from poor families have failed a primary grade, compared to only 11% from wealthy families. This pattern is consistent with the earlier observation that less access to early childhood programmes amongst poor children may reduce their chances at succeeding in primary school. Determinants of this relatively high failure rate and the role of family background, school quality, and access to early childhood development are important topics for future research (see chapter 5).

In terms of health, 46% of all pre-school children have had an illness within the past 30 days, compared to only 38% of poor pre-school children (Table 2-14). These differences commonly occur with self-reported health surveys in developing countries because the definition of being sick is subjective and highly correlated with socioeconomic status; that is, poorer individuals may have a higher threshold for illness. Compared to non-poor households,

TABLE 2-14 Health Outcomes for Pre-school Children

Outcome item	Poor	*N*	Non-poor	*N*	All	*N*
Questions (0–5 year olds)						
Ill in last 4 weeks?	38.13	37	47.82	234	46.29	277
Diarrhoea in last 4 weeks?	4.73	7	6.66	34	6.22	41
If so, treated?	100.00	7	80.02	30	82.66	38
Has vaccination card?	85.12	97	88.14	450	87.81	561
Vaccinations on schedule?	84.81	87	87.12	414	86.36	511
Anthropometry (2–5 year olds)						
Weight for height (proportion)						
Severely wasted	0.00	0	0.09	1	0.07	1
Moderately wasted	3.37	1	1.5	4	1.68	5
Severely overweight	3.37	1	4.91	19	5.30	22
Moderately overweight	13.42	7	8.76	16	9.03	25
Height for age (proportion)						
Severely stunted	5.65	4	9.23	24	9.08	29
Moderately stunted	5.30	3	5.38	20	5.29	24

TABLE 2-15 Education and Training of Non-head Adults, Ages 25–65

Education or training factor	Poor	*N*	Non-poor	*N*	All	*N*
Highest level completed						
None/kindergarten	8.18	8	2.66	34	2.95	42
Primary	17.81	32	11.25	192	11.61	224
Lower secondary	26.89	30	15.11	212	15.61	242
Higher secondary	46.8	59	49.21	573	49.29	632
College/university	0.32	1	17.46	192	16.54	193
Technical/vocational	0	0	4.31	48	3.99	48
Highest academic exam passed						
None	80.22	94	31.53	454	34.13	548
SLC	6.77	11	9.69	114	9.7	125
BJC or CXC basic	12	15	20.42	277	19.87	292
O level/CXC general	0.67	2	16.96	200	16.14	202
A level/other degree	0.34	1	21.4	239	20.16	240
Skill or trade?	19.27	130	45.98	1252	43.85	1,382

poor families reported slightly lower incidence of diarrhoea; however, the small sample size may mean that results are unreliable (see chapter 4).

Nationwide, about 87% of children have a vaccination card and 86% have had the full schedule of vaccinations, given their age and Ministry of Health protocols (Table 2-14). These rates are a few percentage points lower amongst poor children, indicating serious differences by poverty status. In a country like The Bahamas, the overall coverage rate should be virtually universal.

Table 2-14 also provides anthropometric outcomes for children ages 2–5.[14] Because sample sizes are small, little confidence can be placed in the results. The main area of concern is the rate of moderately overweight poor children (13.4%), which is significantly higher than the national average (9.0%) (see chapter 4).

ADULT EDUCATION AND TRAINING FOR NON-HEADS

Whilst the adult head is arguably the most important household member, other adult members clearly help determine overall household welfare. As Table 2-15 shows, non-head adults (ages 25–65) from poor households are more likely to have lower levels of schooling than those from non-poor ones. For example, more than 50% of poor, non-head adults, compared to only 28% of their non-poor counterparts, have only completed lower secondary schooling or below. At the other end of the spectrum, more than 20% of non-head adults from non-poor households have completed some tertiary education, compared to less than 1% of their poor counterparts.

With regard to distribution of qualifications, as measured by examinations passed, one observes an enormous quality difference between non-head adults from poor and non-poor households. In poor households, 80% of non-head adults have passed no exams, compared to 32% of those from non-poor households. Even if one considers an alternative qualification path—attainment of a specific skill or trade—non-head adults from non-poor households have a higher attainment rate (46%), relative to those from poor households (19%).

In terms of education and training of young adults (ages 19–24), 34% of poor youth, compared to only 22% of non-poor youth, do not attend a training institution and are not gainfully employed (Table 2-16). Distribution of completed education amongst poor and non-poor youths differs somewhat, but not as much as between the non-head adults (ages 25–65) described in

[14] "Severely" wasted or stunted is defined as less than, or equal to, −3 z-scores, whilst "moderately" wasted or stunted is between −3 and −2 z-scores. Similarly, "severely" overweight is defined as greater than, or equal to, 3 z-scores, whilst "moderately" overweight is between 2 and 3 z-scores.

TABLE 2-16 Education and Training of Young Adults, Ages 19–24

Factor	Poor	*N*	Non-poor	*N*	All	*N*
Educational Status						
Student only	0	0	6.78	21	5.72	21
Employed only	63.25	42	64.19	251	63.51	293
Student and working	2.85	1	7.47	22	7.92	23
Unattached	33.89	25	21.57	94	22.85	119
If not currently in school, highest level completed						
None/kindergarten	0	0	1.24	4	1.04	4
Primary	0.81	2	3.5	17	3.05	19
Lower secondary	29.71	23	18.65	69	19.82	92
Higher secondary	61.13	38	66.97	226	66.84	264
College/university	2.34	1	7.71	22	6.78	23
Technical/vocational	6.01	2	1.93	7	2.47	9

Table 2-15. For example, the rate of tertiary training is about 8% amongst both sets of youth, although youth from poor households are more likely to have attained technical or vocational training (6%) whilst non-poor youth are more likely to have attained a college or university degree (8%).

In sum, non-head adults from poor and non-poor households differ significantly in terms of schooling levels and educational qualifications, which clearly has implications for their labour-market potential and ability to contribute to household welfare. Amongst youth (ages 19–24), schooling outcomes do not differ as much, indicating a degree of convergence in educational attainment over time. Nevertheless, the unattachment rate is significantly higher amongst poor youth, which increases the dependency burden, thereby affecting overall household welfare.

HOUSING CHARACTERISTICS

Housing tenure differs markedly between poor and non-poor Bahamian residents. Non-poor households are more likely to own their home (58%); whilst poor families are more likely to rent (41%), live rent free (10%), or rent a Government home (6%) (Table 2-17). About 95% of non-poor households either own or rent their homes privately, compared to only 82% of poor households, for whom other forms of tenure are more important.

In addition, housing quality differs significantly between poor and non-poor families. In terms of outer-wall material, for example, 73% of non-poor families have concrete slabs or blocks, compared to only 42% of poor families, who are more likely to live in wood or stucco homes (54%). Similarly, 90% of non-poor households have bathing water piped into their dwellings; amongst poor households, only 46% have piped water and more than 50% use non-piped water. With regard to access to toilet facilities, 95% of non-poor households use a flush toilet, whilst only 67% of poor households have access; 25% of poor households use a pit latrine, and 7% have no toilet (see chapter 8).

Nationwide, about 70% of households have fewer than two people per bedroom, and 90% have fewer than three people per bedroom. By contrast, only 22% of poor households have fewer than two people per bedroom, and 50% have more than three people per bedroom. It is well known that crowded conditions affect hygiene and overall sanitary conditions, leading to easier transmission of disease and other forms of illness. Significantly more crowded living conditions amongst the poor, especially in light of their lower housing quality and limited access to water and toilets, is a major policy concern.

TABLE 2-17 Housing Characteristics, by Poverty Status

	All Bahamas		Poor		Non-poor	
Characteristic	**%**	***N***	**%**	***N***	**%**	***N***
Tenure type						
Owned	57.78	1,211	41.79	76	58.22	1,087
Private rented	36.85	537	40.67	38	37.16	489
Government rented	1.12	37	5.64	3	0.81	33
Rent free	3.46	80	9.94	11	3.08	66
Other	0.80	27	1.97	1	0.74	24
Main materials of outer walls						
Wood/stucco	20.96	470	54.02	65	19.33	389
Concrete blocks/slabs	71.42	1,258	41.83	54	73.01	1,164
Wood/concrete	2.07	59	1.35	5	2.1	50
Stone/brick	5.35	98	2.8	5	5.34	89
Other	0.21	8	0	0	0.22	8
Main source of water for bathing and cleaning						
Public, piped into dwelling	51.86	948	39.72	47	51.84	859
Public, not piped into dwelling	7.69	175	31.82	40	6.57	130
Private, piped	36.12	655	6.11	12	38.11	627
Private, not piped	3.57	96	19.72	25	2.79	70
Other	0.76	19	2.63	5	0.69	14
Main source of drinking water						
Public, piped into dwelling	5.8	111	7.74	9	5.71	97
Private, piped	4.68	118	1.16	4	5	109
Public/private, not piped	2.81	90	15.03	26	2.23	62
Purchased bottled water	86.32	1,560	75.85	89	86.68	1,420
Other	0.38	13	0.22	1	0.38	11
Toilet facility type						
Flush toilet, linked into public sewerage system	12.73	158	10.8	9	12.42	139
Flush toilet, with cesspit of septic tank	81.32	1,580	56.84	74	82.94	1,456
Pit latrine	4.54	115	24.69	32	3.54	80
Other	0.32	8	0.59	2	0.31	6
None	1.09	32	7.08	12	0.79	19
Level of crowding (persons per bedroom)						
Fewer than 1.0	22.93	482	1.1	4	24.16	467
1.0–1.9	47.56	866	21.37	38	48.67	802
2.0–2.9	19.55	330	27.36	32	19.08	288
3.0–3.9	5.95	107	22.85	24	5.2	81
4 or more	4.01	66	27.32	27	2.89	38

KEY RESULTS AND POLICY IMPLICATIONS

The analysis presented in this chapter, though descriptive and bivariate, nonetheless highlights key results that deserve further analysis and policy attention. Before turning to them, however, it should be emphasized that, compared to the Latin America and the Caribbean (LAC) region, and even the world, The Bahamas has an overall low rate of poverty. For example, poverty in The Bahamas is nearly 5% less than in Barbados (13.9%), which has a comparable level of gross domestic product (GDP) and almost 3% less than in the United States (12%), which has a significantly higher level of GDP.

- ***Poverty rates versus composition of the poor***. There is an underlying tension between specific risk factors associated with poverty and the proportion of the population that exhibits these factors. For example, residents living in regions other than New Providence and Grand Bahama, a widowed household head, an individual in a common-law relationship, or a Haitian immigrant are all important predictors of poverty. Yet, these specific groups represent only a small portion of the population, not a large proportion of the actual poor. Although poverty rates are much higher outside of New Providence and Grand Bahama, 75% of the country's poor live on these two islands. This can lead to conflict over allocating resources for poverty programmes. The overall poverty situation outside of New Providence and Grand Bahama indicates the need for more effort and resources directed to those regions; however, any overall reduction in poverty or improvement in living conditions will come only from changes in New Providence and Grand Bahama. At the same time, from a basic-needs perspective, the situation in other regions is more critical; poor residents on Other Family Islands are much worse off, as indicated by larger PG and SPG values. Thus, if the Government's strategy is to ensure a minimum level of basic needs for all Bahamians, then resources allocated to the poor on these islands should be a top priority.
- ***Inequality***. The Bahamas is one of the world's most unequal societies, although it has a low level of absolute poverty, distinguishing it from most other highly unequal societies, such as Brazil, where high inequality coexists with high rates of poverty. In The Bahamian context, it is unclear whether inequality should be a pressing policy issue, given the low rate of poverty; indeed, inequality is probably a direct consequence of one of the country's key development strategies: providing a tax haven for wealthy expatriates. Nevertheless, a highly unequal society is less cohesive, which has direct implications for financing of public goods and willingness to share the burden during times of crises. Highly unequal societies may also be more prone to crime, with direct economic consequences for investment and business confidence. Whilst inequality has not presented an economic burden to date, extreme inequality could lead to social unrest, which could negatively affect the country's economy. This issue clearly deserves further intellectual attention.
- ***Poverty, employment, and education***. Poor households have significantly less education than non-poor households. This is true for both household heads and non-head adults and youth. In addition, and perhaps as a consequence, employment rates are much lower amongst poor household heads and non-head adults in poor households, compared to non-poor households. Thus, the overall economic dependency ratio is three times as high in poor households as in non-poor households. These results indicate that there may be scope for training or other interventions oriented to the labour market to raise poor households' long-term earning capacity (see chapter 6).

  In terms of education, the results show that the majority of poor household heads have at least a primary education, and 20% have completed higher secondary schooling. This raises the question of quality and relevance of secondary schooling, which deserves further research (see chapter 5).
- ***Female headed households***. As is common in the English-speaking Caribbean, FHHs represent a significant portion of all Bahamian households, and their poverty rates are double those of MHHs. FHHs are larger, have more children, and have higher economic dependency burdens than MHHs. However, poor female heads are better educated than poor male heads. The analysis reflected in Table 2-6b indicates that female heads require higher levels of schooling than male heads to reduce the risk of poverty. The reasons for this may range from labour-market discrimination to compensating wages for

jobs that are more flexible or compatible with family responsibilities (see chapter 6).

- ***Vulnerability of children***. Poor households are larger and have more children; thus, it is not surprising that more than 50% of the poor are children age 14 and under. Poverty alleviation programmes must consider how to reach these children and what services to provide them.
- ***Youth unemployment and school-to-work transition***. In poor households, 33% of youths (ages 19–24) are "unattached," meaning that they neither work nor train; even amongst non-poor households, the unattachment rate for this age group is more than 20%. Unattachment can quickly lead to disillusionment with the system and pursuit of alternative, usually illegal, outlets for productive activity. Often resulting from difficulty in making the school-to-work transition, youth unattachment is a major policy issue throughout the region; many interventions focus specifically on easing this transition, especially for poor youth.
- ***Intergenerational transmission of poverty***. Breaking the vicious cycle of poverty across generations is often viewed as one of the most important public-policy issues facing any state. In The Bahamas, poor children suffer, relative to non-poor children, in four key areas:
  1) *Access to early childhood education*. Early childhood is the most rapid period of human development; events that occur during this period have an enormous effect on future health, cognitive development, socialization, and adult productivity. Access to early childhood education is extremely low amongst poor children (ages 3–4), which is likely to negatively affect their readiness for school and eventual achievement (see chapter 5).
  2) *Primary-grade repetition*. Whilst grade repetition may be directly linked to issues of school readiness and early childhood development, high rates of repetition represent a significant cost to both society and the individual. The individual cost is borne disproportionately by poor families.
  3) *Low rates of tertiary school enrolment, relative to the non-poor*. This issue deserves further analysis to ensure that market failures and equity issues are adequately addressed by suitable interventions.
  4) *Underweight and overweight children*. Nearly 50% of poor children (ages 2–5) are either underweight or overweight, a significantly higher percentage than for non-poor children of the same age. The precise policy response to this phenomenon depends on the causal mechanism underlying this outcome and clearly deserves further research (see chapter 4).
- ***Coverage and targeting of social programmes***. Whilst the existing menu of social programmes, including the NSLP, appears reasonably well targeted, coverage rates are extremely low. As a result, it is highly unlikely that these programmes can, at their present coverage levels, have a major impact on the poor. An in-depth analysis of the social safety net is needed, using the information presented in this chapter, to assess the suitability of the current menu of programmes, target populations and criteria, and benefit levels.

With regard to targeting, the criteria used to select beneficiaries for poverty programmes are more challenging the fewer potentially eligible individuals there are. Thus, in The Bahamas, beneficiary identification and selection are difficult because of the country's low poverty rate. Under these circumstances, simple methods, such as geographical targeting, must be replaced by more sophisticated techniques, such as proxy means tests or selection on a combination of characteristics. To illustrate the challenge, simulations have been conducted to assess the targeting efficiency of selecting beneficiaries based on characteristics associated with poverty, as indicated by the results of this chapter.

As Table 2-18 shows, if the selection criterion were female headship only, then 86% of qualified applicants would not be poor, which represents leakage of programme benefits to the non-poor. Leakage rates are extremely high, even when combined with geographical targeting (within New Providence and Grand Bahama or within Other Family Islands). However, when female headship is combined with a housing-quality indicator (e.g., whether a family has a toilet), leakage rates decline dramatically. In fact, if the selection criteria were female headship with no toilet and at least one child under age 5, the leakage rate drops to an extremely efficient 6% nationally and 4% in New Providence and Grand Bahama.

Of course, this criterion carries a substantial cost because it entails a visit to verify housing conditions.

TABLE 2-18 Leakage Rates for Various Beneficiary Selection Mechanisms (%)

Selection criterion	National	New Providence/ Grand Bahama	Other Family Islands
FHH only	86	87	78
FHH, with child 0–4	76	77	64
FHH, with child 0–14	83	84	73
FHH, no toilet	26	28	22
FHH, no toilet and child 0–4	6	4	10
FHH, no toilet and child 0–14	14	15	12

Note: Leakage indicates the proportion of individuals who would qualify for the programme, based on the selection criteria, but who are non-poor.

Nevertheless, in a country with a low poverty rate, such as The Bahamas, some level of verification is usually necessary to avoid large rates of leakage. It should be noted that female headship is not a straightforward targeting criterion since households may alter their composition to gain programme eligibility. In general, permanent characteristics that cannot be easily manipulated are the most appropriate for selecting beneficiaries; in practice, however, such characteristics may not be easily identified.

APPENDIX: METHOD FOR CALCULATING THE POVERTY LINE

CONSTRUCTING THE POVERTY LINE

The poverty line represents the minimum expenditure necessary for an individual to satisfy basic needs over a specific reference period (e.g. per day). This cost is estimated in two stages. In the first stage, the minimum expenditure necessary to purchase a nutritionally adequate diet is calculated. This amount is often referred to as the *food poverty line*. In the second stage, the minimum required cost of non-food items, such as clothing and shelter, is estimated. The sum of these two estimates equals the poverty line. Although estimations vary by country—because of data availability and other country-specific factors—the methodological approach is fairly standard. The specific technique used for The Bahamas is identical to that used for Jamaica and several other LAC countries.

FOOD POVERTY LINE

The food poverty line is derived by costing out a low-cost basket of food that satisfies acceptable nutritional requirements. Following recommendations of the World Health Organization (WHO), the chosen basket of goods provides 2,400 kcal per day. These 2,400 kcal are derived from the eight broad food groups listed in Table 2-A1. The distribution of calories amongst these eight groups was selected so that the implied cost share of each group in the final basket would be consistent with the observed empirical distribution of the food budget amongst households in the BLCS.

Within each broad food group, specific commodities were selected based not only on their price, but also on their popularity, as measured by frequency of purchase, based on BLCS data. In some cases, this involved a trade-off because a frequently purchased item (as observed from the BLCS) was not one of the two-to-three cheapest sources of calories in a particular food group. In these few cases, the cheaper source of calories was selected to maintain consistency with the fundamental idea behind the exercise. Table 2-A2 lists the 31 commodities comprising the food basket, by food group.

Prices per unit quantity were collected from New Providence for the items in the food basket, and standard calorie-quantity conversion tables were used to calculate the cost per calorie for each item. Within each food group, calories were assumed to come from specific commodities in equal proportion. The cost of calories for each food group was then summed across all food groups to obtain the total cost of the food basket. This cost, in New Providence prices, is $2.64 per day (Table 2-A3).

NON-FOOD COMPONENT

The non-food component of the poverty line was estimated from the observed expenditure patterns of households in the BLCS. Specifically, the cost of basic food-basket needs was divided by the average food-ratio for households in deciles 2, 3, and 4 of the welfare distribution to derive the full poverty line. The mean food ratio for these three deciles is

TABLE 2-A1 Caloric and Cost Distribution of Low-cost Food Basket, by Major Food Group

Food group	Energy (%)	No. items in final diet	Total cost ($)	Cost share (%)
Cereals	35.0	5	0.57	20
Starchy fruits, roots, and tubers	10.0	3	0.33	14
Sugar and syrups	5.0	1	0.02	1
Legumes	5.0	3	0.14	5
Vegetables	4.0	4	0.33	13
Fruits	6.0	3	0.45	18
Animal-derived foods	25.0	8	0.77	29
Fats and oils	10.0	3	0.03	1
Total	**100**	**30**	**$2.64**	

0.328, and the resulting daily poverty line is $8.05, implying an annual poverty line of $2,941. This poverty line is close to that recently calculated for Barbados, and is significantly higher than poverty lines for LAC countries with much lower overall levels of development, such as Jamaica, Guyana, and Honduras (Table 2-A4). In The Bahamas, the food budget share is extremely low, especially for the poorer quintiles; in other LAC countries, the food share is close to 0.5 and sometimes even higher. The low food share in The Bahamas, an indicator of the country's relatively high standard of living, leads to a higher poverty line (Table 2-A4).

TABLE 2-A2 Items in Low-cost Food Basket

Item	Amount (oz.)	Amount (gram)	Energy (kcal)
Cereals			
Wheat flour (all purpose, enriched)	1.98	56	204.1
Rice (parboiled)	1.98	56	208
Grits	1.98	56	197.9
Bread (white, enriched)	1.98	56	150.8
Spaghetti, macaroni (enriched, ckd)	1.98	56	79.1
Starches			
Potato (sweet, fresh); tuber (raw)	3.77	107	80.7
Potato (Irish, fresh); tuber (raw)	3.77	107	63.3
Cassava (fresh root, raw)	3.77	107	96.1
Sugars and cereals			
Sugar (white, refined, granulated)	1.1	31	120
Legumes			
Lima beans (whole seed, dry, raw)	0.33	9	31.8
Peanut butter (added fat, sweet)	0.33	9	55.7
Pigeon pea (whole seed, dry)	0.33	9	32.5
Vegetables			
Corn (canned, solid and liquid)	2.04	58	35.2
Cabbage (common, raw)	2.04	58	11.6
Carrot (fresh, raw)	2.04	58	22.1
Mixed vegetables (canned, drained)	2.04	58	27.1
Fruits			
Peaches (canned, in syrup)	3.02	86	63.4
Bananas	3.02	86	51.2
Oranges (all varieties)	3.02	86	29.4
Animal-derived foods			
Mackerel (canned, solid and liquid)	1.18	34	52.3
Beef (canned, medium fat)	1.18	34	73.1
Ham (picnic)	1.18	34	68.6
Mutton (whole, lean and fat, choice ckd)	1.18	34	74
Bologna	1.18	34	82.9
Cheese (hard, cheddar)	1.18	34	135.2
Sardines (canned, in oil)	1.18	34	104.3
Turkey (dark meat, raw)	1.18	34	9.6
Fats and oils			
Vegetable shortening	0.34	10	84.6
Margarine (regular, hard, vegetable fat, oil)	0.34	10	70.7
Oil (pure, all kinds, blend)	0.34	10	84.6
Total			**2,400**

TABLE 2-A3 Diet of Composition of Low-cost Food Basket

Item	Amount
Water (g)	726.7
Energy (kcal)	2,400.1
Protein (g)	89.4
Fat (g)	81.8
Saturated fat (g)	23.0
Cholesterol (mg)	180.3
Carbohydrate (g)	331.6
Fibre (g)	23.6
Calcium (mg)	762.2
Iron (mg)	20.8
Potassium (mg)	3,371.8
Sodium (mg)	2,211.4
Zinc (mg)	9.7
Vitamin A (R.E.)	3,973.0
Thiamin (mg)	2.9
Riboflavin (mg)	1.50
Niacin (mg)	24.9
Folacin (ug)	242.3
Cyano cobalamin (ug)	11.7
Vitamin C (mg)	159.7
Total amount (lb)	3.19
Total amount (kg)	1.45
Total cost ($)	**2.64**

TABLE 2-A4 Poverty Lines and Rates for Selected LAC Countries and U.S.

Country	Poverty line (US$)	Poverty rate (%)	GDP per capita (US$)	Year
Bahamas	2,863	9.10	15,997	2001
Barbados	2,752	13.9	8,212	1997
Brazil	749	37.5	4,690	1999
Guyana	510	36.3	901	1999
Honduras	762	79.1	790	1999
Jamaica	980	16.0	2,604	1998
Mexico	1,545	41.1	4,100	2000
United States	4,525*	11.7	34,000	2001

Note: Poverty lines are for an individual per year.

* Calculated by converting the poverty line for a family of 4 to that per person.

CHAPTER 3

Household Expenditure Data: Patterns for Analysis

Jaikishan Desai

It is now commonly accepted that expenditures on food and various non-food items provide a better measure of an individual's standard of living than does income. Although the process of collecting data on expenditures is more time-consuming, measurement errors are fewer, respondents are less likely to misrepresent information, and a closer connection is made with economic well-being (Box 3-1) (see chapter 2). Independent of its role in measuring living standards, expenditure data provides a wealth of information that can be used for making policy and planning decisions. This chapter examines the expenditure data collected for the Bahamas Living Conditions Survey (BLCS).

ISSUES FOR DATA INTERPRETATION

Obtaining accurate data on household expenditures requires various methods and reference (recall) periods since such expenditures differ by household member and in frequency. For example, it is easier to identify food eaten outside the home by individual household members than food prepared and eaten at home, which is more likely to be eaten by members collectively. Thus, it is better to collect data on food eaten outside the home from individuals and data on food eaten within the home from the household member who makes the purchases or does the cooking. Moreover, certain expenditures (e.g., food, rent, utilities, transport, and personal care) occur more regularly whilst others (e.g., furniture, appliances, overnight stay in hospitals and clinics) occur less often. Collecting accurate data requires choosing a recall period appropriate to the type of expenditure. For more frequently purchased items, such as food, the recall period is shorter (monthly); however, for such items as clothing and hospital stays, the recall period is yearly. Ultimately, all expenditures must be standardized to one recall period—in this case, a year. This necessarily requires extrapolation, which can introduce a degree of error into the measurement of total expenditures.

BOX 3-1 Key Terms and Definitions

Economic well-being. Usually defined in terms of the value of all goods and services consumed over a well-defined time period, economic well-being or standard of living is a major criterion used to define the range of goods and services included in estimating household expenditures.

Double-counting. Avoidance of double-counting is a second criterion that drives the selection of expenditure items. Double-counting can occur for two reasons. First, the survey instrument's definitions of expenditure can overlap, especially when data is collected in various survey sections. Second, expenditures of one household may be receipts for another; thus, it is necessary to ensure that both expenditures and gifts are not included when, as with sample surveys, each selected household represents several others. For example, The BLCS measure of expenditures included the value of food and non-food gifts received by each household. If it also included remittance and gift expenditures to other households, this could lead to double-counting if the receiving households were located within the same enumeration area. Unless the survey instrument clearly identifies the origin and destination of each type of gift and remittance, thus permitting exclusion within the enumeration area, it is advisable to exclude gifts and remittances for all households

Expenditure. As used in this chapter, expenditure implies the value of all goods and services contributing to well-being consumed over a specified period. Within this context, household expenditures are not restricted to out-of-pocket expenditures, but also include the estimated value of household-owned goods and services, household production, and gifts received.

DATA-COLLECTION METHODS AND CATEGORIES

The BLCS, unlike a typical income-expenditure survey, collected expenditure data in a variety of ways that corresponded to incidence and relevance to the topics covered by the survey instrument. The data-collection methods chosen sought to strike a balance between accuracy (of recall) and practicality (of obtaining information). For example, data on food eaten at home, frequent (and some less frequent) non-food expenditures, housing, and consumer durables were collected for the entire household, largely because most of these items were collectively consumed by all household members. On the other hand, expenditure data on food eaten away from home, health, and education were collected for each household member because these items were more clearly correlated with specific individuals. Similarly, whilst certain expenditure information referred to the month preceding the interview, other data covered a longer recall period (e.g., year); the choice was based on respondents' recall ability.

Food-expenditure data were collected separately for food consumed at and away from home. The Survey team obtained data on food consumed at home by soliciting detailed information on household purchases, value of home production (consumed by the household), and gifts received for 98 food items over a 12-month period. Data on food consumed away from home, disaggregated by meal type (breakfast, lunch, dinner, and snack), was collected for the month preceding the interview for each household member, as the amount spent was expected to be substantial (the data collected validated this assumption) and a shorter recall period was deemed appropriate.

Non-food expenditure data were collected for the entire household over the 12-month period prior to the interview.[1] Data on such consumer durables as motor vehicles and appliances were collected by item for the entire household; this information—obtained on current value, acquisition price, and acquisition date—was used to estimate a "use value" for one year.[2]

[1] Non-food expenditures encompass a wide range of items, from frequently purchased fuel, toiletries, personal-care items, and transport to less frequently purchased clothing, footwear, and small household items.

[2] It should be noted that data were not collected on furniture, based on the assumption that respondents would be unable to provide accurate information on the current value of these items.

Data on health and education expenditures were collected for each relevant household member. For health, information was collected on outpatient-visit expenditures over a four-week period, inpatient visits over a 12-month period, and insurance premiums for one year. For education, information was collected on school tuition and fees, uniforms, and books for each household member who attended school during the 12 months preceding the interview.

Finally, housing-expenditure data were collected for the entire household. Data on such utility expenditures as water, electricity, telephone, and garbage disposal were based on the most recent bill and months covered. For dwelling use, actual household rents were used for rented homes; in the case of owner-occupied, rent-free, and squatter-occupied dwellings, respondents were asked how much they were prepared to pay each month. This "perceived" rental value was used to determine the value that the household derived from use of the dwelling.

FINDINGS: FOOD EXPENDITURE PATTERNS

The average Bahamian household consumes nearly B$8,164 of food each year (Table 3-1), which translates into a daily per-capita expenditure of B$8.41. However, consumption varies widely across households, particularly in terms of standard of living. Amongst the poorest 20% of the population, daily per-capita expenditure is only about $2.91, whilst the wealthiest 20% consume a per-capita equivalent of B$14.19 per day (see chapter 2).

The most striking finding was that the largest share of total food expenditures is food eaten away from home (including out-of-pocket expenditures and food eaten at other households and social events).[3] For the average Bahamian household, food eaten away from home constitutes 34% of total annual food expenditures (Figure 3-1). The largest component of this category is lunch, typically consumed at the workplace, for which mean annual expenditures total more than B$1,779 per household or about B$1,535 per capita (Table 3-1).

As Table 3-2 shows, men spend about B$500 more per year than women on food eaten away from home.

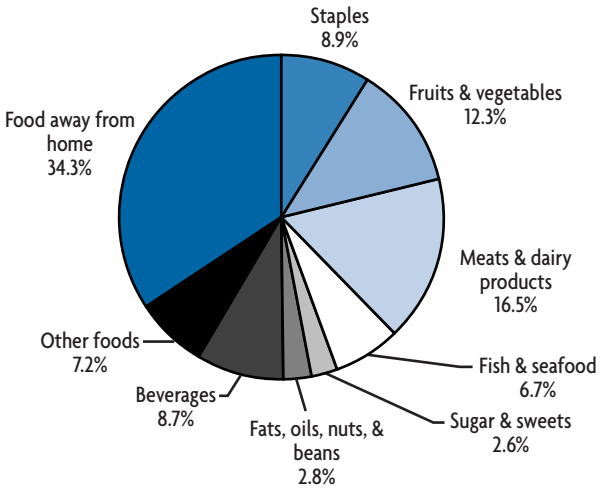
[3] To the extent that food was eaten at other households—including the homes of friends and relatives—double-counting of food expenditures may have occurred because food eaten at home is based on purchases, home production, and gifts received. The survey instrument does not break down the value of food eaten away from home into purchased and non-purchased components.

TABLE 3-1 Average Household Food Expenditures, Share in Total, and Household Consumption

Food group*	Mean annual expenditure	Share of total food expenditure	% Households that consumed over past 12 months
Staples (cereals, roots, and tubers)	631.7	8.9	98.8
Fruits & vegetables	876.5	12.3	98.5
Meats & dairy products	1,201.1	16.5	98.8
Fish & seafood	539.6	6.7	96.1
Sugar and sugar products	193.8	2.6	98.2
Fats, oils, nuts, & beans	193.1	2.8	97.9
Beverages	667.9	8.7	98.2
Other foods	535.7	7.2	98.4
Foods consumed away from home	3,324.6	34.4	83.2
Breakfast	373.7	3.9	45.4
Lunch	1,779.3	19.2	75.6
Dinner	694.5	6.5	38.4
Snacks	477.1	4.8	47.9
Total food expenditure	**8,163.9**	**100**	

* See Table 3-A1 for data on the items within each food group.

FIGURE 3-1 Food Groups as Share of Total Food Expenditure



Amongst working-age individuals (19–64 years old), those who worked in the 12 months prior to the BLCS spent nearly B$800 more than those who did not; most of this difference was due to higher spending of those who operated their own businesses. Amongst school-age children (6–18 years), those enrolled at the time of the survey spent about B$350 less than non-enrolled children, largely because the latter group was employed and thus spent more on meals consumed away from home.

Meats and dairy products comprise the second largest share of total food expenditures. Within this food group, average household expenditures on chicken are substantially higher, amounting to nearly B$20 per month. The third largest share of food expenditures is fruits and vegetables. Whilst no single fruit or vegetable accounts for more than 1% of total food expenditure, together they account for about 12% of the total. Staples (cereals, roots, and tubers) and beverages (alcoholic and non-alcoholic) each comprise about 9% of total food expenditure; of the items that comprise each of these food groups, bottled water (2.7%), fruit juices (2.2%), soft drinks (2.0%), bread (1.8%), and cold breakfast cereal (1.6%) are the main ones. Fish and seafood expenditures, about B$540 per year, comprise nearly 7% of the total, with fresh and frozen fish accounting for nearly 3% of the total.

Variations across Households

Household spending on staple foods is inversely related to standard of living (Table 3-3a). Predictably, wealthier households spend a smaller share of their total food budget on staples. Whilst households in the poorest quintile spend 12.5% of their food budget on staples, those in the wealthiest quintile spend only 7%. Similarly, share of total food expenditure on meat and dairy products is lower amongst those who are better off, although differences between quintiles are small. The largest differences between quintiles involve food expenditures away from home. The wealthiest 20% of households spends about B$4,139 on food away from home, whilst the poorest spends 80% less.

Household food-expenditure differences are also related to the age and gender of the household head, as well as household composition (Tables 3-3A and B). Households headed by older individuals spend progressively less on food eaten away from home and more on all food items consumed at home. Male-headed households spend about 4% more on food eaten away from home. Variations in household size and composition do not translate into large differences in spending patterns, although they clearly affect the amounts spent on specific foods. One exception is the large difference in expenditures on food eaten away from home between households with and without at least one member 15–64 years old. Households with no members in this age group spend an average of only 12.7% of their total food expenditure on food away from home, whilst households with one or more members in this age group spend between 34.6–38.4% on food away from home.

Variations across Island Groups

Another striking difference in food expenditure patterns occurs between island groups. Distinct from the other regions, New Providence and Grand Bahama (Region 1) largely follow the patterns of the fourth expenditure quintile. Households on these two islands spend a smaller share on staples and nearly every other food group, but spend more on food away from home. To a certain degree, island-wise differences reflect differences in living standards; however, they also persist within expenditure quintile groups. Thus, Region 1 households in the poorest quintile (quintile 1) spend more on food away from home than do the poorest quintile households on other islands.

TABLE 3-2 Mean Individual Expenditures on Food Eaten Away from Home

Factor	Breakfasts	Lunches	Dinners	Snacks	All meals
Age (in years)					
5 or younger	57	362	115	158	691
6–14	43	627	132	147	948
15–18	79	999	120	159	1,357
19–24	189	873	285	248	1,595
25–64	242	930	449	261	1,882
65 or older	264	469	411	180	1,325
Gender					
Male	216	909	379	274	1,778
Female	127	731	259	164	1,281
Total (annually, per person)	173	822	321	220	1,535
Work status (individuals, 19–64 years old)					
Worked for wages (past 12 months)					
Yes	229	955	410	246	1,839
No	250	767	477	319	1,813
Worked on own farm (past 12 months)					
Yes	169	919	561	198	1,846
No	234	920	420	260	1,834
Worked in own business (past 12 months)					
Yes	311	978	703	365	2,357
No	212	904	344	230	1,689
Worked (past 12 months)					
Yes	242	953	432	262	1,888
No	115	468	292	223	1,098
Total	233	920	422	259	1,835
Currently enrolled in school (6–18 years old)					
Yes	44	726	125	150	1,045
No	201	828	196	170	1,394
Total	53	733	129	151	1,066

FINDINGS: NON-FOOD EXPENDITURES

Rent, averaging about B$8,799, comprises the largest share—35.5%—of total non-food expenditure (Table 3-4).[4] Overall, about 57% of Bahamian households own their dwellings. This largely reflects the home-ownership status of New Providence and Grand Bahama, where much of the population lives. By contrast, on the Family Islands, more than 70% of households own their dwellings. The rental market is largely private; although, on the Family Islands, about 4% of all households live in Government-rented housing. The imputed rent for homeowners is nearly 2.8 times the rent that tenants actually pay. This finding may indicate that homeowners overestimated rental values. Annual rent averages about 9% of house value, which is somewhat higher than such countries as the U.S., where the average is 6–7% (see chapter 8).

The second largest non-food expenditure item is electricity (7%), followed by health and dental insurance

[4] For rental units, the tenant's rent is the expenditure incurred by the household; for owner-occupied dwellings and rent-free dwellings, the respondent's estimate of rental value is the implicit expenditure on use of the dwelling.

TABLE 3-3A Mean Shares of Food Groups in Total Food Expenditure, by Various Factors

Factor	Staples	Fruits & vegetables	Meats & dairy products	Fish & seafood	Sugar & sugar products	Fats, oils, nuts, & beans	Beverages	Other foods	Food away from home
Expenditure quintile									
1 (lowest 20%)	12.5	11.3	18.3	6.4	3.1	3.4	8.0	9.0	27.9
2	10.9	12.3	17.9	6.0	2.6	3.1	8.7	7.7	30.9
3	9.6	12.8	16.5	6.9	3.0	2.8	8.8	7.8	31.9
4	8.2	12.2	16.2	6.6	2.6	2.7	8.5	7.3	35.7
5 (highest 20%)	6.9	12.3	15.3	7.2	2.3	2.5	9.1	5.8	38.6
Region									
1	8.6	12.0	16.2	6.3	2.5	2.6	8.6	7.1	36.0
2	10.9	13.7	18.0	8.1	3.3	3.7	9.4	7.2	25.7
3	10.3	13.1	17.3	10.3	3.0	3.7	9.8	7.6	24.9
4	10.7	12.4	16.6	10.6	3.3	3.1	9.7	7.7	25.9
Age of household head									
25 or younger	7.0	7.8	12.6	3.5	2.5	1.7	6.6	6.7	51.5
25–34	8.5	10.3	14.3	6.0	2.7	2.3	8.3	7.5	40.0
35–44	8.5	11.0	16.1	5.9	2.7	2.5	8.8	7.8	36.9
45–54	8.3	13.0	16.2	7.6	2.4	2.9	8.8	6.5	34.3
55–64	10.2	15.1	19.1	7.8	2.6	3.6	9.2	7.0	25.5
65 or older	11.1	15.3	19.3	7.9	2.9	3.5	9.2	6.7	24.1
Gender of household head									
Male	8.5	11.8	16.0	7.0	2.5	2.6	8.8	7.0	35.8
Female	9.6	13.1	17.3	6.3	2.7	3.1	8.6	7.4	32.0
Household size (no. members)									
1	8.0	12.8	15.3	6.9	2.5	2.9	10.4	5.7	35.5
2	9.0	13.8	17.3	7.7	2.5	3.0	9.4	6.4	31.0
3–4	8.9	12.2	16.6	6.5	2.7	2.7	8.4	7.6	34.4
5–6	9.5	10.9	16.7	6.0	2.5	2.5	7.8	8.3	35.7
7 or more	9.8	10.6	16.0	6.6	3.2	2.6	6.8	8.2	36.2

Ages of household members (no.)									
0–4 years									
0	8.8	12.7	16.8	6.9	2.5	2.8	9.0	6.0	34.4
1	9.0	10.9	15.6	6.2	2.8	2.5	8.0	10.0	35.2
2 or more	9.7	10.8	15.6	7.0	3.4	2.9	8.2	11.2	31.2
5–14 years									
0	8.7	12.7	16.5	6.9	2.4	2.9	9.2	6.7	34.0
1	8.7	11.8	16.0	6.5	2.7	2.5	8.0	7.8	35.9
2	9.4	11.9	16.5	6.8	2.7	2.7	8.8	7.8	33.3
3 or more	10.6	10.7	17.4	5.8	3.3	2.7	7.4	8.0	34.1
15–64 years									
0	12.6	18.5	22.3	9.3	3.3	4.2	10.6	6.6	12.7
1	8.3	12.5	15.7	6.5	2.7	2.9	10.0	6.6	34.8
2	8.7	12.1	16.0	7.2	2.6	2.7	8.6	7.5	34.6
3	9.0	11.8	17.2	6.1	2.5	2.7	8.2	7.2	35.4
4 or more	9.3	10.6	16.3	6.1	2.5	2.5	6.9	7.4	38.4
65 years and older									
0	8.6	11.9	16.0	6.5	2.6	2.7	8.7	7.3	35.8
1	10.7	14.1	18.8	8.3	2.8	3.4	8.9	6.7	26.3
2 or more	11.4	15.8	20.9	6.9	2.9	3.4	8.8	6.2	23.6
All Bahamas	8.9	12.2	16.5	6.7	2.6	2.8	8.7	7.2	34.3

TABLE 3-3B Mean (Nominal) Expenditure on Types of Food, by Various Factors

Factor	Staples	Fruits & vegetables	Meats & dairy products	Fish & seafood	Sugar & sugar products	Fats, oils, nuts, & beans	Beverages	Other foods	Food away from home
Expenditure quintile									
1 (lowest 20%)	642	627	998	363	181	179	409	492	2,151
2	708	787	1,169	417	183	190	622	526	2,886
3	721	952	1,277	559	226	204	682	594	3,083
4	591	838	1,120	544	186	182	614	592	3,237
5 (highest 20%)	574	997	1,306	649	193	202	813	490	4,139
Region									
1	611	873	1,200	502	186	186	658	537	3,427
2	757	920	1,258	685	238	243	768	533	2,749
3	609	866	1,059	866	203	225	603	486	2,814
4	771	816	1,138	822	237	189	642	550	2,937
Age of household head									
under 25	483	575	922	276	191	115	527	503	4,276
25–34	596	764	1,039	473	195	165	664	572	3,629
35–44	662	872	1,297	510	225	195	707	616	3,727
45–54	644	983	1,300	712	189	214	765	499	3,611
55–64	647	957	1,201	517	158	219	600	507	2,280
65 or over	608	855	1,093	471	162	185	489	383	2,137
Gender of household head									
Male	642	906	1,242	600	201	194	706	565	3,634
Female	615	828	1,134	440	182	192	605	488	2,818
Household size (no. members)									
1	356	602	761	371	107	130	564	270	2,490
2	486	799	992	483	146	177	573	358	2,573
3–4	658	939	1,266	549	209	199	703	577	3,358
5–6	827	988	1,471	617	243	220	752	782	4,219
7 or more	1,090	1,215	1,874	864	343	297	809	869	4,930

Ages of household members (no.)									
0–4 years									
0	578	848	1,146	500	170	186	654	404	3,188
1	767	971	1,359	608	242	203	693	884	3,665
2 or more	817	906	1,342	771	308	238	750	950	3,820
5–14 years									
0	499	765	994	452	145	170	593	421	2,810
1	755	1,011	1,415	678	239	209	731	664	3,908
2	808	1,053	1,486	661	257	227	834	706	3,850
3 or more	976	1,047	1,668	616	319	262	792	752	4,589
15–64 years									
0	449	701	883	400	101	142	315	213	681
1	422	648	830	365	135	144	587	348	2,536
2	624	895	1,183	591	205	195	666	571	3,366
3	721	1,003	1,456	579	225	220	765	595	3,850
4 or more	982	1,141	1,705	720	262	259	810	815	4,845
65 years and older									
0	629	879	1,204	540	198	193	697	558	3,466
1	618	825	1,131	558	157	183	480	404	2,520
2 or more	737	981	1,340	464	197	228	531	391	2,303
All Bahamas	632	876	1,201	540	194	193	668	536	3,325

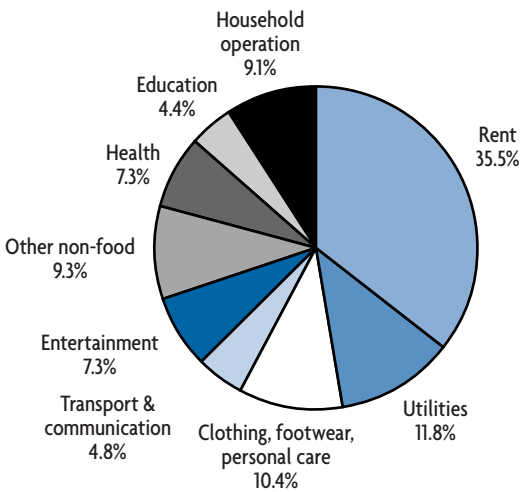
TABLE 3-4 Average Household Non-food Expenditures, Share in Total, and Household Consumption

Non-food expenditure group*	Mean annual expenditure	Share in total non-food expenditures	% Households that consumed over past 12 months
Rent	8,799.2	35.5	100.0
Utilities	2,838.5	11.8	93.1
Clothing, footwear, & personal care		10.4	
Clothing & footwear	1,914.6	7.8	92.9
Personal care	630.4	2.7	98.0
Household operation		9.1	
Consumer durables (excluding furniture)	1,448.8	4.8	97.6
Household maintenance	545.7	2.6	99.0
Cooking fuel	195.1	1.0	77.6
Small household items	163.1	0.7	59.5
Other non-food items	3,268.6	9.3	76.3
Health	2,138.4	7.3	75.5
Entertainment	2,247.2	7.3	93.7
Transport & communication	1,234.9	4.8	86.9
Education	1,331.8	4.4	55.7
Total non-food expenditures	**26,756.2**	**100**	

*See Table 3-A2 for data on the items within each non-food group.

(4.5%) and education (4.5%), excursions and holidays (3.8%), telephone (3.7%), gasoline (3.4%), and the use value of cars or trucks (3.2%). The individual expenditure items listed in Table 3-A2 are further grouped into a smaller set of nine non-food groups (Tables 3-5a and b).

FIGURE 3-2 Shares of Non-food Items in Total Non-food Expenditure



As Figure 3-2 illustrates, utilities comprise 12% of total non-food expenditures, whilst health and education combined account for only 11%.

Expenditure Variations by Quintile, Region, and Household

Non-food expenditures vary by quintile, region, and household characteristics (including size, composition, and household head) (Tables 3-5A and B). As Table 3-5B shows, households in the lowest expenditure quintile (quintile 1) pay an average of B$3,718 for rent, whilst those in the highest (quintile 5) pay nearly four times as much. However, viewed as a share of total non-food expenditures, the rent difference between the poorest and wealthiest quintiles is less than 2% (Table 3-5A). Conversely, most other types of non-food expenditures are more closely related to living standard. For example, utilities; clothing, footwear, and personal care; household operation; and education comprise a smaller share of non-food expenditures for wealthier households.

Variations across Households

Rent, as a share of total non-food spending, is positively related to age of household head and household size;

TABLE 3-5A Mean Share of Non-food Groups in Total Non-food Expenditure

Expenditure factor	Rent	Utilities	Personal care, clothing, & footwear	Transport & communication	Entertainment	Other services	Health	Education	Consumer durables, household maintenance, fuel, & small items
Quintile									
1 (poorest 20%)	37.8	14.0	13.4	3.6	4.6	4.0	5.5	7.1	10.0
2	37.7	13.0	11.9	4.9	5.3	6.6	6.7	4.6	9.4
3	32.8	12.6	10.4	5.3	7.2	8.8	7.6	5.5	9.8
4	34.1	11.1	9.9	5.6	8.0	10.0	7.6	4.8	8.9
5 (wealthiest 20%)	36.0	10.4	9.0	4.4	8.8	12.3	8.0	2.6	8.5
Region									
1	34.8	11.5	10.3	4.9	7.3	10.0	7.3	4.8	9.1
2	38.7	13.3	10.7	3.8	7.2	6.4	7.5	2.7	9.7
3	43.6	11.6	10.8	5.2	6.6	5.1	5.8	2.0	9.3
4	38.9	13.1	11.9	4.3	9.1	5.1	7.5	2.1	8.2
Age of household head									
Under 25	34.9	9.9	14.5	4.5	8.1	10.5	6.3	3.1	8.2
25–34	33.3	9.9	13.1	5.4	7.7	10.0	6.7	5.1	8.7
35–44	33.5	11.6	10.5	4.7	7.6	9.6	7.2	5.8	9.5
45–54	35.8	11.7	10.4	5.1	7.0	9.0	7.4	4.2	9.4
55–64	35.8	13.2	8.0	4.7	7.8	10.2	8.7	2.7	8.9
65 or older	43.2	14.2	7.4	3.6	5.9	7.1	7.5	2.4	8.6
Gender of household head									
Male	35.5	11.1	10.5	5.4	7.1	9.7	7.4	4.0	9.4
Female	35.5	12.9	10.4	3.8	7.6	8.8	7.2	5.0	8.7
Household size (no. members)									
1	44.0	11.1	9.3	4.1	7.9	9.7	5.5	0.2	8.1
2	36.6	11.7	9.6	4.9	7.3	9.9	8.6	2.0	9.3
3–4	34.1	11.4	10.2	5.1	7.5	9.8	7.5	5.2	9.3
5–6	30.9	12.1	11.8	5.0	7.0	8.2	7.9	7.3	9.6
7 or more	28.4	14.1	12.9	4.5	5.8	7.7	6.8	10.5	9.2

(continues)

TABLE 3-5A (*Continued*)

Expenditure factor	Rent	Utilities	Personal care, clothing, & footwear	Transport & communication	Entertainment	Other services	Health	Education	Consumer durables, household maintenance, fuel, & small items
No. household members									
0–4 years									
0	36.9	11.7	9.7	4.8	7.4	9.9	7.4	3.2	9.1
1	31.9	11.7	12.3	5.1	7.0	8.1	7.5	7.2	9.3
2 or more	31.1	12.5	12.9	4.5	6.8	7.3	6.3	10.0	8.7
5–14 years									
0	38.9	11.7	9.7	4.8	7.3	9.6	7.2	1.8	9.1
1	31.1	11.5	11.5	5.1	7.4	9.6	8.0	6.6	9.3
2	31.4	11.6	10.4	5.0	7.8	9.3	7.0	8.6	8.9
3 or more	29.6	13.0	12.7	4.0	6.4	7.1	7.3	10.6	9.1
15–64 years									
0	52.7	14.5	5.6	2.6	4.3	6.6	5.9	0.3	7.6
1	40.8	11.2	9.8	4.3	8.2	9.0	6.5	1.7	8.5
2	34.0	10.9	10.9	5.0	7.7	9.7	7.6	4.9	9.2
3	31.8	12.3	10.5	5.5	6.8	9.7	8.0	6.0	9.5
4 or more	29.2	13.5	11.9	5.0	6.2	9.3	7.6	7.3	10.0
65 or over									
0	34.4	11.3	10.9	5.0	7.5	9.7	7.3	4.7	9.2
1	42.3	15.0	7.8	3.1	6.0	7.4	7.2	2.8	8.5
2 or more	41.4	13.5	6.7	6.0	5.6	6.9	8.1	2.4	9.6
All Bahamas	35.5	11.8	10.4	4.8	7.3	9.3	7.3	4.4	9.1

TABLE 3-5B Mean Annual Expenditure (B$) on Non-food Items

Expenditure factor	Rent	Utilities	Personal care, clothing, & footwear	Transport & communication	Entertainment	Other services	Health	Education	Consumer durables, household maintenance, fuel, & small items
Quintile									
1 (poorest 20%)	3,718	1,683	1,377	390	533	492	541	872	1,043
2	5,368	2,123	1,810	802	849	1,501	1,257	907	1,442
3	6,606	2,632	2,253	1,223	1,627	2,174	1,806	1,405	2,157
4	8,082	2,758	2,604	1,474	2,225	2,807	2,085	1,544	2,274
5 (wealthiest 20%)	13,842	3,753	3,423	1,592	3,854	5,968	3,336	1,519	3,406
Region									
1	8,997	2,880	2,649	1,296	2,358	3,567	2,197	1,485	2,462
2	8,454	2,848	1,996	923	1,721	1,892	1,975	590	1,936
3	7,003	2,019	2,059	996	1,420	1,437	1,222	407	1,611
4	5,693	2,227	1,983	809	1,671	1,233	1,778	422	1,317
Age of household head									
Under 25	6,579	2,103	3,300	853	2,006	2,486	1,792	650	1,823
25–34	6,544	2,091	2,646	1,167	1,878	2,872	1,648	1,126	1,897
35–44	8,334	2,908	2,573	1,276	2,268	3,164	2,150	1,739	2,430
45–54	11,132	3,246	2,972	1,333	2,653	3,561	2,478	1,537	2,713
55–64	9,944	3,399	2,091	1,357	2,789	4,892	2,606	952	2,657
65 or older	8,227	2,626	1,743	1,003	1,488	2,084	1,860	813	2,006
Gender of household head									
Male	9,825	2,981	2,634	1,421	2,321	3,481	2,356	1,469	2,582
Female	7,121	2,605	2,400	930	2,127	2,921	1,782	1,107	1,977

(continues)

TABLE 3-5B *(Continued)*

Expenditure factor	Rent	Utilities	Personal care, clothing, & footwear	Transport & communication	Entertainment	Other services	Health	Education	Consumer durables, household maintenance, fuel, & small items
Household size (no. members)									
1	8,824	2,120	1,612	752	2,024	3,015	1,149	30	1,574
2	8,840	2,708	2,246	1,093	2,026	3,037	2,354	483	2,292
3–4	9,623	3,109	2,683	1,502	2,537	3,762	2,489	1,749	2,633
5–6	8,181	2,972	3,230	1,375	2,403	3,155	2,410	2,348	2,668
7 or more	6,774	3,486	3,371	1,341	1,797	2,723	1,973	2,480	2,523
No. household members									
0–4 years									
0	9,149	2,794	2,288	1,193	2,259	3,410	2,171	1,084	2,334
1	8,061	3,005	3,378	1,463	2,301	3,019	2,172	1,998	2,517
2 or more	7,153	2,839	2,913	1,031	1,959	2,463	1,683	2,089	2,082
5–14 years									
0	8,885	2,639	2,101	1,104	2,045	3,082	1,926	519	2,132
1	9,700	3,204	3,309	1,514	2,620	3,737	2,587	2,176	2,788
2	8,051	3,031	2,813	1,458	2,566	3,597	2,317	2,544	2,506
3 or more	6,906	2,985	3,213	1,103	2,225	2,890	2,178	3,022	2,518
15–64 years									
0	8,143	2,157	682	544	793	1,630	1,199	47	1,158
1	8,423	2,283	1,803	824	2,108	2,717	1,456	337	1,730
2	9,110	2,788	2,671	1,319	2,342	3,426	2,338	1,513	2,473
3	9,249	3,307	3,215	1,539	2,751	3,971	2,665	2,092	2,890
4 or more	8,273	3,606	3,301	1,594	2,053	3,468	2,473	2,099	2,860
65 years or older									
0	8,889	2,832	2,669	1,269	2,365	3,464	2,161	1,407	2,401
1	7,914	2,795	1,866	846	1,571	2,074	1,886	850	1,916
2 or more	9,320	3,135	1,555	1,600	1,403	2,113	2,358	945	2,503
All Bahamas	8,799	2,839	2,545	1,235	2,247	3,269	2,138	1,332	2,353

however, there is no clear relationship in absolute amounts. Spending on clothing, footwear, and personal care comprises a larger share of non-food spending in households with younger heads and in larger households (especially those with more young children). The other categories of non-food expenditures display no relationship with household size and composition.

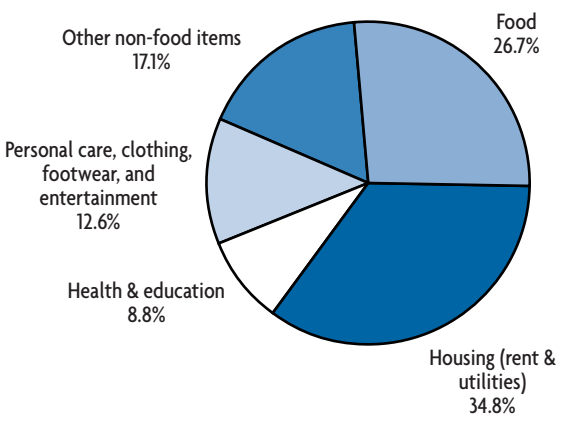
FINDINGS: FOOD AND NON-FOOD EXPENDITURES

To analyse the BLCS findings in terms of all household expenditures—both food and non-food—all food items were combined into a single category, whilst non-food items were combined into four groups: housing (rent and utilities); health and education; clothing, footwear, personal care, and entertainment; and other non-food items (Tables 3-6A and B).[5]

For the typical Bahamian household, housing expenses (rent and utilities) amount to B$11,638, comprising 35% of total expenditures (Figure 3-3 and Table 3-6A). Food expenditures average B$8,164 per household, accounting for 27% of total expenditures (Table 3-6B). Clothing, footwear, personal care, and entertainment average B$4,792 (13% of total expenses); whilst health and education average B$3,470 (9%). Expenditures on other non-food items amount to B$6,856 (17%), bringing total nominal expenditures to B$29,489;[6] this amount corresponds to a median, nominal per-capita expenditure of B$9,754 per year.

[5] Expenditure items were grouped in order to examine expenditure variations in terms of household characteristics. Whilst the grouping of non-food items may appear somewhat arbitrary, it follows a general prioritization of expenses in terms of human needs.

FIGURE 3-3 Shares of Food and Non-food Items in Total Annual (Nominal) Expenditures



Variations across Groups

As Tables 3-6A and B illustrate, the share of food in total expenditures declines with a rise in living standard. Households in quintile 1 spend 36% of total expenditures on food, whilst those in quintile 5 spend only 21%.[7] Greater concentration of the wealthiest quintile in New Providence and Grand Bahama means that share of food expenditures is lowest on these two islands even though, in absolute terms, the amount spent on food is similar to that of other island regions (Table 3-6A). Clearly, households with more children below 14 years of age spend more—in absolute terms and as a percentage of total expenditure—on food. Whilst households headed by younger adults do not spend more on food; food expenditures account for a higher percentage of their total spending. These variations by household composition and age of household head do not merely reflect differences in living standards. Indeed, a regression analysis of the determinants of food share (not reported here) demonstrates that these factors are significant, even after controlling for living standards.

Housing expenses are clearly higher in better-off households and in New Providence and Grand Bahama; however, as a share of total expenditure, they do not exhibit systematic variation across the living standard or regional spectrum. The relatively constant expenditure in households of varying sizes suggests that economies of scale are considerable with respect to these expenditures.

Health and education expenditures generally increase with household living standard, but the relationship is not perfectly linear. The bottom 40% of the population spend about 8% of their total expenditure on health and education. Amongst the next 40% of the population, spending on health and education is about 2% higher, but then amongst the top 20% it is somewhat lower at 8.5%. These differences (in expenditure shares) are relatively small, but

[6] The relevant time period for this estimate is October 2000 to December 2001 (the 12 months preceding the survey period).

[7] Food share is often used as an indicator of well-being; thus, this pattern is not surprising.

TABLE 3-6A Shares of Food and Non-food Items in Total Expenditures

Expenditure factor	Food	Housing (rent & utilities)	Health & education	Personal care, clothing, footwear, & entertainment	Other non-food items
Quintile					
1 (poorest 20%)	36.2	34.0	7.9	10.9	11.0
2	33.1	34.2	7.8	10.9	13.9
3	27.9	32.9	9.9	12.1	17.2
4	24.5	34.4	9.5	13.2	18.4
5 (wealthiest 20%)	21.0	36.7	8.5	13.9	19.9
Region					
1	26.0	34.5	9.1	12.7	17.8
2	29.7	37.2	7.4	11.9	13.9
3	30.7	38.2	5.4	11.9	13.8
4	33.6	34.2	6.7	13.8	11.8
Age of household head					
Under 25	31.4	30.9	6.8	15.6	15.3
25–34	29.9	30.2	8.5	14.3	17.2
35–44	27.5	32.7	9.6	12.8	17.4
45–54	25.8	35.6	8.7	12.6	17.3
55–64	22.1	38.2	9.1	11.8	18.8
65 or older	24.8	43.2	7.6	9.6	14.7
Gender of household head					
Male	26.9	34.2	8.6	12.4	17.8
Female	26.3	35.8	9.0	12.9	16.0
Household size (no. members)					
1	26.6	40.8	4.3	12.2	16.0
2	23.7	37.2	8.3	12.5	18.4
3–4	25.3	33.9	9.8	12.8	18.2
5–6	29.3	30.6	11.1	12.8	16.2
7 or more	33.9	28.1	11.2	12.2	14.5
No. household members					
0–4 years					
0	25.9	36.2	8.0	12.2	17.6
1	27.9	31.3	10.7	13.7	16.3
2 or more	31.9	29.8	11.0	13.1	14.1
5–14 years					
0	25.7	37.9	6.9	12.2	17.4
1	26.2	31.5	11.0	13.5	17.8
2	28.2	30.6	11.3	12.9	17.0
3 or more	32.6	28.6	12.3	12.6	13.9
15–64 years					
0	22.9	52.2	4.8	7.1	13.0
1	26.7	38.2	6.2	12.9	16.0
2	25.9	33.2	9.6	13.4	17.9
3	26.1	32.7	10.6	12.4	18.1
4 or more	30.7	30.0	10.3	12.0	17.0
65 years or older					
0	27.0	33.5	9.0	13.1	17.5
1	24.9	43.2	7.7	9.9	14.3
2 or more	25.6	41.2	7.8	8.7	16.8
All Bahamas	26.7	34.8	8.8	12.6	17.1

TABLE 3-6B Total Annual (Nominal) Expenditures

Expenditure factor	Food	Housing (rent & utilities)	Health & education	Personal care, clothing, footwear, & entertainment	Other non-food items
Quintile					
1 (poorest 20%)	6,041	5,401	1,413	1,910	1,925
2	7,487	7,491	2,164	2,659	3,745
3	8,297	9,237	3,212	3,880	5,554
4	7,904	10,840	3,630	4,829	6,555
5 (wealthiest 20%)	9,362	17,595	4,855	7,276	10,967
Region					
1	8,180	11,878	3,682	5,007	7,326
2	8,152	11,302	2,566	3,717	4,751
3	7,730	9,022	1,629	3,479	4,044
4	8,101	7,920	2,200	3,655	3,359
Age of household head					
Under 25	7,867	8,682	2,442	5,305	5,163
25–34	8,097	8,635	2,774	4,524	5,936
35–44	8,812	11,242	3,889	4,841	6,871
45–54	8,919	14,378	4,015	5,625	7,607
55–64	7,087	13,343	3,558	4,879	8,905
65 or older	6,383	10,853	2,673	3,231	5,092
Gender of household head					
Male	8,691	12,806	3,825	4,954	7,484
Female	7,302	9,726	2,889	4,527	5,829
Household size (no. members)					
1	5,651	10,944	1,179	3,637	5,341
2	6,585	11,548	2,837	4,272	6,422
3–4	8,458	12,732	4,238	5,220	7,897
5–6	10,118	11,153	4,758	5,632	7,198
7 or more	12,293	10,260	4,453	5,168	6,587
No. household members					
0–4 years					
0	7,675	11,943	3,255	4,548	6,936
1	9,391	11,066	4,170	5,679	6,999
2 or more	9,901	9,992	3,772	4,872	5,576
5–14 years					
0	6,848	11,525	2,446	4,146	6,318
1	9,610	12,904	4,763	5,930	8,039
2	9,883	11,082	4,861	5,380	7,561
3 or more	11,022	9,891	5,200	5,438	6,512
15–64 years					
0	3,885	10,299	1,246	1,474	3,333
1	6,015	10,707	1,793	3,912	5,271
2	8,296	11,898	3,851	5,014	7,218
3	9,414	12,556	4,758	5,965	8,400
4 or more	11,540	11,879	4,572	5,353	7,922
65 years or over					
0	8,364	11,722	3,569	5,034	7,134
1	6,877	10,709	2,736	3,437	4,835
2 or more	7,172	12,455	3,303	2,958	6,217
All Bahamas	8,164	11,638	3,470	4,792	6,856

as Table 3-6B shows, in absolute amounts, the differences are large: the wealthiest 20% (quintile 5) spend 3.4 times the amount spent by the poorest 20% (quintile 1).

Region 1 households spend considerably more than the other three regions on health and education—as a share of total expenditures and in absolute amounts. These expenditures vary by age of household head, number of young children, and household size. Such patterns are also apparent in expenditure shares (Table 6A); however, the differences are less striking.

Expenditures on clothing, footwear, personal care, and entertainment increase—in terms of absolute amounts and expenditure share—as living standards rise and decline as household heads grow older; however, the differences are small. Variation in expenditures on other non-food items is more pronounced; however, with the exception of differences between expenditure quintiles, no patterns are easily discernable.

CONCLUSIONS

The BLCS examination of household expenditures reveals interesting patterns. Based on the findings, the average per-capita food expenditure is about $8.41 per day, of which $2.85 is spent on food eaten away from home. Using the detailed Survey data on food-expenditure patterns, it should be possible to determine, in general, the nutritional adequacy represented by this level of spending.[8]

Survey results demonstrate clearly that food expenditures vary with living standards in predictable ways; that is, share of total expenditure devoted to food items declines with an increase in living standard. In such large samples as the BLCS—involving several interviewers, several hundred respondents, and a lengthy interview process—this result is reassuring, as it points to a reasonable degree of internal consistency in the data collected. Interestingly, amongst the poorest quintile—even within the poorest decile—food share amounts to only about 37% of total expenditure.

As mentioned above, the largest component of food expenditure is food eaten away from home, which accounts for 34% of the total spent on food. Had the Survey instrument been designed to collect information on the types of foods that comprise this expenditure, this data could have been used for nutritional analysis. Even if it had been, however, it would still have been limited by the difficulty in translating expenditures incurred away from home into quantities and quality of food consumed by individuals. Nevertheless, given the primacy of expenditures on food eaten away from home, it is imperative that future surveys attempt to collect more detailed information on these types of expenditures.

That rent (actual or imputed) represents the largest component of non-food expenditures—and is uniformly above 34% for households across the economic well-being spectrum—has critical implications for welfare policy. As housing values increase—with economic development and, at times, in a speculative market—the poorest of the poor are increasingly likely to face conditions in which housing is unaffordable.[9] How welfare policy addresses the issue of affordable housing is likely crucial to how the country addresses poverty and equity (see chapter 8).

Health and education, the critical avenues for ensuring a reasonable degree of equity and opportunity in a market economy, together represent less than 10% of the average Bahamian household's annual expenditures (see chapters 4 and 5, respectively). As a share of total expenditure there is relatively little variation across households from different economic strata, but in absolute amounts there is large variation since the poorest 20% spend 25–33% of what the wealthiest 20% spend. Whether these differences in private household expenditures reflect differences in the quality of schooling received by children from different economic backgrounds—and the extent to which they hide differences in public subsidies—requires careful analysis, as this issue is often a matter of policy debate in market economies.

[8] Although this research is outside the scope of this chapter, the general approach is straightforward. Using the BLCS data collected on market prices, it is possible to calculate average quantities consumed by households. Along with information from widely-used food composition tables, it should be possible to determine the nutritional adequacy of the diets across Bahamian groups. Obviously, this would not be the same as carefully collecting dietary histories and food consumption data, and thus should not be used for individual counseling; however, in being representative of the entire country, it would highlight the nutritional health of the population. One limitation of this exercise would be the inability to determine the nutritional composition of food eaten away from home.

[9] Assuming that the location of housing is reasonably convenient to work and basic amenities.

LOOKING AHEAD: CONDITIONS FOR DATA APPLICATION

The patterns revealed by the BLCS household-expenditure data are rich in content and can be put to worthy use for public policy and market analysis. However, any such use must carefully consider the instruments and methods used to collect this data, a point sometimes forgotten in the rush to use a new data set. The BLCS instruments are based on a wide body of research that spans the entire globe, and they have been painstakingly tested in the Bahamian context. A capable set of interviewers administered these instruments; they used methods—those that international and statistical organizations, including the World Bank, have applied around the world for more than 20 years—to digitize, check, and organize the data. Thus, the data are internally consistent and provide a reasonably good snapshot of spending patterns in the country.

APPENDIX

TABLE 3-A1 Average Household Food Expenditures, Share in Total, and Household Consumption; by Food Group/Item

Food group/item	Mean annual expenditure	Share in total food expenditures	% Households that consumed over past 12 months
Staples (cereals, roots, and tubers)	**631.7**	**8.9**	**98.8**
Bread	122.7	1.8	94.9
Breakfast cereal (cold)	120.7	1.6	84.0
Rice	76.1	1.1	93.0
Pasta	69.1	0.9	82.0
Breakfast cereal (hot)	47.7	0.7	71.9
Potatoes (w & s)	47.2	0.7	89.3
Plantains	42.1	0.6	77.9
Grits	35.7	0.5	86.5
Flour	26.1	0.4	73.5
Root crops	25.4	0.4	46.2
Prepared flour mixes	19.0	0.2	40.3
Fruits & vegetables	**876.5**	**12.3**	**98.5**
Banana	76.2	1.1	84.6
Grapes & berries	66.9	0.9	77.7
Limes, lemons, & big sours	61.9	0.9	87.5
Apple	54.8	0.8	83.5
Other citrus fruit	54.7	0.7	75.9
Tomato (fresh)	54.0	0.8	85.1
Other fresh fruit	53.1	0.7	55.0
Canned vegetable	48.5	0.7	69.4
Frozen vegetable	47.6	0.6	61.1
Onion	41.3	0.6	93.9
Other fresh vegetable	40.4	0.5	59.3
Lettuce	38.6	0.6	84.5
Tomato paste & sauce	37.9	0.6	81.8
Other fresh local fruit	37.2	0.5	52.7
Sweet pepper	35.3	0.5	84.7
Carrot	30.2	0.4	84.1
Cabbage	27.8	0.4	77.2
Canned fruit & fruit filling	24.3	0.3	38.7
Avocado	18.5	0.3	50.4
Tomato (canned)	13.6	0.2	32.3
Cucumber	10.9	0.2	38.2
Frozen fruit	3.0	0.0	6.2
Meats & dairy products	1,201.1	16.5	98.8
Chicken (fresh & frozen)	232.6	3.3	92.9
Beef	99.7	1.2	63.1
Fresh milk	98.7	1.4	84.4

TABLE 3-A1 *(Continued)*

Food group/item	Mean annual expenditure	Share in total food expenditures	% Households that consumed over past 12 months
Pork	94.8	1.3	67.2
Deli-meat	77.2	1.0	70.0
Turkey	73.3	1.1	72.6
Canned milk	71.4	1.0	90.4
Hot dogs & other	67.6	0.9	80.2
Cheese	59.4	0.8	86.0
Tinned meat	58.3	0.8	76.7
Eggs	53.7	0.8	93.0
Ice cream & related products	52.7	0.7	68.8
Lamb-mutton	46.2	0.6	45.3
Ham	45.4	0.6	58.7
Other poultry	23.8	0.3	25.9
Bacon	23.5	0.3	47.3
Other milk product	16.2	0.2	28.7
Organ meat (liver, kidney, etc)	6.6	0.1	15.7
Fish & seafood	**539.6**	**6.7**	**96.1**
Fish (fresh & frozen)	236.3	2.9	79.7
Conch	87.2	1.1	61.1
Tinned fish & seafood	86.3	1.2	89.4
Crawfish	75.8	0.9	46.2
Crab	36.5	0.5	40.9
Other marine products	17.6	0.2	18.0
Sugar and sugar products	**193.8**	**2.6**	**98.2**
Cakes & pastries	75.0	0.9	64.1
Sugar	45.6	0.7	94.7
Candy, chocolate, & chewing gum	36.2	0.5	54.7
Jams & jellies	21.5	0.3	62.4
Honey & artificial sweeteners	8.3	0.1	32.0
Other confectioneries	7.3	0.1	26.0
Fats, oils, nuts, & beans	**193.1**	**2.8**	**97.9**
Peas & beans	50.0	0.7	81.0
Cooking oil, shortening, & lard	46.0	0.7	91.2
Butter, margarine, & vegetable spreads	37.7	0.5	92.8
Nuts & dried fruit	23.9	0.4	46.6
Peanut butter	23.8	0.4	68.6
Creamers & non-dairy substitutes	6.7	0.1	17.2
Other fats & oils	5.1	0.1	14.2
Bottled water	197.0	2.7	89.8
Fruit juice	160.8	2.2	78.7
Soft drink	142.1	2.0	84.5
Beer, wine, & other alcoholic beverages	103.8	1.0	24.9
Other non-alcoholic drinks	64.3	0.9	53.9

(continues)

TABLE 3-A1 *(Continued)*

Food group/item	Mean annual expenditure	Share in total food expenditures	% Households that consumed over past 12 months
Other foods	**535.7**	**7.2**	**98.4**
Snacks	100.3	1.3	68.8
Canned & packaged soup	87.9	1.2	79.8
Seasoning, salt, spices, olives, etc.	56.9	0.8	92.8
Coffee, tea, & cocoa	50.8	0.8	86.8
Baby food & juice	43.7	0.5	10.7
Baby milk/formula	40.2	0.5	10.9
Tomato ketchup, mustard, & hot sauce	37.6	0.5	88.5
Mayonnaise	34.7	0.5	91.6
Miscellaneous foods	29.9	0.4	14.9
Salad dressing	23.5	0.3	69.2
Frozen prepared food	12.1	0.2	13.2
Rising agents	9.7	0.1	49.5
Other condiments	8.5	0.1	27.5

TABLE 3-A2 Average Household Non-food Expenditures, Share in Total, and Household Consumption; by Non-food Group/Item

Non-food group/item	Mean annual expenditure	Share in total food expenditures	% Households that consumed over past 12 months
Rent	**8,799.21**	**35.51**	**100.00**
Utilities	**2,838.51**	**11.76**	**93.10**
Electricity	1,633.53	6.85	89.90
Telephone (includes mobile)	923.25	3.60	77.80
Water	247.06	1.12	45.10
Garbage collection fees	21.60	0.13	8.10
Sewage	13.07	0.06	3.80
Clothing, footwear, & personal care			
Clothing & footwear	**1,914.55**	**7.75**	**92.90**
Women's clothing	545.22	1.92	65.90
Men's clothing	389.95	1.71	62.40
Children's clothing (excluding uniforms)	264.79	1.06	45.90
Laundry & dry cleaning	187.06	0.86	57.10
Women's footwear	141.54	0.56	64.50
Jewelry & accessories	134.54	0.49	25.40
Men's footwear	128.72	0.61	56.10
Cloth & sewing supplies	22.53	0.09	14.70
Tailoring expenses	19.86	0.08	12.60
Shoe repair & cleaning services	1.76	0.01	4.30
Personal care	**630.44**	**2.69**	**98.00**
Personal services	267.77	1.03	74.60
Personal-care items	191.65	0.99	94.90
Infant personal-care items	69.18	0.36	15.00
Medical supplies/equipment	58.06	0.16	12.90
Cosmetics	43.78	0.15	40.70
Household operation			
Consumer durables (excluding furniture)	**1,448.84**	**4.83**	**97.60**
Car or truck	999.43	3.18	68.90
Boat	100.09	0.24	6.60
Personal computer	75.49	0.24	33.80
Television	55.72	0.24	88.80
Refrigerator	44.79	0.22	75.90
Stove	25.06	0.13	75.50
Air conditioner (wall unit)	20.25	0.07	35.60
Washing machine	17.19	0.07	44.40
Tape player/CD player	17.12	0.07	55.20
Camera/video camera	10.14	0.03	26.10
Freezer	9.27	0.04	30.90
Video player/DVD player	9.21	0.04	45.70
Microwave oven	8.75	0.04	62.50
Vacuum cleaner	8.58	0.03	32.60
Fan	7.95	0.04	76.80

(continues)

TABLE 3-A2 *(Continued)*

Non-food group/item	Mean annual expenditure	Share in total food expenditures	% Households that consumed over past 12 months
Water heater	7.77	0.03	39.70
Clothes dryer	7.36	0.02	19.10
Bicycle	7.22	0.03	24.10
Video games	5.62	0.02	19.90
Motorcycle/scooter	5.03	0.01	1.20
Lawnmower	4.25	0.02	19.80
Sewing/knitting machine	2.53	0.01	18.20
Household maintenance	**545.67**	**2.58**	**99.00**
Cleaning articles	236.89	1.17	96.30
Toilet supplies (paper, cleanser, etc.)	130.33	0.67	96.40
Kitchen supplies	92.99	0.43	84.10
Item repair & maintenance	57.99	0.18	14.30
Electrical items (light bulbs, cords, plugs, & batteries)	27.46	0.13	69.00
Cooking fuel	**195.07**	**1.00**	**77.60**
LPG	119.59	0.73	71.90
Condo assoc. & property maintenance fees	67.09	0.15	3.80
Charcoal	4.59	0.05	8.40
Kerosene	3.81	0.07	11.70
Small household items	**163.06**	**0.70**	**59.50**
Linens (sheets, blankets, towels)	80.62	0.32	46.40
Dishes (crockery, cutlery, glassware, etc.)	18.55	0.07	21.80
Utensils (pots, pans, buckets, tools, etc.)	18.19	0.08	21.50
Small electrical items (radio, walkman, watch, clock)	17.84	0.11	18.60
Small kitchen appliances (blender, mixer, etc.)	16.23	0.06	17.50
Household tools	11.63	0.04	10.80
Other non-food items	**3,268.58**	**9.33**	**76.30**
Life insurance premiums	764.15	2.38	49.10
Insurance (auto & property)	762.08	2.29	62.20
Contributions to Ague's, Christmas clubs, etc.	748.12	2.63	22.10
Domestic staff (maids, gardeners, chauffeurs)	528.00	0.78	14.00
Legal or notary services	241.37	0.57	8.40
Funeral expenses	180.56	0.57	5.10
Membership fees (clubs & associations)	44.31	0.11	11.70

TABLE 3-A2 *(Continued)*

Non-food group/item	Mean annual expenditure	Share in total food expenditures	% Households that consumed over past 12 months
Health	**2,138.36**	**7.33**	**75.50**
Health & dental insurance premium	1,239.44	4.49	58.20
Outpatient care	775.16	2.41	39.00
Inpatient care	123.76	0.43	11.20
Entertainment	2,,247.18	7.30	93.70
Excursion, holiday	1,324.82	3.81	52.40
Cable TV & satellite services; Internet & beeper fees	343.39	1.51	74.80
Pet supplies & services	127.56	0.29	20.60
Newspapers & magazines	82.53	0.30	54.20
Cinema; cultural & sporting events	74.54	0.24	34.30
Toys	65.15	0.26	28.10
CDs & cassettes	49.13	0.18	30.50
Books (excluding textbooks) & stationery	46.93	0.15	30.60
Cigarettes, cigars, & tobacco	44.85	0.24	9.50
Gambling (lottery, etc.)	32.37	0.14	6.40
Photography supplies & services	22.17	0.07	16.60
Sports & hobby equipment	21.95	0.05	6.90
Musical instruments	11.80	0.06	5.60
Transport & communication	**1,234.88**	**4.81**	**86.90**
Gasoline	956.51	3.38	70.40
Parking fees & motor-vehicle licenses	122.29	0.46	56.90
Transportation costs	81.25	0.59	24.40
Postal expenses, telegrams, & pre-paid phone cards	49.55	0.29	28.10
Diesel fuel	25.28	0.08	3.30
Education	**1,331.80**	**4.42**	**55.70**
School tuition, fees, books, uniforms, & meals	1,331.80	4.42	55.70

CHAPTER 4

Health Status: Socioeconomic Analysis

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The health of any country's population is affected by the socioeconomic status (SES) of its citizens. The Bahamas Living Conditions Survey (BLCS) provided an opportunity to evaluate the causal link between SES and health in the Bahamian context. In addition, the Survey provided a baseline for selected health indicators, while allowing for a comparison with the findings of earlier investigations. It examined the following health-related areas: self-reported health status; child health; nutritional status of children, adolescents, and adults; female-reproductive health; health-services use and expenditure; and health-insurance coverage.

SELF-REPORTED HEALTH STATUS

Whilst self-reporting reveals much about a population's health, it is subject to biases that lead to underreporting; thus, a population's true health status may be clouded by survey respondents' perception and level of well-being. If feasible, health measures that use physical evaluations are preferable and more accurate. Ideally, both measures can be used to enhance understanding of a population's health status. Inferences drawn from findings based on self-reporting should be considered in light of these limitations.

BLCS respondents were asked to report on several aspects of their health status: recent illness, injury or accident, and disability. They were also asked whether they had previously been diagnosed with chronic diabetes and hypertension. Approximately 1 in 10 respondents (13.4%) reported having had an illness or injury during the four-week period preceding the survey (Table 4-1); of these, slightly more than half (53.6%) subsequently visited a health practitioner to treat their condition. The majority of those who did not seek treatment either found it unnecessary (57%) or chose to self-medicate at home (41%).[1] The average length of illness was eight days.

[1] With initial symptoms of illness, self-medication is a common tendency in The Bahamas, where over-the-counter drugs are readily available and "bush" medicine is commonly practiced.

TABLE 4-1 Ill Residents Who Sought Care (%), by Population Characteristic

Population characteristic	Ill residents (%)	*N*	Ill residents who sought care (%)	*N*
Gender				
Male	11.8	3,152	49.2	382
Female	14.9	3,262	56.8	465
Age group (years)				
0–4	23.1	625	69.4	142
5–14	12.2	1,394	51.8	172
15–19	7.6	503	39.1	33
20–34	11.0	1,435	43.7	152
35–54	13.4	1,623	52.8	217
55–64	12.6	389	41.6	47
65 and older	20.3	446	66.2	84
Region				
1	13.4	3,413	53.0	457
2	15.1	1,775	56.4	267
3	10.6	621	61.6	67
4	9.2	605	56.4	56
Quintile				
1	10.7	1,560	49.5	161
2	10.5	1,325	63.1	147
3	14.9	1,247	51.7	178
4	15.0	1,173	52.0	189
5	15.7	1,024	49.9	164
Total	**13.4**	**6,414**	**53.6**	**847**

In terms of gender, fewer males (11.8%) than females (14.9%) reported an illness. Vulnerable or immunocompromised groups—children under 5 years (23.1%) and adults 65 years and older (20.3%)—were more likely to report an illness during the reference period. Reporting of illness was also higher amongst persons from the better-off households; for example, 15.7% of those from the wealthiest quintile (of per-capita consumption expenditure) reported being ill, compared to only 10.8% from the poorest quintile. Higher reporting of illness amongst better-off households is consistent with similar surveys conducted around the world, and is often viewed as representative of reporting bias rather than poorer health status.

Geographically, more residents (15.1%) of the Family Islands of Region 2 (Abaco, Andros, and Eleuthera)—where about 10% of Bahamians live—reported an illness than persons residing in the other three regions (Table 4-1).

Disabilities and Injuries

The Survey sought to determine the prevalence of both physical and mental disabilities in the population (Table 4-2). Approximately 6% of the sample population reported having a physical or mental disability. Of those who had a disability, 68.5% of reported disabilities were related to sight, hearing, or speech; 18.2% to limbs; and 13.3% to mental disabilities.

Males and females were equally likely (6%) to report having a disability. Regardless of the type of physical or mental disability, it generally increased with age. For example, whilst only 3.7% of children under 5 years of age had a disability, 17.6% of the elderly were disabled—a nearly fivefold increase. Mental disabilities were also more common amongst the elderly (2.3%) (Figure 4-1). These findings support conclusions drawn from institutional data, which show that aging is associated with

TABLE 4-2 Proportion of Respondents with a Disability or Injury in Past 12 Months

Population characteristic	Physical or mental disability (%)	Injury (%)	*N*
Gender			
Male	5.8	4.7	3,152
Female	5.7	4.1	3,262
Age group (years)			
0–4	3.7	3.9	625
5–14	4.1	3.2	1,394
15–19	3.8	1.5	503
20–34	5.0	5.7	1,435
35–54	6.0	5.1	1,623
55–64	9.7	3.4	389
65 and older	17.6	5.9	446
Region			
1	5.9	4.7	3,413
2	4.0	2.2	1,775
3	9.5	5.0	621
4	5.1	1.9	605
Quintile			
1	6.3	3.1	1,560
2	6.2	5.1	1,325
3	3.3	2.1	1,247
4	8.5	6.7	1,173
5	4.6	4.6	1,024
Total	**5.7**	**4.4**	**6,414**

disability, which further affects quality of life and may be linked to poverty.

That residents in quintile 4 had the highest proportion of disability (8.5%) requires further investigation. Lowest reporting of disabilities was found in quintiles 3 (3.3%) and 5 (4.6%). Lack of a systematic pattern suggests that living standards bear little relationship to incidence of disability in the population or that the effect is heavily outweighed by other factors, such as age.

Residents of Region 3 (Exuma and Long Island) had the greatest proportion (9.5%) of persons with disabilities overall—both physical (7%) and mental (2.5%)—whilst the lowest proportion was found in Region 2 (Abaco, Andros, and Eleuthera) (4.0%), where the elderly population comprises about 7%.

Respondents were asked whether they had experienced any injury due to an accident at their workplace, gunshot, stabbing, or other external cause during the past 12 months (Table 4-2). Approximately 4% of the population—4.7% of males and 4.1% of females—reported an injury over the reference period. Most incidents occurred at work or school (63%) (Figure 4-2). The proportion of reported injuries was highest amongst the elderly (5.9%), who are more likely to experience falls, and amongst working-age individuals in age groups 20–34 years (5.7%) and 35–54 years (5.1%).

FIGURE 4-1 Prevalence of Disability, by Type and Age Group

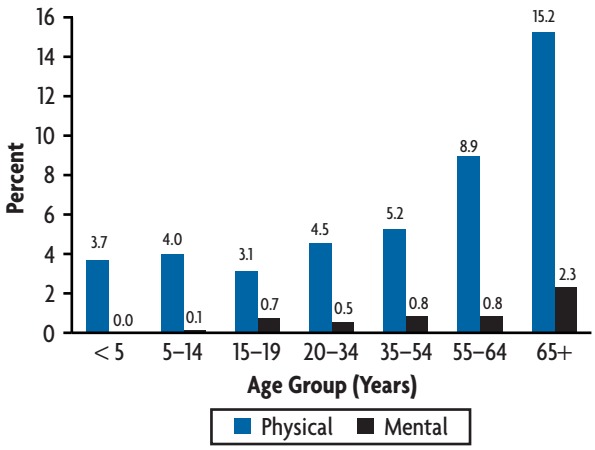
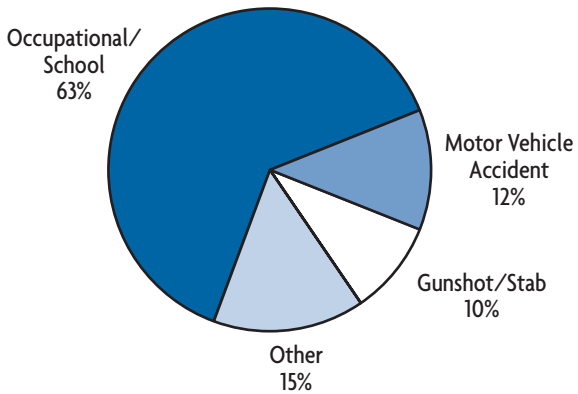


FIGURE 4-2 Distribution of Injuries, by Type (%)



(n = 246)

The highest and lowest occurrences of injuries were found in quintiles 4 (6.7%) and 3 (2.1%), respectively. In terms of region of residence, Bahamians on the most developed islands of New Providence and Grand Bahama (Region 1), as well as Exuma and Long Island (Region 3), had the most injuries.

Diabetes and Hypertension

To estimate the prevalence of diabetes and hypertension, BLCS respondents were asked whether they had a history of those conditions or whether a doctor or nurse had ever told them they had these chronic diseases. Notably, it is well documented that reported history of diabetes and hypertension is significantly lower than what actually occurs in a population.

As Table 4-3 shows, prevalence of diabetes was 3.3%, with knowledge of the condition more prevalent amongst females (3.8%) than males (2.7%), a significant difference, proven by chi-square testing ($p = 0.000$). Amongst males, prevalence increased from nearly 1% for those 20–34 years of age to about 17% for those 55–64 years old, and remained at the same level amongst elderly men 65 years and older. Amongst females, prevalence increased from less than 1% (0.1%) for girls under 20 years old, peaking at 19.1% for women 55–64 years old, and then declining to 15.7% amongst elderly women.

National Health and Nutrition Survey (NHNS) (1988–1989) respondents were asked: *"Has a doctor ever told you that you have diabetes?"* Answers showed that prevalence of self-reported diabetes was 3.3% in the 15-to-64 age group, and 14% in the elderly group. Corresponding BLCS rates were 3.8% and 16.4%, respectively. Higher rates may have resulted from changing lifestyle

TABLE 4-3 Self-reported Diabetes and Hypertension and Proportion Treated

	Diabetes				Hypertension			
Population characteristic	**Self-reported diagnosis (%)**	***N***	**Received treatment (%)**	***N***	**Self-reported diagnosis (%)**	***N***	**Received treatment (%)**	***N***
Gender								
Male	2.7	3,152	88.6	94	6.1	3,252	85.2	242
Female	3.8	3,262	90.1	160	12.3	3,262	92.4	479
Age group (years)								
0–4	0.0	625	0.0	0	0.3	625	11.1	2
5–14	0.1	1,394	100.0	1	0.2	1,394	47.6	2
15–19	0.0	503	0.0	0	0.1	503	0.0	1
20–34	1.3	1,435	78.3	18	3.8	1,435	78.3	69
35–54	4.4	1,623	83.2	83	15.8	1,623	88.5	295
55–64	18.2	389	95.5	74	36.0	389	90.8	158
65 and over	16.4	446	95.1	78	44.0	446	99.5	194
Region								
1	3.0	3,413	90.0	101	8.3	3,413	90.2	289
2	5.1	1,775	87.8	89	15.1	1,775	89.4	263
3	5.3	621	88.4	33	14.0	621	94.4	88
4	5.0	605	87.3	31	13.3	605	86.8	81
Quintile								
1	2.2	1,560	95.7	48	6.4	1,560	95.8	137
2	3.1	1,325	92.7	61	7.3	1,325	92.4	129
3	3.9	1,247	86.1	48	9.8	1,247	89.8	148
4	3.1	1,173	96.3	46	9.9	1,173	91.6	142
5	4.2	1,024	81.8	48	13.1	1,024	84.6	155
Total	**3.3**	**6,414**	**89.5**	**254**	**9.3**	**6,414**	**90.1**	**721**

practices and increased obesity—a risk factor for diabetes—in addition to a growing elderly population.

In the BLCS, prevalence of diabetes based on reported history increased as levels of consumption rose between the first (2.3%) and third (3.9%) quintiles, but fluctuated thereafter; a statistical association was not found between the proportion of persons with diabetes and quintile levels. These results may reflect differences in obesity levels across consumption groups.

The highest prevalence of diabetes (about 5%) was found in the Family Islands (Regions 2, 3, and 4), as compared to 3% in the urban areas of Region 1 (New Providence and Grand Bahama). One contributing factor may have been the elevated levels of obesity amongst adults in these regions, as first reported in the NHNS and observed in the present BLCS. In addition, low consumption of complex carbohydrates—including fresh fruits and vegetables, root crops, and legumes—persists.[2]

Nearly 1 out every 10 persons (9.3%) had a self-reported history of hypertension, with rates for females about twice that of males (12.3% versus 6.2%). Like diabetes, reported hypertension increased with age, from about 4% in adults aged 20–34 years, to 44% in the elderly. The proportion of females with a history of hypertension increased from less than 1% (0.2%) in girls under 20 years old to 50.9% in elderly women; that is, 1 out of every 2 women 65 years or older had a reported history of hypertension. Self-reported hypertension amongst males ranged from less than 1% in boys under 20 years old to about 34.5% in elderly men.

NHNS blood-pressure measurements showed that prevalence of hypertension amongst adults aged 15–64 years was 13%,[3] compared to BLCS self-reported results of 11% for the same age group. In addition, the NHNS classified 37.9% of those 65 years or older as hypertensive by blood-pressure measurement, compared to 53.1% who reported hypertension. In the BLCS, 44% of the elderly reported a history of hypertension. In the NHNS, self-reporting was determined by responses to a question similar to that asked in the BLCS: *"Did a doctor ever tell you that you had hypertension?"*

Analysis by quintiles of consumption groups showed the proportion of self-reported hypertension to increase by quintile, rising from 6.4% in the lowest, to 13.1% in the highest. This may reflect a tendency of better-off individuals to seek health care, thus having a greater opportunity for diagnosis.

The highest prevalence of hypertension by reported history was 15.1%, found in Region 2 (Abaco, Andros, and Eleuthera), whilst the lowest was 8.4%, found in Region 1 (New Providence and Grand Bahama).

About 9 out of every 10 persons with a history of diabetes or hypertension subsequently received treatment, and a greater proportion of these persons was 55 years or older. Those most likely to seek treatment lived on islands with greater access to health care (New Providence and Grand Bahama) (90.5%). A greater percentage from Region 3 (Exuma and Long Island) was treated for hypertension (94.4%).

Whilst the proportion of treated persons was high, the extent of compliance with prescribed medications to control the conditions is not known. Consequently, in addition to the need to reduce the percentage of untreated persons, particularly adults 54 years and younger, an aggressive approach is needed to create awareness of the signs and symptoms of diabetes and related complications to improve compliance.

These findings on diabetes and hypertension adequately reflect the current reality in the population. Both diseases present a public-health problem of alarming proportion, which, if ignored, could result in a deficit of human capital and reduced quality of life.

CHILD HEALTH

In terms of childhood illness, BLCS results showed that, in children ages 5 years and younger, respiratory illness is a major concern. During the four weeks prior to the Survey, amongst children in this age group, coughs, colds, and runny noses were the most common illnesses (41.6%), followed by diarrhoea (6.6%) and asthma (2.4%). A greater percentage of girls than boys was reported as having each illness; however, no significant statistical association was found by gender (Table 4-4).

Incidence of diarrhoea amongst children five years of age and younger was 7.8%; only 3 out of every 10 (28.6%) who suffered with the condition were given oral rehydration therapy, the course of treatment recommended by the

[2] This problem is evidenced in the most recent Food and Agriculture Organization (FAO) data on food availability data, as well as in NHNS observations.

[3] NHNS classification for hypertension was systolic ≥160 and/or diastolic ≥95.

TABLE 4-4 Proportion of Children Five Years and Younger with Common Illnesses in Past Four Weeks

Population characteristic	Cough, cold, or runny nose	Asthma	Diarrhoea	*N*
Gender				
Male	42.1	2.3	5.4	319
Female	44.7	3.6	7.3	306
Age group (years)				
0–1	46.9	2.3	9.3	204
2–3	46.4	2.3	5.5	195
4–5	36.8	4.1	3.9	225
Region				
1	43.8	3.2	6.1	353
2	41.6	1.1	6.2	174
3	41.0	0.0	2.2	42
4	34.8	3.4	16.5	55
Quintile				
1	41.4	2.1	7.8	203
2	45.1	7.1	6.2	141
3	45.1	2.6	4.4	130
4	39.5	1.3	6.4	99
5	47.9	0.0	5.7	52
Total	**41.6**	**2.4**	**6.6**	**624**

World Health Organization (WHO). Most of the children affected were in the lowest consumption quintile. Region 4 (Other Family Islands) had the highest incidence (16.5%), whilst Region 3 (Exuma and Long Island) had the lowest (2.2%).

As part of the Expanded Program on Immunization (EPI), children in The Bahamas are immunized against Diphtheria, Pertussis, and Tetanus (DPT), Poliomyelitis (Polio), Haemophilus Influenza Type B (HIB) and Hepatitis B (Hep B) within the first year of life; and Measles, Mumps, and Rubella (MMR) at age 1. DPT and HIB boosters are given at 15 months, whilst Paediatric Diphtheria Tetanus (Paed DT), Polio, and MMR boosters are given at ages 4–5 years.

In accordance with the national immunization schedule, coverage levels for infants and children ages 0–71 months who had received the required three doses of vaccines on schedule were: DPT (88.8%); Polio (87.2%); HIB (71.9%); and Hep B (32.1%).[4] Coverage amongst children 12–71 months who received their first dose of MMR on schedule was 69.1% (Figure 4-3).

Amongst infants 6–11 months, the coverage level was 74% for DPT, Polio, and HIB; and, amongst children 12–23 months, MMR coverage was 74%.

Less than 3% of the children surveyed were not immunized against DPT and Polio. Higher proportions were not immunized for HIB (12.6%), Hep B (48%), and MMR (7.7%) (Figure 4-4).

Immunization coverage (for DPT, Polio, and HIB) was generally higher amongst children from progressively better-off households, but sample sizes were smaller in the upper two quintiles (Table 4-5).

Amongst the four regions, Exuma and Long Island had the highest reported coverage levels for DPT (93%) and Polio (97.5%). Both Exuma and Long Island and Other Family Islands had the highest coverage for MMR (76%), whilst New Providence and Grand Bahama had the highest for HIB (74.9%) and Hep B (35.7%) (Table 4-5).

The immunization or vaccination card, used to verify a child's immunization status, is a requirement for school enrolment. The Child Health Passport (CHP), currently used in place of the original immunization card, was

[4] The Hep B vaccine, as part of the pentavalent vaccine, was introduced to the public sector in July 2001, which explains its low coverage level at the time of the BLCS.

FIGURE 4-3 Vaccination Coverage Amongst Children 0–71 Months, by Vaccine

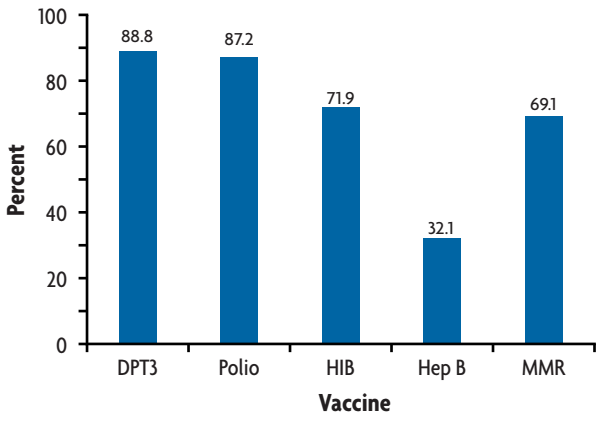
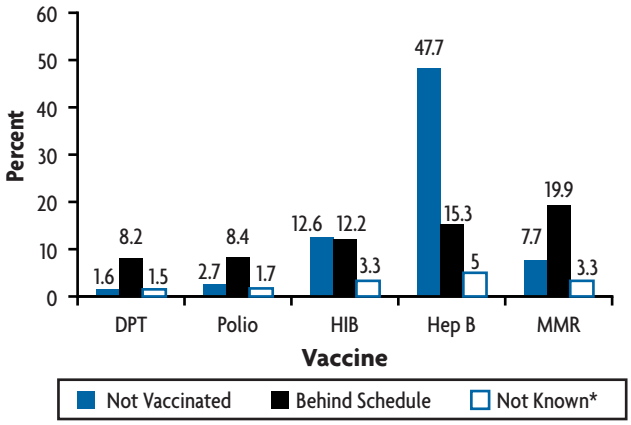


FIGURE 4-4 Children 0–71 Months Not Vaccinated or Behind Schedule



*While most of these children were vaccinated, a card was not produced to verify dosage.

presented for about 88% of children who participated in the BLCS. Nurse enumerators then reviewed the card and determined coverage levels. The CHP may have presented some limitations during data collection, as it was not designed to capture new vaccines added to the national immunization schedule.

In evaluating the immunization status of infants and children 0–5 years, coverage levels reported for children under 1 year were slightly lower than national figures (Table 4-6A). However, through defaulter tracing and immunization outreach, coverage levels usually increased by age 2, as reflected in Survey findings. Potential factors contributing to low coverage levels included small or non-representative sample sizes for children under 2 years. In addition, CHPs may not have been up to date; moreover, children may not have been due their third dose at the

TABLE 4-5 Immunization Coverage Amongst Children 0–71 Months

Population characteristic	DPT (%)	*N*	Polio (%)	*N*	HIB (%)	*N*	Hep B (%)	*N*	MMR[1] (%)	*N*
Gender										
Male	89.0	304	86.1	302	68.5	300	30.2	296	69.3	259
Female	88.6	297	88.4	297	75.5	291	34.0	295	69.0	248
Age (months)										
0–5	63.0	34	57.6	33	66.3	34	50.6	34	n.a.	n.a.
6–11	74.2	58	74.2	58	74.1	57	36.9	58	n.a.	n.a.
12–23	89.5	91	86.2	91	77.2	89	34.9	91	73.6[2]	90
24–71	93.1	418	92.0	417	70.8	411	29.0	408		—[2]
Region										
1	90.2	343	88.4	343	74.9	340	35.7	342	69.6	284
2	76.0	166	75.1	164	48.5	161	8.0	159	62.6	144
3	93.0	42	97.5	42	56.1	42	7.1	42	75.5	37
4	87.4	49	87.4	49	63.2	47	8.2	47	76.5	42
Quintile										
1	86.9	192	84.4	192	62.9	185	26.4	190	66.1	161
2	89.1	135	86.8	135	69.7	134	31.0	134	71.8	109
3	91.0	127	88.1	126	77.7	126	27.5	124	67.5	109
4	92.1	96	93.1	95	80.4	95	46.0	94	71.5	84
5	83.7	51	84.4	51	74.8	51	35.7	49	71.4	44
Total	**88.8**	**601**	**87.2**	**599**	**71.9**	**591**	**32.1**	**591**	**69.1**	**507**

[1] Children ages 12–71 months.

[2] MMR age groups differed for older children: 24–47 mo. coverage = 93.0% (n = 196); 48–71 mo. coverage = 44.4% (n = 221).

n.a. = not applicable.

TABLE 4-6A National Immunization Coverage Levels, 1997–2000

	Coverage level			
Vaccine type	1997	1998	1999	2000
DPT	87	89	84	99
Polio	86	88	84	92
HIB	n.a	n.a	77	92
Hep B	n.a	n.a	n.a	n.a.
MMR	94	92	87	94

n.a. = not applicable.

time of the Survey because of defaulting. Additional contributing factors were the recent introduction of HIB and Hep B into the national immunization schedule.[5]

National figures for the 1997–2000 period show that, amongst vaccine-preventable diseases, there were no reported cases of DPT, whooping cough, polio, tetanus neonatorum, or mumps. In 1997 and 1998, respectively, one case of measles and four cases of congenital rubella were reported. Since introduction of the HIB vaccination in 1999, the number of reported cases declined from six that year to none in 2000. In 2000, national vaccination coverage was reported at 99% for DPT; 92% for Polio and HIB; and 94% for MMR (Tables 4-6A and B).

[5] HIB was introduced into the schedule in 1999, and Hep B was included in 2001; however, at the time the BLCS was conducted, the third dose of Hep B was not administered routinely to infants under age 1 by all private doctors.

TABLE 4-6B Vaccine-preventable Cases Reported, 1997–2000

Disease	1997	1998	1999	2000
Diphtheria	0	0	0	0
Whooping cough	0	0	0	0
Poliomyelitis	0	0	0	0
Tetanus neonatorum	0	0	0	0
Measles	1	0	0	0
Mumps	0	0	0	0
Congenital rubella syndrome	0	4	0	0
Rubella (German measles)	19	2	0	0
Hep B	156	215	208	353
HIB	7	0	6	0

NUTRITIONAL STATUS OF CHILDREN

The nutritional status of children 2–10 years was assessed, using the anthropometric measurements of weight and height compared with WHO reference standards (Z-scores). The three indices examined were Weight for Age (WAZ), Height for Age (HAZ), and Weight for Height (WHZ). WAZ compares a child's weight with the WHO reference standard weight for a child of the same age. WAZ is the easiest indicator to measure, and therefore the most common measure of nutritional well-being.

HAZ compares a child's height with the WHO reference standard height for a child of the same age. In children older than 3 years, HAZ is a proxy for the cumulative environmental conditions—past influences—of the period of earlier growth, principal amongst which is the effect of poor nutrition (a clear indicator of stunted growth). In children younger than 3 years, HAZ is a proxy for past and current influences on nutritional status, as well as future growth failure and resulting associated risk; it is also a stronger predictor of mortality in children of this age. WHZ compares a child's weight with the WHO reference standard weight for a child of the same height. It is used to assess wasting, is the most sensitive measure of the three used, and is a proxy for current nutritional status. Across a population, it is generally expected that 2.3% of children will be undernourished (Z-score of −2.00), whilst 2.3% will be overnourished (Z-score of +2.00).

Prevalence of Undernutrition

As shown in Table 4-7, 11% of Bahamian children had low HAZ, whilst 6% had low WHZ. The indicators stunting (low HAZ) and wasting (low WHZ) were at least three times greater than what is normally expected, with Region 1 indicating the highest prevalence. These levels suggest the population may have pockets of endemic undernutrition. This extreme situation is difficult to assess in this type of survey and requires surveillance and clinic-based data. The proportion of children with low weight for age (WAZ) (3.3%) was within normal levels (Table 4-7).

Stunting is slightly more prevalent amongst boys (11%) than girls (10%), and both percentages are unacceptably high. Using the other two indicators—WHZ and WAZ—percentages were significantly lower, with 8% of boys and

TABLE 4-7 Low and High Z-scores for Children 2–10 Years of Age*

	HAZ-score (%)		WAZ-score (%)		WHZ-score (%)		
Population characteristic	**<−2.0**	**>2.0**	**<−2.0**	**>2.0**	**<−2.0**	**>2.0**	***N***
Gender							
Male	11.2	6.7	4.2	7.4	7.6	13.0	492
Female	9.9	6.2	1.7	8.2	4.4	15.8	332
Region							
1	11.2	6.4	3.4	7.6	6.9	14.3	437
2	9.4	8.2	2.9	9.2	4.5	10.4	212
3	7.9	0.0	3.3	5.6	3.3	19.7	87
4	4.4	9.5	1.1	7.5	1.4	13.3	88
Quintile							
1	9.8	7.2	3.3	5.8	6.5	8.8	273
2	11.4	4.4	1.8	7.6	4.8	18.0	181
3	9.0	8.8	3.6	11.4	6.7	13.1	175
4	13.5	5.2	4.2	5.2	5.2	17.3	130
5	11.3	6.2	4.2	10.2	11.1	17.8	65
Total	**10.7**	**6.5**	**3.3**	**7.7**	**6.4**	**14.0**	**824**

* Low Z-scores = < − 2.0; high Z-scores = >2.0.

4% of girls having low WHZ; 4% of boys had low WAZ, whilst the percentage of girls with low WAZ (2%) was in keeping with the expected proportion (Table 4-7).

The highest rate of stunting was found amongst the youngest population, with proportions declining as children grew older. The HAZ-score indicated that 15% of children 2–4 years of age were at significant risk of stunting; that proportion was more than halved (7%) in children 7–10 years of age. These results show a reverse of the pattern usually found in populations with a certain level of food deprivation; they may suggest an error in either data collection or measurement or reflect a current or emerging economic situation that is acutely depressed. In any event, these results warrant further investigation by the social agencies of the various ministries and the local, national, and international institutions involved.

The overall trend of low WHZ-scores (wasting), which reflect current nutritional status, showed that the potential for undernourishment increased as children grew older. This was evident in the increase from 4% in children 2–4 years to 8% in children 7–10 years, a proportion triple that of what is expected by global standards. This pattern deviates from what is typically found in other surveys. In the BLCS, the higher prevalence of wasting amongst older children reflects similar results from two previous surveys, and may indicate that, within households, the nutritional status of younger children is a priority.

Both WHZ- and HAZ-scores showed the highest prevalence of undernutrition on the urbanized islands of Region 1 (New Providence and Grand Bahama) and the lowest on the less developed Family Islands of Region 4 (Other Family Islands). In both developing and developed countries, this pattern suggests that, for individual households, the economic and social safety net (e.g., land for farming or extended family) is less secure in urban areas during periods of economic stress.

Prevalence of Overweight Children

The WHZ-score, the indicator used to determine underweight children, was also used to assess the extent of overweight children. Overall, 14% of the total sample of 2–10 year-olds was overweight, indicating the emergence of chronic overnutrition. As Table 4-7 shows, the proportion of children considered clinically obese was six times more than what was expected. The likelihood that these children will become overweight adults has daunting consequences for the long-term public health of the country.

As observed in the wider population, more girls than boys (16% versus 13%) were overweight; amongst all children, weight increased with age. Of those in age group 2–4 years, 11% registered above normal weight, compared to the 2.3% referenced as normal; the prevalence of excessive weight for height further increased to 16% amongst children 7–10 years.

Overall, 14% of children 2–10 years were overweight and 6% underweight. Both scenarios underscore the need to identify environmental risk factors—household food insecurity and poor nutritional practices—in this subgroup to determine the causal relation (which is beyond the scope of this study). According to WHO standards, only 5% of a sample should be outside normal ranges.

For the most part, WHZ increased with higher per-capita, household-consumption expenditure. Regions 2 (Abaco, Andros, and Eleuthera) and 4 (Other Family Islands) had the lowest prevalence of overweight children (10.4% and 13.3%, respectively), whilst Region 3 (Exuma and Long Island) reported the highest, with 20%.

NUTRITIONAL STATUS OF ADOLESCENTS

Adolescence, a period characterized by rapid physical growth and social adjustment, makes the adolescent child susceptible to environmental factors, particularly those related to food and nutrition. Amidst the concern of sexual maturation and the milieu of social development and adjustment problems is the disorder of obesity, which is common in adolescents generally. The Body Mass Index (BMI) is a simple and reliable index of weight for height commonly used to classify underweight, overweight, and obesity; the BMI provides useful, crude data on the aforementioned measurements within the population.

The BMI for age and gender was determined for adolescents 11–20 years of age, using reference standards from the Centers for Disease Control. BMI categories used were: underweight (5th percentile); normal weight; at risk of overweight (85th percentile); and overweight (95th percentile). As shown in Table 4-8, of all youth measured, 59% were reported to have normal weight, 14% were at risk of becoming overweight, and approximately 9% were

TABLE 4-8 Body Mass Indices for Adolescents, Ages 11–20 Years

	BMI (%)						
Population characteristic	**Underweight**	**Normal**	**At risk for overweight**	**Overweight**	**Total**	***N***	**Mean BMI**
Gender							
Male	20.0	56.8	14.8	8.4	100.0	483	21.4
Female	16.8	61.0	12.9	9.4	100.0	444	21.5
Age group (years)							
11–15	15.2	60.8	16.5	7.4	100.0	549	19.7
16–20	22.7	56.2	10.2	10.9	100.0	378	23.8
Region							
1	18.9	57.8	14.3	8.9	100.0	489	21.5
2	13.8	66.8	9.1	10.2	100.0	244	21.4
3	14.0	57.7	18.1	10.3	100.0	88	21.5
4	22.2	62.1	13.9	1.8	100.0	103	20.1
Quintile							
1	15.8	62.8	13.7	7.8	100.0	247	21.0
2	15.6	66.1	12.4	5.9	100.0	230	20.8
3	17.7	55.8	14.9	11.6	100.0	218	22.2
4	23.3	52.8	14.3	9.6	100.0	162	21.5
5	22.4	54.1	13.9	9.6	100.0	70	22.0
Total	**18.4**	**58.9**	**13.8**	**8.9**	**100.0**	**927**	**21.4**

overweight for their age. Notably, 18% of these adolescents were underweight at the time of the Survey.

Age group and gender trends revealed more overweight females than males, specifically amongst those 16–20 years (13%). Young people living on more urbanized islands were more likely to have normal weight than those residing in less developed regions.

With regard to the relationship between BMI and socioeconomic status, more children and teenagers who were underweight for their age and gender were from higher-consumption households (quintiles 4 and 5), which contradicts results found in similar surveys. However, this finding could reflect concern for physical appearance, a common phenomenon in populations of wealth and affluence.

More boys than girls were classified as underweight. Overall, the highest prevalence of underweight youth was observed in the less developed islands of Region 4 (Other Family Islands) (Table 4-8).

NUTRITIONAL STATUS OF ADULTS

Evidence is convincing that mortality rates increase as excessive weight increases, as measured by the BMI. Moreover, as the BMI increases, the proportion of people with one or more co-morbid conditions also increases. In this regard, assessing the nutritional status of the adult population is particularly important to understanding its relationship to disease and death, health effects, and the human development index.

The nutritional status of adults 21–60 years of age was assessed based on weights and heights taken during the BLCS. General BMI rankings are:[6] normal weight for height, underweight for height, and overweight for height. The latter is further subdivided into three classes of obesity. WHO-accepted cutoffs for BMI are: $<$18.5 (underweight), 18.5–24.9 (normal), $\geq$25–29.9 (pre-obesity or overweight), 30–34.9 (obesity class I), 35–39.9 (obesity class II), and 40+ (obesity class III).

As Table 4-9 indicates, the mean BMI was 28 for adults; 34.4% of adults were overweight, a further 30.9% were obese, and about 2% were underweight. When the figures were combined, the percentage of overweight or obese adults was 65%, approximately two-thirds of this population. The 1988–1989 NHNS showed that, in adults 15–64 years of age, this prevalence was 49%.

It can reasonably be concluded that The Bahamas, like many other high-income countries, is experiencing an obesity epidemic. Within the adult population, females had a significantly higher prevalence of obesity (37%) than did males (24%) (Table 4-9). Female obesity was highest in Region 4 (Other Family Islands), the most underdeveloped area; there, overweight (35%) and obese (49%) females comprised 84% of the Region's female population, a grave revelation (Tables 4-10 and 4-11).

As shown in Table 4-10, the youngest group of males was the healthiest group in terms of weight. On average, one out of every two men 21–30 years of age (49.5%) was of normal weight. About 62% of men were too heavy for their height, whilst 69% of women had a BMI of 25 or more (Table 4-11). These results clearly show that a high proportion of Bahamian adults is at risk for developing one or more co-morbidities of the chronic, non-communicable diseases.

Amongst all persons, the combination of being overweight and obese increased with age. Obesity was most notable in the age groups between 31–50 years (about 35%), as well as in the 51–60 age group (33%), whilst young adults in the 21–30 age group were predominantly the healthiest in terms of weight (Table 4-9).

As an indirect measure of socioeconomic status, obesity is more common amongst middle-aged women in low-income countries. In high-income countries, it is more prevalent amongst middle-aged people, as well as younger adults and children, and tends to be associated with lower socioeconomic status. The highest prevalence of overweight persons was found in quintile 5 (38%) and decreased steadily in lower-consumption households. With regard to obesity, however, the wealthiest households had the smallest proportion of obese persons (27%), whilst quintile 2 had the highest (35%), an expected result for high-income populations (Table 4-9).

Overall, the highest prevalence of overweight and obese persons was found in Region 3 (Exuma and Long Island). Gender differences, noted in Table 4-10, show that those two islands have the highest percentage of obese men

[6] BMI, the international standard for determining weight range, is calculated by weight in kilograms (kg), divided by height in meters (m) squared (kg/m^2).

TABLE 4-9 Body Mass Indices for All Persons, Ages 21–60 Years

Population characteristic	BMI (%) Underweight (<18.5)	Normal weight (18.5–24.9)	Overweight (25.0–29.9)	Obese (30+)	Total	*N*	Mean BMI
Age group (years)							
21–30	3.8	45.2	27.7	23.3	100.0	712	26.6
31–40	1.0	28.7	34.7	35.6	100.0	747	28.5
41–50	0.8	23.0	41.0	35.2	100.0	475	28.9
51–60	0.3	23.4	43.2	33.1	100.0	235	28.7
Region							
1	1.8	33.2	34.4	30.6	100.0	1,248	27.9
2	2.4	27.1	37.5	32.9	100.0	523	28.3
3	1.0	33.8	30.5	34.6	100.0	188	27.8
4	1.4	35.2	29.6	33.8	100.0	209	27.6
Quintile							
1	3.4	35.3	30.4	30.9	100.0	380	28.2
2	1.6	31.7	31.5	35.2	100.0	416	28.4
3	2.2	31.0	33.6	33.1	100.0	449	28.1
4	2.0	31.5	36.5	30.0	100.0	445	27.7
5	0.7	34.4	37.8	27.0	100.0	481	27.4
Total	**1.9**	**32.8**	**34.4**	**30.9**	**100.0**	**2,169**	**27.9**

TABLE 4-10 Body Mass Indices of Males, Ages 21–60 Years

Population characteristic	BMI (%) Underweight (>18.5)	Normal	Overweight (18.5–24.9)	Obese (25.0–29.9)	Total (30+)	*N*	Mean BMI
Age group (years)							
21–30	5.1	49.5	27.3	18.1	100.0	344	25.7
31–40	0.3	31.6	42.0	26.2	100.0	373	27.3
41–50	0.9	25.4	42.1	31.6	100.0	244	28.3
51–60	0.6	29.1	49.7	20.6	100.0	110	27.5
Region							
1	2.1	35.7	37.9	24.3	100.0	583	27.0
2	2.5	34.1	41.5	21.9	100.0	270	27.2
3	1.0	39.3	31.3	28.4	100.0	99	26.9
4	2.4	49.4	25.6	22.6	100.0	119	25.9
Quintile							
1	3.7	45.1	32.0	19.2	100.0	176	26.3
2	3.2	39.2	36.5	21.1	100.0	213	26.2
3	1.8	35.7	38.4	24.1	100.0	220	27.2
4	2.1	33.6	38.7	25.7	100.0	211	27.2
5	0.9	31.4	40.3	27.5	100.0	253	27.6
Total	**2.1**	**36.1**	**37.6**	**24.1**	**100.0**	**1,071**	**27.0**

TABLE 4-11 Body Mass Indices of Females, Ages 21–60 Years

Population characteristic	BMI (%)				Total	*N*	Mean BMI
	Underweight (<18.5)	Normal (18.5–24.9)	Overweight (25.0–29.9)	Obese (30+)			
Age group (years)							
21–30	2.6	41.5	28.1	27.8	100.0	368	27.4
31–40	1.7	26.1	28.0	44.3	100.0	374	29.5
41–50	0.8	20.7	39.8	38.8	100.0	231	29.4
51–60	0.0	19.3	38.4	42.4	100.0	125	29.6
Region							
1	1.6	31.1	31.3	36.0	100.0	665	28.6
2	2.4	19.7	33.3	44.6	100.0	253	29.4
3	1.1	27.7	29.6	41.6	100.0	89	28.7
4	0.0	16.3	35.0	48.8	100.0	90	30.0
Quintile							
1	3.3	27.9	29.2	39.7	100.0	204	29.7
2	0.0	24.5	26.6	48.9	100.0	203	30.4
3	2.6	27.0	29.5	41.0	100.0	229	29.0
4	2.0	29.6	34.6	33.7	100.0	234	28.1
5	0.5	37.6	35.3	26.6	100.0	228	27.3
Total	**1.7**	**29.8**	**31.5**	**37.1**	**100.0**	**1,098**	**28.7**

(28%). The greatest proportion of obese women was found on Other Family Islands (Region 4), where 47% had a BMI of 30 or more (Table 4-11). Overall, New Providence and Grand Bahama had the lowest prevalence of obesity amongst island regions (Table 4-9). It follows that overweight persons and obesity present a significant public-health problem, especially in the less developed Family Islands (Region 4) and poorest segments of the population.

BREASTFEEDING

Results on breastfeeding show that approximately 74% of all children 24 months and younger had been breastfed (Table 4-12).[7] More boys (79%) than girls (69.6%) had been breastfed. The lowest prevalence of recorded breastfeeding was for infants 7–12 months (69.1%), which was lower than that for children 13–24 months (74.6%). This unexpected finding may be a factor of memory and the accuracy of recall by mothers of older children. As expected, the highest prevalence of breastfeeding (76%) was amongst children 0–6 months of age.

The highest prevalence of breastfeeding (94%) was found in the median quintile, whilst the lowest was found in quintile 4 (63%). Mothers residing in the more developed islands of Region 1 (New Providence and Grand Bahama) and 2 (Abaco, Andros, and Eleuthera) were most likely to breastfeed their infants. Amongst those households, approximately 74% of children were breastfed. These results show that breastfeeding is more prevalent in urban areas than rural ones, which is not typically found. However, this result can be attributed to the National Breastfeeding Campaign. Initiated eight years prior to the BLCS, the Campaign has influenced Regions 1 and 2 more than 3 and 4 because of the way in which resources have been concentrated.

According to lactation management research, the optimal length of time recommended for exclusive breastfeed-

[7] Children's ages were classified as 0–6 months, 7–12 months, and 13–24 months.

TABLE 4-12 Breastfeeding Incidence and Median Months of Exclusive Breastfeeding*

Population characteristic	% breastfed	*N*	Median months of exclusive breastfeeding	*N*
Gender				
Male	79.0	86	2	57
Female	69.6	115	2	68
Age (months)				
0–6	76.3	50	1	35
7–12	69.1	51	1	31
13–24	74.6	100	3	59
Mother's education completed				
Secondary school	70.2	150	2	91
College/university	82.2	28	3	20
Region				
1	74.2	126	2	81
2	72.6	49	3	29
3	57.3	7	3	4
4	62.6	18	3	10
Quintile				
1	68.3	62	2	32
2	70.7	50	2	30
3	93.6	41	2	33
4	62.5	29	1	19
5	72.5	19	3	11
Total	**73.7**	**201**	**2**	**125**

* Note: Breastfeeding sample was for children 24 months or younger; exclusive breastfeeding was for those 6 months or younger.

ing is six months. This is important to prevent incidence of diarrhoeal diseases, which can increase infant morbidity and mortality. A pertinent indicator of the benefits of breastfeeding is the duration of exclusive breastfeeding.[8] Infants 6 months of age and younger were exclusively breastfed for a median of 2 months. For the purpose of comparison with the NHNS of 1988–1989, the level of breastfeeding of children 12 months of age and younger was assessed. BLCS results showed that 7% of children were exclusively breastfed for 4 months, compared to 2% of children in the NHNS, a marked improvement in prevalence rate for exclusive breastfeeding.

With regard to exclusive breastfeeding by region, Region 1 mothers exclusively breastfed their babies for an average of 2 months. Sample sizes for the other regions were too small to make comparisons.

FEMALE REPRODUCTIVE HEALTH

Approximately 61.9% of females 10–49 years of age reported being pregnant at least once, with a proportional range from 6% in adolescent girls 10–19 years of age to 91.8% in women 40–49 years. The average number of reported pregnancies increased from less than one for girls 10–19 years to three for women 40–49 years.

In each age group, those least able to afford it became pregnant, as the highest proportion of women who were ever pregnant was found in the lowest quintile. Amongst

[8] The term *exclusive breastfeeding* is defined as an infant being solely breastfed or fed expressed breast milk via the spoon-and-cup method; and given no bottle (even if it contains expressed breast milk), water, formula, or baby food.

TABLE 4-13 Percentage of Females, 10–49 Years of Age, Who Have Ever Been Pregnant

	10–19 yrs.		20–29 yrs.		30–39 yrs.		40–49 yrs.	
Population characteristic	**%**	***N***	**%**	***N***	**%**	***N***	**%**	***N***
Education								
Primary or lower	5.1	85	100	10	95.4	27	93.9	62
1–3 grades of higher secondary	1.6	153	76.7	19	95.7	32	78.5	26
4–5 grades of higher secondary	5.0	113	79.9	54	93.2	53	100	32
Higher secondary or technical/vocational	19.3	84	73.8	240	87.1	231	95.4	143
Jr. college, community college, or college/univ.	0.0	23	47.1	75	80.5	96	85.9	76
Region								
1	5.6	249	67.9	265	86.7	251	91.9	188
2	8.4	129	79.7	92	90.2	111	92.2	83
3	8.2	37	63.3	22	82.7	35	95.5	42
4	4.9	44	80.4	25	86.4	45	84.2	30
Quintile								
1	9.2	125	80.8	95	92.7	89	98.7	55
2	8.8	109	78.5	92	91.5	85	96.4	65
3	3.5	104	76.1	82	93.2	99	95.2	71
4	5.2	85	56.8	71	85.0	99	95.6	75
5	0.0	37	48.5	64	73.0	70	80.0	78
Total	**6.0**	**460**	**68.9**	**404**	**87.0**	**442**	**91.8**	**344**

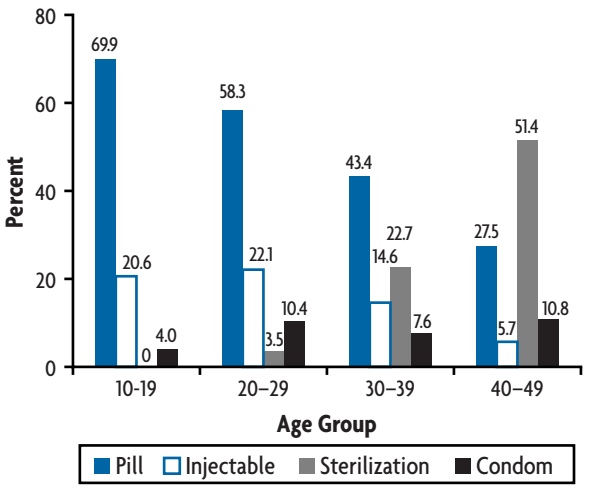
age groups, a greater proportion residing in Family Islands reported pregnancies (Table 4-13).

About 67% of all females had had at least one gynaecological examination. Amongst women 20–49 years of age, more than 80% across all quintile levels had been examined.

Level of contraceptive use to avoid pregnancy was 5.6% for girls 10–19 years of age, 57% for women 30–39 years, declining to 33% for women 40 years and older (some of whom may have no longer needed contraception because of hysterectomies or menopause). Women who had had at least one live birth were more likely to use contraceptive methods than those who had had no deliveries.

The birth control pill was the most popular contraceptive method used amongst all females (47%), followed by female sterilization (19.7%), which was used primarily by older women. Other methods included injectables (16.1%), condoms (9.1%), and other modern

FIGURE 4-5 Common Contraceptive Methods Women Used, by Age and Type



methods (6.5%) (Figure 4-5). This pattern was comparable by quintile.

HEALTH-SERVICES USE AND EXPENDITURE

The Government attempts to make health-care services available to all residents of the Bahamas by subsidizing costs for certain population groups, and deferring or waiving costs in cases of demonstrated lack of ability to pay. Because of this policy, infants, children under 19 years (students only), civil servants, pregnant women, the physically disabled, the elderly (pensioners), and holders of the social-services medical card are exempt from facility fees, including medicines.

Over the past five years, health services accounted for about 15% of the national budget. In fiscal year (FY) 2001–2002, about 69% of the health budget was apportioned to the delivery of health care, with institutions receiving the majority of the share. Given the Government's mandate to ensure the availability of accessible and affordable health care for all persons living in The Bahamas, the BLCS sought to determine whether inequities existed in the level of facility use.

Outpatient Visits

In the four-week period immediately preceding the Survey, approximately 1 in 10 persons (12.9%) visited a health practitioner for outpatient care. More females (15.3%) than males (10.4%) made visits. This finding is not surprising, as pregnant females are more likely to report illness and visit health facilities. The very young (18.7%) and the elderly (24.6%) represented the highest proportion of visits (Table 4-14).

The percentage of persons seeking outpatient care rose with consumption levels, from 8% in the lowest quintile to about 20% in the highest (Table 4-14).

TABLE 4-14 Outpatients (during Past Four Weeks) and Inpatients (during Past 12 Months)

		Inpatient admissions		
Population characteristic	**Outpatient visits**	**Total**	**Average length of stay**	***N***
Gender				
Male	10.4	3.8	8.8	3,152
Female	15.3	7.1	6.5	3,262
Age group (years)				
0–4	18.7	4.1	4.0	625
5–14	9.9	2.1	12.5	1,394
15–19	5.7	3.3	6.9	503
20–34	11.6	7.7	4.7	1,435
35–54	13.9	6.0	6.8	1,623
55–64	14.5	6.2	6.6	389
65+	24.6	11.5	15.7	446
Region				
1	12.4	5.4	6.9	3,413
2	16.6	5.8	9.1	1,725
3	13.9	6.4	6.7	621
4	13.7	5.5	10.6	605
Quintile				
1	8.1	5.1	7.8	1,560
2	9.9	5.4	8.3	1,325
3	13.2	5.2	6.4	1,247
4	13.5	4.4	5.9	1,173
5	19.6	7.1	5.9	1,024
Total	**12.9**	**5.5**	**7.2**	**6,414**

TABLE 4-15 Outpatient Visits to Health Facilities in Past Four Weeks, by Facility and Sector

	Public			Private					
Characteristic	**Total**	**Hospital**	**Clinic**	**Total**	**Hospital**	**Clinic**	**Professional**	**Foreign medical**	***N***
Gender									
Males	66.7	27.7	39.0	31.0	3.0	23.8	4.2	2.3	566
Females	57.8	19.0	38.8	39.9	2.6	33.0	4.2	2.4	797
Age group									
0–4	63.5	19.2	44.3	35.8	3.7	32.1	0.0	0.6	142
5–14	63.8	17.5	46.3	33.7	1.7	27.9	4.0	2.6	173
15–19	56.1	15.5	40.6	43.9	0.0	39.9	4.0	0.0	41
20–34	46.8	15.1	31.7	50.6	3.9	39.7	7.0	2.5	269
35–54	59.9	30.9	29.1	37.9	1.8	30.3	5.8	2.1	411
55–64	74.0	35.2	38.8	24.2	3.6	18.8	1.8	1.8	112
65+	77.3	17.9	59.4	18.2	4.9	11.7	1.6	4.5	215
Region									
1	51.3	33.3	18.0	47.9	3.7	40.2	4.0	0.8	646
2	70.6	12.0	58.6	27.1	1.7	20.4	5.0	2.3	482
3	86.7	11.5	75.2	9.5	1.9	7.6	0.0	3.8	108
4	70.4	16.4	54.1	15.4	1.7	11.1	2.6	14.2	127
Quintile									
1	91.1	24.2	66.9	8.9	0.6	4.2	4.1	0.0	180
2	83.8	38.6	45.3	14.1	1.9	11.5	0.7	2.0	282
3	67.7	22.2	45.5	30.7	2.6	24.4	3.8	1.6	263
4	47.7	13.0	34.7	50.4	2.4	43.7	4.3	2.0	275
5	34.5	14.9	19.6	60.4	5.3	48.0	7.1	5.1	342
Total	**61.5**	**22.7**	**38.8**	**36.2**	**2.9**	**29.1**	**4.2**	**2.3**	**1,363**

Table 4-15 shows that as consumption quintiles increased, visits to public health facilities decreased while those to private practitioners increased. About 62% was made to public-health facilities, 36.2% to private practitioners, and 2.3% to health facilities abroad. On most islands outside of New Providence and Grand Bahama (Region 1), health care is largely limited to Government clinics. The data shows greater usage on Family Islands (Regions 2, 3, and 4), where 70–87% of medical visits were made to public-health facilities, especially clinics. Residents in Region 1 used public-health facilities the least and made the highest proportion of visits to private practitioners (47.9%). This finding is predictable, given that most private-health facilities are found on New Providence and Grand Bahama. Despite comparatively limited availability of private-health facilities on the Family Islands, about 10–27% of those residents chose private facilities for outpatient care, either locally or on other islands. The proportion of outpatient visits to foreign medical facilities was modest in most areas.

Medicine

As Table 4-16A illustrates, respondents who were outpatients tended to buy their medicine from both public and private facilities,[9] although they spent more at the latter over the reference period (past four weeks). When expenditure at public- and private-health facilities was combined, results showed that, on average, about $4 was spent on medicine, with females spending more than males ($4.61 versus $3.91).

[9] Expenditure on medicine is at an individual level, inclusive of those who did not pay, including Government-subsidized groups.

TABLE 4-16A Average Expenditure on Outpatient and Inpatient Care

Population characteristic	Outpatient ($)						Inpatient (all sectors) (B$)	*N*
	Public	Private	Foreign	Public	Medicine private	Both		
Gender								
Male	2.14	6.30	0.82	0.50	3.42	3.91	22.98	3,061
Female	0.77	11.67	0.34	0.66	3.95	4.61	33.56	3,175
Age group (years)								
0–4	0.11	5.73	0.08	0.19	2.31	2.50	15.24	611
5–14	0.08	2.92	0.04	0.29	1.69	1.98	12.52	1,350
15–19	0.49	9.52	0.00	0.25	2.17	2.42	18.44	489
20–34	0.93	10.26	0.03	0.20	2.10	2.30	23.94	1,403
35–54	3.58	11.19	1.08	1.10	4.45	5.56	47.37	1,573
55–64	2.83	7.45	0.87	1.67	12.11	13.78	41.27	380
65 or older	1.33	25.84	4.43	1.19	12.38	13.57	49.15	431
Region								
1	1.39	9.54	0.36	0.55	3.66	4.20	25.89	3,306
2	1.81	7.65	0.27	0.56	4.96	5.52	41.76	1,721
3	1.24	2.06	2.60	2.29	0.72	3.01	49.25	616
4	1.37	4.49	7.44	0.56	2.37	2.93	40.66	594
Quintile								
1	0.30	0.39	0.00	0.25	0.61	0.86	5.47	1,553
2	0.92	2.21	0.07	1.12	1.29	2.41	11.16	1,316
3	0.89	4.75	0.05	0.39	2.89	3.28	15.59	1,220
4	0.73	7.05	0.57	0.27	3.31	3.58	38.70	1,144
5	4.35	31.18	2.19	0.88	10.50	11.39	72.04	1,004
Gini coefficient	0.9935	0.9806	0.9988	0.9933	0.9628	0.9573	0.9889	6,236
Total	**1.43**	**9.06**	**0.57**	**0.58**	**3.69**	**4.27**	**28.41**	**6,236**

In terms of age group, adults aged 55–64 years incurred the highest average cost for medicine ($13.78), most of which was spent at private facilities. Persons under 35 years had the lowest cost (less than $3.00). Low expenditure amongst infants and children reflect, in part, the Government's policy to subsidize their health-care costs in the public sector.

Average spending increased by quintile when expenditures at public and private facilities were combined. On average, individuals in the highest quintile paid 13 times more for medicines to treat various health conditions ($11.39) than those in the lowest quintile ($0.86). This may be related to the tendency of better-off persons to buy medicines at private, rather than public, facilities.

Medicinal expenditure ranged from about $3.00 to $6.00 in the island regions, with residents of Region 2 (Abaco, Andros and Eleuthera) paying the most for medicines ($5.52), as compared to persons in the remaining Family Islands of Regions 3 and 4, who spent about $3.00.

Expenditure

As Table 4-16A shows, the average expenditure for outpatient care (during the four-week period preceding the survey) at public, private, and foreign facilities was $1.43, $9.06, and $0.57, respectively. Expenses were averaged for all costs associated with outpatient visits—excluding medicines, transportation, and insurance-reimbursed costs. Per-capita spending on overall outpatient care was

$11.07, averaging $12.78 for females and $9.26 for males.

On average, males spent more on outpatient care at public health facilities and overseas, whilst females spent more at local private facilities. The average health-care cost at public facilities was $2.14 for males and $0.77 for females. At private facilities, average expenditure was $6.30 for males and $11.67 for females.

Amongst those who sought outpatient care in the public sector, expenditures decreased with age amongst adults in the 35 years and older age groups. Average expenses decreased from $3.58 (for adults aged 35–54 years) to $1.33 (those 65 years or older). For children and young adults, the average cost of public-health care was less than $1.00. For private costs, average expenses increased from $2.92 for children aged 5–14 years to $11.19 for adults aged 35–54 years. Overall, the highest average, private-care cost was found amongst the elderly ($25.84), whilst the lowest was amongst children 5–14 years. Amongst residents who traveled abroad for outpatient care, the elderly incurred the highest average cost ($4.43).

Across all sectors, health expenditure increased as quintiles rose. Results using the Gini coefficient to measure inequality showed statistical differences by consumption quintile (the measure was greater than 0.95 in each sector).

Mean expenditure on public-health care, by region, was about $2 or less. Residents of Region 1 (New Providence and Grand Bahama), where most private health-care facilities are found, had the highest private health-care expenditure ($9.54). Persons living in Region 4 (Other Family Islands), who had to travel longer distances for

TABLE 4-16B Average Annual Health Expenditure and Percentage Distribution, by Expenditure Type

Population characteristic	Average annual expenditure (B$)	Distribution (%)						
		Outpatient					Inpatient (all sectors)	*N*
		Public	Private	Foreign	Medicine	Total		
Gender								
Male	252.40	8.10	24.90	1.40	54.20	88.70	11.30	3,156
Female	363.20	5.40	29.20	0.60	51.20	86.30	13.70	3,269
Age Group (years)								
0–4	148.20	1.50	37.90	0.40	55.10	94.90	5.10	626
5–14	158.60	0.90	36.60	0.40	54.10	92.10	7.90	1,396
15–19	174.40	9.70	30.40	0.00	41.60	81.80	18.20	503
20–34	234.40	8.30	30.60	0.20	42.00	81.10	18.90	1,436
35–54	493.60	8.20	25.20	1.20	51.10	85.70	14.30	1,625
55–64	445.80	7.00	18.20	0.60	65.70	91.50	8.50	391
65 or older	743.60	6.00	12.70	3.40	71.10	93.20	6.80	448
Region								
1	238.20	5.40	28.70	0.60	53.20	87.80	12.20	3,367
2	238.30	13.50	21.50	1.10	49.60	85.70	14.30	1,745
3	164.20	22.30	12.00	2.50	42.90	79.70	20.30	620
4	249.60	4.40	18.20	10.80	43.90	77.20	22.80	599
Quintile								
1	25.50	11.00	7.90	0.00	59.90	78.80	21.20	1,560
2	83.60	11.80	14.60	0.40	55.60	82.40	17.60	1,325
3	139.50	5.70	26.10	0.10	58.50	90.40	9.60	1,248
4	189.50	4.70	30.40	0.70	51.10	86.90	13.10	1,177
5	747.80	5.20	34.20	1.80	47.80	89.00	11.00	1,021
Total	**309.20**	**6.50**	**27.50**	**0.90**	**52.40**	**87.20**	**12.80**	**6,425**

hospital services, had the highest average expenditure for outpatient care abroad ($7.44).

Table 4-16B shows that the share of Total Health Expenditure (THE) increased between the lowest and middle consumption quintiles (78.8% and 90.4%, respectively) and fluctuated in the highest ones. Share of public-sector expenditure decreased as consumption levels increased (from 11% in the lowest consumption quintile to about 5% in the upper quintiles). This finding corresponds with the earlier observation that visits to the public-health sector decrease with increased levels of well-being. Conversely, the share of private-sector (and foreign facility) expenditure increased as consumption levels rose (from 7.9% in the lowest quintile to 34.2% in the highest); this represented a fourfold increase, indicating that, with higher levels of affluence, a greater portion of THE is spent on private care. The expenditure share on medicines was highest amongst persons in the lowest consumption quintile and decreased between the middle and highest quintiles.

Inpatient Admissions and Expenditure

During the 12 months preceding the BLCS, 5.5% of all respondents were admitted to a health facility for inpatient care: 4% at public facilities and 1.5% at local private or foreign ones. In all facilities combined, female admissions were nearly twice as high as that of males (7.1% compared to 3.8%). Adults 65 years and older (11.5%), followed by those 20–34 years (7.7%), were more likely than other groups to be admitted for medical care (Table 4-15). The difference between consumption quintiles was only 3% (4–7%) and only 1% (5–6%) across the island regions.

Average Length of Stay

Whilst some Government-owned clinics have accommodations for overnight medical stay, most persons requiring extended medical care are retained in a hospital. As shown in Table 4-14, the average length of stay in health-care institutions over the reference period (last 12 months) was 7 nights. Even though fewer males than females were admitted to health-care facilities, they were retained longer (9 versus 7 nights). The reasons may be that males are more likely to suffer from externally caused, acute illnesses and be diagnosed at a more advanced stage of illness. The elderly and children 5–14 years had the longest average periods of stay (16 nights and 13 nights, respectively), whilst children under 5 years were retained for the shortest period of time (4 nights).

Generally, as quintiles increased, the average number of nights spent in a health facility decreased. Whilst respondents in the lower two quintiles spent an average of about 8 nights, this decreased to about 6 nights in the higher quintiles. Whilst it is possible that persons in a lower socioeconomic level may have more severe illness, resulting from deprivation of certain services, it is also possible that these results may reflect who is paying the bills (i.e., Government, persons paying out of pocket, or a third party).

On average, respondents from the more remote islands of Region 4 (Other Family Islands) had the longest stay (11 nights), followed by those from Region 2 (Abaco, Andros, and Eleuthera) (9 nights). In Regions 1 and 3, respondents were retained for an average of about 7 nights. This finding may reflect the need for more diagnostic services for persons referred to hospitals in New Providence or Grand Bahama from the other islands, or simply that only the more serious cases are referred.

Expenditure

Table 4-16A, which summarizes the average expenditure amongst those admitted to a health facility over the 12-month period prior to the Survey, shows expenditure, which covered all payments associated with inpatient visits (including medicines), but excluded transportation, room and board, and insurance-reimbursed costs.

Combined per-capita expenditure for inpatient care (public, private, and foreign) was $28.41. Average expenditure on inpatient health care was lower amongst males than females ($23.00 versus $33.56). By age group, the elderly incurred the highest average cost ($49.15), whilst children 5–14 years had the lowest ($12.52). Average cost increased with age between the 5–14 and 35–54 age groups. Expenses for adults 55–64 were lower ($41.27) but rose again for those 65 and older.[10]

Average expenditure on health care over the past 12 months increased steadily by quintile, from $5.47 at the lowest quintile to $72.04 at the highest—roughly a thirteen-fold increase. This finding most likely reflects the preference for private services as socioeconomic status (SES) increases. However, as shown in Table 4-16B, the share of THE on inpatient care (including medicine) dif-

[10] These results are interesting, considering that the Government heavily subsidizes care to the elderly.

fered by quintile. It was highest in the lowest quintile (21.2%), which was about twice that of the middle and highest quintiles. This latter finding clearly indicates the SES/health cycle: How poor health can negatively affect SES and how poverty can lead to poor health.

Amongst island regions, average expenditure was highest on Family Islands, where average cost ranged between $40 and $49 for inpatient care. It was lowest for Region 1 residents, who spent an average of $25.89 (Table 4-16A).

Whilst expenditure rose by quintile, the share of THE on outpatient care was lowest amongst children and the elderly, both subsidized by Government. The poor allocated the greatest proportion of their THE share to inpatient care. Medicines comprised the greatest share of THE.

Overall, the average annual expenditure on health care per person was $309.20 ($252.40 amongst males and $363.20 amongst females). Generally, expenses increased with age (with the exception of adults 55 to 64 years). By consumption quintile, persons in the lowest quintile spent an average of $25.50 annually, compared to $747.80 for those in the highest quintile. Regional comparisons showed that Region 3 (Exuma and Long Island) had the lowest annual cost ($164.20), whilst Region 4 (Other Family Islands) had the highest ($249.60) (Table 4-16B).

HEALTH INSURANCE COVERAGE

The principal avenues by which health care is financed are:

- *Government*. Approximately 15% of the nation's budget is allocated to health (MOF 2004).
- *Private health insurance*. About $102 million was spent in 2001.
- *User fees at both public and private facilities*. Total out-of-pocket expenditure was $309 per capita over the last 12 months.
- *Social health insurance*. Through the National Insurance Board (industrial injury component).
- *External sources*. Such sources are limited because of the country's economic profile (MOH 2004, p. 77).

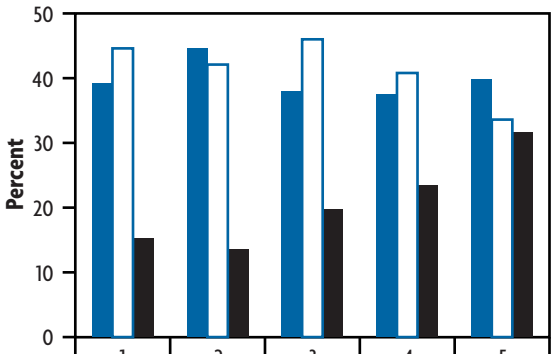
Survey results revealed that 51.4% of respondents reported having some form of health insurance, leaving others to cover health-care expenses out of pocket or with Government assistance. In terms of gender, coverage levels did not differ significantly between males (50.7%) and females (52.2%). The age groups with the least coverage were those most likely to seek care: the elderly (34.7%) and children under 5 years (42.8%). Both groups are more vulnerable to illness than others, and additionally, the cost of insurance for the elderly is prohibitive. Coverage for employable persons (ages 20–64) ranged from 50%–59%.

Individuals from better-off households (higher consumption quintiles) had higher levels of coverage. For example, only 20.1% of those in the poorest quintile had coverage, compared to 76% in the wealthiest quintile. In addition to differences in level of insurance coverage, scope of coverage differed. Higher-income persons were more likely to have comprehensive health-insurance packages, whilst lower-income persons, who purchased lower-priced premiums, faced higher deductibles (MOH 2003).

TABLE 4-17 Proportion of Respondents with Medical and Dental Coverage

Population characteristic	Medical (%)	Dental (%)	*N*
Gender			
Male	48.9	4.5	3,148
Female	50.3	4.7	3,259
Age group (years)			
0–4	41.8	2.4	624
5–14	50.8	5.0	1,392
15–19	49.8	3.4	503
20–34	48.1	3.4	1,433
35–54	56.5	6.9	1,622
55–64	49.2	4.7	389
65+	33.8	2.4	444
Region			
1	52.1	4.6	3,407
2	36.6	2.4	1,774
3	30.1	3.0	621
4	36.8	12.6	605
Quintile			
1	18.7	1.3	1,560
2	38.7	1.5	1,325
3	51.6	4.5	1,247
4	62.3	6.5	1,171
5	75.1	8.4	1,023
Total	**49.6**	**4.6**	**6,407**

FIGURE 4-6 Medical Insurance Payers



	1	2	3	4	5
Self	39.2	44.6	38.0	37.5	39.8
Family	44.6	42.1	46.0	40.8	33.6
Employer	15.2	13.5	19.7	23.4	31.6

Quintile

TABLE 4-18 Average Medical Insurance Payments

Population characteristic	Medical insurance ($)	*N*
Gender		
Male	61.6	1,354
Female	60.6	1,446
Age group		
0–4	9.8	234
5–14	10.1	640
15–19	27.9	219
20–34	70.9	614
35–54	100.6	819
55–64	106.8	172
65 and older	97	102
Region		
1	60.0	1,748
2	74.2	641
3	68.5	184
4	56.7	227
Quintile		
1	29.5	272
2	40.2	488
3	49.1	593
4	62.7	668
5	85.4	734
Total	**61.1**	**2,800**

Results also showed that family members were the primary sources of obtaining both medical (40.8%) and dental (44.2%) insurance coverage. However, as consumption quintiles increased, the level of coverage by employers increased, whilst coverage by family members decreased (Figure 4-6).

Residents of the most developed islands of New Providence and Grand Bahama (Region 1) had the highest coverage level (54%), whilst residents of Exuma and Long Island (Region 3) had the lowest (30.8%).

Further analysis revealed that a much greater proportion of respondents had medical (50%), as opposed to dental (5%), insurance, possibly because of the lower priority given to oral health care and the more affordable, out-of-pocket cost of dental care. Males and females had comparable levels of medical (50%) and dental (5%) coverage.

On a monthly basis, respondents paid an average of nearly three times as much for medical insurance ($61.1) as for dental coverage ($21.20). Table 4-18 provides details on medical insurance payments (dental-insurance payments are excluded because of small sample sizes in most subgroups). Predictably, payments increased with levels of consumption. Residents of Region 2 (Abaco, Andros, and Eleuthera) had the highest average cost for medical insurance ($74), whilst the Family Islands of Region 3 (Exuma and Long Island) had the lowest ($57).

Total outpatient expenditure on visits to health facilities (over the past four weeks) was estimated at about $2 million amongst persons with private insurance and about $1 million amongst those without coverage. Total inpatient expenditure was higher, at about $6 million amongst those insured and $3 million for the uninsured (MOH 2003). This finding raises the question: Do those with - insurance make more use of the service or are pricing and billing differences based on whether an individual has coverage?

CONCLUSIONS AND POLICY RECOMMENDATIONS

The Survey findings described above reveal the need for comprehensive, intersectoral interventions to improve the

overall health status of Bahamians of all ages. Various initiatives are recommended for consideration at the policy or program level. Some of the more critical ones are summarized below.

Self-reported Health Status

Accidents and Workplace Injuries

The proportion of injuries due to violence and preventable accidents is of increasing concern to health-care practitioners and the general public. (About 20% of reported accidents and workplace injuries resulted from gunshots or stabbing and motor vehicle accidents.) As reflected in both national morbidity and mortality statistics, such injuries affect productivity levels and result in temporary or permanent disability, or even death. Given that the leading causes of mortality are external, it is important to understand and prevent the occurrence of such events through evidence-based interventions.

In the BLCS, most injuries reported occurred at the workplace or school. This highlights the need to strengthen and implement national occupational health-safety initiatives that are intersectoral—including labour, education, and other social agencies. Appropriate linkages must be forged to ensure that safety measures are in place in the workplace and school environments.

Chronic Non-Communicable Disease

With regard to chronic non-communicable diseases—the chief contributors to morbidity and mortality in the population—The Bahamas has characteristics similar to those of industrialized countries. Its profile of hypertension and diabetes, particularly the greater prevalence of the latter in the Family Islands, is of concern, and efforts to control these diseases must be strengthened.

A related factor may be food availability,[11] which, according to FAO data, has increased in recent years. For example, the WHO-recommended, daily-caloric availability per capita is 2,250 for a population the size of the Bahamas. In 2001, 2,777 total calories were available in the population, compared with 2,500 in 1999 and 2,498 in 1992. Another contributing factor is the shift in quality of dietary intake toward increasingly higher percentages of refined carbohydrates and high-fat foods. Combined with a sedentary lifestyle, this factor exacerbates the problem of obesity—a risk factor for diabetes, hypertension, and other chronic diseases.

These realities require a comprehensive response involving all levels of Bahamian society—national, community, and individual—so that people will be empowered to take greater responsibility for their health. To this end, the following recommendations are proposed:

- Adoption of the National Food and Nutrition Policy. This Policy defines the direction of such initiatives as national dietary guidelines, food standards, regulatory measures, education, promotion of best nutrition practices, and institutional strengthening for the prevention of obesity and chronic non-communicable diseases.
- Increased health education and promotion and community awareness-raising of associated risk factors.
- Targeted research on the relationship between non-communicable diseases and socioeconomic status and region of residence.

Child Health

Immunization

The current instrument used to record vaccinations is inadequate, and should be revised to address such limitations as the inclusion of new vaccines. Moreover, an immunization database should be established to capture vaccination information on each child. This would allow for detection of defaulters and early follow-up, and would improve coverage rates.

Respiratory Illness

In view of the high incidence of upper-respiratory illnesses, compared to that of asthma and diarrhoea (Table 4-4), it is recommended that further research be conducted to determine contributing factors so that preventive measures can be taken.

Nutrition

Children: Ages 2–10 Years

Although prevalence of undernutrition in this age group is low by World Health Classification standards (less than 20%), the low HAZ-score in this Survey for children 2–4 years of age (15%) is cause for concern. This is especially true for children 3 years and younger, as this measurement

[11] In The Bahamas, food availability is a proxy for consumption, as no portion of imported foods is exported, but is consumed by the population and its visitors.

is a most sensitive predictor of mortality in this age group. Further investigation should be conducted to determine the extent to which this problem exists so that appropriate intervention strategies may be implemented, if and where necessary, to prevent exacerbating the problem.

Although wasting is not a significant public-health problem, targeted health- and social-sector programs are needed for children 7–10 years of age (the group with the highest prevalence rate). The health sector should monitor this group closely to ensure intervention response and control of the condition.

Survey results indicate that, for this age group, being overweight is a nutritional problem of sufficient public-health magnitude to warrant immediate action to abate a future crisis. Response to the current situation must be multifaceted and multisectoral. Prevention should be the primary focus of targeted interventions.

Adolescents: Ages 11–20 Years

As with younger children, prevention, containment, and reduction are a top priority. Survey results showed that children living in households with overweight adults were four times more likely to be overweight, or at risk of becoming overweight than those not living with overweight adults. This shows that obesity is a familial problem related to household consumption patterns, as well as genetic traits. Thus, it is recommended that:

- Prevention programs be family-oriented.
- Targeted programs meet the needs and expectations of adolescents. In addition, underweight adolescents (18%) should be followed closely, and contributing environmental factors should be identified as an early warning of household food insecurity (especially in the urban areas, taking note of the implication of nationality).

Adults: Ages 21–60 Years

Every avenue must be explored to empower adults to take better care of their health. This includes making healthy food choices, increasing physical exercise and limiting lifestyle practices that negatively affect health and well-being. Adults 21–60 years of age comprise the majority of human capital in the Bahamian workforce. This group is critical to the country's economic and social development, underscoring the need for it to maintain good health. The prevention approach to the overweight and obesity issue is needed amongst younger adults to delay the onset of chronic non-communicable diseases. It is recommended that:

- Partnerships and linkages be forged with all segments of society to enable a synergistic effect and minimize the burden in terms of human and financial capital expenditure, as proposed in the National Food and Nutrition Policy.
- Gender-specific programs and components on chronic non-communicable disease be strengthened and integrated into all other health programs. Nationwide health education and promotion strategies must continue to be developed to empower individuals to take greater responsibility for their health care.

Breastfeeding

Populations with a high prevalence of breastfeeding are characterized by reduced incidence of childhood disease, particularly diarrhoea and upper-respiratory infections; subsequently, such a reduction lowers morbidity and mortality rates of children under 2 years. Since inception of the National Breastfeeding Campaign more than a decade ago, incidences of childhood diseases, including gastroenteritis, have been significantly reduced and, by extension, infant mortality rates have declined. The Campaign has also succeeded in increasing breastfeeding prevalence amongst lactating women, particularly in Regions 1 and 2, where Campaign efforts were more concentrated. The same effect on breastfeeding was not observed in Regions 3 and 4. These factors indicate the need to target health-promotion efforts evenly across all regions. Additionally, there is a need for the Government to approve the National Breastfeeding Policy, (currently in draft form), which will mobilize all necessary resources to create a baby-friendly environment.

Female Reproductive Health

Based on the Survey results, it is recommended that promotion of health education be increased throughout The Bahamas to raise awareness of the importance of family planning.

Health Services Use, Expenditure, and Insurance

Survey results showed that, as wealth increased, a shift occurred in the use of health-care facilities. With increasing

consumption levels, the proportion of visits to public-health facilities decreased, whilst those to private facilities increased, indicating that private providers were the preferred choice. Clearly, public-health care is affordable; however, users tend to choose other alternatives as their socioeconomic capacity—and thus their health-care options—increases.

Given the rising costs of private coverage and many persons not being able to afford private coverage, the Blue Ribbon Commission was formed to investigate the feasibility of forming a national health insurance system to ensure equity of access to all. The Commission recommended that a compulsory social health insurance be introduced as the principal method of financing health care for The Bahamas (MOH 2004, p. ix).

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CHAPTER 5

Educational System: Achievements and Challenges

Brenda Y. Coakley

The Bahamian Government regards education as a fundamental human right—a key to sustainable development and an indispensable means by which its people can participate effectively in the national and global economy. Today, education is viewed as a powerful determinant of labour-force participation, career choice, and ultimately earning capacity; in short, education both affects and is affected by individuals' well-being (Box 5-1).

GOVERNMENT INITIATIVES AND THEIR IMPLEMENTATION

To ensure equitable access to the country's schools,[1] The Government has initiated a range of initiatives and programmes that focus on:

- Academic success;
- Student support; and
- Family life, character-building, and reform.

Initiatives that aim to further academic success include Let's Read Bahamas, Virtual School Mathematics, the 3Rs + Enrichment, massive computerization of schools (including labs), Early Childhood thrust (including appending pre-school units to existing primary schools in all four geographical regions), and scholarships earmarked for students in the southeastern part of the country who wish to pursue technical studies in any region.

The massive Curriculum Initiative of 1997 improved curriculum relevance and effectiveness. Primary and secondary curricula were expanded to include Family Life and Health Education (FLHE), Social Studies, and Tourism; and Spanish became the country's second language.

[1] Educational access in The Bahamas is universal; moreover, under the Education Act of 1996, education is mandatory for children 5–16 years of age (see chapter 36, Bahamas Islands Statute Law, rev. eds. 1987 and 1996, Nassau). The country has a 6+3+3 structure of schooling; that is, 6 years of primary school, 3 years of junior-secondary school, and 3 years of senior-high school

BOX 5-1 Evolution of Bahamian Education

When The Bahamas gained internal self-rule in 1964, the country's educational system underwent a dramatic shift. A new Ministerial System replaced the Board System, which had existed since 1835. The educational frontier expanded as the Government undertook a massive school-construction programme at both primary and secondary levels. Central secondary schools were established on the Family Islands, the first of which was on Crooked Island; this development, in turn, extended secondary education throughout the country. In addition, provisions were made for post-secondary institutions and teacher training both locally and abroad.

Tertiary education

1974—the year after The Bahamas gained independence from Great Britain—marked another watershed for education, with establishment of the College of The Bahamas (COB). The COB provided for academic success and helped students overcome deficiencies through preparatory courses.

Current challenges

Today, both international and local educational institutions offer services in The Bahamas. While most are located in New Providence, others have made inroads into the Family Islands.

In 1997, the Government undertook massive curriculum reform in response to national and international demands; by 2000, new curriculum guidelines and support materials were available across the island chain. The country now faces the challenge of delivering an equitable educational system to students throughout the archipelago, including remote islands and cays. Roving teachers and distance education are helping to meet teacher shortages in critical subject areas, and computerization of schools is under way; however, much work remains.

A variety of programs and institutions have been established to support at-risk students. For many years, Providing Access for Continuing Education (PACE) has equipped pregnant students for re-entry into school or the workforce. The Ministry of Health provides PACE students pre-natal care (see chapter 4), and The Bahamas Technical and Vocational Institute (BTVI) provides post-natal educational opportunities, as well as nursery facilities. Another program, Success Ultimately Reassures Everyone (SURE), targets male students challenged by the traditional school curriculum. The National School Lunch Programme (NSLP), introduced by the Government in 1981, was extended to Special Schools the following year so that children of unemployed parents or guardians or from indigent families could be guaranteed one nutritious meal daily (see chapter 7). Both PACE and SURE participants are NSLP recipients. Two reformatory schools, The Williemae Pratt School for Girls and Simpson Penn School for boys, were established to build students' character and instill moral values.

SURVEY CONTEXT

When the BLCS was conducted in 2001, the country had 147 Government and 42 private schools.[2] The 147 Government schools included primary, all-age, junior-high, secondary and senior-high schools, and special schools (the latter numbering 11); 48,478 students were enrolled in Government schools (24,880 males and 23,598 fe-

[2] The Bahamian school system comprises Government and private/independent schools. Various governing bodies control the independent—mainly church-administered—private schools; however, these schools function within the ambit of the Education Act (1996), and many receive annual Government subventions. While private-school students must pay tuition and related costs, the Government underwrites the costs of public education. Structural financial assistance for public education is achieved through International Educational Loans and local self-help projects. All of the country's private schools and colleges must register with the Ministry of Education; the Education Act sets out the regulations under which the public schools operate.

males). In the 42 private schools, the student population numbered 16,752 (8,025 males and 8,727 females). Special schools had 690 enrolled students (376 males and 314 females). The total number enrolled in Bahamian educational institutions was 65,920.

Staff members in Government schools numbered 3,132, while 1,572 worked in private schools. In 2000–2001, the average pupil-teacher ratio across the country was 16:1 for Government schools and 11:1 for private schools.

This chapter provides an overview of the Bahamian educational system with respect to student enrolment and attendance rates, age and gender, type and level of school attended, method of transport used to reach school and distance traveled, and school-related expenses. Unenrolled youths are also briefly discussed.

ENROLMENT

Characteristics

The BLCS found that persons under 25 years of age were most likely to be enrolled in some type of educational institution, whether a day-care facility, high school, or university. As Table 5-1 shows, 52% of all persons in this age group were males. Similarly, males accounted for 52% of those not enrolled. By age, 28% were 5–10 years of age, 19% were 19–24, and 13% were younger than 3 years old. This distribution compares favourably with that of the 2000 Population Census.[3] More than 75% of this enrolled population were 5–16 years of age (the compulsory age for school attendance). Of those not enrolled, 52.2% were 19–24 years of age, while an additional 30% were younger than 3 years old. In keeping with the overall pattern of population distribution, 86% of these youths resided in New Providence and Grand Bahama.

Rates

Given that public primary and secondary education is free and universal throughout the country, and that school attendance is compulsory for children 5–16 years of age, it is expected that enrolment rates would be exceptionally high in these age groups. Indeed, this assumption is supported by the data, which shows an enrolment rate of 96.7% for youth 14–16 years of age and an even higher rate of 99.2% for children 5–10 years of age (Table 5-2). All regions and quintiles enjoyed such high enrolment rates.

Beyond the age of 16, a dramatic drop in enrolment to 48.8% occurred among 17–18 year olds; the rate fell further to 14% for persons over 18 years of age. It can be assumed that individuals falling between these two age groups had completed secondary school and that a fair proportion would likely be working. It should also be noted that, across all age groups, the enrolment rate for females was higher than that for males, with differences more pronounced amongst persons 17–18 years old (Table 5-2).

TABLE 5-1 Characteristics of Individuals 0–24 Years of Age

Characteristic	All individuals	Currently enrolled	Not enrolled
Age (years)			
0–2	13.2	5.0	30.5
3–4	8.3	10.3	4.0
5–10	28.4	41.4	0.7
11–13	12.5	17.9	0.8
14–16	11.7	16.6	1.2
17–18	6.6	4.8	10.6
19–24	19.4	4.0	52.2
Region			
1	85.9	86.3	85.7
2	10.0	10.2	9.9
3	1.8	1.4	2.0
4	2.4	2.1	2.4
Gender			
Boys	52.2	52.2	52.3
Girls	47.8	47.8	47.7
Quintile			
1	26.4	24.0	31.4
2	22.3	21.4	24.2
3	21.0	22.3	18.3
4	18.0	19.4	15.0
5	12.3	12.9	11.1
N	2,965	2,030	935

Regional Comparisons

For young people 11–13 years of age, full enrolment was recorded in all regions, except Region 1 (New Providence

[3] See *Commonwealth of The Bahamas: Report of the 2000 Census of Population and Housing*. Department of Statistics, Ministry of Economic Development, Nassau, 2002.

TABLE 5-2 Enrolment Rates for Individuals 0–24 Years of Age

Characteristic	Age group							N
	0–2	3–4	5–10	11–3	14–16	17–18	19–24	
All Bahamas	26.0	84.5	99.2	97.9	96.7	48.8	14.0	2,965
Gender								
Male	24.8	83.6	99.0	97.5	94.4	43.9	11.3	1,528
Female	27.0	85.7	99.4	98.2	98.8	53.8	16.7	1,437
Region								
1	28.0	85.9	99.1	97.4	96.8	49.8	15.4	1,630
2	11.4	72.8	99.2	100.0	96.5	36.3	1.6	812
3	10.1	89.4	99.0	100.0	93.0	60.5	11.3	253
4	18.7	79.5	100.0	100.0	97.7	43.8	0.0	270
Quintile								
1	18.6	65.8	97.4	93.0	97.2	19.8	3.5	928
2	21.2	88.4	100.0	100.0	94.3	36.5	1.9	663
3	35.6	88.0	99.9	98.0	97.0	47.3	14.2	599
4	31.6	99.5	99.7	100.0	99.4	75.5	20.4	478
5	36.0	100.0	100.0	100.0	99.3	67.8	30.9	255

and Grand Bahama). The latter had the highest enrolment rates amongst infants and toddlers (0–2 years of age) and the eldest youth group (19–24). These findings are not surprising, as New Providence has an abundance of day-care centers catering to working parents. Such facilities are not as prevalent in other regions, where the economic structure depends highly on self-employment and informal activities, which more easily accommodate the presence of young children in the workplace (often the home). In the case of those 19–24 years old, most (if not all) post-secondary institutions are based on the two islands of Region 1.

Surprisingly, Exuma and Long Island (Region 3) had the highest enrolment rates for persons 17–18 years old (60.5%) (Table 5-2). Closer examination of this phenomenon indicates that, unlike their counterparts in New Providence and Grand Bahama, who were either enrolled in tertiary schools or working, all of these individuals were still in high school because a significant number had had to repeat one or more grades (Table 5-9). BLCS data indicate that grade repetition in secondary school was considerably higher in Region 3 (18.5%) compared to the other three regions. This situation requires further investigation and action.

Quintile Comparisons

Although enrolment rates were high across all quintiles, those in the wealthiest quintile were more likely part of the school system, particularly in the non-compulsory age categories. As Table 5-2 indicates, the enrolment rate for children 3–4 years old was 100% in quintile 5, compared to 65.8% in quintile 1. If allowed to continue unchecked, such a situation would give persons in the wealthier quintiles a jump start in the educational process—an advantage they would likely maintain throughout their lives, according to various sociological studies on the benefits of early childhood education. Cognizant of this issue, policymakers have instituted initiatives to correct this potential imbalance. One such initiative is the development of a pre-school curriculum and attachment of pre-schools to primary schools, the effects of which are yet to be determined.

Persons 19–24 years old in the wealthiest quintile had an enrolment rate approximately 10 times higher than that of persons in the poorest quintile (30.9% versus 3.5%). Stated simply, richer persons were more likely than poorer ones to have a tertiary level of education. This suggests that incentives and initiatives directed toward encouraging participation in tertiary education should be intensified and/or redirected.

TABLE 5-3 Type of School, by Age (Those Currently Enrolled)

		Age group (years)						
School type	**Total**	**0–2**	**3–4**	**5–10**	**11–13**	**14–16**	**17–18**	**19–24**
All Bahamas								
Pre-school/day care	15.6	100.0	91.7	2.3	0.0	0.0	0.0	0.0
Primary	45.2	0.0	8.3	96.5	24.0	0.1	0.4	0.0
High school	33.5	0.0	0.0	0.8	76.0	99.4	62.4	1.0
Technical/vocational	2.0	0.0	0.0	0.0	0.0	0.5	12.6	34.6
College/university	3.7	0.0	0.0	0.0	0.0	0.0	24.6	64.4
N	2,030	83	198	860	380	366	89	54
Region 1								
Pre-school/day care	16.5	100.0	92.8	3.0	0.0	0.0	0.0	0.0
Primary	44.5	0.0	7.2	96.4	24.3	0.0	0.0	0.0
High school	32.3	0.0	0.0	0.6	75.7	99.4	59.0	0.0
Technical/vocational	2.4	0.0	0.0	0.0	0.0	0.6	14.0	35.2
College/university	4.2	0.0	0.0	0.0	0.0	0.0	26.9	64.8
N	1,102	62	114	451	193	178	56	48
Region 2								
Pre-school/day care	10.4	100.0	83.0	1.9	0.0	0.0	0.0	0.0
Primary	47.9	0.0	17.0	96.7	18.5	0.0	5.4	0.0
High school	41.3	0.0	0.0	1.4	81.5	100.0	87.7	50.8
Technical/vocational	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
College/university	0.4	0.0	0.0	0.0	0.0	0.0	6.9	49.2
N	548	13	48	240	117	110	18	2
Region 3 & 4								
Pre-school/day care	10.2	100.0	84.6	0.0	0.0	0.0	0.0	0.0
Primary	51.3	0.0	15.4	98.3	32.5	2.2	0.0	0.0
High school	38.2	0.0	0.0	1.7	67.5	97.8	100.0	68.1
Technical/vocational	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
College/university	0.2	0.0	0.0	0.0	0.0	0.0	0.0	31.9
N	380	8	36	169	70	78	15	4
Quintiles 1, 2, & 3								
Pre-school/day care	14.6	100.0	88.5	1.3	0.0	0.0	0.0	0.0
Primary	49.0	0.0	11.5	98.0	27.0	0.2	0.8	0.0
High school	33.8	0.0	0.0	0.7	73.0	99.1	67.2	3.7
Technical/vocational	1.5	0.0	0.0	0.0	0.0	0.7	17.0	53.4
College/university	1.2	0.0	0.0	0.0	0.0	0.0	15.1	42.9
N	1,475	59	144	644	288	271	52	17
Quintiles 4 & 5								
Pre-school/day care	18.0	100.0	97.3	6.4	0.0	0.0	0.0	0.0
Primary	37.6	0.0	2.7	92.7	14.9	0.0	0.0	0.0
High school	33.0	0.0	0.0	0.9	85.1	100.0	60.0	0.0
Technical/vocational	3.0	0.0	0.0	0.0	0.0	0.0	9.1	27.1
College/university	8.5	0.0	0.0	0.0	0.0	0.0	30.8	72.9
N	524	24	52	206	84	88	36	34

School Type and Level

Two-thirds of the nation's children were enrolled in public schools, ranging from 54% in New Providence and Grand Bahama (Region 1) to 90% in Exuma and Long Island (Region 3) (Table 5-4). For the overwhelming majority of children in the two poorest quintiles—86% and 78%, respectively—public schools were their vehicle for obtaining an education. In contrast, slightly less than half (46%) of the students in quintile 4 and a quarter of those in quintile 5 attended Government schools.

For children in the public school system, 57% were in primary school, an additional 43% were in secondary school, and less than 2% were in pre-school. No significant variation was found by region. The proportion of students in primary school was highest in quintiles 1 (66%) and 5 (60%). Within the wealthiest quintile, no children were enrolled in public pre-schools. This finding could indicate that persons in this quintile prefer private pre-schools or home-schooling and can exercise this choice. However, it could also indicate the effectiveness of Government policy as it relates to pre-schools; that is, it gives priority to providing for those with the greatest need and therefore the neediest students, who would otherwise lack access to pre-school (Table 5-4).

DISTANCE TRAVELED

Differences by Level of Schooling

Nationwide, slightly more than one-third of students attended a school within a mile of their homes, while nearly one-quarter had to travel more than five miles (Table 5-5). The Government's effort to ensure that primary schools are located in most settlements and communities is reflected by the data, which show that 46% of all primary school students attended a school within a mile of their homes—a proportion noticeably higher than their counterparts attending pre-schools or secondary schools. On average, these students traveled 2.7 miles to school, a shorter distance than any other category of students. High-school students traveled the farthest, with an average of 4.4 miles.

Regional Differences

On average, students in Abaco, Andros, and Eleuthera (Region 2) had to travel longer distances to school than did their counterparts in other regions. For example, they traveled 6 miles, compared to 4.8 miles for students in Exuma and Long Island (Region 3), who had the second longest distance to travel. High-school students in these two regions traveled considerably farther than did those in the other two regions. In Region 3, nearly 63% of students had to travel more that 5 miles, compared to nearly 51%

TABLE 5-4 Current Public-school Enrolment, by Type and Level (Ages 0–24)

	Level of schooling				School type		
Characteristic	**Pre-school**	**Primary**	**High school**	***N***	**Public school**	**Private school**	***N***
All Bahamas	1.2	56.5	42.3	1,353	66.6	33.4	2,030
Region							
1	1.3	57.1	41.6	595	54.0	46.0	1,102
2	0.4	53.6	45.9	429	78.3	21.7	548
3	1.1	55.5	43.3	170	90.4	9.6	188
4	0.6	55.2	44.1	159	82.8	17.2	192
Quintile							
1	1.4	65.5	33.1	512	85.5	14.5	599
2	1.0	52.3	46.8	349	77.9	22.1	448
3	0.8	53.5	45.7	261	61.0	39.0	428
4	2.1	46.3	51.5	169	48.4	51.6	349
5	0.0	60.3	39.7	43	24.6	75.4	175

TABLE 5-5 Distance (Miles) to School, by Level

Level	Miles traveled (%)					Avg. distance	*N*
All Bahamas							
Pre-school/day care	37.3	17.7	14.2	10.3	20.6	3.2	277
Primary	45.6	17.1	11.2	7.3	18.9	2.7	951
High school	24.7	21.0	16.7	7.6	30.0	4.4	729
All schools	36.8	18.6	13.7	7.9	23.1	3.4	1,957
Region 1							
Pre-school/day care	34.4	18.3	14.8	11.2	21.3	3.3	181
Primary	43.7	17.7	10.9	8.2	19.4	2.7	493
High school	24.3	23.3	18.0	8.4	26.1	3.4	359
All schools	35.3	19.8	14.1	8.8	22.1	3.0	1,033
Region 2							
Pre-school/day care	69.1	3.6	8.5	1.7	17.1	2.8	58
Primary	57.3	10.7	13.5	3.1	15.5	2.8	262
High school	25.1	7.2	12.3	4.8	50.6	10.6	225
All schools	45.2	8.5	12.5	3.6	30.2	6.0	545
Region 3							
Pre-school/day care	35.6	28.9	7.8	6.8	20.9	3.3	14
Primary	39.3	21.6	14.8	1.0	23.2	2.9	99
High school	9.3	13.4	10.6	4.0	62.7	7.5	73
All schools	27.2	19.0	12.6	2.6	38.6	4.8	186
Region 4							
Pre-school/day care	62.5	29.1	8.4	0.0	0.0	1.4	24
Primary	63.2	18.4	8.2	0.0	10.2	2.6	97
High school	48.0	19.7	3.0	0.0	29.3	5.4	72
All schools	57.4	20.2	6.3	0.0	16.1	3.5	193
Quintile 1							
Pre-school/day care	42.4	26.3	20.1	6.7	4.5	2.1	73
Primary	62.5	13.1	10.6	6.4	7.4	2.0	329
High school	24.9	26.2	16.6	9.8	22.5	4.3	197
All schools	48.8	18.8	13.7	7.4	11.3	2.7	599
Quintile 2							
Pre-school/day care	57.5	3.4	6.7	21.0	11.4	2.6	49
Primary	42.3	25.6	10.6	9.3	12.0	2.3	213
High school	25.7	19.0	22.3	6.4	26.6	4.5	179
All schools	37.8	20.3	14.7	9.7	17.6	3.2	441
Quintile 3							
Pre-school/day care	27.1	23.1	18.7	3.8	27.3	3.2	71
Primary	40.9	15.6	11.6	8.0	23.9	3.2	189
High school	27.4	21.9	12.1	7.1	31.6	4.4	154
All schools	33.4	19.3	13.1	6.9	27.4	3.7	414
Quintile 4							
Pre-school/day care	30.3	13.6	17.0	16.8	22.3	4.0	57
Primary	43.6	13.5	13.7	6.1	23.1	2.9	137
High school	30.8	20.6	14.4	5.2	29.0	4.3	135
All schools	35.7	16.4	14.7	8.1	25.2	3.7	329
Quintile 5							
Pre-school/day care	33.1	21.1	1.0	3.8	41.0	4.0	25
Primary	19.3	16.9	10.9	4.9	48.0	4.4	71
High school	6.4	17.9	22.1	12.7	40.8	4.1	51
All schools	17.5	18.0	12.8	7.3	44.3	4.2	147

in Region 2. The distances traveled by these students reflect the fact that most communities in these regions lack high schools, which are few in number and located only in specific areas. Region 3, which comprises two separate islands, has only three high schools. The major reason for so few schools is that the population base does not support establishing additional schools.[4]

Because schools—particularly high schools—in such areas are difficult to access due to the distance involved, the Government, via contracts, provides a busing system for students in these areas to ensure that distance is not a deterrent to school attendance. Government-operated bus service provided transportation for 59.8% of high-school students in Region 2 (Abaco, Andros, and Eleuthera) and 72.6% of those in Region 3 (Exuma and Long Island). Likewise, more than 20% of primary-school students in the three regions outside of New Providence and Grand Bahama used the school bus.

Quintile Comparisons

As Table 5-5 suggests, the higher the consumption-expenditure quintile, the farther the distance traveled to school. Persons in the wealthiest quintile traveled an average of 4.2 miles, compared to 2.7 miles for those in the poorest quintile. Some 48% of students in the wealthiest quintile traveled approximately 5 miles to reach primary school. This percentage compares to 7.4% and 12%, respectively, of students in the two poorest quintiles. This finding reflects the fact that students in the wealthiest quintile can exercise choice of school, which for most is private school. Moreover, these students were three times more likely than the poorest ones to be driven to school in private vehicles (87% versus 27%) (Table 5-6).

MODE OF TRANSPORT

Differences by Level of Schooling

Slightly more than half (52.3%) of the nation's students traveled to school in a private vehicle; an additional 22% walked; and the balance relied on school bus (13.8%), jitney (8%), or another means (3.5%). Private car was the most common mode of transport for students at all levels; however, the proportion of pre-school children who used this means was significantly higher than other groups. Some 30% of primary-school students walked, while 21% of high-school students took the bus and an additional 15% used the jitney.

Regional Differences

Region 1 (New Providence and Grand Bahama) was the only region in which more than half (57%) of students traveled to school by private vehicle. In Regions 2 (Abaco, Andros, and Eleuthera) and 4 (Other Family Islands), most students took the school bus or walked. In Exuma and Long Island (Region 3), they took the school bus or were driven in a private car (Table 5-6). The school bus plays a striking role outside of New Providence and Grand Bahama. The Survey showed that, in the other three regions, more than one-third of students used this system; overwhelmingly, it was the major mode of transport for high-school students. This data confirms the critical need for a busing system in these regions and further indicates the need for decision makers to ensure its continuance and potential improvement.

Quintile Comparisons

Nearly all students in the wealthiest quintile (87%) took a private car to school, compared to 27% of those in the poorest quintile. In the latter group, 43% walked to school, compared to only 3% in the former group. Heavy reliance on the school bus and jitney, particularly for high-school students, is obvious amongst students in the two poorest quintiles. In quintile 1, an almost equal proportion of high-school students used the jitney (27.8%) and school bus (24.4%). In quintile 5, these respective percentages were 5.3% and 3.6%.

These findings indicate the demand for school-bus service. Of concern, however, is the relatively large proportion of poorer students who use the jitney. Whether this results from the school not catering to the area in which they live, an administrative loophole, or the students' failure to use the service is unknown. Whatever the reason, further investigation is needed. Some of the surveyed students who said they were jitney users may have indeed participated in the school-bus system.[5] Several jitney operators are contracted to bus children to school; perhaps because these students physically rode in a jitney, they answered the question accordingly, not indicating that they had a school voucher to ride the jitney.

[4] It should be noted that, in certain areas, some students must travel by both car and bus in order to attend high school.

[5] Jitney services are available only in New Providence and Grand Bahama (Region 1).

TABLE 5-6 Mode of Transport to School, by Level of Schooling

	Transport mode					
Level	**Walk**	**Private car**	**School bus**	**Jitney**	**Other**	***N***
All Bahamas						
Pre-school/day care	12.9	69.0	10.3	4.0	3.7	277
Primary	30.0	53.2	9.6	4.0	3.2	951
High school	16.5	43.4	21.2	15.3	3.7	729
All schools	22.4	52.3	13.8	8.0	3.5	1,957
Region 1						
Pre-school/day care	10.7	71.5	10.1	4.4	3.3	181
Primary	27.8	57.6	7.4	4.7	2.6	493
High school	15.6	49.3	13.2	18.4	3.5	359
All schools	20.5	57.2	9.9	9.4	3.0	1,033
Region 2						
Pre-school/day care	40.1	38.4	12.2	0.0	9.2	58
Primary	45.3	29.1	20.0	0.0	5.6	262
High school	20.0	16.2	60.3	0.0	3.6	225
All schools	34.3	24.7	35.9	0.0	5.2	545
Region 3						
Pre-school/day care	14.6	78.6	6.8	0.0	0.0	14
Primary	22.6	47.8	25.7	0.0	3.9	99
High school	5.3	16.0	72.6	0.0	6.1	73
All schools	15.2	37.6	42.8	0.0	4.5	186
Region 4						
Pre-school/day care	25.3	49.4	16.8	0.0	8.4	24
Primary	45.0	15.1	25.5	0.0	14.5	97
High school	38.8	5.4	47.7	0.0	8.1	72
All schools	40.3	15.7	32.7	0.0	11.3	193
Quintile 1						
Pre-school/day care	32.2	35.3	15.3	13.9	3.3	73
Primary	52.5	28.7	7.8	7.3	3.8	329
High school	28.6	18.6	24.7	27.5	0.7	197
All schools	42.7	26.7	13.7	14.1	2.8	599
Quintile 2						
Pre-school/day care	16.4	70.4	10.0	0.0	3.2	49
Primary	31.0	51.3	11.6	4.4	1.8	213
High school	23.8	29.7	25.2	19.2	2.2	179
All schools	26.4	45.2	16.7	9.6	2.1	441
Quintile 3						
Pre-school/day care	9.1	68.5	17.2	2.3	2.9	71
Primary	18.5	62.1	12.8	2.2	4.4	189
High school	11.6	51.3	24.8	7.7	4.6	154
All schools	14.2	59.2	18.1	4.2	4.2	414
Quintile 4						
Pre-school/day care	4.6	81.3	5.0	2.0	7.0	57

(continues)

TABLE 5-6 *(Continued)*

Level	Transport mode					N
	Walk	Private car	School bus	Jitney	Other	
Primary	19.8	63.2	11.2	2.3	3.5	137
High school	7.8	61.0	15.9	11.3	3.9	135
All schools	11.8	66.2	11.7	5.8	4.4	329
Quintile 5						
Pre-school/day care	0.0	99.1	0.0	0.0	0.9	25
Primary	3.3	91.4	2.9	0.0	2.4	71
High school	5.3	74.1	5.3	3.6	11.6	51
All schools	3.4	87.0	3.2	1.2	5.2	147

SCHOOL ATTENDANCE IN LAST FIVE DAYS

Comparisons by Schooling Level

Attendance is one among many variables used to assess students' overall participation in the school system. Table 5-7 shows that, at both the primary and secondary levels, the proportion of students who attended school the full week prior to the interview exceeded 85%. At both levels, students in private schools had a better attendance record than those in Government schools. Likewise, the attendance record for girls was better than that for boys. During the week surveyed, 4% of the nation's primary school students and 3% of its high-school students were absent the entire week.

TABLE 5-7 Attendance in Last Five Days, by Level of Schooling

Characteristic	Primary school (days)				High school (days)			
	5	1–4	0	N	5	1–4	0	N
All Bahamas	87.2	8.7	4.2	949	86.0	10.6	3.3	724
School Type								
Government	86.2	9.7	4.1	199	85.0	10.7	4.3	138
Private	89.6	6.2	4.3	750	88.6	10.4	1.0	586
Gender								
Boys	85.1	10.5	4.4	499	85.0	11.4	3.6	367
Girls	89.8	6.3	3.9	450	87.0	9.9	3.1	357
Region								
1	89.3	7.1	3.6	491	87.2	10.1	2.7	355
2	73.0	16.2	10.7	262	76.8	14.1	9.1	225
3	76.6	23.4	0.0	99	83.2	16.8	0.0	73
4	84.4	14.6	1.0	97	92.5	7.5	0.0	71
Quintile								
1	86.2	8.3	5.4	327	84.3	10.7	5.0	195
2	89.6	6.0	4.4	213	87.8	9.2	3.0	178
3	86.1	10.2	3.7	189	86.0	12.3	1.7	153
4	87.4	11.2	1.4	137	84.6	12.3	3.1	135
5	86.2	9.3	4.6	71	88.3	8.0	3.6	50

The survey found that girls were more likely than boys to miss school for reasons other than illness, especially at the high-school level. This was the case for 81% of girls and 70% of boys. Government-school students at the primary level were more likely to be absent due to illness than their private-school counterparts (26% versus 18%). At the high-school level, the situation was greatly reversed; illness was the reason for absences amongst 18% of Government-school children and 46% of private-school students (Table 5-8).

In short, children in Government schools are far more likely to be absent for non-health reasons than those in private schools, probably because parents of private-school children view education as an investment and make extra efforts to ensure that their children attend regularly. It could also stem from the fact that private schools enforce their attendance rules more strictly.

Regional Comparisons

Region 1 (New Providence and Grand Bahama) was the only region in which high-school attendance was lower than primary attendance. Region 2 (Abaco, Andros, and Eleuthera) had the lowest attendance rate at both levels; however, at the high-school level, attendance was considerably lower than in the other three regions. Additionally, at both levels, the proportion of Region 2 students who were absent the entire week was significantly higher than in other regions.

The survey found that high-school students were more likely to be absent due to illness than those in primary school (Table 5-8). For 55.5% of high-school students in Region 4 (Other Family Islands), illness accounted for their absence. However, this finding is based on only a small number of observations (5); moreover, absenteeism was not a serious problem in Region 4 as no students were absent for the entire one-week period, and some 93% attended all five days (Table 5-7).

One striking finding is that, in Region 2 (Abaco, Andros, and Eleuthera), some 85.5% of high-school students indicated they were absent for non-health reasons (Table 5-8). This percentage was considerably higher than the second highest figure (73.3%) recorded in Region 1 (New Providence and Grand Bahama) and nearly twice that found in Region 4 (Other Family Islands). On the

TABLE 5-8 Percentage Who Did Not Attend All Five Days, by Level and Reason

	Primary school			High school		
Characteristic	**Illness**	**Other**	***N***	**Illness**	**Other**	***N***
All Bahamas	24.0	76.0	155	24.7	75.3	114
School type						
Government	25.7	74.3	135	18.1	81.9	97
Private	17.8	82.2	20	46.2	53.8	17
Gender						
Boys	24.9	75.1	88	29.8	70.2	60
Girls	22.0	78.0	67	19.2	80.8	54
Region						
1	25.5	74.5	46	26.7	73.3	43
2	21.3	78.7	72	14.5	85.5	53
3	16.8	83.2	24	31.3	68.7	13
4	21.8	78.2	13	55.5	44.5	5
Quintile						
1	15.9	84.1	57	14.7	85.3	44
2	25.1	74.9	33	19.0	81.0	25
3	10.1	89.9	25	14.8	85.2	21
4	47.5	52.5	26	26.2	73.8	17
5	38.7	61.3	11	75.5	24.5	5

Survey form, the "other reasons" category was to be specified; however, in many instances, it was not. When it was, the reasons given were so varied and the observations so few that further analysis was precluded.[6]

The lower attendance rate of Region 2 and the underlying causes are not new to decision makers. For example, in June 1993, the National Task Force on Education concluded that absenteeism in Region 2 was linked to crawfishing and crabbing seasons.[7] Because crawfishing is the backbone of many families' monetary gains for the year, their children absent themselves from school in an effort to participate in such family activities. Thus, these economic realities challenge educators to develop solutions. Suggestions put forth have included introducing a flexible, district-based school calendar and developing a comprehensive, practical training and/or job-release programme.

Quintile Comparisons

When the data were examined by living standards, no appreciable differences were found in attendance. However, differences were noted in reasons for non-attendance. At both the primary and high-school levels, children in the poorest quintile were more likely to be absent for non-health reasons than those in all other quintiles (with the exception of primary-school children in quintile 3). Amongst high-school students, 85.3% of those in the poorest quintile were absent for non-heath reasons, compared to 24.5% of their counterparts in the wealthiest quintile.

When the reasons for absences were examined by quintile, observations were too small to allow for reliable analysis; however, they did indicate that the major reasons students in the poorest quintile gave for their absence were "no lunch," "no transportation," and "did not want to go."

GRADE REPETITION

Differences by Schooling Level

The Survey data show that 14% of primary-school students repeated a grade, whilst 10% of those in secondary school repeated a grade when they were in primary school. Of these students, 3% repeated one or more grades whilst in secondary school. In each instance, repetition was higher for boys than for girls, with differences more pronounced amongst secondary students who had repeated grades in primary school. The proportion of boys repeating grades was twice that of girls (14% versus 7%). Students in Government schools had a higher repetition rate than those in private schools. Within the secondary school, no significant difference was found between Government and private schools with regard to repeating a class. However, at the primary-school level, a noticeably larger percentage of Government students repeated classes.

Regional Differences

At the primary level, Regions 1 and 3 had significantly lower repetition rates than Regions 2 and 4. However, at the secondary level, Region 3 had the highest repetition rate, whilst Region 1 had the lowest. Particularly disturbing was the relatively high proportion of secondary students in all regions except Region 1 who had repeated grades while in primary school. Of further concern is the large proportion of secondary-school repeaters in Regions 3 (18%) and 4 (13%).

Quintile Comparisons

Somewhat unexpectedly, no distinct relationship was found between grade repetition and students' living standards. Between the wealthiest and the poorest quintiles, a slight difference was observed at the primary level; however, rates in these groups were higher than those of the other three quintiles. Even more surprising was that, at the secondary level, rates for these two quintiles were about equal and were higher than for students in all other groups, except quintile 3 (Table 5-9).

SELECTED OUTCOMES BY SCHOOLING OF MOTHER

In sociological circles, it is generally thought that parents' educational background has a significant effect on the schooling of their children and that student performance is linked to the educational level of the parent; thus, students who perform better are likely to have parents with a higher educational background than that of other students. As Table 5-10 shows, mothers with higher levels of education had fewer children who repeated a grade. For instance, 19.4% of children whose mothers had a primary-school education repeated a grade; however, only 8% of children whose mothers had a tertiary-level education did so. The attendance record for children whose mothers had

[6] One of the other reasons given was "hurricane." Indeed, Hurricane Mitchell threatened the country, particularly Region 2 (Abaco, Andros, and Eleuthera) during the early stage of fieldwork.

[7] See National Task Force on Education, Ministry of Education, Nassau, 1994.

TABLE 5-9 Grade Repetition (%) (Currently Enrolled Students)

	Primary students		Secondary students		
Characteristic	**Primary repeated**	***N***	**Primary repeated**	**Secondary repeated**	***N***
All Bahamas	13.9	949	10.4	3.3	725
School type					
Government	14.9	750	11.7	3.4	587
Private	11.5	199	7.1	3.0	138
Gender					
Boys	14.3	499	13.8	3.9	368
Girls	13.4	450	7.0	2.6	357
Region					
1	12.9	491	9.3	2.2	356
2	20.7	262	15.5	5.3	225
3	11.9	99	16.2	18.5	73
4	20.9	97	16.6	13.4	71
Quintile					
1	17.0	327	16.1	3.7	195
2	13.9	213	8.9	3.2	179
3	10.8	189	4.0	3.8	153
4	11.9	137	11.5	2.5	135
5	14.2	71	16.7	3.5	50

TABLE 5-10 Selected Schooling Outcomes, by Schooling of Mother

	Mother's educational level				
Outcome (children 5–24)	**Less than primary**	**Primary**	**Secondary**	**Tertiary**	**Not known**
Current enrolment status					
Yes	34.0	49.9	25.0	15.0	53.1
No	66.0	50.1	75.0	85.0	46.9
N	52	253	1,568	354	113
If "yes," then					
Ever repeat grade					
Yes	18.6	19.4	12.8	7.9	23.2
No	81.4	80.6	87.2	92.1	76.8
Full attendance					
Yes	90.3	86.2	86.4	88.0	91.4
No	9.7	13.8	13.6	12.0	8.6
Enrolled in Government school					
Yes	100.0	83.6	76.8	41.3	80.4
No	0.0	16.4	23.2	58.7	19.6
N	35	136	1,222	300	56

TABLE 5-11 Reported Reasons for Unenrolment (ages 5–16 years)

Reason given	Total	Boys	Girls
Need to work	0.0	0.0	0.0
Does not want	43.8	46.5	35.4
Pregnancy	2.0	0.0	8.5
Chronic illness	11.3	0.0	47.6
Completed	12.2	16.0	0.0
Other	17.3	22.7	0.0
Too young or hasn't started	13.3	14.8	8.5
N	18	13	5

a primary-level education was slightly lower (86%) than those whose mothers had a tertiary-level education (88%). The data also indicate that educational background of the mother influences whether her children attend Government or private schools. For students whose mothers had a primary-school education, 84% were enrolled in Government schools; for those whose mothers had a tertiary-level education, the proportion in Government schools was considerably less (41%).

UNENROLLED YOUTH

Since The Bahamas has a compulsory school age, knowing the proportion of persons within this group (5–16 year olds) who are not enrolled and the underlying reasons offer educators useful data. The BLCS attempted to capture this information (Table 5-11); however, the number of observations was too few (18) to allow for meaningful, reliable analyses. However, as a basic guideline, the data indicated that 44% of unenrolled youth in this age group simply did not want to be in school. This was the main reason for boys and the second major reason for girls.

Educational Status of 16–24 Year Olds

Tables 5-12 and 5-13 show that 68% of those between the ages of 16 and 24 had completed high school, while 32% had no form of academic qualification. That girls continued on through the system more than did boys is evident from the data; only 3.8% of girls with 1–3 years of high school terminated their education at this point, compared to 11% of boys. A greater proportion of girls than boys completed high school, and 7.4% of girls, compared to 4.4% of boys, completed college. Girls also surpassed boys in qualifications; considerably fewer girls than boys had no

TABLE 5-12 Education of Youth Not in School (ages 16–24)

	Highest level completed							
Characteristic	Primary or lower	High school 1–3	High school 4–5	High school 6	College 1–2	College 3+	Technical/ vocational	*N*
All	2.9	7.6	12.1	68.2	3.2	5.8	0.3	572
Gender								
Boys	3.9	11.0	12.0	65.8	2.4	4.4	0.5	303
Girls	1.9	3.8	12.2	70.8	4.0	7.4	0.0	269
Region								
1	2.5	7.3	11.4	68.9	3.5	6.0	0.3	337
2	6.5	9.9	14.7	64.8	0.6	3.5	0.0	146
3	2.3	13.8	30.3	48.6	0.0	4.9	0.0	43
4	4.4	2.3	17.9	66.8	2.4	6.1	0.0	46
Quintile								
1	2.2	11.1	24.2	58.5	0.9	3.2	0.0	173
2	6.5	6.9	8.9	71.5	1.2	3.9	1.1	136
3	1.3	3.8	7.5	84.3	0.0	3.2	0.0	109
4	1.4	9.3	6.2	69.2	9.9	3.9	0.0	87
5	0.0	5.8	7.2	59.8	7.6	19.6	0.0	62

TABLE 5-13 Qualifications of Youth Not in School (ages 16–24)

Characteristic	No. qualifications	School-leaving certif./High-school diploma	BJC; Pitman/ RSA stage 1; CXC basic; CSE; Cambridge Jr. School Certif.	GCE 'O' levels; BGCSE; Cambridge School Certif.; CXC gen. prof.; Pitman stage 2 & 3/ RSA stage 2	Post-secondary qualification	*N*
All	32.2	10.1	23.6	27.1	6.9	569
Gender						
Boys	40.1	10.1	18.5	26.0	5.4	303
Girls	23.5	10.2	29.4	28.4	8.6	266
Region						
1	31.7	9.8	23.0	28.2	7.3	336
2	37.5	14.5	27.5	16.8	3.6	144
3	32.5	6.7	25.6	30.3	4.9	43
4	34.2	6.3	29.8	23.1	6.6	46
Quintile						
1	53.3	10.8	22.1	11.8	2.0	174
2	36.6	11.0	20.5	27.8	4.1	135
3	26.8	9.2	26.7	36.9	0.4	106
4	17.0	15.1	31.7	23.7	12.5	87
5	9.5	2.9	17.5	46.6	23.5	

qualifications (23.5% versus 40.1%). Beyond this level, the proportion of girls with various levels of qualifications was greater than that of their male counterparts.

Regional and Quintile Comparisons

In all regions except Region 3 (Exuma and Long Island), about 67% of youths completed high school. In Region 3, only 48.6% of youths completed high school; however, this region had the highest proportion of youths with The Bahamas General Certificate of Secondary Education (BGCSE) or its equivalent (30.3%), and had the second lowest proportion of youths without any qualifications.[8] Region 2 (Abaco, Andros, and Eleuthera) had the largest proportion of youths with only a primary-level education and the smallest proportion of youths who had completed college. Youths in this region were also less qualified than those in other regions; they had the largest proportion of persons without qualifications and the smallest proportion with either BGCSE or post-secondary qualifications.

The two poorest quintiles accounted for 56% of youths not in school, while the two wealthiest quintiles accounted for 26%. Within all quintiles, the proportion of youths who had completed high school was more than 50%, with the smallest proportion in the poorest and wealthiest quintiles (59% and 60%, respectively). Within the wealthiest quintile, approximately 20% of youths had completed college, compared to 3% of those in the poorest quintile. Likewise, youths in the wealthiest quintile were far better qualified than those in the other quintiles; 24% of them had post-secondary qualifications, compared to 12% in quintile 4 and 2% in quintile 1. More than half (53%) of the youths in the poorest quintile had no academic qualifications, compared to 9% of those in the wealthiest quintile.

The above data clearly show that youths from the poorer quintiles exited the educational system earlier and with fewer qualifications than did youths from wealthier quintiles. Youths from the poorer quintiles, therefore, are

[8] The BGCSE, initiated in 1993, is an exit examination for students completing Grade 12; The Bahamas Junior Certificate (BJC), reintroduced the same year, evaluates students completing Grade 9.

disadvantaged. Because they are less equipped to enter the job market, they are more likely to end up with lower-paying jobs, which, in turn, will seal their position in the lower quintiles, thereby repeating the cycle experienced by their parents.

NATIONAL EDUCATIONAL EXPENDITURE

BLCS data on educational expenditure show that the average household expenditure on education amounted to $1,470 in 2001. This represented approximately 4% of total annual household expenditure. This figure compares with an estimated 5.3%, as calculated by the Consumer Price Index (CPI). Educational expenditure included that for "school tuition and fees," "extra classes (outside school)," "transportation," "lunch and snacks at school," "uniforms," "books," and "other supplies." By contrast, the CPI, based on the 1993 Household Budgetary Survey, included "school tuition and fees," "books," and "other supplies."

According to Table 5-14, "lunch and snacks at school" represented the largest item of household expenditure on education, accounting for 31.3% of educational expenses. This was followed by "school tuition and fees" (28.6%), "uniforms" (22.4%), "books" (10.3%), and other categories (ranging from 1% to 4%).

Regional Comparisons

Across all regions, major expenditure items, in varying order, were: "school tuition and fees," "lunch and snacks at school," "uniforms," "books," and "other supplies." Together, these five categories accounted for 96.02–99.27% of educational expenditure.

Urban households in Region 1 spent considerably more on education than did Family Island households. According to Table 5-14, the former group spent $1,583 per year on education; Region 2 households spent 56.1% of this amount, whilst those in Regions 3 and 4 spent 43.4% and 34.2%, respectively.

Region 1 households spent the largest proportion of educational expenditure on tuition and fees (31.1%). Those in Region 2 spent the most on "lunch and snacks at school," whilst those in Regions 3 and 4 spent the largest proportion (41.5% and 41%, respectively) on "uniforms."

Across all regions except Region 4 (Other Family Islands) expenditure on "lunch and snacks at school" accounted for one-third or more of annual educational expenditure. It was the highest expenditure (37.6%) for Region 3, 30.7% for Region 1, and only 28.1% for Region 4.

For Family Island households, "uniforms" represented a substantial burden—more than 41% of total educational expenditure in two of the regions and nearly 29% in another. On the other hand, households in New Providence and Grand Bahama spent more on "school tuition and fees," presumably because of the preponderance of private educational institutions available on those two islands.

Quintile Comparisons

Households in the wealthiest quintile spent five times as much on education as those in the poorest and almost one-third more than the next wealthiest quintile. According to Table 5-14, the average household expenditure in the wealthiest quintile ($3,388) was more than twice that of the national average and accounted for about 6.4% of total consumption expenditure for those households. The data reveal a direct relationship between welfare status and household expenditure on education, highlighting a significant expenditure difference between the wealthiest and poorest groups.

Survey results showed a distinct difference between the educational-expenditure priorities of households in the poorest and wealthiest consumer quintiles. While households in the poorest quintile spent the largest proportion on "uniforms," those in the wealthiest spent it on "school tuition and fees." The second and third poorest quintiles spent more on "lunch and snacks at school" than any other item, while the second wealthiest spent it on "school tuition and fees."

In the wealthiest quintile, the proportion spent on "school tuition and fees" was more than twice what was spent on any other item. Households in this consumer class were the only ones that spent less than one-third of their educational output on "lunch and snacks at school" and less than 10% on "uniforms."

For households in the poorest consumption quintile, like Family Island householders, "uniforms" presented a substantial burden. While most households in quintile 1 reside in Region 1, the issue affects all regions.

Although expenditure on transportation was only 2.5% nationally, it accounted for nearly 5% of household expenditure in the poorest quintile and 2% in the next poorest. In all other quintiles, it represented less than 2% of expenditure and accounted for the lowest proportion.

TABLE 5-14 Educational Expenses of Those Enrolled (Ages 0–21), by Level

		Region				Quintile				
Expense type	**All Bahamas**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**5**
ALL SCHOOLS										
Average total expenditure	$1,470	$1,583	$887	$686	$541	$675	$935	$1,288	$2,043	$3,388
Share spent										
School tuition and fees	28.57	31.09	15.21	5.97	10.53	13.30	16.96	30.43	39.62	53.28
Extra classes (outside school)	1.14	1.26	0.24	0.56	0.84	0.13	0.58	0.86	1.69	3.61
Transportation	2.45	2.69	1.20	0.16	0.52	4.70	2.10	1.72	1.51	1.09
Lunch and snacks at school	31.31	30.66	37.62	31.91	28.10	31.62	33.81	33.01	31.89	23.86
Uniforms	22.38	20.73	28.76	41.48	41.07	34.06	30.10	19.72	13.05	7.98
Books	10.26	10.05	11.50	11.92	11.64	11.89	12.00	10.14	8.83	7.33
Other supplies	3.86	3.49	5.47	7.99	7.30	4.13	4.45	4.13	3.41	2.85
Room and board	0.04	0.05	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00
N	2,012	1,086	547	187	192	602	448	426	344	168
DAY CARE/PRE-SCHOOL										
Average total expenditure	$1,648	$1,716	$1,064	$1,037	$768	$1,219	$1,289	$1,253	$2,072	$2,760
Share spent										
School tuition and fees	68.75	69.23	67.85	45.69	60.51	61.88	67.36	71.58	69.25	72.81
Extra classes (outside school)	0.62	0.69	0.00	0.00	0.00	0.00	0.87	0.26	0.68	1.86
Transportation	0.74	0.56	2.49	0.00	3.97	0.54	1.30	1.10	0.23	0.79
Lunch and snacks at school	16.89	16.86	15.04	24.73	20.91	16.50	16.00	16.76	19.89	15.21
Uniforms	9.62	9.37	10.54	21.31	12.45	17.39	11.71	7.35	6.00	5.46
Books	2.22	2.19	2.02	6.94	2.06	3.17	1.44	1.61	2.48	2.57
Other supplies	1.16	1.12	2.07	1.32	0.10	0.51	1.32	1.34	1.46	1.30
Room and board	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
N	276	180	58	14	24	73	49	71	57	25
PRIMARY SCHOOL										
Average total expenditure	$1,204	$1,305	$684	$625	$562	$528	$788	$1,037	$1,767	$3,363
Share spent										
School tuition and fees	19.86	22.17	8.39	3.39	4.39	4.10	12.01	22.51	31.79	51.96
Extra classes (outside school)	1.21	1.39	0.29	0.20	0.10	0.11	0.72	1.14	1.31	4.78
Transportation	1.66	1.78	1.35	0.30	0.00	4.03	1.25	0.70	0.31	0.19
Lunch and snacks at school	31.00	30.51	34.73	35.15	28.35	32.36	30.76	31.80	33.50	23.29
Uniforms	29.31	27.83	35.32	40.73	44.13	40.88	35.44	26.47	18.09	9.70

(continues)

TABLE 5-14 *(Continued)*

		Region				Quintile				
Expense type	**All Bahamas**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**5**
Books	12.17	12.01	13.40	10.49	14.18	13.05	15.28	11.92	10.50	7.32
Other supplies	4.69	4.21	6.51	9.74	8.85	5.16	4.54	5.47	4.50	2.76
Room and board	0.09	0.10	0.00	0.00	0.00	0.30	0.00	0.00	0.00	0.00
N	949	491	262	99	97	329	213	189	137	71
SECONDARY SCHOOL										
Average total expenditure	$1,655	$1,807	$1,077	$707	$437	$685	$979	$1,600	$2,303	$3,897
Share spent										
School tuition and fees	17.95	20.21	9.01	0.24	1.08	4.59	5.26	18.96	27.91	45.97
Extra classes (outside school)	1.20	1.31	0.25	1.18	2.14	0.23	0.13	0.88	2.87	2.93
Transportation	4.06	4.79	0.51	0.00	0.00	8.30	3.45	2.61	3.13	0.87
Lunch and snacks at school	40.21	39.79	47.18	29.40	30.30	39.54	43.56	44.60	38.68	28.57
Uniforms	21.77	19.73	26.09	47.25	47.07	30.10	31.51	18.38	13.81	9.76
Books	10.81	10.53	11.79	15.00	11.63	13.15	11.40	10.87	9.94	7.74
Other supplies	4.01	3.65	5.18	6.92	7.77	4.09	4.68	3.69	3.67	4.15
Room and board	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
N	725	356	225	73	71	197	179	154	135	51
POST-SECONDARY SCHOOL										
Average total expenditure	$2,140	$2,156	$536	$950	$0	$915	$1,270	$1,492	$2,020	$3,227
Share spent										
School tuition and fees	54.39	54.19	89.43	84.21	0.00	60.03	35.65	49.63	61.50	52.44
Extra classes (outside school)	1.09	1.09	0.00	0.00	0.00	0.00	3.16	0.00	0.00	1.83
Transportation	3.98	3.99	2.44	0.00	0.00	0.00	1.53	9.47	2.55	4.54
Lunch and snacks at school	19.92	20.04	0.00	0.00	0.00	3.69	31.25	10.30	20.17	24.82
Uniforms	1.23	1.24	0.00	0.00	0.00	0.00	1.96	0.39	0.82	1.92
Books	15.52	15.57	8.13	5.26	0.00	36.28	12.39	24.34	13.29	12.22
Other supplies	3.88	3.88	0.00	10.53	0.00	0.00	14.06	5.87	1.67	2.23
Room and board	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
N	62	59	2	1	0	3	7	12	15	21

To reiterate, transportation represents a significant burden for households in this welfare class. When this fact is correlated to the data presented in Table 5-6, the distinction is further amplified; that is, while 14.1% of children in the poorest quintile used the jitney (for which there is a charge), only 1.2% of those in the wealthiest quintile did so. Conversely, 87% of children in the wealthiest quintile were transported to school in a private vehicle, compared to only 26.7% of those in the poorest quintile.

Expenditure by School Type

Households spent more annually on post-secondary education than on any other level of education. The lowest expenditure was for children at the primary level, which had the largest enrolment rate—45.17%—of any level (Table 5-3).

Bahamian households spent an average of $1,648 on pre-school education (Table 5-14). Region 1 households spent an average of $1,716, while those in Region 4 spent less than 50% of that amount. When examined by quintile, expenditure at this level ranged from $1,220 for the poorest quintile to $2,760 for the wealthiest. At the pre-school level, the largest proportion expended was on "school tuition and fees;" this was so for all regions and quintiles. The next major item of expenditure was "lunch and snacks at school," followed by "uniforms." Region 3 households spent the least amount (45.7%) on "school tuition and fees" and the most (24.7%) on "lunch and snacks at school;" whilst households in the poorest quintile spent the least on "school tuition and fees" (61.9%) and the most on "uniforms" (17.4%).

According to Table 5-14, Bahamian households spent an average of $1,204 on items related to primary education. At this level, the largest expenditure items were "lunch and snacks at school" for Region 1 households and "uniforms" for households in the other three regions. For the two lowest consumer quintiles, the largest expenditure was "uniforms;" for the next two quintiles, it was "lunch and snacks at school;" and, for the highest, it was "school tuition and fees." Households in the wealthiest quintile spent more than six times as much as those in the poorest quintile on primary education.

Interestingly, at the secondary level, households in the poorest quintile spent a higher proportion of their education dollars on "transportation" than they did on "school tuition and fees." In the wealthiest quintile, the largest proportion was spent on "school tuition and fees," while "transportation" accounted for less than 1% of total expenditure on secondary education.

Regions 3 and 4 had no significant transportation expenditures. In these regions, the overwhelming majority of students attended Government school, for which the busing system was available at no charge. Bahamian households spent an average of $1,655 on secondary education, with Region 1 households spending the most ($1,807) and Region4 households spending the least ($437). Similarly, the wealthiest households spent more than five times that of the poorest ones.

At the post-secondary level, households across all regions and quintiles spent the largest proportion of their education dollars on "school tuition and fees." For all households, this item was followed by either "books" or "lunch and snacks at school." Households spent more on this level of education than on any other. Region 4 households reported no expenditure at this level, presumably because no institutions offered post-secondary education on those islands.

Table 5-4 helps to explain differences between the wealthiest household quintiles and the other four at all levels of education. While two-thirds of the school population is enrolled in Government-operated, public schools, only 24.6% of children from the wealthiest household quintiles participate in the public-school system. Table 5-14 displays variations in spending levels amongst the five quintiles.

As Table 5-15 shows, the average net expenditure across the country was $1,357, which Region 1 exceeded by $96; other regions were significantly below the national average—from $870 in Region 2 to $532 in Region 4. The wealthiest quintile expended four times as much as the poorest on their children's education ($2,926 versus $663).

For those receiving financial aid only, the average expenditure nationwide was $753. Again, Region 1 exceeded this amount, while the other three regions were significantly lower (Table 5-15) (however, sample sizes for Regions 3 and 4 were small). Only the poorest and wealthiest quintiles exceeded the national average ($1,475 and 1,206, respectively), while the other three were significantly lower, with quintile 4 expending only $161.

FINANCIAL ASSISTANCE

Many Bahamian households received assistance with educational expenses. As Table 5-16 shows, 7.6% of households with currently enrolled children 0–21 years of age received a certain amount of assistance. This was generally

TABLE 5-15 Net Expenditures for Enrolled Children (Ages 0–21)

		Region				Quintile				
Expenditure average	**All Bahamas**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**5**
Avg. (All Bahamas)	$1,357	$1,453	$870	$680	$532	$663	$895	$1,235	$1,876	$2,926
N	2,017	1,089	548	188	192	599	448	425	345	169
Avg. (those receiving aid only)	$753	$784	$449	$665	$438	$1,475	$895	$741	$161	$1,206
N	119	83	29	5	2	18	19	27	32	22

Note: Net expenditure equals expenditures, minus assistance received.

provided by non-household family members (55.2%), private companies (24.4%), private schools (9.4%), Government (3.7%), and other sources (7.3%). Households received an average of $1,579 to assist with educational expenses. The average amount of assistance received accounted for about 55.5% of annual household expenditure on education.

Regional Comparisons

Regions 3 and 4 were conspicuous in terms of the paucity of financial assistance reported. In all regions except Other Family Islands, assistance with household educational expenses was secured mainly from family members who resided elsewhere. Non-household family members accounted for 52.4% of assistance in Region 1, 89.7% in Region 2, and 74.2% in Region 3. In New Providence and Grand Bahama, a significant amount of assistance was tendered by private companies (26.4%) and private schools (10.3%). Family Islands had little of this type of assistance (Region 2 had only 3.5%). Government assistance was reported only for Region 1.[9]

Quintile Comparisons

Households in the poorest consumer quintile received most of their financial assistance (55.6%) from private schools, while those in the wealthiest received the most (41.1%) from private companies.

[9] This finding reflects how the BLCS recorded data; for example, a Family Island student who received educational assistance and attended an educational institution in Region 1 would therefore be recorded as a resident of that region.

TABLE 5-16 Financial Aid Received (Enrolled Children, Ages 0–21)

		Region				Quintile				
Survey question	**All Bahamas**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**5**
Received help?	7.6	8.2	5.8	2.6	1.1	2.7	5.2	8.7	10.6	15.5
Avg. help received	$1,579	$1,695	$329	$230	$850	$419	$888	$725	$1,583	$2,975
Share, by source										
Gov't.	3.7	4.1	0.0	0.0	0.0	0.0	0.0	0.0	4.0	9.7
Private school	9.4	10.3	0.0	0.0	0.0	55.6	0.0	0.0	13.2	0.0
Private co.	24.4	26.4	3.5	0.0	0.0	0.0	2.0	34.6	19.1	41.0
Nonprofit org.	1.4	1.2	3.5	0.0	0.0	0.0	0.0	6.0	0.0	0.0
Non-household family member	55.2	52.4	89.7	74.2	0.0	39.7	97.7	58.6	49.7	43.8
Other	6.0	5.6	3.4	25.8	100.0	4.7	0.3	0.8	13.9	5.5
N	127	89	31	5	2	20	21	31	32	22

CONCLUSIONS

The above analysis reveals interesting and pertinent information about the Bahamian educational system. Despite a range of efforts to bring about equity in access to education—attachment of pre-schools to Government-operated schools, provision of primary schools in nearly every community, availability of a free bus system, and standardized curricula and exit examinations—inequalities persist. Disparities are apparent both across and within regions. The developed region of New Providence and Grand Bahama is the seat of tertiary education; the COB is situated in New Providence, automatically placing Region 1 students at an advantage. Region 1 also has the majority of the country's pre-schools.[10] Taken together, these factors mean that Region 1 students exit the educational system with better academic qualifications than students from other islands.

Students from outside New Providence and Grand Bahama had limited access to tertiary institutions and depended almost entirely on Government-operated schools for their education. They were typified by lower attendance records and higher repetition rates (particularly in Regions 2 and 4). Secondary-school students in these regions traveled greater distances to school than did their Region 1 counterparts, and most relied on bus transportation. Because most attended Government schools, their expenditure on school tuition and fees, as a proportion of total educational expenditure, was miniscule; however, this low outlay was offset by substantially high expenditure on uniforms and lunch and snacks at school.

The analyses clearly indicate that students from the wealthier quintiles had a more productive educational experience than did others. Their enrolment rates were higher, and they were more likely to attend pre-schools and tertiary schools, as well as private schools. Their school absences were mainly due to illness rather than extraneous reasons. They completed school with higher academic qualifications than did their counterparts in the poorer quintiles. Conversely, students from the poorest quintile got a slower start at school. Their proportions in pre-school were considerably lower, they were less likely to attend tertiary schools (no students from quintile 2 were on record for college), and were more likely to exit the educational system without qualifications. Their expenditure on education was burdened by the cost of uniforms, lunch and snacks at school, and transportation.

Finally, throughout the analyses, it was noted that, although males outnumbered females in the school system, the participation of females was more meaningful. Their attendance and enrolment rates were higher, particularly at the tertiary level. They exited the school system with higher levels of education and qualifications. It must be emphasized, however, that too large a proportion of youths has left and is leaving secondary schools without qualifications.

MEETING THE CHALLENGE: POLICY AND RESEARCH RECOMMENDATIONS

As the above results show, educators face many challenges. The Bahamian educational system needs improving at all levels to ensure that, when students exit the system, they do so with acceptable academic qualifications. To this end, the necessary infrastructure and resources must be put in place to enforce merit-based promotion, thereby eradicating social promotion completely. In addition, educators need to address the issue of high repetition rates, particularly in Region 3.

Further study is needed with regard to the relevance and practicality of curricula, with specific focus on the Family Islands. Special emphasis should be given to expanding educational and training opportunities outside Region 1 through distance education and other related initiatives. To this end, more work is needed to understand the precise incentives needed to encourage greater academic participation in these regions, as well as among males in general, whose involvement in higher education is considerably lower than that of females.

In situations where 19–24 year olds are still in high school or where 17–18 year olds do not aspire to attend college, technical and vocational studies should be introduced so that these students can acquire the skills needed to make the transition to the labour force. More civic clubs should be invited to start programmes to develop students' entrepreneurial ethos and spirit. In this way, students—especially unskilled youths over 19 years of age—can learn to create jobs and earn money.

On islands where crabbing, fishing, and harvesting of crops are major economic activities for students' families (especially in Region 2), a shift system of schooling should

[10] Region 1 had the highest household expenditure on education because of the preponderance of private pre-schools and tertiary institutions.

be introduced so that critical school hours will not be missed.

Efforts must be made to ensure accessibility and affordability of education at all levels, particularly at the pre-school and tertiary levels. These issues are especially important at the pre-school level, when young children are at the critical stage of cognitive development. Thus, efforts to incorporate pre-schools into most Government-operated schools should be intensified to ensure accessibility by those unable to pay for this vital service. Failing that, designated pre-schools may need to be subsidized through agreements allowing for the attendance of "sponsored" children.

That a large proportion of poorer students spent substantial amounts on lunch and snacks at school reinforces the need to revitalize and expand the NSLP. Although the NSLP appears to be reaching its targeted population, a large proportion of qualifying students and parents are unaware of the Programme. Thus, efforts must be created and strengthened to heighten NSLP awareness. Similarly, the Survey data clearly reveal the financial burden that uniforms place on students in the lower quintiles and a significant proportion of Family Island students, suggesting the need to subsidize their cost.

The data show that the Government-supported busing system has proven beneficial, especially to students in the Family Islands. However, it also suggests that the system may need to be expanded in New Providence and Grand Bahama, perhaps using a voucher system for those who frequently take the bus to school.

Finally, the data infer that students in private schools perform better than those in Government-operated schools. These results are in line with those of national examinations, which have consistently shown better grades for private-school students. For example, 2001 BGCSE results indicate that 51% of private-school students received passes of A-C, compared to only 27% of those in Government schools.

It is often said that the teachers in Government schools are more highly qualified than those in private schools. If this is indeed the case, then other factors—school environment, availability of supplies, and preparedness of the students themselves, among other variables—must contribute to the greater success of private-school students. This phenomenon must be studied rigorously to determine the precise, underlying causes for the differences in performance. Answers to this question could provide a catalyst to effect overall improvement in the Bahamian educational system.

FOR FURTHER READING

The Bahamas Union of Teachers. 1974. *The Black Paper on Education*. Nassau: The Bahamas Union of Teachers.

MOE. 1974. *Educational Development in an Archipelagic Nation*. The Maraj Report. Nassau: Ministry of Education.

CHAPTER 6

Employment Data Analysis: Toward Equitable Planning

Kelsie Dorsett

The labour force is that segment of a country's population economically engaged, or willing and able to be engaged, in the production of goods and services. It is composed of those persons with jobs—the employed—and those without jobs who seek economic activity—the unemployed. The Bahamas Living Conditions Survey (BLCS) analysed the population of individuals 15 years of age and older.[1] However, in order to thoroughly examine how individuals live and the major factors contributing to their well-being, the Survey relaxed this group's age limits to include persons 10 years of age and older; in this way, it could investigate the extent of child labour and its effects on the well-being of Bahamian households. Accordingly, this analysis includes a brief section focused only on persons 10–14 years of age.

Reliable labour-force data is vital to formulating, implementing, and monitoring a country's socioeconomic-development plans and programmes. Labour-force participation is inextricably linked with socioeconomic status and is a widely asserted determinant of individuals' well-being and standard of living; hence its inclusion in this chapter.

This overview focuses mainly on employment variables—ranging from employment status and occupational and industrial characteristics to transport to work and hours worked. In most cases, these variables are analysed by sex, region, and quintile. Finally, policy implications of this analysis are discussed.

TARGET POPULATION

BLCS data show that persons 15 years of age and older had the following characteristics: 44% were household heads, 52% were female, the average age was 38 years, and 85% resided in the more developed areas of New Providence and Grand Bahama (Region 1). Distribution by quintile indicates that the largest proportion of this group was

[1] The age group targeted by the Department of Statistics in its annual labour-force surveys; see DOS (annual).

in the wealthiest quintile (25%), whilst 15% were in the poorest. Perhaps predictably, most were Bahamians (87%), with Haitians representing the second largest nationality (7%). Finally, schooling-level data showed that the majority (66%) had a high-school education, 16% were educated to the college level, and 2% had no schooling (Table 6-1).

Labour-force Participants

Of the targeted population, 78% actively participated in the labour force. As Figure 6-1 clearly shows, across all age groups, males participated at a much higher level than did females; differences were more pronounced amongst persons 65 years of age or older, where the level of male participation was more than twice that of females. As expected, the 25–44 year age group, considered the core of the labour force, had the highest level of participation (91%), accounting for more than half (57%) of the total force (Tables 6-2 and 6-3).

By nationality, Survey data showed that Haitians had a 75% participation rate, which was slightly lower than

TABLE 6-1 Population Profile: Individuals 15 Years and Older

Population characteristics	Total	Employed	Unemployed	Not in labour force
Male	48.0	52.2	43.2	34.6
Household head	43.6	50.1	23.8	25.0
Region				
1	84.6	86.1	84.1	79.8
2	10.6	9.4	14.3	14.0
3	2.2	2.0	1.0	3.3
4	2.5	2.5	0.6	2.8
Quintile				
1	15.3	12.8	34.6	20.9
2	18.8	17.3	29.1	22.1
3	19.2	19.0	17.3	20.1
4	21.3	22.2	11.8	19.7
5	25.4	28.7	7.3	17.2
Nationality				
Bahamian	87.2	87.8	82.6	85.9
Haitian	6.9	6.3	15.6	7.7
Other Caribbean	2.6	3.0	0.9	1.5
U.S. and Canada	1.9	1.7	0.9	2.8
Other	1.4	1.2	0.0	2.1
Education completed				
No schooling	2.2	1.6	2.4	5.2
Primary school	11.3	7.5	13.1	28.3
High school	66.1	67.2	80.4	57.9
College/university	16.3	19.0	3.0	6.5
Technical/vocational	4.1	4.7	1.1	2.0
Age				
Mean years	37.9	37.6	28.9	40.2
15–24	21.9	15.5	44.2	39.9
25–44	48.4	57.2	45.1	19.0
45–64	22.8	24.5	10.3	18.9
65 and older	6.9	2.7	0.4	22.2
N	4,887	3,504	173	1,210
Percent	100.0	74.4	3.6	22.0

FIGURE 6-1 Labour-force Participation, by Age Group and Sex

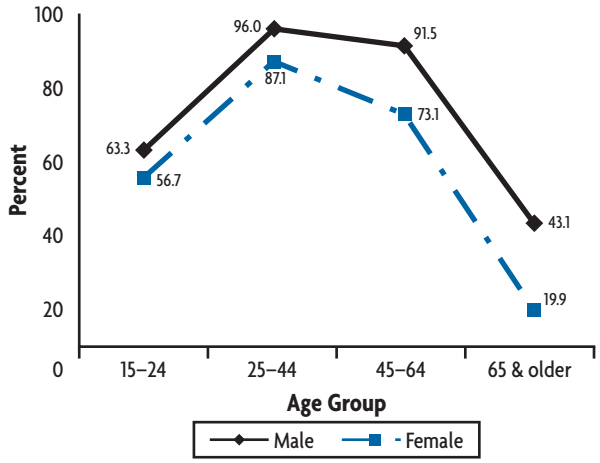


TABLE 6-2 Labour-force Participation of Persons 15 Years and Older, by Selected Variables

Characteristic	Total	Male	Female
All Bahamas	78.1	84.2	72.4
Age Group			
15–24	60.0	63.2	56.7
25–44	91.4	96.0	87.1
45–64	81.8	91.5	73.1
65 and older	29.7	43.1	19.9
Nationality			
Bahamian	78.3	83.2	74.0
Haitian	75.5	92.4	45.3
Other	76.1	83.8	69.7
Region			
1	79.3	85.0	74.2
2	71.1	81.0	61.0
3	67.4	73.4	61.3
4	75.0	81.9	67.0
Quintile			
1	70.0	74.6	66.2
2	74.1	82.4	66.6
3	77.3	84.7	70.9
4	79.7	86.0	73.9
5	85.1	88.7	81.4
N	4,875	2,396	2,479

TABLE 6-3 Labour-force Characteristics, Persons 15 Years and Older

Characteristic	Labour force (%)
Male	51.8
Household head	48.9
Region	
1	86.0
2	9.7
3	1.9
4	2.4
Quintile	
1	13.8
2	17.8
3	19.0
4	21.7
5	27.7
Education completed	
No schooling	1.6
Primary school	7.8
High school	67.8
College/university	18.2
Technical-vocational	4.6
Age	
Mean years	37.2
15–24	16.8
25–44	56.7
45–64	23.9
65 and older	2.6
N	3,677

that of other nationalities; however, the rate for Haitian males was significantly higher than that for the next highest group (93% versus 84%). Conversely, Haitian females had a rate of 45%, well below that of others (Table 6-2).

Regional Differences

New Providence and Grand Bahama (Region 1), where 85% of the total population resides, accounted for an almost equal share of the labour force (86%). Not surprisingly, participation in Region 1—the primary site for job search and procurement—was higher than in the other three regions. Indeed, the BLCS data showed that Region 1 participation was 79%, compared to 67% in Region 3.

Interestingly, Region 4—the least developed of the four regions—had the second highest participation rate

TABLE 6-4 Labour-force Participation of Persons 15 Years and Older, by Age Group and Region

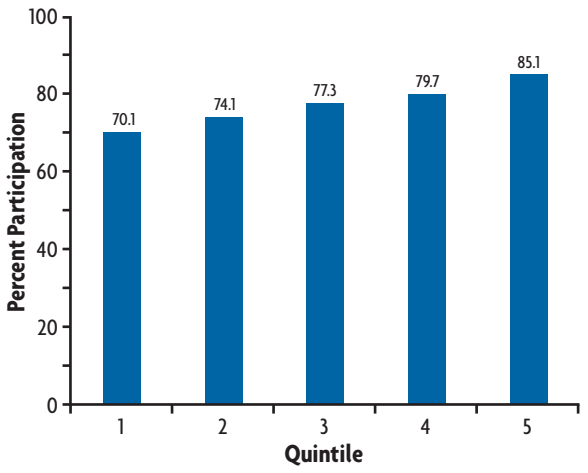
Age group	All Bahamas	Region 1	2	3	4
15–24	60.0	61.3	51.3	47.4	55.2
25–44	91.4	91.9	87.6	86.7	92.6
45–64	81.8	83.1	71.8	83.1	80.7
65 and older	29.7	30.0	29.7	20.2	35.6
N	4,875	2,544	1,362	510	459

(Table 6-2). This is perhaps related to the fact that, in the absence of a corporate/industrial sector, the individuals themselves generate economic activity through informal activities: subsistence farming and fishing and operation of local 'petty' stores. Many do not consider such activities as work, but rather as a way of life, especially in the elderly age group. As Table 6-4 shows, in Region 4, participation of persons 65 years and older was noticeably higher than in the other three regions.

Quintile Differences

The Survey data indicated a direct relationship between labour-force participation and living standard; that is, the higher the consumption quintile, the higher the level of labour-force participation (Figure 6-2). The poorest consumption group (quintile 1) had the lowest participation rate (70%); the rate increased with each quintile, peaking at 85% in the wealthiest group (quintile 5). This pattern did not differ by sex.

FIGURE 6-2 Rate of Labour-force Participation, by Quintile



Non-participants

Selected Characteristics

Of those individuals not participating in the labour force, 65% were female, 25% were household heads, and 58% had some high-school education (Table 6-1). Forty percent of the non-participants were youths between 15 and 24 years of age. It is expected that a large proportion of this group would be in school, given that the average age at which young persons in The Bahamas exit the secondary school system is 17. It follows, therefore, that the majority of youths between 15 and 17 years of age would be in school, bearing in mind that attendance at school is compulsory up to age 16. The section below focuses on youths between 16 and 24 years of age who neither attend school nor work.

UNATTACHED YOUTHS

A critical issue facing policymakers across the Caribbean region is unemployed/unattached youths; that is, persons 16–24 years of age who are neither working nor attending school. Given the importance of an educated youth to any country's future, the BLCS conducted a brief analysis related to this phenomenon in The Bahamas.

Survey results showed that 20% of all persons 16–24 years of age were unattached. Region 1, by virtue of its size, accounted for the majority (60%). However, this region accounted for about 87% of total youths, meaning that the other regions had more than their share of

TABLE 6-5 Status of Youths 16–24 Years Old

Status	All Bahamas	Sex		Quintile					Region			
		M	F	1	2	3	4	5	1	2	3	4
Student only	22.8	21.5	24.2	14.0	18.5	26.4	32.4	25.0	22.7	21.6	31.4	26.7
Employed only	48.9	54.6	42.9	48.9	54.2	51.6	46.3	43.9	48.8	47.5	47.1	57.1
Student and working	8.4	6.9	10.0	2.0	2.8	8.4	9.9	19.4	9.2	2.5	4.6	0.0
Unattached	19.9	17.0	22.9	35.1	24.5	13.6	11.4	11.7	19.3	28.3	16.9	16.2
N	822	424	398	222	179	159	142	104	494	194	67	61

unattached youths. Table 6-5, which provides more detailed information on these youths, shows that, within regions, the largest proportion of unattached youths was in Region 2 (28%). It is no surprise that unattached youths were more evident in the poorest quintile (35%) than they were in the wealthiest (12%).

Lack of academic qualifications was likely a major factor contributing to detachment of these youths. As Table 6-6 shows, 19.4% of all youth had tertiary-level (college/university or technical/vocational) education, compared to only 4% of unattached youths. Higher representation of all youths at this level, vis-à-vis that of unattached youths, accounted, in part, for their high-school proportion being lower than that of unattached youths (79% versus 90%). Although 90% of unattached youths completed high school, 53% had only a School Leaving Certificate (SLC) or no qualification. Similarly, of the 79% of youths overall who completed high school, 36% had the maximum of an SLC.

The data also highlighted a characteristic well known to policymakers: the educational level and qualification of female youths has surpassed that of male youths. This was the case for both population sets (total and unattached youths).

These findings point to a key problem in the educational system: Too many of the country's young people are

TABLE 6-6 Educational Status of Total and Unattached Youths, 16–24 Years of Age

Status	Total youths			Unattached youths		
	Total	Male	Female	Total	Male	Female
Education completed						
No schooling	0.4	0.1	0.6	1.0	0.5	1.3
Primary school	1.7	2.8	0.7	5.0	9.5	1.7
High school	78.5	82.7	74.4	90.1	87.6	91.8
College/university	15.4	10.1	20.7	2.0	2.4	1.7
Technical/vocational	4.0	4.4	3.6	2.0	0.0	3.5
Educational qualifications						
SLC or less	35.5	43.2	27.7	53.3	64.8	44.5
BJC, CXC Basic	28.1	26.0	30.2	23.8	17.8	28.4
0 Level, CXC General, A level	31.5	27.5	35.6	20.5	15.0	24.7
Degree	4.1	3.0	5.2	1.1	2.4	0.0
Other	0.8	0.32	1.3	1.4	0.0	2.4
N	814	415	399	178	69	109

exiting the system without any qualifications and are thus ill-equipped to participate meaningfully in the workforce (see chapter 5).[2]

CHILDREN 10–14 YEARS OF AGE

In an effort to comply with United Nations Conventions pertaining to the rights and protection of children, the focus on child labour has increased both regionally and internationally (ILO 1973, 1999).[3] Recently, The Bahamas participated in a regional child-labour study mounted by the International Labour Office (ILO) in Trinidad. Such activities led to the decision to collect economic-activity data on children beginning at age 10 to examine the extent of child labour and its potential effect on household well-being.[4] The data presented in Table 6-7 suggest that child labour was not widespread in The Bahamas; that is, only 2.4% of children were economically active. These youngsters accounted for less than 1% of the total labour force. All of them were employed, and most were from the poorest quintile.

The Unemployed

Quintile and Regional Comparisons

Mirroring worldwide patterns, unemployment was highest amongst females (5.4%), youths (12%), and the poor (11.6% in quintile 1). Amongst nationalities, Haitians had the highest unemployment rate (8%), compared to the national average of 4.6%. By region, the rate was highest (6.7%) in Region 2 (Table 6-8).[5] Data profiling of the unemployed showed that almost one-quarter were heads of households, 57% were females, and slightly more than one-third were in the poorest quintile (Table 6-9).

TABLE 6-7 Labour-force Profile, Persons 10–14 Years of Age

Characteristic	%
Total labour force (%)	0.4
Participation rate	2.4
Region	
1	79.0
2, 3, & 4	21.0
Quintile	
1	53.0
2, 3, 4, & 5	47.0
N	18

TABLE 6-8 Unemployment of Persons 15 Years and Older, by Selected Variables

Characteristic	Total	Male	Female
All Bahamas	4.6	3.8	5.4
Age group			
15–24	12.0	10.7	13.6
25–64	3.6	2.6	4.7
65 and over	1.8	1.9	1.8
Nationality			
Bahamian	3.4	3.0	3.7
Haitian	8.0	5.8	11.9
Other	1.1	2.4	0.0
Region			
1	4.5	3.6	5.4
2	6.7	6.9	6.6
3 & 4	1.7	1.0	2.7
Quintile			
1	11.6	8.4	14.7
2	7.6	7.7	7.4
3	4.2	3.6	4.9
4 & 5	1.8	1.4	2.2

[2] Apparently, this is the basic problem for unattached youths; however, other underlying factors are likely at play; hence, the need for further study.

[3] The Bahamas, based on its ratification of the ILO Convention on child labour, considers *child labour* work that is harmful to children's physical and moral health or development and that prevents them from attending and participating effectively in school and vocational training programmes.
ILO Convention no. 182 (ratified by The Bahamas) lists four categories of the worst forms of child labour: 1) all forms of slavery or practices similar to slavery, such as the sale and trafficking of children, debt bondage and serfdom or forced labour, or compulsory recruitment of children for use in armed conflict; 2) use, procurement, or offering of a child for prostitution or pornography; 3) use or procurement of a child for illicit activities; and 4) work, which by its nature or the circumstances by which it is carried out, is likely to harm the health, safety, and morals of children.

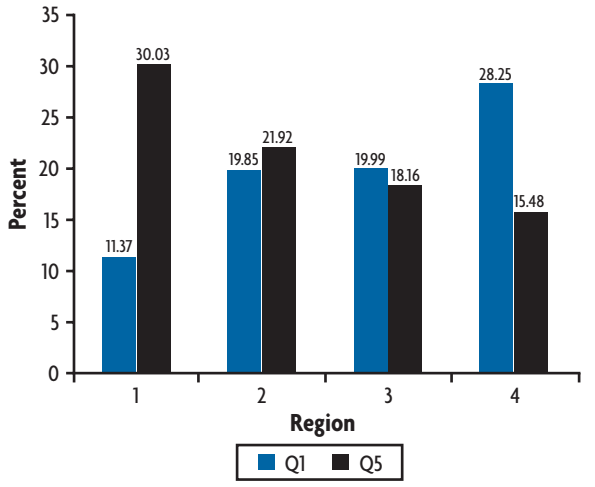
[4] The data presented in Table 6-7 should be considered only as a general outline of the employment status of children 10–14 years of age, as the small numbers captured in the BLCS (18 observations) precluded meaningful analysis.

[5] It should be noted that the unemployment rate was calculated using the labour-force population, not persons 15 years of age and older, as a base.

TABLE 6-9 Characteristics of Unemployed Persons, Ages 15 Years and Older

Characteristic	% unemployed	*N*
Total no.		173
Household head	23.8	48
Sex		
Male	43.2	82
Female	56.8	91
Age group		
15–24	44.2	68
25–44	45.1	84
45 and older	10.7	21
Region		
1	84.1	94
2	14.3	67
3 & 4	1.6	12
Quintile		
1	34.6	69
2	29.1	46
3	17.3	30
4 & 5	19.0	28

FIGURE 6-3 Employed Persons, by Region and Poorest and Wealthiest Quintiles



EMPLOYMENT CHARACTERISTICS

The BLCS showed that 95% of labour-force participants were employed, compared to 93%, recorded in the labour-force survey conducted earlier in 2001. In terms of quintiles, persons in the two poorest quintiles had the lowest levels of employment (88% and 92%, respectively). In the two wealthiest quintiles, the rates were 97% and 99%, respectively (Table 6-10).

Region 1 workers enjoyed a more affluent lifestyle than those in other regions (Figure 6-3). In this region, 11% of workers fell into the poorest quintile, whilst 30% were in the wealthiest. By contrast, 28% of Region 4 workers were

TABLE 6-10 Percentage Distribution of Labour Force of Persons 15 Years and Older, by Selected Variables

	Employed			Unemployed			*N*		
Variable	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**
All Bahamas	95.4	96.2	94.6	4.6	3.8	5.4	3,677	1,969	1,708
Region									
1	95.5	96.4	94.6	4.5	3.6	5.4	2,018	1,022	996
2	93.3	93.1	93.4	6.7	6.9	6.6	973	557	416
3	97.6	98.3	96.8	2.4	1.7	3.2	343	189	154
4	98.8	99.5	97.8	1.2	0.5	2.2	343	201	142
Quintile									
1	88.4	91.6	85.3	11.6	8.4	14.7	633	322	311
2	92.4	92.3	92.6	7.6	7.7	7.4	681	360	321
3	95.8	96.4	95.1	4.2	3.6	4.9	691	368	323
4	97.5	98.3	96.6	2.5	1.7	3.4	767	413	354
5	98.8	98.8	98.8	1.2	1.2	1.2	855	480	375
N	3,504	1,887	1,617	173	82	91	—	—	—

in the poorest quintile, with a considerably smaller proportion (15%) in the wealthiest. Figure 6-3 clearly illustrates that disparities amongst employed persons were greatest within these two regions. In Region 1, the wealthiest quintile had the larger proportion of employed persons; whilst in Region 4, the poorest quintile accounted for the larger share of workers. The two poorest Region 4 groups represented 50% of workers; this finding contrasted sharply with Region 1, where the two wealthiest groups accounted for 52% of workers.

Further disparities were noted when one examined the regions' share of total employed persons by quintile (Table 6-11). Within the two poorest quintiles, the proportion of Region 1 workers was lower (77% and 85%, respectively) than their share of total workers (86%). Within the remaining quintiles, their share of workers was larger than their share of population, peaking at 90% in the wealthiest quintile. As living standards increased, so did the share of Region 1 workers. This was not the case for workers in the other regions; as living standard increased, their proportions decreased. Within the two poorest quintiles, the proportion of workers from Regions 2, 3, and 4 were higher than their share of the total working population; that is, these regions were over-represented in the poorer quintiles.

In addition to substantial disparities in welfare status of employed persons amongst regions, within-region disparities were pronounced in Region 1; however, workers in this region enjoyed a more affluent life style than their counterparts in other regions. The problem of the working poor outside of Region 1, which were linked to the employment structure in those regions, is a major policy concern. The sections that follow analyze causes for these disparities, particularly as they relate to education and occupation.

Nationality

Bahamians, not surprisingly, comprised 88% of workers nationwide. Haitians accounted for an additional 6%, equivalent to the percentage for all other nationalities combined. The Bahamian share of workers was highest in Regions 3 (92%) and 4 (93%), less developed areas generally unattractive to migrants. Haitians were more visible in Region 2, where they accounted for 10% of employed persons (Table 6-12).

As Table 6-13 shows, Bahamians accounted for more than 80% of workers across all quintiles—from 82% in quintile 1, peaking at 90% in quintile 3, and declining slightly to 88% in quintile 5. "Other" nationalities appeared more affluent than either Bahamians or Haitians, as their share of workers increased from 2% in the lowest quintile to 10% in the highest. Clearly, Haitians were more disadvantaged than other groups, as their proportions declined with each rising quintile, from 16% in the lowest to 2% in the highest.

Education

Sixty-four percent (64%) of employed persons had a high-school education, 22% had attained a college degree, whilst slightly less than 2% had no schooling. Despite this relatively high level of attainment, some 30% of employed persons had no form of qualification. Data clearly indicate that female workers were better educated than their male counterparts; 28% had some college education, compared to 16% for male workers. Females also surpassed males in academic qualifications; for example, 22% had a General Certificate of Education (GCE), The Bahamas General Certificate of Secondary Education (BGCSE), or similar qualifications; and 17% had a degree. Proportions for males were 19% and 12%, respectively. Females enjoyed this advantage in all regions (Tables 6-14 and 6-15).

TABLE 6-11 Quintile Distribution of Employed Persons, by Region

		Quintile				
Region	Total	1	2	3	4	5
1	86.2	76.8	84.9	86.8	86.8	90.3
2	9.3	14.5	9.7	9.0	9.1	7.1
3	2.0	3.1	2.2	1.9	2.1	1.3
4	2.5	5.6	3.2	2.2	2.0	1.3

TABLE 6-12 Regional Distribution of Employed Persons 15 Years and Older, by Nationality and Sex

Region	Nationality			N
	Bahamian	Haitian	Other	
All Bahamas				
Total	87.8	6.3	5.9	3,504
Male	84.5	9.9	5.6	1,887
Female	91.4	2.3	6.3	1,617
Region 1				
Total	87.9	6.1	6.0	1,924
Male	84.5	9.9	5.6	983
Female	91.6	2.0	6.4	941
Region 2				
Total	84.3	9.9	5.8	906
Male	81.5	12.7	5.8	518
Female	88.1	6.2	5.7	388
Region 3*				
Total	92.2	3.8	4.0	335
Region 4*				
Total	92.9	2.7	4.4	339

* For Regions 3 and 4, observations by sex were too few for meaningful analysis.

Regional Differences

Tables 6-15, 6-16, and 6-17 clearly indicate disparities by region and quintile in the educational level of the working population; these were more pronounced at the primary and tertiary levels. By region, the proportion of workers with education to the primary level was lowest in Region 1 (7%) and highest in Region 2 (21%). The reverse was observed at the tertiary level, where 28% of Region 1 workers had education to this level, doubling the propor-

TABLE 6-13 Quintile Distribution of Employed Persons 15 Years and Older, by Nationality

Quintile	Nationality			N
	Bahamian	Haitian	Other	
1	81.9	16.5	1.7	564
2	86.8	10.6	2.6	635
3	90.1	5.5	4.4	661
4	89.2	4.3	6.5	751
5	88.4	1.6	10.0	843

TABLE 6-14 Educational Status of Employed Persons 15 Years and Older, by Sex

Status	Total	Sex	
		Male	Female
Education completed			
No schooling	1.5	2.0	1.0
Primary school	7.1	7.7	6.5
High school	64.4	67.7	60.9
College/university	21.7	16.2	27.6
Technical/vocational	5.3	6.5	4.0
N	3,469	1,866	1,603
Qualification			
None	30.2	33.3	26.8
SLC	9.7	12.0	7.2
BJC, CXC Basic	19.5	17.2	21.9
0 Level, CXC General, A level	20.4	18.9	22.1
Degree	14.3	12.0	16.8
Other	6.0	6.6	5.3
N	3,363	1,798	1,565

TABLE 6-15 Educational Status of Employed Persons, by Sex Within Regions

	Region 1			Region 2			Region 3			Region 4		
Status	**Total**	**M**	**F**	**Total**	**M**	**F**	**Total**	**M**	**F**	**Total**	**M**	**F**
Education completed												
No schooling/primary school	6.8	7.7	5.9	20.9	22.7	18.3	19.2	14.3	25.2	14.2	15.6	12.2
High school	64.8	68.7	60.7	60.4	58.6	62.8	61.4	69.3	51.6	71.4	71.3	71.6
College/university	28.4	23.6	33.4	18.8	18.7	18.8	19.4	16.3	23.2	14.3	13.1	16.2
Technical/vocational												
N	1,901	968	933	899	515	384	334	185	149	335	198	137
Qualification												
SLC or less	37.9	43.4	32.3	51.5	55.4	46.3	49.2	49.7	48.6	54.2	60.2	45.5
BJC, CXC Basic	19.3	16.7	21.9	21.7	20.7	23.1	17.2	18.4	15.7	19.8	18.5	21.6
0 Level, CXC General, A level	21.7	20.5	23.0	11.7	10.0	14.0	15.3	14.2	16.6	11.9	8.0	17.6
Degree/other	21.0	19.4	22.8	15.1	13.9	16.6	18.4	17.7	19.1	14.1	13.3	15.3
N	1,840	929	911	858	490	368	331	182	149	334	197	137

tion noted in Region 4 (14%). In all regions, more than 60% of employed persons had a high-school education, the proportion ranging from 60% in Region 2 to 71% in Region 4 (Table 6-15).

Region 1 workers were better qualified than their counterparts in all other regions; 22% had a GCE or its equivalent, and 21% had a degree or other tertiary-level certification. Region 3 followed, with 15% and 18%, respectively. Workers with either no academic qualification or an SLC were significantly fewer in Region 1 (38%) than in the other regions, peaking at 54% in Region 4 (Table 6-15).

Quintile Comparisons

It is well understood that education exerts a powerful influence on labour-force participation, career choice, and ultimately earning capacity. Data provided in Table 6-16 clearly show that wealthier workers had higher levels of education and academic qualifications than poorer ones. Within the wealthiest quintile, the proportion of workers with a college education was at least 5 times that of persons in quintile 2 and nearly 10 times that of workers in quintile 1. In the latter group, 5% of workers had a college education, compared to 48% in the wealthiest group. At the opposite end of the educational spectrum, workers with either no schooling or a primary education accounted for 14% in the richest quintile but 17% in the poorest.

Disparities in academic qualifications of employed persons were stark. A mere 3% of workers in the poorest quintile had a degree or some form of tertiary-level certification, compared to 40% of those in the wealthiest quintile. Whilst the proportion of persons with tertiary-level degrees or certificates increased with each quintile, the proportion with no academic qualification, including an SLC, decreased with each quintile (from 71% of workers in the poorest quintile to 22% of those in the wealthiest).

The analyses above not only underline the disparities in education amongst the regions and quintiles; they also suggest that too many persons are completing school without any form of qualification, indicating a serious imbalance in the educational system.

The strength of any country's economy is largely based on the educational prowess of its workforce. A solid educational background benefits both the individual and his or her country. Social theory asserts that education is a major vehicle of social mobility and therefore a major determinant of an individual's well-being. As a basic guideline, the data in Table 6-17 suggest that, in terms of schooling, an individual needs tertiary-level education in order to move into quintile 5; with regard to qualifications, a degree is needed to advance to quintile 5. These findings point to the need for serious upgrading of the Bahamian educational system.

TABLE 6-16 Educational Status of Employed Persons, by Sex Within Quintiles

Status	Quintile 1			Quintile 2			Quintile 3			Quintile 4			Quintile 5		
	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F
Education completed															
No schooling/primary school	16.8	18.4	15.1	14.0	17.2	10.4	7.9	9.1	6.6	6.7	7.6	5.7	4.0	3.6	4.3
High school	78.4	78.6	78.2	77.2	76.9	77.5	72.0	75.2	68.8	62.3	69.7	54.3	48.3	52.4	43.5
College/university/ technical/vocational	4.8	3.0	6.7	8.8	5.9	12.1	20.1	15.6	24.6	31.0	22.7	40.0	47.8	43.9	52.2
N	551	287	264	630	331	299	654	345	309	745	404	341	839	473	366
Qualification															
SLC or less	71.3	75.3	67.4	55.0	63.8	45.4	38.5	43.2	33.5	35.6	43.4	27.2	22.2	26.5	17.4
BJC, CXC Basic	15.6	12.0	19.2	20.6	18.1	23.3	24.7	19.1	30.4	21.6	21.3	22.0	15.7	14.8	16.8
0 Level, CXC General, A level	10.6	11.6	9.6	19.8	14.9	25.2	24.3	24.3	24.2	20.4	19.2	21.6	22.4	20.0	25.1
Degree/other	2.5	1.1	3.8	4.6	3.2	6.1	12.6	13.4	11.8	22.4	16.1	29.2	39.7	38.7	40.7
N	529	271	258	599	315	284	639	338	301	727	391	336	821	459	362

TABLE 6-17 Educational Status of Employed Persons, by Sex Across Quintiles

Status	Total						Males						Females					
	Quintile						Quintile						Quintile					
	1	2	3	4	5	*N*	1	2	3	4	5	N	1	2	3	4	5	*N*
Education completed																		
No schooling/ Primary school	24.1	28.1	17.4	17.3	13.2	425	23.0	31.0	17.3	17.6	11.1	248	25.5	23.9	17.4	16.9	16.2	177
High school	15.1	20.8	21.2	21.4	21.4	2,181	14.0	19.8	20.5	22.8	22.9	1225	16.5	22.0	22.2	19.7	19.6	956
College/university/ technical/vocational	2.2	5.2	13.8	25.7	53.1	667	1.8	4.6	12.8	21.5	59.3	329	2.6	5.7	14.8	29.6	47.4	338
Qualification																		
SLC or less	21.9	23.1	18.7	20.0	16.2	1,472	19.3	23.7	18.2	21.4	17.4	881	25.6	22.3	19.5	18.0	14.6	591
BJC, CXC basic	9.8	17.6	24.4	24.8	23.4	669	8.1	17.8	21.1	27.6	25.4	330	11.2	17.5	27.1	22.5	21.6	339
0 level, CXC general, A level	6.3	16.3	23.0	22.4	32.0	585	7.2	13.4	24.7	23.0	31.7	275	5.5	18.9	21.5	21.9	32.2	310
Degree/other	1.5	3.8	12.1	25.0	57.5	589	0.7	3.0	13.9	19.6	62.8	288	2.2	4.6	10.6	29.9	52.7	301

EMPLOYMENT STATUS

Nearly 62% of the workforce were engaged in the private sector, 21% in Government, and 17% were self-employed. Almost equal proportions of males (61%) and females (63%) were employed in the private sector. About 24% of females depended on the Government for their employment, whilst 12% were self-employed. In the case of males, 22% were self-employed, whilst 17% were employed by the Government (Tables 6-18 and 6-19).

Regional Differences

As Table 6-18 highlights, type of employment varied by region. In the urbanized, developed area of New Providence and Grand Bahama (Region 1), 64% of workers were private employees. In the less developed regions of Exuma and Long Island (Region 3) and Other Family Islands (Region 4), the percentage of private employees, though the largest group, was substantially smaller (less than 50%). In these regions, self-employed persons accounted for nearly 33% of workers; a larger share than that of Government employees. Interestingly, the combination of self-employed persons and Government employees outnumbered private employees. This finding reflects the absence of a corporate sector, which is heavily concentrated in Region 1. As mentioned earlier, self-employment in Regions 3 and 4 tends to consist of small-scale businesses and other informal-sector activities.

Moreover, in Regions 2, 3, and 4, females relied on Government employment far more than did males. This phenomenon was most pronounced in Region 4, where 39% of female workers versus 18% of male workers, were Government employees.

Quintile Comparisons

Workers in the lowest quintiles (1 and 2) depended more heavily on private-sector employment than those in the higher quintiles; this dependency ranged from 71% in quintile 1 to 53% in quintile 5. Persons in the latter quintile were more equally distributed throughout the employment groups; 53% were private employees, and an almost equal share were self-employed (24%) or Government-employed (22%).

When self-employment was examined more closely it was noted that the proportion of persons varied little within the three lowest quintiles; however above quintile 3, the proportion jumped by 4 percentage points and again by 7 percentage points to quintile 5, suggesting two distinct groups of self-employed persons: a poorer group (quintiles 1, 2, and 3) and a wealthier group (quintiles 4 and 5). One possible explanation is that poor self-employed persons were likely engaged in informal-sector activities, whilst the work of wealthier self-employed persons was more formalized. Data in Table 6-19 lends support to this suggestion; for example, within the poorer quintiles, the majority of self-employed persons were craft workers (29%), service and sales workers (27%), and agricultural workers (14%). In the two wealthier quintiles, they were craft workers (26%), managers (21%), and professionals (16%).

When a sex perspective is added to the analysis of self-employment, the Survey found that self-employed males enjoyed a standard of living that far exceeded that of their female counterparts (Table 6-18). Within the poorest quintile, self-employed females, as a proportion of total female workers, accounted for 12%; in the wealthiest quintile, the proportion was slightly higher, at 15%. The proportion of self-employed males was 11% in the poorest quintile; however, their share in the wealthiest quintile was substantially higher, at 32%. Females accounted for approximately 34% of the total self-employed persons, however they represented 39% of the self-employed in the three poorer quintiles and only 29% in the two two wealthier quintiles. The data further showed that 45% of poorer, self-employed females were service and sales workers (Table 2-19).

EMPLOYED PERSONS BY INDUSTRY

Some 30% of employed persons were engaged in community, social, and personal services. This group not only comprised the largest industrial group; it was also the largest employer of women (40%). For men, the largest proportion (28%) worked in construction, the second largest industry, which accounted for 15% of all workers (Table 6-20).

Regional Differences

Across all regions, a minimum of 25% of workers was engaged in "community, social, and personal services." Variation in industrial distribution across regions was largely confined to two industries: 1) "agriculture, hunting, forestry, and fishing" and 2) "financing, insurance, real estate, and other business services." Predictably, a significantly larger proportion of workers in Region 1—the

TABLE 6-18 Primary Employment Status of Employed Persons, by Sex within Regions and Quintiles

	All Bahamas			Region 1			Region 2			Region 3			Region 4		
Status	**Total**	**M**	**F**	**Total**	**M**	**F**	**Total**	**M**	**F**	**Total**	**M**	**F**	**Total**	**M**	**F**
Employee- Govt./ Govt. corp.	20.7	17.2	24.4	20.8	17.8	23.9	18.2	13.4	24.8	20.6	12.3	31.2	26.9	18.4	39.2
Employee- private	61.9	61.0	62.8	63.9	63.0	64.9	51.9	52.3	51.3	47.6	48.0	47.1	40.1	43.1	35.9
Self-employed	16.8	21.6	11.7	14.8	19.2	10.2	28.5	33.3	22.0	30.1	37.6	20.4	32.4	38.6	23.4
Unpaid family worker	0.6	0.1	1.1	0.5	0.0	1.0	1.4	2.0	1.9	1.8	2.2	1.4	0.6	0.0	1.5
N	3,466	1,866	1,600	1,908	970	938	892	512	380	328	185	143	338	199	139

	Quintile 1			Quintile 2			Quintile 3			Quintile 4			Quintile 5		
Status	**Total**	**M**	**F**	**Total**	**M**	**F**	**Total**	**M**	**F**	**Total**	**M**	**F**	**Total**	**M**	**F**
Employee- Govt./ Govt. corp.	17.2	12.0	22.7	14.6	12.0	17.4	23.1	18.6	27.6	22.8	19.6	26.2	22.4	19.5	25.6
Employee- private	71.2	77.5	64.6	72.1	71.0	73.4	63.3	66.4	60.2	59.6	56.5	63.0	52.5	48.2	57.4
Self-employed	11.4	10.5	12.3	12.8	16.9	8.3	13.5	14.8	12.1	17.3	23.8	10.1	23.8	32.1	14.5
Unpaid family worker	0.2	0.0	0.4	0.5	0.1	0.9	0.1	0.2	0.1	0.4	0.1	0.7	1.3	0.2	2.4
N	559	293	266	626	331	295	655	345	310	746	405	341	838	471	367

TABLE 6-19 Occupational Distribution of Self-employed Persons, by Region and Sex within Quintile

					Quintile					
	Region				1, 2, & 3			4 & 5		
Primary occupation	Total	1	2	3 & 4	Total	Male	Female	Total	Male	Female
Legislators, senior officials, & managers	16.6	16.6	19.7	11.4	8.6	5.3	12.9	21.3	19.5	25.5
Professionas, technicians, & associate professional	13.2	15.5	6.8	2.8	9.0	5.6	13.3	15.6	14.0	19.5
Clerks	0.4	0.4	0.5	1.2	0.1	0.0	0.3	0.6	0.7	0.4
Service workers & shop and market sales workers	19.5	20.6	13.9	19.6	26.8	13.0	44.6	15.4	6.9	35.9
Skilled agricultural & fishery workers	9.1	3.5	27.9	27.7	13.8	23.0	1.8	6.3	8.4	1.3
Craft & related trade workers	27.1	28.5	20.0	26.8	28.6	38.7	15.7	26.5	33.7	9.0
Plant & machine operators & assemblers	7.5	8.3	6.0	2.8	3.8	4.5	3.0	9.3	12.0	2.9
Elementary occupations	6.6	6.7	5.3	7.7	9.3	9.9	8.4	5.0	4.8	5.5
N	599	234	198	167	267	162	105	327	231	96

TABLE 6-20 Primary Industry of Employed Persons, by Sex

Primary industry	Total	Sex		Sex distribution		*N*
		Male	Female	Male	Female	
Agriculture, hunting, forestry, & fishing	3.7	6.2	1.0	87.6	12.4	252
Mining, quarrying, electricity, gas & water	0.2	0.4	0.1	83.9	16.1	26
Manufacturing	4.6	4.9	4.2	56.4	43.6	138
Construction	15.4	27.9	1.8	94.3	5.7	564
Wholesale & retail	14.4	12.2	16.8	44.1	55.9	496
Hotels & restaurants	14.6	10.4	19.1	37.3	62.7	525
Transport, storage & communication	6.4	8.6	4.0	70.0	30.0	213
Financing, insurance, real estate & other business services	10.6	8.1	13.2	40.0	60.0	270
Community, social & personal services	30.2	21.3	39.9	36.8	63.2	1,006
N	3,490	1,882	1,608	—	—	—

country's major business centre—was engaged in "financing, insurance, real estate, and other business services" (12%), a sharp contrast to less than 2% of Region 4 workers so engaged. With regard to "agriculture, hunting, forestry, and fishing," significantly larger employed shares were found in the other regions. For example, this industry category accounted for only 2% of employed persons in Region 1, compared to 15% of those employed in Region 2 (Table 6-21).

Quintile Comparisons

Industrial grouping was not significant as a determinant of economic differences, as the pattern was similar for most consumption quintiles. This is an expected finding, given that industries usually engage a wide spectrum of occupations; these, not the industry itself, affect the well-being of workers. Nonetheless, slight differences were found. For example, 16% of persons in the highest quintile worked in "financing and business" compared to 5% in the lowest quintile; while 19% of those in the lowest quintile worked in "construction," compared to 13% of those in the highest.

EMPLOYED PERSONS BY OCCUPATION

About 20% of all workers were "service workers & shop and market sales workers;" this was the main occupational group for women (26%) and the second largest for men (15%). "Elementary occupations" (e.g., maids or labourers) was the third largest occupational group and was also third for both males and females. Indeed, it was the only group in which males and females were almost equally represented (Table 6-22).

Regional Differences

"Skilled agricultural & fishery workers" was the smallest occupational group; however, in this group, differences between Region 1 and the other three regions were apparent. In Region 1, only 2% of workers performed in this capacity, whilst at least 12% did so in all other regions (Table 6-23).

In Region 2–by far the country's most agrarian region–13% of employed persons worked in the "skilled agricultural & fishery workers" category; additionally, Region 2 accounted for 35% of total workers in this category. Thus, this category was over-represented in Region 2, where

TABLE 6-21 Primary Industry of Employed Persons, within Region and Quintile

		Region				Quintile				
Primary industry	**Total**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**5**
Agriculture, hunting, forestry, & fishing	3.7	2.0	14.5	13.8	12.3	5.7	6.0	3.2	3.4	2.2
Mining, quarrying, electricity, gas, & water	0.2	0.1	0	0	7.0	0.6	0.4	0.3	0.0	0.0
Manufacturing	4.6	4.8	2.8	3.1	3.3	6.1	4.3	3.6	5.0	4.6
Construction	15.4	15.0	18.0	18.1	16.7	19.4	19.4	14.0	14.3	13.0
Wholesale & retail	14.4	14.6	12.0	16.9	12.6	14.1	15.3	13.7	12.6	15.7
Hotels & restaurants	14.6	14.5	14.8	14.6	16.4	16.7	14.7	17.8	12.1	13.5
Transport, storage, & communication	6.4	6.6	5.9	6.1	4.4	3.2	4.7	6.7	8.1	7.5
Financing, insurance, real estate, & other business services	10.6	11.7	3.7	2.7	1.5	4.9	7.2	6.9	12.5	15.8
Community, social, & personal services	30.2	30.7	28.2	24.6	25.8	29.4	28.0	33.9	32.0	27.7
N	3,490	1,918	901	332	339	559	634	659	749	841

TABLE 6-22 Primary Occupation of Employed Persons, by Sex

				Sex distribution		
Primary occupation	**Total**	**Male**	**Female**	**Male**	**Female**	***N***
Legislators, senior officials, & managers	8.6	9.6	7.4	58.7	41.3	282
Professionals	9.6	7.9	11.4	42.9	57.1	278
Technicians & associated professionals	11.3	8.3	14.6	38.2	61.8	316
Clerks	10.9	2.7	19.9	12.7	87.3	358
Service workers & shop and market sales workers	20.3	14.8	26.3	38.1	61.9	676
Skilled agricultural and fishery workers	3.5	6.2	0.5	93.6	6.4	232
Craft & related trade workers	16.6	28.5	3.6	89.5	10.5	593
Plant & machine operators & assemblers	4.9	8.4	1.0	89.7	10.3	169
Elementary occupations	14.4	13.6	15.2	49.5	50.5	581
N	3,485	1,878	1,607	—	—	—

TABLE 6-23 Primary Occupation of Employed Persons, by Region and Quintile

		Region				Quintile				
Primary occupation	**Total**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**5**
Legislators, senior officials, & managers	8.6	8.6	8.7	8.8	6.1	2.6	2.3	3.8	7.5	18.7
Professionals	9.6	10.1	7.0	4.9	4.5	0.9	3.4	8.3	9.8	17.6
Technicians & associate professionals	11.3	12.3	5.3	5.1	6.3	5.3	8.1	10.0	13.6	14.9
Clerks	10.9	11.2	9.6	6.0	8.3	6.1	9.0	16.2	12.0	9.1
Service workers & shop and market sales workers	20.3	20.8	17.2	19.5	15.1	21.2	23.2	24.3	20.7	16.0
Skilled agricultural & fishery workers	3.5	2.0	12.9	12.4	12.5	4.1	6.5	2.6	4.5	1.3
Craft & related trade workers	16.6	16.5	16.3	18.8	19.0	18.8	22.4	18.3	15.9	11.5
Plant & machine operators & assemblers	4.9	4.9	4.3	5.9	4.6	4.7	5.2	4.8	6.1	4.0
Elementary occupations	14.4	13.6	18.8	18.7	23.5	36.3	20.0	11.7	9.8	6.9
N	3,485	1,916	902	330	337	558	632	659	745	842

the total number of employed persons accounted for only 9% of the nation's workers. By contrast, Region 1, embracing 86% of total workers, accounted for only 49% of the "skilled agricultural & fishery workers" category. However, Region 1 clearly dominated in occupations associated with more developed, urban centres; for example, "technicians & associated professionals" accounted for 93% of total workers in this group. Within this region, the proportion of workers who fell into this category was twice that of any of the other regions (Tables 6-23 and 6-24).

TABLE 6-24 Primary Occupation of Employed Persons, Across Regions and Quintiles

	Region					Quintile					
Primary occupation	**1**	**2**	**3**	**4**	***N***	**1**	**2**	**3**	**4**	**5**	***N***
Legislators, senior officials, & managers	86.6	9.6	2.0	1.8	282	3.9	4.7	8.5	19.6	63.4	282
Professionals	91.0	6.9	1.0	1.2	278	1.2	6.1	16.7	22.8	53.2	278
Technicians & associate professionals	93.3	4.4	0.9	1.4	316	5.9	12.4	16.9	26.8	38.0	316
Clerks	88.7	8.3	1.1	1.9	358	7.2	14.6	28.7	24.9	24.5	358
Service workers & shop and market sales workers	88.3	8.0	1.9	1.8	676	13.1	19.6	22.5	22.4	22.4	676
Skilled agricultural & fishery workers	49.1	35.1	6.9	8.9	232	14.7	32.1	14.1	28.6	10.4	232
Craft & related trade workers	85.6	9.3	2.2	2.8	593	14.4	23.5	21.0	21.3	19.9	593
Plant & machine operators & assemblers	87.1	8.3	2.3	2.3	169	12.2	18.2	18.7	27.5	23.3	169
Elementary occupations	81.1	12.32	2.5	4.1	581	31.8	24.0	15.4	15.1	13.7	581

Quintile Comparisons

As Tables 6-23 and 6-24 suggest, stark occupational disparities by quintile were found. Persons from the poorest quintile were more likely to be employed as "elementary workers" (36%) or "service workers & shop and market sales workers" (21%). Few worked as "legislators, senior officials, & managers" (3%) or "professionals" (1%)—occupations associated with lucrative financial opportunities and more affluent life styles. By contrast, a significant proportion of persons from the wealthiest quintile were "legislators, senior officials, & managers" (19%) or "professionals" (18%). They were less likely to be "elementary workers" (7%), although a fair proportion was "service workers & shop and market sales workers" (16%). These disparities are further crystallized, upon further examination of the data, which shows that employed persons in the highest quintile accounted for 63% of all "legislators, senior officials, & managers" (Table 6-24). The proportion of this category in quintile 5 far exceeded that of any other consumption quintile (it tripled the proportion in quintile 4 and eclipsed the 4% found in quintile 1).

MODE OF TRANSPORT

Most workers (73%) traveled to their respective jobs in private vehicles (Table 6-25). Substantial disparities by region and quintile were found in the mode of transport used to commute to work. Use of a private vehicle was far more prevalent in the more developed area of New Providence and Grand Bahama (74%). In the more rural Region 4, the proportion using private vehicles was considerably less (49%). The share of workers who cycled or walked was significantly larger in Region 4 (29%)—nearly six times that of Region 1 (5%) (see chapter 7).

The second most common method of worker transport was the jitney. This bus system, confined mainly to Region 1, was used by 11% of workers in that area.

With regard to consumption expenditure quintile, use of private vehicles to commute to work was well above the national average in the two wealthiest groups (82% in each group). The proportion was substantially lower in the poorest quintile (49%), which relied more heavily on the jitney (23%). Only 5% of workers in the wealthiest quintile used the jitney.

TIME SPENT EN ROUTE

The vast majority of Bahamian workers (85%) reached their workplace within half an hour. For workers that required more than half an hour, the proportion was highest in Region 1 (15%) and lowest in Region 4 (6%). Region 1 was heavily weighted by the small island of New

TABLE 6-25 Transport Method and Time for Employed Persons 15 Years and Older, by Region and Quintile

Transport method or time traveled	All Bahamas	Region				Quintile				
		1	2	3	4	1	2	3	4	5
Mode of transport										
Walk/bicycle	7.1	4.9	18.8	19.1	29.1	16.4	9.5	7.5	4.9	3.0
Private vehicle	72.5	74.5	63.2	61.4	48.8	48.6	62.6	70.3	82.6	82.1
Jitney	9.9	11.4	0.4	0.6	0.9	22.4	16.0	9.7	5.1	4.7
Taxi/private bus	4.3	4.3	3.8	1.8	8.2	6.2	6.8	6.5	2.2	2.4
Boat/ferry	1.1	0.2	6.7	8.3	4.4	1.6	1.6	1.1	1.2	0.7
None needed	5.1	4.7	7.0	8.8	8.6	4.9	3.6	4.9	4.0	7.1
N	3,487	1,917	902	330	338	559	632	659	746	842
Minutes traveled to activity										
0–10	30.8	26.2	59.1	54.9	59.2	30.1	24.1	30.3	28.4	36.8
11–30	55.6	59.1	33.0	38.2	35.0	57.1	60.9	58.1	57.8	48.6
31–60	12.6	13.8	6.2	5.9	3.9	11.7	13.9	11.4	13.4	12.7
61 or more	1.0	1.0	1.6	1.0	1.8	1.1	1.2	0.2	0.4	1.9
N	3,310	1,807	869	314	320	527	604	629	704	802

Providence, where the amount of time taken to reach work was more likely associated with traffic congestion than distance. The situation was likely reversed outside Region 1 (Table 6-25).

HOURS WORKED

Employed persons worked an average of 43 hours per week. Across all regions and quintiles, males worked longer days than did females, with averages of 46 and 41 hours, respectively. Younger persons (15–24 year-olds) and the elderly (persons 65 years and older) worked fewer hours than did all other age groups.

In Region 3, more than any other region, employees worked longer days (47); whilst the shortest work days (41) were found in Region 4. The average hours worked was directly related to the well-being of individuals; persons in the poorest quintile worked an average of 40 hours, whilst those in the wealthiest quintile worked 45. Those engaged in "elementary occupations," associated with the poorest quintile, worked 39 hours; by contrast, those employed as "legislators, senior officials, & managers," associated with the highest quintile, worked an average of 52 hours per week (Tables 6-26 and 6-27).

TABLE 6-26 Mean Weekly Hours in Primary Activity, by Selected Demographic Characteristics

Characteristic	Total	Male	Female
All individuals	43.4	45.9	40.9
Household head	45.0	47.2	40.8
Region			
1	43.6	45.8	41.3
2	42.0	45.0	38.0
3	46.6	53.8	37.3
4	41.3	44.1	37.4
Quintile			
1	40.1	40.8	39.3
2	41.0	42.5	39.4
3	43.7	46.3	41.2
4	45.4	48.8	42.1
5	44.9	47.9	41.6
Age group			
15–24	41.0	43.0	38.7
25–44	44.5	47.0	42.0
45–64	43.3	46.0	40.5
65 and older	36.0	40.2	29.7
Education completed			
No schooling	38.4	37.2	40.8
Primary school	42.0	43.9	39.6
High school	43.6	45.5	41.4
College/university	45.3	50.4	41.7
Technical/vocational	45.5	49.8	37.7

CONCLUSIONS AND POLICY IMPLICATIONS

The picture that emerges from this analysis is a country of extreme worker inequalities, both across and within regions. Because of Region 1's economic structure, the socioeconomic status of its workers outstripped that of all other regions. Clearly, Region 1 workers' level of education and academic qualifications require improvement; nonetheless, they still surpassed those of the other regions. The level and type of labour-force participation of Region 1 workers also surpassed those of the other regions. This resulted directly from the large economies of scale enjoyed in Region 1: banking, industrial centre, and seat of Government. Ironically, although Region 1 workers were generally better off than those in the other regions, inequalities within the Region were more extreme.

The other three regions, characterized by small economies of scale, were more rural. Self-employment featured prominently amongst most workers in the lower consumption quintiles. Many were engaged in informal activities, including subsistence farming and fishing. A significant proportion had a high-school education but lacked academic qualification or training. Many others were engaged in various "elementary occupations," which accounted for as much as 24% of employment (Region 4).

With regard to overall living standard, low levels of academic achievement typified workers in the two lowest quintiles. In general, they were unskilled workers engaged as "elementary workers" or "service workers". Their rate of participation was lower than workers in the other quintiles; however, their unemployment rate was higher. A significant proportion walked to work or used the jitney. To safeguard the jobs of poorer workers and to continue to service others in the community, policymakers must ensure that a well-organized, accessible transportation system is provided and maintained. Thus, these workers' heavy reliance on the jitney is an issue that planners must seriously address.

Workers in quintiles 4 and 5 had the lowest unemployment rates, whilst their level and nature of participation in the labour force were higher. These quintiles had the majority of "legislators, senior officials, & managers,"

TABLE 6-27 Mean Weekly Hours in Primary Occupation and Industry, by Sex

Occupation or industry	Total	Male	Female
Primary Occupation			
Legislator, senior officials, & managers	51.9	52.4	51.2
Professionals	42.0	48.7	37.2
Technicians & associate professionals	42.2	44.8	40.7
Clerks	41.5	50.7	40.3
Service workers & shop and market sales workers	42.9	45.0	41.6
Skilled agricultural & fishery workers	45.5	46.0	39.7
Craft & related trade workers	44.7	44.6	45.8
Plant & machine operators & assemblers	49.2	50.3	40.0
Elementary occupations	39.1	40.7	37.6
Primary Industry			
Agriculture, hunting, forestry, & fishing	46.4	47.7	37.8
Mining, quarrying, & electricity, gas, & water	43.3	43.6	41.6
Manufacturing	46.5	48.6	43.8
Construction	43.3	44.0	31.3
Wholesale & retail	45.0	48.6	42.3
Hotels & restaurants	42.4	43.7	41.7
Transport, storage, & communication	47.3	49.6	41.2
Financing, insurance, real estate, & other business services	43.7	46.0	42.3
Community, social, & personal services	41.7	45.3	39.6
N	3,024	1,600	1,424

as well as "professionals." By a wide margin, they were better educated than workers in the other groups. They worked longer hours, and the vast majority traveled to work in private vehicles. Quintile 3, the middle group, to varying degrees, exhibited characteristics found in the higher and lower quintiles.

The underlying thrust of the Employment Act 2001 was that workers throughout the country were entitled to equal employment opportunity and treatment.[6] As BLCS data indicate, this goal remains far from being realized; it will be difficult, if not impossible, to accomplish in the absence of sustainable economic growth and investment, particularly in areas outside Region 1.

As Survey results show, employment opportunities in Regions 2, 3, and 4 are more limited; hence, the pressing need to equip workers to capitalize on existing opportunities and prepare for future ones. Self-employment in these regions is largely subsistence level; thus, capacities must be strengthened, and workers must be equipped to create employment. Small-scale farmers, fishermen, and entrepreneurs, with special emphasis on females, require increased technical and financial support to improve their productivity. A range of initiatives—ongoing training, marketing strategies, and greater accessibility to credit—must be intensified.

The major thrust of all initiatives must be improving workers' educational level, as education is perhaps the major vehicle for empowerment. The BLCS demonstrates the serious imbalance in the Bahamian educational system; to reiterate, too many people are completing school without any qualification. BLCS data convincingly show that educational attainment of the working population has not yet reached acceptable levels; the data further illustrate that education to the tertiary level is needed to move into the highest quintile. Therefore, actions should be directed toward ensuring that tertiary-level education is accessible

[6] The Employment Act 2001 established standardized provisions for employees, including minimum number of working hours, wages, and child employment (DOL 2001).

and affordable to all. Special emphasis must be placed on expanding educational and training opportunities outside Region 1 through distance education and related initiatives (see chapter 5). In this process, consideration should be given to tailoring the educational programme to meeting the unique needs of these communities. There is a definite need for further research in this area.

Finally, the above-cited initiatives are likely to affect unattached youths, who represent 20% of all youths; of this percentage, 26% are from the poorest quintile. Clearly, these statistics have implications for urgent policy action; nonetheless, the phenomenon of unattached youths must also be treated as a special project requiring further study.

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CHAPTER 7

Community Services and Social Programmes: Accessibility Analysis

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Because The Bahamas is an archipelago, it is difficult to develop community services and social programmes to serve everyone. Uneven distribution of population and transportation—within and between islands—exacerbates the difficulty. Across the four regions, average population density varies from 423 persons per square mile (sq. mi.) in New Providence and Grand Bahama; to 22.3 in Exuma and Long island; to 9.1 in Abaco, Andros, and Eleuthera;[1] to only 7.8 in other Family Islands. Ragged Island's population of 72 is only about .034% that of New Providence, whose population numbers 210,832.[2] In terms of transportation infrastructure, Andros has only 0.034 miles (mi.) of main road per sq. mi., compared to 8.75 for New Providence.

Despite such disparities, residents of all islands have similar expectations with regard to access to community services and social programmes. Thus, the challenge for policymakers is this: How can the Commonwealth's resources be used most equitably and efficiently to ensure broadest access by communities and avoid marginalizing any particular ones. This chapter seeks to answer this question by analysing accessibility–defined in terms of both availability and affordability of services and programmes—by households in each consumption group and region.

ACCESS TO COMMUNITY SERVICES

Given the distance between the Family Islands and the two most developed and populated centres—New Providence and Grand Bahama—it is reasonable to expect that families who live in sparsely populated areas, particularly on the smaller Family Islands, will pay more to access community services.[3] The high cost of travel to community services centres puts Family

[1] Excluding Andros, Abaco and Eleuthera have an average population density of 24.9 persons per sq. mi. (Andros has an average of only 3.3).

[2] 2000 estimate.

[3] For example, Inagua is about 350 mi. from New Providence.

BOX 7-1 Making the Case for Equitable Access: Hospital Facilities

To date, The Government of the Bahamas has built hospitals on only the two most populated islands—New Providence and Grand Bahama—and clinics on other islands. Whilst such a strategy permits the most cost-effective expenditure of public money, it adds to the financial burden of Family Island residents, who must use more expensive air or sea transport to access hospital care. In emergency cases, it may even prevent access to timely care. Notably, more than twice as many lower-expenditure residents (26%) as higher-expenditure ones (12%) must travel over water to reach a hospital. However, since Family Island populations have declined in recent years, providing facilities on those islands may be difficult to justify.

Islanders at a disadvantage and means that poorer households may be deprived access to services (Box 7-1).

Household Access: Distance to Nearest Facility

Survey data collected on access to community services referred to the facility nearest the household, not necessarily the facility a household elected to use. Some households might have been considered disadvantaged if they had to use the nearest—but not what they perceived as the best—facility and thus had less choice than other households (see Appendix; Tables 7-A1, 7-A5, 7-A9, 7-A13, and 7-A17).

The study found that, overall, more than 80% of households were located within two miles of food market/grocery stores, Government administration complexes, health clinics/doctors' offices, police stations, post offices, and primary schools. This proximity reflects 1) the small size of the islands and 2) that clinics and other facilities are spread throughout the islands. Only with regard to access to banking facilities, hospitals, and secondary schools were there consistent regional differences. Exuma and Long Island residents generally had farther to travel to reach many facilities (Table 7-1).

Few clear differences are associated with household expenditures. That the highest-expenditure households must

TABLE 7-1 Median Household Distance to Facilities, by Region

Facility type	Bahamas overall	Median distance (mi.)			
		Region			
		1	2	3	4
Bank/banking services facility	1.6	1.6	1.7	7.1	5.8
Food market/grocery store	0.8	0.8	0.6	0.9	0.7
Govt. admin. complex	4.8	6.0[1]	1.5	7.8	1.4
Health clinic/doctor's office	1.0	1.0	0.9	1.3	1.5
Hospital	6.7	5.7	OAI[2]	OAI[2]	OAI[2]
Mail boat[3]	6.8	6.9	4.3	9.8	3.8
Police station	1.4	1.4	1.5	5.1	1.2
Post office	1.6	1.6	1.0	1.9	1.2
Primary school	1.0	1.0	1.0	1.5	1.0
Secondary school	1.6	1.5	4.5	6.8	1.4

[1] Refers to Grand Bahama only.

[2] On another island.

[3] Provides freight and passenger service throughout the archipelago.

TABLE 7-2 Median Distance to Facilities, by Quintile

Facility type	Median distance (mi.) Quintile 1	2	3	4	5
Bank/banking services	1.5	1.7	1.5	1.7	1.5
Food market/grocery store	0.7	0.8	0.7	0.8	0.8
Govt. admin. Complex	1.9	4.5	4.8	5.1	5.3
Health clinic/Doctor's office	0.9	1.0	0.9	1.0	1.2
Hospital	7.2	7.1	6.6	7.0	6.3
Mail boat*	6.2	6.5	6.7	6.8	7.1
Police station	1.3	1.5	1.3	1.3	1.4
Post office	1.6	1.7	1.5	1.5	1.5
Primary school	0.9	1.0	0.9	1.0	1.2
Secondary school	1.8	1.6	1.4	1.5	1.6

* See definition in Table 7-1.

travel the farthest median distance to access Government administration complexes probably reflects the choice of higher-expenditure New Providence and Grand Bahama residents to live on the outskirts of town (Table 7-2).

Overall, 95% of households were within 10 miles of a secondary school. Of the four regions, only Region 2 (Abaco, Andros, and Eleuthera) had access to a school on another island (3.4% of households). Moreover, students in poorer households were more likely than wealthier students to travel more than 10 miles to school.

Similarly, 95% of households were within 10 miles of a banking facility.[4] In Exuma and Long Island (Region 3) and Other Family Islands (Region 4), formal banking facilities were limited but not completely inaccessible, even if bank buildings were lacking; in Region 3, 38% of households had to travel more than 10 miles to reach a banking facility.

Transport to Nearest Facility

The car was the most popular mode of transport and ownership was widespread. Nearly 73% of all Bahamian households owned motor vehicles, ranging from more than 39% of the lowest-expenditure households to more than 84% of the highest-expenditure ones (Table 7-3). Outside New Providence and Grand Bahama (Region 1), where public transport was less available, transport poverty may have been higher (see Appendix; Tables 7-A2, 7A6, 7-A10, 7-A14, and 7-A18).

General bus services were limited to New Providence and Grand Bahama (except for school buses), whilst taxis were available across all islands. Thus, use of public transport was greater in New Providence and Grand Bahama, except for accessing hospitals—overall, 66% of households used a car to access hospital facilities; however, marked inter-island differences resulted from location of facilities limited to New Providence and Grand Bahama. On other islands, walking was more prevalent, which may have reflected lower levels of car ownership and lack of public transport.

Tables 7-4A and B, respectively, show the percentage of households who walked or used public transport to access facilities, by region and quintile. Walking and bus travel were more common in low-expenditure groups (high-expenditure households, who had the highest levels of car ownership, used cars the most; low-expenditure households used them the least). Taxis were little used, but slightly more by lower-expenditure groups. Households from all groups used public transport to access hospitals; this resulted from the need for residents from islands other than New Providence and Grand Bahama to travel over water to reach hospitals on these two islands.

TABLE 7-3 Household Ownership of Cars, by Region and Quintile

Region or quintile	% households
Region	
1	74.94
2	59.33
3	61.58
4	52.94
All Bahamas	72.55
Quintile	
1	39.45
2	61.21
3	72.73
4	79.83
5	84.27

[4] The term banking facility can refer to a physical bank that offers a full range of services or places that allow money to be deposited and withdrawn from accounts or cheques cashed.

TABLE 7-4A Households' Mode of Transport (%) To Access Facilities, by Region

Facility type	Walking					Public transport[1]				
	All Bahamas	Region				All Bahamas	Region			
		1	2	3	4		1	2	3	4
Bank/bank services facility	12	10	20	8	24	10	11	4	7	1
Food market/grocery store	22	18	48	30	40	6	6	1	1	1
Gov't. admin. complex	12	3[2]	24	12	22	10	16[2]	2	5	2
Health clinic/doctor's office	15	12	33	24	23	10	11	2	2	6
Hospital	4	4	0	0	0	30	17	100	100	100
Mail boat[3]	4	2	18	8	11	17	17	5	7	5
Police station	12	10	23	12	26	10	12	2	5	1
Post office	11	8	28	20	25	13	15	2	5	1
Primary school	20	18	32	25	29	7	8	6	3	3
Secondary school	13	13	18	6	34	12	12	18	10	6

[1] Includes jitney/bus; taxi; and boat, airplane, and other.

[2] Refers to Grand Bahama only.

[3] See definition in Table 7-1.

TABLE 7-4B Households' Mode of Transport (%) To Access Facilities, by Quintile

Facility type	Walking					Public transport[1]				
	Quintile					Quintile				
	1	2	3	4	5	1	2	3	4	5
Bank/bank services facility	32	15	11	6	6	24	17	11	8	5
Food market/grocery store	51	38	23	15	11	12	7	6	5	3
Gov't. admin. complex[2]	29	17	15	7	6	16	14	18	8	8
Health clinic/doctor's office	37	25	17	7	8	20	17	10	9	4
Hospital	7	6	3	2	3	59	45	30	25	17
Primary school	48	34	23	11	7	12	13	7	6	4
Police station	27	20	15	5	7	26	17	9	8	4
Post office	23	17	13	6	6	32	23	12	8	5
Primary school	48	34	23	11	7	12	13	7	6	4
Secondary school	28	24	15	8	7	20	20	12	9	6

[1] Includes jitney/bus; taxi; and boat, airplane, and other.

[2] Excludes New Providence.

Cost of Travel to Facility

Data on cost of travel were collected only for those households that did not own the mode of transport (usually car or motorcycle) used; thus, these costs referred only to the use of public transport or immediate, out-of-pocket travel expenses. Table 7-5 reflects access to private transport (generally motor vehicles) and the lack of bus services outside of New Providence and Grand Bahama. Further, in those islands without buses, more expensive public transport modes must be used. The net effect of these factors was that households outside of New Providence and Grand Bahama needed to spend more to access facilities than did households on New Providence and Grand Bahama. This, combined with the lower household expenditure groups on Family Islands, made travel proportionately more expensive for these households. Overall, transport costs in Exuma and Long Island were probably the most expensive in The Bahamas (see Appendix; Tables 7A-3, 7A-7, 7A-11, 7A-15, and 7A-19).

Notably, two recurring activities—grocery shopping and going to primary school—were relatively expensive journeys. These costs probably reflected the use of public transport, instead of private (car) or pedestrian modes of transport, for the bulk of the population, which resided in New Providence and Grand Bahama. The cost of travel to primary schools was greater in Region 1 than in the other regions, which made greater use of public transport. Conversely, travel to secondary schools in Regions 3 and 4 was up to six times more expensive than in Region 1 (Table 7-5).

Cost of travel to a hospital was some 24 times more expensive for the Other Family Islands, compared with New Providence and Grand Bahama. Thus, in some cases, lack of a facility on an island added greatly to household expenditure. Cost of travel to health clinics/doctors' offices was more expensive outside New Providence and Grand Bahama and as much as 15 times more expensive in Abaco, Andros, and Eleuthera.

Travel Time to Nearest Facility

Travel time depends on distance travelled, speed, and mode of transport. However, in more heavily populated areas, such as New Providence, travel time in relation to distance increases, especially at peak travel times—morning and evening rush hour—because of traffic congestion and speed limits. Thus, speed is a function of traffic congestion and speed limits. These factors undermine the assumed relationship between distance, speed, and mode of transport (see Appendix; Tables 7-A4, 7-A8, 7-A12, 7-A16, and 7-A20).

It should be noted that travel time data provided by survey respondents did not always include the time needed to complete the journey (e.g., from leaving home to arriving at the hospital). For example, some households only stated the flying time, which drastically reduced the overall time of the journey. Consequently, the study team re-

TABLE 7-5 Travel Costs to Access Selected Facilities, by Region

Facility type	Region				Average cost ($)
	1	2	3	4	
Bank/banking services facility	1.41	11.90	16.42	5.41	2.03
Food market/grocery store	4.48	8.54	10.49	10.00	4.64
Govt. admin. complex	1.52	13.24	14.82	6.19	3.24
Health clinic/doctor's office	1.47	22.86	15.82	6.93	2.29
Hospital	3.25	67.88	72.19	78.03	36.11
Mail boat*	2.57	19.01	22.02	7.89	3.40
Police station	2.85	5.25	17.08	4.47	3.03
Post office	2.30	10.85	11.48	3.00	2.50
Primary school	3.98	0.77	3.14	0.57	3.56
Secondary school	1.21	2.27	8.13	6.80	1.62

* See definition in Table 7-1.

TABLE 7-6 Summary of Median Distances and Time Required To Access Facilities, by Region

	Median time (min.)			
	Region			
Facility type	**1**	**2**	**3**	**4**
Bank/banking services facility	9.0	10.5	14.0	12.5
Food market/grocery store	8.0	8.0	9.0	8.0
Govt. admin. complex	9.0[1]	10.0	14.0	9.5
Health clinic/doctor's office	8.5	8.5	8.5	8.5
Hospital	16.5	>60	>60	>60
Mail boat[2]	21.5	12.0	17.5	9.5
Police station	8.5	9.0	12.0	9.0
Post office	9.0	8.5	10.0	9.0
Primary school	8.0	8.5	8.5	8.5
Secondary school	9.0	13.5	12.0	9.5

[1] Refers to Grand Bahama only.

[2] See definition in Table 7-1.

evaluated the amount of time associated with modes of transport, which is reflected in Table 7-6.

Only access to hospitals and mail boats involved journeys of more than 15 minutes for many people. Residents trying to reach a hospital from islands other than New Providence and Grand Bahama would have a travel time of more than one hour (Table 7-6). This finding raises a concern that, in emergency situations, such residents may not have sufficient time to access effective treatment. Whilst differences in travel time were negligible across expenditure groups for accessing most facilities, travel time to access hospital care was a clear exception: highest-expenditure groups' travel time was nearly 10 minutes less than that of lowest-expenditure groups (Table 7-7). Dis-

TABLE 7-7 Median Time to Access Facilities, by Quintile

	Median time (min.)				
	Quintile				
Facility type	**1**	**2**	**3**	**4**	**5**
Bank/banking services facility	10.9	10.3	9.3	9.4	8.6
Food market/grocery store	8.2	8.5	7.9	7.8	7.9
Govt. admin. Complex	10.8	10.0	9.2	9.8	8.8
Health clinic/doctor's office	9.4	9.0	8.7	8.3	8.0
Hospital	24.3	23.0	20.0	19.5	15.1
Mail boat*	22.4	21.5	20.2	21.2	18.5
Police station	9.8	9.2	8.5	8.1	7.9
Post office	10.1	10.1	9.1	8.8	8.5
Primary school	9.0	8.4	8.2	7.9	8.1
Secondary school	11.5	10.6	9.3	8.9	8.6

* See definition in Table 7-1.

tances to mail boats, which probably reflected the geography of the islands, varied; however, median travel time did not vary by more than about 12 minutes (Table 7-6).

Discussion: Cost of Access and Regional Geography

Not surprisingly, higher-expenditure households accessed facilities by car to a greater extent than did lower-expenditure ones. Despite the convenience that the car offered users, the median time to arrive at facilities was virtually the same across quintiles. Although higher-expenditure households typically lived on the outskirts of urban areas, the small size of the islands resulted in little difference in median distance to a particular facility across expenditure groups.

As Box 7-1 illustrates, access to hospital care presented the highest travel cost to residents living outside New Providence and Grand Bahama, which likely creates a financial burden for lower-expenditure groups. Access to food markets/grocery stores involved the second highest travel cost, which likely represents an important item in the budget of lower-expenditure households. Likewise, accessing health clinics/doctors' offices and schools involved significant expenses; in the case of primary schools, for example, daily household expenditures might need to cover several children. As Table 7-4b shows, use of walking and public transport as modes of accessing facilities was highest for low-expenditure household groups and lowest for high-expenditure groups.

Given the geography of the islands, it is clear that most facilities are well distributed throughout the Commonwealth. However, the cost of accessing facilities varies considerably. To reiterate, the most striking cost variation was in accessing hospitals on New Providence and Grand Bahama. Clearly, transport cost to a frequently used facility, such as schools and grocery stores, is a key component of the household budget.

Except in Other Family Islands, secondary-school children were less inclined to walk to school than their primary-school counterparts. Greater use of public transport in New Providence and Grand Bahama reflected the availability of public buses. Elsewhere, however, walking was used more often than public transport. This could reflect 1) willingness to make short trips by foot, 2) unavailability of public transport on the desired route, or 3) a decision to use the cheapest method of transport. In Other Family Islands, extensive use of public transport to reach a banking facility resulted from the limited number of full-service banks on those islands. The figures in Table 7-4a demonstrate the high level of private transport used for all purposes on all islands. For example, in New Providence and Grand Bahama, 18% of residents walked and 6% used public transport to reach a food market/grocery store; it can be assumed that the remaining 76% used an alternate means of transport, like a private motor vehicle.

Overall, Family Islanders face higher direct-transport costs than do households in New Providence and Grand Bahama. This fact, combined with their lower expenditure levels, indicates that the travel cost to access community services presents a greater burden for households living outside New Providence and Grand Bahama.

ACCESS TO SOCIAL PROGRAMMES

Like other governments, the Government of the Commonwealth of The Bahamas (GOBH) recognizes that certain members of society will always require assistance to enable them to provide for themselves and their dependents, particularly in terms of food and education. To this end, various social programmes are available to assist households in need. Programme assistance includes:[5]

- ***Burial.*** Burial assistance of $550 is provided to persons with little or no expenditure.
- ***Disability.*** Medically certified disabled persons awaiting approval from the National Insurance Board (or those who do not qualify) can claim a disability allowance as a short-term cash allowance. Single applicants can claim $100 per month. Applicants with one-to-three dependents can claim $130 per month, whilst those with four or more dependents can claim $140.
- ***Financial.*** Financial assistance is limited to persons with little or no expenditure. Applicants can receive allowances for clothing, footwear, school supplies, basic household items, and travel (boat or airplane).
- ***Food.*** The Food Assistance Programme provides long-term, monthly food coupons to eligible pensioners and invalids and short-term, monthly coupons to others. Single applicants receive $50. Applicants with dependents receive $60, $70, or $80, respectively, with one or two, three, or four or more

[5] Complete descriptions of these programmes are available from the Ministry of Social Services and Community Development.

dependents. To qualify, applicants must be either unemployed or classified as "low expenditure."[6]

- ***Housing repair***. Indigent senior citizens or invalids may receive a housing repair allowance of $1,000–2,000 (amounts cover minor repairs and include labour and materials).
- ***Med card***. Med-card service is provided to persons seeking medical attention who are unable to pay for some or all services. Claimants usually have disabilities or chronic medical conditions. Cards are usually issued for 6–12 months. Patients with chronic psychiatric conditions or terminal illnesses (including full-blown AIDS) can receive five-year cards. One-day cards can be issued to persons experiencing financial hardship. Cards do not cover services costing more than $300.
- ***Rent***. Rental assistance of $300 per year is available to applicants with little or no expenditure who are in arrears on their rent. This amount is paid directly to the landlord.
- ***School lunches***. The National School Lunch Programme (NSLP) is open to children 1) identified as undernourished and recommended by medical authorities, school administrators, or social workers; 2) whose parents (or other breadwinners) are unemployed; and 3) whose family earnings are less than the minimum wage or whose household expenditure is insufficient (Box 7-2).
- ***School uniforms***. The School Uniform Assistance Programme aims to ensure regular school attendance by children from lower-expenditure households. Available annually to single parents, two-parent families, and other caregivers experiencing economic

[6] As a general rule, persons earning less than $150 a week (about $7,800 per year) are classified as "low expenditure" and are thus eligible to apply for assistance; about 11% of Bahamian households may be eligible for these programmes.

BOX 7-2 National Lunch Programme Targets Neediest Schoolchildren

The National School Lunch Programme (NSLP), unlike other social programmes, is delivered directly to beneficiaries—that is, schoolchildren. Overall, about 45% of the households surveyed were aware of the Programme. In the lowest-expenditure households, 55% knew about it, compared to 31% in the highest-expenditure ones. Overall, 20% of households reported that their school participated in the Programme when children were 5–10 years old and 16% when children reached 11–16 years of age. The percentage of households in the highest expenditure group that reported school participation (for either child age group) was more than 10 times less than that reported by households in the lowest expenditure group (see Tables 7-A24 and 7-A25).

Survey results showed that younger schoolchildren were more likely than older ones to receive school lunches. No children from higher-expenditure households received them. At the time of the survey, 13% of lowest-expenditure households with children aged 3–10 received them, whilst 5% with children aged 11–18 did. A slightly higher percentage of boys than girls received the meals. A smaller percentage of children in both age groups in New Providence and Grand Bahama received them, compared with children in the other islands.

When schoolchildren aged 5–16 were considered, it was found that no child in the two highest-expenditure households received school lunches, and less than 1% of those in the middle-expenditure group received them. Across all islands and quintiles, 54% of schoolchildren received a snack/meal from the school canteen or vendor. In New Providence and Grand Bahama, children were more likely not to eat lunch, as were children in the highest-expenditure group, suggesting that, for these children, "skipping" lunch may have a psychological cause (Table 7-A26).

For the most part, children from the lower-expenditure groups and households outside New Providence and Grand Bahama participated, suggesting that the Programme has succeeded in its overall targeting. Nonetheless, data suggest that coverage may be low. This may reflect children's reluctance to be seen by their peers participating in the Programme, as this would indicate they came from lower-expenditure households (see chapter 5).

hardship, the Programme provides schoolchildren uniforms and footwear.

- ***Unemployment***. Since the survey was conducted, operation of the Unemployment Assistance Programme, as initially designed, has been discontinued. Individuals may now receive assistance with rent arrears and/or utility payments, and a limited number of persons may receive cash grants. When it was fully operational, the programme was available to Bahamian citizens who were unemployed but seeking gainful employment or citizens suffering genuine hardship. The monthly allowances were $104 for a single applicant. Applicants with dependents received $150, $196, $246, and $300, respectively, for one, two, three, or four or more dependents.
- ***Work***. The Work Assistance Programme provides temporary relief for unemployed persons. Participation is for not more than six months, but this limitation is not fixed. Employable out-of-work persons are paid temporarily to work in charitable organizations. Workers receive payment of $190 per week and $350 monthly.

Public Awareness of Programmes

Awareness of these social programmes was greatest in New Providence and Grand Bahama (Region 1), followed by Abaco, Andros, and Eleuthera (Region 2); Exuma and Long Island (Region 3); and finally Other Family Islands (Region 4). This suggests that awareness amongst household heads was greatest in the most densely populated islands, decreasing as populations became sparser (see Appendix, Table 7-A21).

The Food Assistance Programme was the most commonly known programme. Overall, 45% of the households surveyed had heard of it, compared to only 34% of respondents on Other Family Islands. Overall, about 33% of respondents knew of the Unemployment Assistance Programme and Disability Allowance; whilst the least known programmes were Burial and Rent Assistance. The programmes about which respondents displayed greatest variation in knowledge were Med Card, Work Assistance, Rent Assistance, and Burial Assistance.

Beneficiaries

Overall, 8.5% of respondents received medical benefits and 6% received Food Assistance. At the time of the survey, no respondents received Burial or Rent Assistance. Food Assistance was the most common benefit ever received, and some respondents had received all benefits at certain times. Less than 3% of respondents had ever applied for any specific benefit (see Appendix, Table 7-A22).

Beneficiaries of social programmes were predominantly female (71%). Fifty-one percent were heads of households, 13% were children, and 12% spouses. Nearly all recipients (98%) were Bahamian nationals. Sixty-nine percent were aged 35 or older, and 21% were teenagers or younger. While up to 3% of children received school lunches, only 1% received a school-uniform allowance (see chapter 5). As Table 7-A23 shows, the average monthly value of all social benefits received by a household was about $105; of this amount, $61 was for Food Assistance. However, the median monthly value of all assistance per household was the same as the mean monthly amount received for Food Assistance ($50); that is, the monthly benefit was nearly always equivalent to the food allowance. This finding clearly suggests that Food Assistance is the most important allowance.

Discussion

Females were more likely than males to claim social-programme benefits (males comprise 49% of the population, yet receive 29% of the benefits). Likewise, Bahamian nationals were more likely than other nationals to benefit (Bahamians constitute 87% of the population and 98% of beneficiaries). Older people were more likely than younger people to benefit. Those over 55 years of age comprise 11% of the population, but represent 39% of beneficiaries; whilst 0–14 year-olds represent 30% of the population and only 11% of beneficiaries. This finding may suggest that hardship is age-related and that older people may have inadequate income (due to limited pensions) and thus be in greater need of state aid. These observations suggest that this issue requires further research.

Given the eligibility criteria for social programmes, it is clear that only a subset of the population can claim assistance. Of the 10% of households that included persons with disabilities, 2.5% claimed the disability allowance, which suggests that more households with disabled members might be eligible to utilize the programme. Similarly, of the 12% of households with diabetic persons and 32% with hypertensive persons, the medical-card benefit could be claimed by more than 8% of households.

The monthly value of benefits is slightly more than $100 per household. As the most commonly received allowance is Food Assistance (varying from $50 to $80) and the average monthly amount received per household is

$50, Food Assistance is likely the most important allowance. Given that the household food-poverty line is $280 per month, the Food Assistance contribution represents about 18% of essential food expenditure. This may suggest that an increase in the food allowance currently offered would be beneficial.

Implications for Further Research

The above findings raise important issues with regard to providing the neediest Bahamians a social safety net. This study collected relatively little information on this group; the limited extent of the data is evidenced by the fact that regional and quintile breakdowns are not always given. As a result, a reliable, detailed analysis is not yet available to benefit policymakers. However, the chapter findings suggest that the topic of social programmes and their delivery would benefit from further research. Specific areas that need clarification include low rates of programme participation and, if confirmed, reasons for lack of programme utilization.

APPENDIX

TABLE 7-A1 Distance to Nearest Health Facility, by Region and Quintile

Distance (mi.)	All Bahamas	Region				Quintile				
		1	2	3	4	1	2	3	4	5
Health clinic/doctor's office										
Less than 1	48.8	48.4	56.2	39.6	38.7	53.9	49.6	54.8	50.6	42.9
1–2	32.4	34.5	19.1	30.6	24.0	28.2	30.8	29.6	31.2	36.4
3–10	17.8	16.5	22.4	24.9	33.6	15.7	19.2	14.8	17.5	19.7
11–20	0.6	0.3	1.7	4.3	3.2	2.0	0.3	0.7	0.4	0.4
21 or more	0.4	0.3	0.71	0.50	0.5	0.2	0.2	0.2	0.4	0.6
On another island										
N	1,873	951	532	200	190	287	306	330	403	527
Hospital										
Less than 1	6.6	7.9	0.0	0.0	0.0	7.5	5.8	5.8	6.4	7.1
1–2	12.7	15.1	0.0	0.0	0.0	15.0	11.9	16.1	8.8	12.4
3–10	58.1	69.2	0.0	0.0	0.0	45.5	55.4	54.9	60.7	64.4
11–20	5.8	6.9	0.0	0.0	0.0	5.2	6.6	5.6	8.6	4.0
21 or more	0.8	0.9	0.0	0.0	0.0	0.8	1.9	0.4	0.4	0.5
On another island	16.1	0.0	100.0	100.0	100.0	26.0	18.4	17.1	15.2	11.6
N	1,872	950	532	200	190	287	305	330	403	528

TABLE 7-A2 Means of Transportation to Nearest Health Facility, by Region and Quintile

Means of transportation	All Bahamas	Region				Quintile				
		1	2	3	4	1	2	3	4	5
Health clinic/doctor's office										
Walk	15.2	12.4	32.8	24.2	23.2	36.6	25.4	16.8	7.1	7.7
Bicycle/motorcycle	1.1	0.5	3.8	3.3	5.8	1.0	1.7	0.8	1.2	0.6
Private car	73.7	75.7	61.4	70.0	64.9	42.8	55.7	72.5	82.7	87.6
Jitney/bus	8.4	9.8	0.4	0.0	1.0	17.4	15.0	7.5	7.8	2.8
Taxi	1.7	1.5	1.7	2.4	5.1	2.2	2.2	2.3	1.1	1.3
Boat/airplane/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
N	1,863	947	526	200	190	287	303	329	402	523
Hospital										
Walk	3.6	4.3	0.0	0.0	0.0	6.6	5.8	3.3	2.0	3.0
Bicycle/motorcycle	0.5	0.6	0.0	0.0	0.0	0.0	1.1	0.5	0.5	0.2
Private car	65.8	78.3	0.0	0.0	0.0	32.8	48.9	66.7	72.6	80.3
Jitney/bus	11.5	13.7	0.0	0.0	0.0	28.1	21.7	10.0	9.0	3.4
Taxi	2.6	3.1	0.0	0.0	0.0	6.8	4.3	2.9	0.7	1.5
Boat/airplane/other	16.0	0.0	100.0	100.0	100.0	25.7	18.2	16.6	15.2	11.6
N	1,850	945	529	200	176	283	302	324	399	523

TABLE 7-A3 Average Cost of Travel to Health Facility*

Region of facility location	Health clinic/ doctor ($)	Hospital ($)
All Bahamas	2.3	36.1
1	1.5	3.2
2	22.9	67.9
3	15.8	72.2
4	6.9	78.0
N	153	1,073
Primary means of transport		
Jitney/bus	1.2	2.6
Taxi	7.6	6.4
Boat/airplane/other	—	70.1
N	142	1,066

* Data were collected only for households that did not use their own means of transportation.

TABLE 7-A4 Travel Time to Nearest Health Facility, by Region and Quintile*

Travel time (min.)	All Bahamas	Region				Quintile				
		1	2	3	4	1	2	3	4	5
Health clinic/doctor's office										
0–15	88.5	88.3	89.1	90.3	90.5	79.8	83.5	85.9	90.6	93.4
16–30	9.6	9.8	8.8	9.2	8.5	15.7	12.5	12.9	7.9	6.0
31–60	1.1	1.2	1.1	0.5	0.5	2.5	2.4	0.7	0.7	0.6
More than 60	0.8	0.8	1.0	0.0	0.5	2.0	1.6	0.5	0.9	0.1
N	1,873	952	531	200	190	287	305	330	403	528
Hospital										
0–15	38.9	45.0	9.4	0.0	0.0	28.5	27.4	36.6	36.5	49.8
16–30	36.8	41.0	18.6	0.0	11.4	32.8	39.5	37.6	41.7	34.0
31–60	18.5	12.6	40.5	78.8	63.9	27.3	25.9	19.7	16.4	12.8
More than 60	5.8	1.4	31.4	21.2	24.7	11.4	7.2	6.0	5.4	3.4
N	1,856	952	528	200	176	284	303	324	401	525

* Based on reported means of transportation.

TABLE 7-A5 Distance to Nearest School, by Region and Quintile

Distance (mi.)	All Bahamas	Region				Quintile				
		1	2	3	4	1	2	3	4	5
Primary school										
Less than 1	50.3	50.6	51.4	31.8	51.9	58.0	51.2	57.8	52.6	42.1
1–2	32.0	33.4	21.8	35.9	28.3	25.4	35.1	29.0	31.8	34.0
3–10	16.8	15.5	25.5	28.8	13.4	15.9	13.6	12.3	15.1	22.6
11–20	0.7	0.4	1.3	3.5	5.9	0.7	0.2	0.4	0.5	1.3
21 or more	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0
On another island	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
N	1,870	950	531	200	189	287	306	330	402	526
Secondary school										
Less than 1	31.9	32.6	30.2	6.4	39.8	28.9	31.7	38.3	32.9	29.0
1–2	32.6	35.6	14.3	12.7	30.4	27.6	30.2	32.1	33.8	34.6
3–10	30.3	30.4	26.4	57.0	21.6	35.8	32.0	23.7	28.5	32.2
11–20	3.4	1.4	15.8	19.3	2.0	4.4	4.8	3.7	3.3	2.2
21 or more	1.5	0.2	10.0	4.5	6.2	3.2	1.3	2.0	1.0	1.2
On another island	0.4	0.0	3.4	0.0	0.0	0.0	0.0	0.1	0.4	0.8
N	1,872	950	532	200	190	287	306	330	403	527

TABLE 7-A6 Means of Transportation to Nearest School

Means of transportation	All Bahamas	Region				Quintile				
		1	2	3	4	1	2	3	4	5
Primary school										
Walk	19.6	17.5	32.0	25.1	28.6	48.1	33.8	23.5	10.8	7.2
Bicycle/motorcycle	1.0	0.5	2.8	3.3	7.5	1.5	1.2	1.0	1.2	0.4
Private car	71.9	74.0	59.1	68.7	60.7	38.4	52.1	67.7	81.9	88.4
Jitney/bus	6.8	7.2	5.5	1.4	2.6	11.2	11.6	7.2	5.9	3.2
Taxi	0.7	0.7	0.6	1.5	0.5	0.8	1.3	0.6	0.2	0.8
Boat/airplane/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
N	1,862	945	528	200	189	287	305	329	400	523
Secondary school										
Walk	13.5	12.7	18.0	5.8	23.8	27.9	24.0	14.9	7.8	6.9
Bicycle/motorcycle	0.9	0.4	2.8	1.4	6.3	0.8	1.1	0.7	1.1	0.6
Private car	73.4	75.0	61.1	82.9	63.6	42.1	56.2	71.2	83.1	86.8
Jitney/bus	10.8	11.0	11.6	4.5	5.3	26.6	17.0	11.6	7.5	4.1
Taxi	1.0	0.8	1.4	5.4	1.1	2.0	1.8	0.7	0.2	0.9
Boat/airplane/other	0.6	0.0	5.1	0.0	0.0	0.5	0.0	0.8	0.4	0.8
N	1,873	948	534	200	191	287	305	330	403	527

TABLE 7-A7 Average Cost of Travel to School*

Region of facility location	Primary school ($)	Secondary school ($)
All Bahamas	3.6	1.6
1	4.0	1.2
2	0.8	2.3
3	3.1	8.1
4	0.6	6.8
N	133	253
Primary means of transport		
Jitney/bus	3.8	1.0
Taxi	2.8	6.9
Boat/airplane/other	—	5.6
N	122	253

* Data collected only for households that did not use own means of transportation.

TABLE 7-A8 Travel Time to Nearest School*

Travel time (min.)	All Bahamas	Region				Quintile				
		1	2	3	4	1	2	3	4	5
Primary school										
0–15	91.3	92.1	86.4	88.2	90.2	83.8	89.6	92.0	94.5	92.5
16–30	7.5	6.9	11.6	8.7	8.1	13.3	8.7	6.2	5.3	6.9
31–60	1.0	0.8	1.5	2.5	1.6	2.0	1.3	1.3	0.2	0.6
More than 60	0.2	0.2	0.6	0.5	0.0	0.9	0.4	0.5	0.0	0.0
N	1,873	952	532	200	189	288	306	330	403	527
Secondary school										
0–15	80.3	84.0	56.1	61.9	80.2	65.1	71.0	80.4	84.4	87.4
16–30	16.0	13.8	30.7	33.1	10.7	25.4	23.7	14.8	13.7	11.1
31–60	3.3	2.0	12.2	4.5	7.4	9.0	4.6	4.4	1.5	1.4
More than 60	0.4	0.3	1.0	0.5	1.7	0.6	0.8	0.4	0.4	0.1
N	1,873	951	532	200	190	288	306	330	403	527

* Based on reported means of transportation.

TABLE 7-A9 Distance to Nearest Post Office or Police Station

Distance to facility (mi.)	All Bahamas	Region				Quintile				
		1	2	3	4	1	2	3	4	5
Post office										
Less than 1	31.8	29.0	50.8	33.2	42.4	36.4	30.6	34.6	32.1	29.4
1–2	31.5	33.3	20.3	18.0	35.2	32.4	27.4	30.8	33.2	32.2
3–10	33.4	35.4	24.9	32.3	9.8	28.0	39.0	31.8	31.4	35.1
11–20	2.6	2.2	2.0	12.0	7.4	2.4	2.0	1.9	3.1	2.7
21 or more	0.6	0.2	2.0	4.5	5.4	0.9	0.9	0.9	0.3	0.6
On another island	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
N	1,870	949	531	200	190	287	305	329	403	527
Police station										
Less than 1	35.7	35.2	40.6	21.7	43.6	41.1	32.6	39.0	37.4	33.0
1–2	38.8	41.9	19.9	17.4	35.2	29.3	37.8	38.5	41.0	40.6
3–10	23.3	21.8	35.1	37.1	11.1	27.5	27.0	20.3	19.0	24.6
11–20	1.3	0.6	2.4	16.8	4.3	1.0	1.5	1.2	1.3	1.1
21 or more	1.0	0.5	2.0	7.1	6.0	1.1	1.1	1.1	1.2	0.7
On another island	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
N	1,872	951	531	200	190	287	305	330	403	528

TABLE 7-A10 Means of Transportation to Nearest Post Office or Police Station

Means of transportation	All Bahamas	Region				Quintile				
		1	2	3	4	1	2	3	4	5
Post office										
Walk	10.6	7.6	27.6	20.0	25.6	23.1	16.7	12.8	5.8	5.8
Bicycle/ motorcycle	1.1	0.4	3.8	3.4	7.3	1.1	1.3	0.8	1.3	0.6
Private car	75.4	76.8	67.0	75.3	66.6	44.4	59.1	74.2	84.4	88.5
Jitney/bus	11.8	14.0	0.4	0.0	0.5	29.6	21.7	10.6	8.2	4.0
Taxi	1.1	1.2	1.3	1.4	0.0	1.9	1.2	1.7	0.5	1.0
Boat/airplane/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
N	1,863	945	528	200	190	287	305	328	401	524
Police station										
Walk	12.2	10.3	23.4	12.2	25.6	27.5	20.4	15.0	5.1	6.5
Bicycle/ motorcycle	1.0	0.6	2.8	1.9	7.8	1.2	0.9	0.6	1.3	0.8
Private car	76.4	77.2	72.2	81.0	65.4	45.4	61.7	75.4	85.3	88.8
Jitney/bus	8.7	10.3	0.4	0.0	0.5	22.5	14.8	6.7	7.5	2.8
Taxi	1.7	1.6	1.3	4.9	0.6	3.5	2.2	2.2	0.9	1.0
Boat/airplane/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
N	1,862	946	526	200	190	287	305	329	400	523

TABLE 7-A11 Average Cost of Travel to Post Office or Police Station*

Region of facility location	Post office ($)	Police station ($)
All Bahamas	2.5	3.0
1	2.3	2.8
2	10.8	5.2
3	11.5	17.1
4	3.0	4.5
N	171	151
Primary means of transport		
Jitney/bus	2.2	2.7
Taxi	6.9	5.5
Boat/airplane/other	0.0	0.0
N	162	139

* Data collected only for households that did not use own means of transportation.

TABLE 7-A12 Travel Time to Nearest Post Office or Police Station*

Travel time (min.)	All Bahamas	Region				Quintile				
		1	2	3	4	1	2	3	4	5
Post office										
0–15	82.8	82.2	88.6	76.2	83.6	73.7	74.0	82.1	85.6	88.2
16–30	14.8	15.5	9.2	19.8	12.1	22.1	20.4	15.2	12.4	11.4
31–60	2.2	2.2	1.8	3.5	2.4	4.0	5.4	2.7	1.4	0.4
More than 60	0.2	0.1	0.4	0.5	1.9	0.1	0.2	0.0	0.6	0.0
N	1,872	950	532	200	190	288	306	329	403	527
Police station										
0–15	89.1	90.7	83.9	63.6	83.5	77.5	81.5	87.8	93.2	94.6
16–30	9.5	8.4	13.4	29.9	10.4	19.2	15.9	10.8	6.1	4.9
31–60	1.3	0.9	2.3	6.0	4.8	3.0	2.4	1.4	0.7	0.5
More than 60	0.1	0.0	0.4	0.5	1.2	0.3	0.2	0.0	0.1	0.0
N	1,874	952	532	200	190	288	306	330	403	528

* Based on reported means of transportation.

TABLE 7-A13 Distance to Nearest Mail Boat or Government Complex

Distance to facility (mi.)	All Bahamas	Region				Quintile				
		1	2	3	4	1	2	3	4	5
Mail boat										
Less than 1	8.0	4.3	32.1	13.3	18.8	11.2	7.5	7.9	8.3	7.1
1–2	10.6	9.8	12.9	9.7	26.5	13.5	11.7	11.3	9.0	9.3
3–10	58.0	63.6	27.1	27.7	40.3	55.0	60.9	57.6	60.0	57.0
11–20	18.7	19.6	10.5	36.2	7.9	11.7	15.5	19.8	19.3	21.7
21 or more	4.7	2.7	17.4	13.1	6.5	8.6	4.4	3.3	3.4	4.9
On another island	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
N	1,869	947	532	200	190	284	306	329	403	528
Government complex										
Less than 1	19.0	2.9	41.2	17.2	35.6	27.5	17.4	25.2	20.4	11.9
1–2	17.1	13.8	18.6	12.2	36.4	25.0	22.8	11.4	13.1	17.1
3–10	52.6	78.9	25.1	30.4	11.4	32.3	47.4	50.9	54.3	62.8
11–20	8.1	4.3	9.0	32.8	7.9	10.4	8.2	9.0	9.6	5.8
21 or more	3.2	0.0	6.1	7.5	8.7	4.8	4.2	3.6	2.6	2.4
On another island	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
N	1,130	208	532	200	190	195	195	199	240	292

TABLE 7-A14 Means of Transportation to Nearest Mail Boat or Government Complex

Means of transportation	All Bahamas	Region				Quintile				
		1	2	3	4	1	2	3	4	5
Mail boat										
Walk	3.8	1.5	17.9	8.3	11.1	9.3	3.9	4.5	1.2	3.1
Bicycle/motorcycle	1.0	0.7	2.3	0.5	7.4	0.6	0.8	1.2	1.2	0.9
Private car	80.2	80.9	75.2	84.5	76.4	53.2	67.5	80.6	88.0	90.5
Jitney/bus	12.0	14.3	0.2	0.0	1.0	31.3	21.7	11.2	8.3	3.7
Taxi	2.9	2.6	4.4	6.8	4.1	5.6	6.1	2.5	1.3	1.8
Boat/airplane/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
N	1,858	944	524	200	190	285	305	329	398	523
Government complex										
Walk	11.7	2.8	23.5	11.6	21.6	29.3	15.4	14.7	6.1	5.5
Bicycle/motorcycle	1.6	0.0	3.0	0.0	7.8	2.1	2.7	0.5	2.1	1.0
Private car	77.0	80.9	71.3	83.0	68.8	53.8	67.8	76.7	83.7	85.6
Jitney/bus	7.0	13.0	0.4	0.0	0.5	11.2	9.8	4.4	7.6	5.1
Taxi	2.7	3.2	1.8	5.3	1.1	3.6	4.3	3.8	0.5	2.8
Boat/airplane/other										
N	1,125	208	527	200	190	194	195	198	239	291

TABLE 7-A15 Average Cost of Travel to Mail Boat or Government Complex

Region of facility location	Mail boat ($)	Government complex ($)
All Bahamas	3.4	3.2
1	2.6	1.5
2	19.0	13.2
3	22.0	14.8
4	7.9	6.2
N	230	66
Primary Means of Transport		
Jitney/bus	1.2	1.2
Taxi	13.1	8.1
Boat/airplane/other	—	—
N	214	61

TABLE 7-A16 Travel Time to Nearest Mail Boat or Government Complex*

Travel time (min.)	All Bahamas	Region				Quintile				
		1	2	3	4	1	2	3	4	5
Mail boat										
0–15	35.2	30.0	63.3	41.8	77.3	31.2	33.0	34.2	32.3	40.0
16–30	39.6	42.8	21.2	42.1	15.7	35.3	36.4	42.9	40.2	40.4
31–60	22.9	25.1	11.5	16.1	5.1	30.2	30.2	19.8	23.9	18.2
More than 60	2.2	2.1	3.9	0.0	1.9	3.2	0.4	3.2	3.6	1.4
N	1,874	952	532	200	190	288	306	330	403	528
Government Complex										
0–15	79.2	84.1	76.9	52.8	79.4	69.3	75.0	81.2	76.9	85.2
16–30	16.1	14.5	15.1	36.3	13.5	23.8	19.5	12.3	18.0	12.5
31–60	3.8	0.4	7.6	11.0	4.7	5.8	3.7	5.2	4.1	2.3
More than 60	0.8	1.0	0.4	0.0	2.5	1.0	1.8	1.3	1.0	0.0
N	1,130	208	532	200	190	195	195	199	240	292

* Based on reported means of transportation.

TABLE 7-A17 Distance to Nearest Grocery Store or Banking Facility

Distance to facility (mi.)	All Bahamas	Region				Quintile				
		1	2	3	4	1	2	3	4	5
Grocery store										
Less than 1	65.4	63.3	82.0	56.7	70.9	76.1	62.6	68.0	66.6	60.5
1–2	20.2	21.8	9.6	19.5	14.2	12.1	23.9	18.3	20.5	22.2
3–10	13.0	13.8	6.8	12.3	11.4	10.3	12.4	12.5	11.6	15.7
11–20	0.8	0.6	0.5	7.0	2.5	1.1	0.6	0.6	0.6	0.9
21 or more	0.6	0.4	1.0	4.5	1.0	0.4	0.4	0.6	0.7	0.7
On another island	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
N	1,870	948	532	200	190	287	306	330	402	526
Banking facility*										
Less than 1	30.0	29.4	37.7	11.8	34.0	36.8	23.7	34.4	27.2	30.1
1–2	34.6	37.4	18.0	20.5	30.4	28.9	37.8	32.4	34.1	36.4
3–10	30.2	31.2	25.1	29.8	20.6	26.8	32.2	27.8	32.7	30.5
11–20	3.8	1.7	14.1	27.8	7.9	6.0	4.6	4.4	4.6	1.9
21 or more	1.3	0.3	5.2	10.0	7.1	1.6	1.7	1.0	1.4	1.1
On another island	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
N	1,873	951	532	200	190	287	306	330	403	528

* Banking facility included availability of financial transactions at the Post Office in the Government Administrative Complex; for about 45% of households in Region 4, this was the only type of banking facility available.

TABLE 7-A18 Means of Transportation to Nearest Grocery Store or Banking Facility

Means of transportation	All Bahamas	Region				Quintile				
		1	2	3	4	1	2	3	4	5
Grocery store										
Walk	22.5	18.3	48.4	29.7	40.0	51.0	37.6	22.9	15.3	10.4
Bicycle/motorcycle	1.1	0.6	3.0	2.9	6.2	1.1	0.9	0.9	1.4	0.7
Private car	70.8	74.6	47.5	66.0	52.7	36.1	54.3	70.4	77.9	86.1
Jitney/bus	4.6	5.4	0.2	0.0	0.0	11.6	5.2	3.6	4.8	2.0
Taxi	1.1	1.1	1.0	1.5	1.0	0.2	2.0	2.1	0.6	0.8
Boat/airplane/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
No. observations	1,865	945	530	200	190	287	305	330	402	523
Banking facility*										
Walk	11.7	10.4	19.6	7.8	23.6	32.1	18.8	10.5	5.8	6.1
Bicycle/motorcycle	1.0	0.5	3.1	0.9	7.9	0.8	0.9	0.8	1.4	0.9
Private car	77.0	77.6	73.6	84.5	67.3	44.8	64.2	77.7	85.3	88.5
Jitney/bus	8.6	10.2	0.4	0.0	0.0	19.3	13.9	9.0	7.4	3.0
Taxi	1.4	1.2	2.0	6.8	1.2	2.7	2.2	1.8	0.1	1.4
Boat/airplane/other	0.2	0.0	1.3	0.0	0.0	0.3	0.0	0.1	0.1	0.1
N	1,867	948	531	200	188	287	303	330	401	527

* Banking facility included availability of financial transactions at the Post Office in the Government Administrative Complex; for about 45% of households in Region 4, this was the only type of banking facility available.

TABLE 7-A19 Average Cost of Travel to Facility[1]

Region of facility location	Grocery store ($)	Banking facility ($)[2]
All Bahamas	4.6	2.0
1	4.5	1.4
2	8.5	11.9
3	10.5	16.4
4	10.0	5.4
Primary Means of Transport		
N	81	207
Jitney/bus	5.0	1.2
Taxi	4.2	8.8
Boat/airplane/other	—	0.0
N	75	201

[1] Data were collected only for households that did not use their own means of transportation.

[2] Banking facility included availability of financial transactions at the Post Office in the Government Administrative Complex; for about 45% of households in Region 4, this was the only type of banking facility available.

TABLE 7-A20 Travel Time to Nearest Grocery Store or Banking Facility[1]

Travel time (min.)	All Bahamas	Region				Quintile				
		1	2	3	4	1	2	3	4	5
Grocery store										
0–15	94.2	94.4	95.7	84.5	91.4	91.4	88.6	95.5	96.6	95.4
16–30	5.2	5.1	3.4	10.9	7.6	8.1	10.5	3.7	2.8	4.1
31–60	0.6	0.5	0.9	4.5	1.0	0.5	0.9	0.9	0.6	0.5
More than 60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
N	1,870	948	532	200	190	287	306	330	402	526
Banking facility[2]										
0–15	80.0	81.7	72.2	52.8	81.6	68.5	72.6	81.0	79.8	87.3
16–30	16.5	15.6	20.9	30.6	12.3	24.6	23.1	14.7	16.8	10.7
31–60	2.9	2.0	6.6	16.6	3.6	6.7	3.8	3.8	2.2	1.2
More than 60	0.7	0.7	0.4	0.0	2.5	0.1	0.5	0.4	1.2	0.7
N	1,873	952	531	200	190	288	305	330	403	528

[1] Based on reported means of transportation.

[2] Banking facility included availability of financial transactions at the Post Office in the Government Administrative Complex; for about 45% of households in Region 4, this was the only type of banking facility available.

TABLE 7-A21 Responses to Survey Question: "Ever Heard of Social Program?"

		Region				
Social program	**All Bahamas**	**1**	**2**	**3**	**4**	***N***
Unemployment	31.0	33.2	20.5	22.4	16.2	1,874
Food assistance	45.1	45.3	47.9	37.9	34.3	1,876
Financial assistance	22.4	23.7	17.8	13.5	9.0	1,876
Disability allowance	30.9	33.0	22.0	18.4	14.1	1,876
Housing repair allowance	16.1	15.9	18.3	15.5	12.5	1,876
Burial assistance	15.1	16.3	10.9	5.9	3.8	1,876
Rent assistance	14.5	16.0	8.0	5.6	3.2	1,876
Work programme	19.2	21.1	11.0	7.4	5.0	1,875
School uniform	19.4	19.9	18.9	14.3	10.8	1,875
Medical card	23.7	25.8	14.4	9.3	5.9	1,876

TABLE 7-A22 Receipt of Social Benefits*

Social benefit	**Currently received**	**No. observations**	**Ever received**	***N***	**Ever applied**	***N***
Unemployment	0.2	497	2.4	492	2.6	484
Food assistance	6.2	827	5.5	752	2.4	703
Financial assistance	0.4	361	1.9	357	0.9	352
Disability allowance	1.6	492	0.8	483	0.9	481
Housing repair allowance	0.2	302	1.2	298	0.7	292
Burial assistance	0.0	232	0.3	229	0.0	227
Rent assistance	0.0	209	0.5	207	1.1	206
Work Programme	0.1	279	0.1	276	1.4	275
School uniform	0.4	338	1.3	332	0.6	328
Medical card	8.4	356	0.7	323	0.6	319
Any social programme	7.9	1,040	6.0	996	4.5	968

* The number of responses was insufficient to allow for analysis by region and quintile.

TABLE 7-A23 Beneficiary Characteristics for All Social Programs

Characteristic	Currently received	Ever received	Currently or ever received
Male	30.3	25.52	27.3
Relationship to head			
Head	50.7	51.2	50.1
Spouse	11.9	14.7	13.6
Child	12.8	18.8	15.4
Other	24.6	15.4	20.9
Bahamian national	98.1	97.4	97.7
Age			
0–14	15.0	13.5	14.3
15–19	6.2	2.9	5.0
20–34	12.2	35.8	23.6
35–54	28.6	33.9	29.7
55 or older	38.0	14.0	27.3
$ received per month			
Average	105.1		
Median	50.0		
Average, Food Assistance for household	60.6		
Median, Food Assistance for household	50.0		
Average, Food Assistance per capita	24.9		
Median, Food Assistance per capita	15.0		
N	122	83	197
Per-capita food poverty line (monthly)			80.3
Average household size			3.5
Household food poverty line (monthly)			280.2

TABLE 7-A24 Participation in National School Lunch Programme (NSLP), by Selected Variables

Participation factor	All Bahamas	Region 1	Regions 2–4	Boys	Girls	Quintile 1	Quintile 5
Awareness of the NSLP	44.8	44.3	47.5	46.3	43.2	55.1	30.7
N	2119	1182	937	1062	1057	601	211
Child's school participation in the NSLP							
Children (ages 3–10)	16.4	14.9	25.2	17.4	15.2	27.0	2.5
No. observations	1057	565	492	560	497	353	86
Children (ages 11–18)	15.8	13.0	30.7	15.4	16.2	28.2	2.9
N	834	427	407	421	413	223	63
Child who has ever received lunch							
Children (ages 3–10)	4.3	3.3	10.0	5.3	3.0	13.4	0.0
N	1057	565	492	560	497	353	86
Children (ages 11–18)	1.8	0.7	7.9	2.5	1.3	4.7	0.0
N	834	427	407	421	413	223	63
Child who currently receives lunch							
Children (ages 3–10)	2.6	1.6	8.6	2.4	2.9	7.6	0.0
N	1057	565	492	560	497	353	86
Children (ages 11–18)	1.2	0.4	5.1	1.7	0.7	3.8	0.0
N	834	427	407	421	413	223	63

TABLE 7-A25 Participation of Children Ages 5–16 (Currently Attending) in National School Lunch Programme (NSLP)

		Quintile				
Participation factor	**All Bahamas**	**1**	**2**	**3**	**4**	**5**
Awareness of the NSLP	49.8	59.0	49.2	50.7	44.6	36.3
N	1,581	500	376	327	258	120
Child's school participation in the NSLP						
Children (ages 5–10)	19.7	32.2	15.0	16.3	20.1	3.1
N	849	292	182	170	134	71
Children (ages 11–16)	15.8	26.7	12.2	18.2	12.9	1.4
N	731	208	194	157	124	48
Child who has ever received lunch						
Children (ages 5–10)	5.4	16.1	2.5	0.6	0.0	0.0
N	849	292	182	170	134	71
Children (ages 11–16)	2.0	4.7	3.1	0.6	0.3	0.0
N	731	208	194	157	124	48
Child who currently receives lunch						
Children (ages 5–10)	3.3	9.0	2.3	0.6	0.0	0.0
N	849	292	182	170	134	71
Children (ages 11–16)	1.3	4.0	1.3	0.2	0.3	0.0
N	731	208	194	157	124	48

TABLE 7-A26 Responses to Question: "What Does Child Usually Have for Lunch?," by Selected Variables

Response	**All Bahamas**	**Region 1**	**Regions 2–4**	**Boys**	**Girls**	**Quintile 1**	**Quintile 5**
Snack/meal from school canteen vendor	54.2	54.7	51.1	55.1	53.2	49.1	48.6
Snack/meal from home	39.0	37.7	46.7	40.1	37.7	45.0	37.5
Other	2.8	3.0	1.6	2.1	3.5	4.1	5.1
Nothing	4.1	4.6	0.6	2.6	5.6	1.8	8.8
N	6,409	3,409	3,000	3,149	3,260	1,560	1,023

CHAPTER 8

Housing Variables for Policy Formulation

Carmen Gomez

Housing policy is inextricably linked to socioeconomic and political considerations. Availability of reliable data on the housing variables that characterize a country's living standards is critical to policy planners, who seek to base their decisions upon objective criteria. To describe the national housing stock of The Bahamas, the Bahamas Living Conditions Survey (BLCS) used a range of variables—from dwelling type, construction materials, and tenure type to water supply, utilities, and waste-disposal facilities and services. The household expenditures analysed included water, an array of utilities and services, shelter costs, and real property tax. Expenses were examined in terms of the mean value of household payments, as well as in relation to other expenditures. Several indicators—durable-goods ownership, housing quality index (HQI), and overcrowding—were considered to determine housing conditions. All variables were examined at both national and regional levels and by consumer quintile.

DWELLING TYPE

The BCLS found that 63.4% of dwellings in The Bahamas were separate detached houses (Table 8-1). These units occupied a parcel of land in a freestanding capacity and did not share walls, roofs, or floors with any other dwelling units. The second most significant type of dwelling was the apartment or flat, which accounted for 18.3% of units. Apartments or flats were usually found in blocks, generally stacked atop each other. They shared not only walls, but also floors and ceilings; (that is, one household's floor was another's ceiling). Occasionally, apartments or flats were found above commercial structures. Finally, 17.3% of dwellings were single attached houses. They were usually duplexes or other multi-dwelling structures that shared walls, from ground to roof.

Distribution by Region

In Region 1, which includes the country's two major centres of habitation—New Providence

TABLE 8-1 Percentage Distribution of Dwelling Type

Dwelling type	All Bahamas	Region				Quintile				
		1	2	3	4	1	2	3	4	5
Separate detached house	63.4	60.7	74.9	87.1	79.2	71.3	66.3	72.8	63.3	55.1
Single attached house	17.3	18.1	15.6	6.0	8.2	15.4	12.8	16.6	16.2	21.2
Apartment/flat	18.3	20.5	5.7	6.4	10.5	12.7	18.9	9.9	19.3	22.9
Other	1.1	0.7	3.8	0.5	2.1	0.7	2.1	0.7	1.2	0.8

and Grand Bahama—distribution of dwelling types conforms closely to national percentages. The percentage of apartments/flats was slightly higher than the national average, at 20.5%, whilst the percentage of single detached dwellings was slightly lower, at 60.7%. Across the country's other three regions, the single detached dwelling was more widely represented, with 74.9% in Region 2, 87.1% in Region 3, and 79.2% in Region 4. Single attached dwellings accounted for 15.6% of units in Region 2 and less than 10% in Regions 3 and 4. In Region 4, the apartment/flat accounted for 10.5% of units and less than 10% in the other two regions (Table 8-1).

Distribution by Quintile

Across all consumption quintiles, the single detached dwelling unit was the predominant type, ranging from 71.3% in quintile 1 to 55% in quintile 5. More households in the highest quintile inhabited apartments/flats and attached houses than in the other four quintiles. The Survey data did not show any significant differences in the choice of dwelling unit between the four lower quintiles, except that the lowest percentage (9.9%) was apartments/flats in the middle quintile (3).

CONSTRUCTION MATERIALS

The most widely used construction material for the outer walls of Bahamian dwellings was concrete block or slab. As Table 8-2 shows, 71.4% of units were made of concrete. The second most frequently used material was wood, with or without stucco, which accounted for 21% of units. Other types of materials combined accounted for less than 10% of dwellings.

Nationwide, 80.8% of roofs were covered predominantly with asphalt shingles (Table 8-3). Wooden shingles were used for 8.6% of roofs, corrugated metal sheet was used for 3.8%, tile was used for 3.4%, and concrete for 2.4%. Less than 1% used some other type of roofing material.

Distribution by Region

Outer Walls

In New Providence and Grand Bahama (Region 1), 73.6% of dwellings' outer walls were made of concrete, compared to 19.0% made of wood, with or without stucco, and 5.7% made of stone. In Region 4 (Other Family Islands), houses made of wood were more heavily represented. In Region 2 (Abaco, Andros, and Eleuthera), 33.3% of dwellings were

TABLE 8-2 Percentage Distribution of Outer-wall Construction Materials

Construction material	All Bahamas	Region				Quintile				
		1	2	3	4	1	2	3	4	5
Wood/stucco	21.0	19.0	33.2	26.5	25.6	48.8	32.5	19.0	16.0	10.4
Concrete Block/slab	71.4	73.6	59.9	58.1	61.6	42.6	57.6	73.1	79.9	81.0
Wood & concrete	2.1	1.6	4.0	7.0	4.7	2.6	2.8	1.4	1.1	2.4
Stone/brick	5.4	5.6	2.1	8.5	7.0	5.9	6.9	5.9	2.7	6.2
Other	0.2	0.1	0.9	0.0	1.1	0.0	0.2	0.7	0.2	0.1

TABLE 8-3 Percentage Distribution of Roofing Materials

Roofing material	All Bahamas	Region				Quintile				
		1	2	3	4	1	2	3	4	5
Asphalt shingle	80.8	80.0	85.6	89.9	79.0	73.1	77.4	85.3	84.4	80.5
Wood shingle	8.6	8.2	10.0	9.1	15.3	11.5	14.2	7.0	7.0	6.8
Corrugated metal sheet	3.8	4.3	1.4	0.5	0.5	9.3	4.6	5.3	2.8	1.5
Concrete	2.4	2.7	0.9	0.0	0.0	3.7	1.6	1.8	3.4	1.9
Tile	3.4	4.0	0.8	0.0	0.5	0.2	1.0	0.0	1.4	8.6
Other	1.0	0.9	1.1	0.5	4.8	2.2	1.2	0.6	0.9	0.8

made of wood and 59.9% of concrete. Distribution in the other two regions was similar. In Exuma and Long Island (Region 3), 26.5% of dwellings were made of wood, whilst 58.1% were made of concrete. In Other Family Islands (Region 4), 25.6% of houses were made of wood, and 62% were made of concrete block or slab. All four regions had some stone houses, with Region 3 having the highest percentage (8.5%), followed by Region 4 (7%). In Region 2, only 2.1% of dwellings were made of stone.

Roofing

In all four regions, roofs were made mainly of either asphalt or wooden shingles. In New Providence and Grand Bahama, about 4.3% of roofs were corrugated metal sheet; whilst only 1.4% of dwellings in Region 2 and less than 1% in Regions 3 and 4 used this material (Table 8-3). The data for roofing tile was similar. In Region 4, 4.8% of roofs were made of other types of material not used significantly in the other three regions.

Flooring

Across all regions, concrete was the material of choice for floors, accounting for more than 80%. These floors could be subsequently covered by tile (marble, ceramic, or vinyl), rug, or mat; however, the base material was poured concrete. Table 8-4 shows that Region 2 had the highest percentage of wooden floors (16.8%), followed by Region 1 (16.4%).

Distribution by Quintile

Outer Walls

In quintile 1, 48.8% of dwellings had wooden outer walls, with or without stucco, compared to 10.6% in quintile 5. As Table 8-2 shows, there is an inverse relationship between material used for outer walls and living standards, as typified by consumption quintiles. As consumption status increased, so did the use of concrete; the reverse was the case for wood, whose use increased as consumption status declined (Figure 8-1).

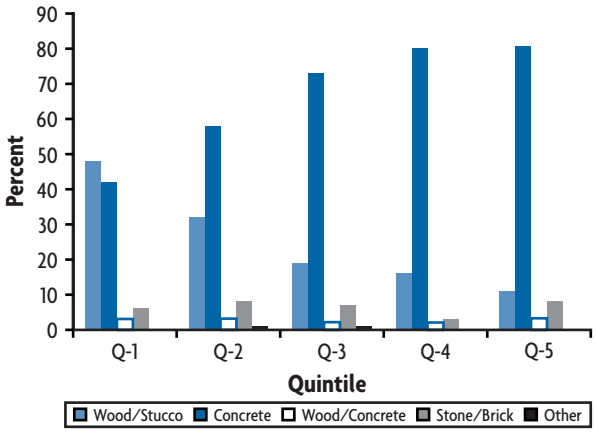
Roofing

The roofing-materials variable was not significant as a determinant of economic differences, as the distribution pattern was similar for all consumer quintiles. More than 70% of households across all quintiles used asphalt shingles. As Table 8-3 shows, 9.3% of dwellings in quintile

TABLE 8-4 Percentage Distribution of Flooring Materials

Flooring material	All Bahamas	Region				Quintile				
		1	2	3	4	1	2	3	4	5
Wood	16.2	16.4	16.8	10.9	11.5	35.6	20.5	17.4	13.1	9.0
Concrete	83.4	83.1	83.0	87.0	88.0	63.0	78.8	82.6	86.8	90.6
Other	0.4	0.4	0.2	2.1	0.6	1.4	0.7	0.1	0.1	0.4

FIGURE 8-1 Distribution of Outer-wall Construction Material, by Consumption Quintile



1 used corrugated metal sheet, compared to only 1.5% in quintile 5. Roofing tile was used almost exclusively by the highest quintile. Whilst all quintiles used wooden shingles, rates were highest in the poorest two quintiles and lowest in the wealthiest quintile.

TENURE TYPE

Owner-occupied dwellings accounted for nearly 58% of dwellings in The Bahamas, whilst renter households accounted for 36.8% (Table 8-5). In addition to private renters, another 1.1% had their units rented for them by the Government (presumably, their employer). Interestingly, some 3.5% of the households occupied their units rent-free.

Separate detached dwellings tended to be owner-occupied (86.3%), whilst single attached dwellings and apartments/flats were more likely to be rented (68.3% and 82.2%, respectively) (Table 8-6). For Region 1, this distinction was particularly true; it was not as marked in Region 4, where private rental units accounted for a much lower percentage of occupied dwellings. Across all five consumption quintiles, renters overwhelmingly occupied apartments/flats and, to a lesser extent, single attached units.

Distribution by Region

In Region 4, nearly 75% of households lived in owner-occupied dwellings. This was in stark contrast to 55% in Region 1. On the other hand, private renters accounted for more than 40% of Region 1 dwellings, compared to only 15–16% in Region 4. Households occupying Government-rented units and rent-free units were also higher in Region 4 than in Region 1.

Distribution by Quintile

In the poorest quintile, 46.4% of households occupied dwellings owned by a member of the household, and 41.8% of dwellings were rented units. Although no measurable relationship was found between wealth and tenure, Table 8-5 shows that the poorest quintile had the lowest percentage (46.4%) of owner-occupied dwellings and the highest percentages of rent- free (7.7%) and Government-rented (2.5) dwellings.

WATER SUPPLY

Any country must have a readily available supply of water to support life and its activities. On average, each person

TABLE 8-5 Percentage Distribution, by Tenure Type

Tenure type	All Bahamas	Region				Quintile				
		1	2	3	4	1	2	3	4	5
Owned	57.8	55.0	71.8	75.5	72.4	46.4	50.6	65.7	59.8	59.4
Private rented	36.8	40.9	16.2	15.0	15.2	41.8	46.6	31.6	33.2	35.9
Gov't. rented	1.1	0.6	3.7	3.9	3.4	2.5	0.1	0.5	1.3	1.3
Rent free	3.5	3.1	5.2	3.5	8.6	7.7	2.1	1.9	4.2	3.0
Other	0.8	0.5	3.2	2.0	0.5	1.5	0.7	0.2	1.4	0.4

TABLE 8-6 Percentage Distribution of Type of Dwelling, by Tenure Type

		Tenure type				
Dwelling type	**Total**	**Owned**	**Private rented**	**Gov't. rented**	**Rent free**	**Other**
All Bahamas						
Separate detached house	63.3	86.3	29.6	20.7	56.9	47.7
Single attached house	17.3	9.3	28.4	39.9	21.5	36.8
Apartment/flat	18.3	3.7	40.7	39.4	20.1	0.0
Other	1.1	0.7	1.3	0.0	1.4	15.4
N	1,880	1,201	536	37	80	26
Region						
Region 1						
Separate detached house	60.6	85.8	28.3	0.0	54.3	48.9
Single attached house	18.2	9.5	28.7	32.2	25.2	51.1
Apartment/flat	20.5	4.0	42.2	67.8	20.5	0.0
Other	0.7	0.7	0.7	0.0	0.0	0.0
N	954	525	390	6	29	4
Region 2						
Separate detached house	74.9	85.1	49.0	323	65.0	41.0
Single attached house	15.6	11.2	27.3	50.8	10.2	24.3
Apartment/flat	5.7	2.8	12.6	16.9	21.3	0.0
Other	3.8	1.0	11.1	0.0	3.6	34.8
N	535	384	88	18	28	17
Region 3						
Separate detached house	87.1	96.8	47.9	57.1	86.8	74.3
Single attached house	6.0	2.6	12.9	28.6	13.2	25.7
Apartment/flat	6.4	0.6	35.7	14.3	0.0	0.0
Other	0.5	0.0	3.5	0.0	0.0	0.0
N	200	153	29	7	7	4
Region 4						
Separate detached house	79.2	91.9	36.9	52.5	56.0	100.0
Single attached house	8.2	3.5	20.2	47.5	11.8	0.0
Apartment/flat	10.5	3.8	39.6	0.0	19.9	0.0
Other	2.1	0.7	3.4	0.0	12.3	0.0
N	191	139	29	6	16	1
Quintile						
Quintile 1						
Separate detached house	71.3	91.7	54.1	0.0	75.2	18.1
Single attached house	15.4	8.0	21.1	31.1	14.6	60.2
Apartment/flat	12.7	0.4	23.9	68.9	10.1	0.0
Other	0.7	0.0	0.9	0.0	0.0	21.7
N	288	174	85	4	19	6

(continues)

TABLE 8-6 *(Continued)*

Dwelling type	Total	Tenure type				
		Owned	Private rented	Gov't. rented	Rent free	Other
Quintile 2						
Separate detached house	66.3	91.5	39.5	0.0	58.5	58.0
Single attached house	12.8	6.6	19.7	100.0	0.0	22.2
Apartment/flat	18.9	1.8	36.9	0.0	36.6	0.0
Other	2.1	0.0	3.9	0.0	4.8	19.9
N	308	192	100	1	10	5
Quintile 3						
Separate detached house	72.7	93.7	30.4	27.3	58.6	100.0
Single attached house	16.6	6.0	37.2	72.7	30.6	0.0
Apartment/flat	10.0	0.3	30.9	0.0	0.0	0.0
Other	0.7	0.0	1.6	0.0	10.8	0.0
N	329	232	81	4	10	2
Quintile 4						
Separate detached house	63.3	87.8	23.8	20.4	39.5	66.8
Single attached house	16.2	8.4	27.7	44.0	27.9	13.3
Apartment/flat	19.3	2.4	48.2	35.6	32.6	0.0
Other	1.2	1.4	0.2	0.0	0.0	19.9
N	404	261	106	9	20	8
Quintile 5						
Separate Detached House	55.1	78.4	17.6	34.5	55.3	26.9
Single Attached House	21.2	12.4	34.2	35.0	25.9	73.1
Apartment/Flat	22.9	8.1	47.7	30.4	18.8	0.0
Other	0.8	1.1	0.5	0.0	0.0	0.0
N	528	324	160	19	21	4

requires more than 50 litres of water daily to meet personal and household needs (Gleick 1996). In The Bahamas, most of the water used comes from underground; the amount of fresh water available varies according to each island's shape, rock formation, and rainfall distribution. Thus, water collection and distribution to households is a costly undertaking.

As Table 8-7 shows, nearly 52% of Bahamian households enjoyed public water piped into their dwellings, whilst almost 35% had a private source of water piped into their homes. Nearly 6% of units had water piped into their yard, either from a public or private source. About 4.1% of households relied on a public standpipe, whilst another 1.3% used a public well or tank.

Distribution by Region

Households that had public water piped into their dwellings were unevenly distributed across the four regions. In Region 1, such households accounted for 51.7% of units, compared to 64.7% in Region 2, 43.7% in Region 3, and only 12.6% in Region 4.

Because the country's public-water system was balanced by a private system, the percentage of households that enjoyed water piped into their dwellings was raised considerably. In Region 4, for example, 64.4% of dwellings had a private piped supply; added to the 12.6% public supply, the percentage for those islands rose to 77%.

Amongst households that relied on a public well or standpipe for their supply (5.4%), Region 1 households

TABLE 8-7 Percentage Distribution of Bathing Water Source, by Region and Quintile

Water source for bathing	All Bahamas	Region				Quintile				
		1	2	3	4	1	2	3	4	5
Public piped into dwelling	51.9	51.7	64.7	43.7	12.6	46.1	48.4	50.1	51.1	56.4
Public piped into yard	2.3	1.7	7.2	2.0	2.2	4.2	4.4	1.2	3.2	0.8
Private piped into dwelling	34.8	37.2	14.4	24.7	52.3	14.5	33.2	39.6	39.0	37.6
Private not piped	3.3	3.2	1.3	15.3	4.9	11.0	4.3	3.1	1.8	1.3
Public stand pipe	4.1	4.3	3.1	1.5	2.0	18.0	6.2	2.8	0.7	1.1
Public well or tank	1.3	0.8	2.1	6.4	6.4	3.5	1.3	1.4	1.1	0.6
Rain water system (piped)	1.3	0.3	5.7	3.4	12.1	1.0	0.7	0.8	1.3	2.0
Rain water system (not piped)	0.2	0.0	0.9	1.0	4.6	0.6	0.2	0.2	0.2	0.2
Other	0.8	0.7	0.6	2.0	2.9	1.1	1.2	0.7	1.5	0.0

mainly used standpipes, whilst Region 4 households tended to used a public well or tank.

Distribution by Consumer Quintile

BLCS results showed that access to water piped into dwellings increased with wealth. In quintile 1, 61.5% of households had water piped into their dwelling units, compared to 96.1% in quintile 5. Less than 2% of households in the wealthiest quintile obtained their water from a public well or standpipe, compared to 21.5% in the poorest quintile. In all but the poorest quintile, more than one-third of households had a private source piped into their dwellings.

Drinking Water

Despite high percentages of households with running water, only 11.1% of all households drank from the same source used for bathing and cleaning (Table 8-8). This

TABLE 8-8 Percentage Distribution of Source of Drinking Water, by Region and Quintile

Drinking water source	All Bahamas	Region				Quintile				
		1	2	3	4	1	2	3	4	5
Public piped into dwelling	5.8	5.6	9.1	3.5	1.0	9.1	4.6	5.0	4.7	6.5
Public piped into yard	0.6	0.4	1.6	0.5	1.1	0.7	1.2	0.1	0.9	0.3
Private piped into dwelling	3.8	3.7	3.6	4.7	7.7	1.6	3.5	3.9	3.2	5.3
Private not piped	0.7	0.4	1.5	7.2	1.1	1.0	1.3	1.1	0.3	0.4
Public stand pipe	0.8	0.9	0.5	0.5	1.6	6.1	0.2	0.4	0.0	0.0
Public well or tank	0.3	0.2	1.1	1.0	1.0	1.3	0.1	0.6	0.2	0.1
Rain water system (piped)	0.8	0.2	4.7	1.4	4.1	0.5	0.4	0.4	1.1	1.2
Rain water system (not piped)	0.4	0.1	1.0	1.9	4.3	1.6	0.3	0.3	0.0	0.2
Purchased bottled water	86.3	88.3	75.2	78.8	77.6	77.8	87.1	88.0	89.4	85.7
Other	0.4	0.2	1.6	0.5	0.5	0.4	1.2	0.1	0.1	0.3
Same water source for bathing and drinking										
Yes	11.1	9.6	19.2	18.4	18.6	19.7	10.5	9.7	8.3	11.2
No	88.9	90.4	80.8	81.6	81.4	80.3	89.5	90.4	91.7	88.8

TABLE 8-9 Percentage Distribution of Sanitary Facility Types

Toilet facilities	All Bahamas	Region				Quintile				
		1	2	3	4	1	2	3	4	5
Flush toilet linked into a public sewerage system	12.7	14.9	2.0	0.0	0.0	12.1	14.4	11.5	13.2	11.7
Flush toilet with cesspit of septic tank	81.3	80.0	89.2	88.3	83.5	64.3	78.0	83.0	83.9	87.1
Pit latrine	4.5	4.0	5.1	9.8	13.8	18.5	4.9	4.2	2.2	1.2
Other	0.3	0.3	0.7	0.5	0.0	1.0	0.6	0.6	0.0	0.0
None	1.1	0.8	3.0	1.5	2.6	4.0	2.1	0.7	0.8	0.0
Exclusive use of flush toilet										
Yes	89.5	90.0	88.4	86.7	80.1	71.0	88.6	90.8	91.8	94.7
No	10.5	10.0	11.6	13.3	19.9	29.0	11.4	9.2	8.2	5.3

percentage was lowest in Region 1 (9.6%) and highest in Region 2 (19.2%). In the poorest quintile, 19.7% of households drank from the same source used for bathing and cleaning, compared to 11.2% in the wealthiest.

More than 86% of all Bahamian households purchased bottled drinking water; whilst Region 1 had the highest use percentage (88.3%), that in the other three regions ranged from 75.2% to 78.8%. In the poorest consumption quintile, 77.8% of households purchased bottled drinking water. In the higher four quintiles, percentages ranged from 85.7% in the wealthiest quintile to 89.4% in quintile 4.

SANITARY FACILITIES

Together with access to safe and adequate water supply, sanitary facilities for disposal of human waste are considered important indicators of housing conditions. Across The Bahamas, most dwelling units had flush toilets, either linked to a public sewerage system (12.7%) or attached to a cesspit or septic tank (81.3%) (Table 8-9). Some 4.5% of households still used a pit latrine, whilst 1.1% reported having no toilet facilities attached to their dwelling unit.

According to Table 8-9, 89.5% of households had exclusive use of toilet facilities, although this figure declined to 71% in the lowest consumer quintile. Only 10.5% of households shared toilet facilities; this percentage fell to 10.0% in Region 1 and rose to 19.9% in Region 4. In the poorest quintile, 29.1% of households shared toilet facilities, compared to 5.3% in the wealthiest quintile.

Slightly more than 10% of households went outside their dwelling unit to use their toilet facility (Table 8-10). This percentage was highest in Region 4 (17%), followed by Region 3 (15.2%). In quintile 1, the percentage of

TABLE 8-10 Comparison of Indoor and Outdoor Toilet Facilities, by Region and Quintile (%)

Had to use outdoor toilet	All Bahamas	Region				Quintile				
		1	2	3	4	1	2	3	4	5
Yes	10.3	10.1	9.1	15.2	16.9	28.3	10.7	8.4	8.2	6.1
No	89.7	89.9	90.9	84.8	83.1	71.7	89.3	91.6	91.8	93.9

TABLE 8-11 Percentage Distribution of Lighting Source, by Region and Quintile

Lighting source	All Bahamas	Region				Quintile				
		1	2	3	4	1	2	3	4	5
Electricity	96.1	96.6	92.2	94.6	95.4	84.8	94.4	96.0	98.0	99.4
Other	3.9	3.4	7.8	5.4	4.6	15.2	5.6	4.0	2.0	0.6

households that had outdoor toilet facilities was 28.3%; compared to 10.7% in quintile 2 and 6.1% in quintile 5.

Distribution by Region

Only Regions 1 and 2 had households that were linked to a public sewerage system. The percentage was highest in Region 1 (14.9%), compared to only 2% in Region 2. Pit-latrine use was highest in Region 4 (13.8%) and lowest in Region 1 (4.5%).

In Region 1, 10% of households shared toilet facilities, whilst less than 1% reported having no toilet facility. More households (2.6%) in Region 4 than in any other region reported having no facilities; 19.9% of Region 4 households shared toilet facilities with other households.

Distribution by Consumer Quintile

Whilst 98.8% of households in the wealthiest quintile reported having flush toilets linked either to a public sewer or cesspit, the rate fell to 75.4% in the poorest quintile. Conversely, 18.5 % of households in the poorest quintile had a pit latrine, as opposed to 1.2% in the wealthiest quintile. Likewise, 29.0% of households in the lowest quintile shared toilet facilities with another household, compared to 5.3% in the highest.

LIGHTING AND COOKING FUELS

Lighting

More than 96% of Bahamian households used electricity for lighting. Region 2 had the highest percentage (7.8%) of households that used other lighting sources. Even in the lowest consumer quintile, nearly 85% of Bahamian households had electric lighting (Table 8-11).

Cooking Fuels

For most Bahamian households, gas was the preferred cooking fuel. Only 21.4% used electricity for cooking. As Table 8-12 shows, 9.9% of households in the lowest quintile used electricity for cooking, although households in this quintile comprised the highest percentage (82.2%) of those who used gas as a cooking fuel.

TELEPHONE SERVICE

In an archipelagic country like The Bahamas, where the population is scattered, telecommunications services are essential. As Table 8-13 shows, 80.3% of the country's dwellings were equipped with telephone service. For some 6.2% of the population, the nearest telephone was within

TABLE 8-12 Percentage Distribution of Cooking Fuel Use, by Region and Quintile

Cooking fuel most often used	All Bahamas	Region				Quintile				
		1	2	3	4	1	2	3	4	5
Gas	75.6	75.1	76.9	85.0	79.5	82.2	81.2	78.2	77.8	67.6
Electricity	21.4	22.4	19.0	10.5	11.3	9.9	15.3	18.7	20.1	31.2
Other	3.0	2.6	4.1	4.5	9.2	7.9	3.5	3.1	2.1	1.2

TABLE 8-13 Percentage Distribution of Household Telephone Access, by Region and Quintile

Nearest telephone	All Bahamas	Region				Quintile				
		1	2	3	4	1	2	3	4	5
Own home	80.3	81.2	74.8	82.8	71.6	48.9	66.9	82.9	87.2	91.1
Neighbour's house	9.5	8.7	14.6	9.0	13.1	22.6	20.2	6.6	4.9	4.6
Public place within 5 minutes walk of unit	6.2	6.3	5.2	5.7	8.3	17.9	8.3	6.5	3.8	2.6
Public place more than 5 minutes walk of unit	2.8	2.7	3.5	1.6	4.3	8.1	3.5	3.2	2.5	0.6
Other	1.2	1.2	1.1	1.0	2.2	2.4	0.9	0.7	1.4	1.1
No access	0.1	0.0	0.8	0.0	0.5	0.1	0.1	0.1	0.2	0.0

a five-minute walk of their dwelling, with only 2.8% having to walk farther to use a public telephone. Only 0.1% of households had no access to a telephone.

Distribution by Region

In Region 1, telephone access was universal. Region 3, which also had universal access, boasted the highest percentage (82.8%) of in-home telephone service. More households in Regions 2 (14.6%) and 4 (13.1%) used a neighbour's telephone than in Regions 1 and 3. Less than 1% (.2%) of Region 4 households had no telephone access.

Distribution by Consumer Quintile

Only 48.9% of households in quintile 1 had a telephone in their dwelling, compared to 91.1% in quintile 5. More than 99% of quintile 1 households had telephone access, compared to 100% in the quintile 5. Slightly more than 25% of quintile 1 households used a public telephone; of these, 30% had to walk more than five minutes to reach that phone.

GARBAGE DISPOSAL

More than 95% of Bahamian households had their garbage collected for disposal in sanitary landfills, nearly 80% used a free Government-provided service, and more than 16% used private sources.[1]

As Table 8-14 shows, 4.3% of households either burned or dumped their garbage. In terms of disposal by

[1] In the mid-nineteenth century, following a series of epidemics that demonstrated the link between unsanitary waste disposal and diseases carried by insects and rodents, the relationship between proper waste disposal and public health was firmly established.

TABLE 8-14 Percentage Distribution of Household Disposal Type, by Region and Quintile

Disposal type	All Bahamas	Region				Quintile				
		1	2	3	4	1	2	3	4	5
Collected by truck (Gov't. service)	79.6	79.9	75.5	80.3	84.3	84.8	81.1	80.6	79.9	75.6
Collected by truck (Private service)	16.1	17.6	10.2	4.3	6.0	7.0	13.5	14.8	16.2	21.9
Burned	2.1	1.8	2.8	9.4	2.1	4.8	3.2	2.7	1.8	0.6
Dumped	2.2	0.7	11.2	6.0	7.6	3.5	2.2	2.0	2.0	1.9
Buried	0.0	0.0	0.2	0.00	0.0	0.0	0.0	0.0	0.1	0.0

dumping, 11.2% of Region 2, 7.6% of Region 4, and 6.0% of Region 3 households used this method; compared to less than 1% of Region 1 households. Burning was most prevalent amongst Region 3 households (9.4%).

HOUSEHOLD EXPENDITURE ON UTILITIES AND SERVICES

Government policymakers require household data on utilities and services spending in order to monitor the effects of public policies on household well-being and to determine the best ways to direct such policies. The BLCS used the following variables to measure household operating expenses: water, electricity, telephone service, sewerage and garbage collection, mortgage and rent (shelter costs), and real property tax. Composition of Bahamian household expenditure on utilities and services, shelter costs and real property tax, and other operational expenses are presented in Tables 8-15, 8-16A and B, and 8-17; respectively.

Nationwide, households spent 40 cents out of every consumption dollar on household operating expenses; in Region 1, 39.6 cents was expended, compared to 37.9 cents in Region 4 (Table 8-17). Regions 2 and 3 households spent somewhat more (about 43 cents out of every dollar). Households in the lowest quintile spent 39.1 cents per dollar on household operations, compared to 42.4 cents for those in the highest quintile.

Analysis of the data reveals that, for utilities (water, electricity, and telephone), households in the poorest quintile spent significantly more, as a share of expenditure, than those in the wealthiest quintile. For example, for quintile 1 households, electricity accounted for a hefty 7.3% of monthly household operational expenses, compared to only 4.3% for quintile 5 households.

Water

Bahamian households spent 0.8% of their mean monthly consumption expenditure on water (Table 8-17). The proportion was as high as 10% in Region 2 and as low as 0.2% in Region 4. Households in the lowest consumer quintile spent an average of 1.3% of their mean monthly outlay on water, as compared to 0.5 % in the highest quintile.

As Table 8-15 shows, households' mean monthly outlay on water was considerably lower in Region 4 (B$3.87) than in any other region. It was about one-third of the outlay in Region 3 and less than one-fifth that spent in Regions 1 and 2. The highest consumer quintiles spent more than did the lowest.

Electricity

Electricity accounted for 5.3% of mean monthly expenditure. In Region 3, the percentage was 4.1%, compared to 5.7% for Region 4. Households in the lowest consumer quintile spent 7.3 cents out of every consumption dollar

TABLE 8-15 Mean Monthly Expenditure on Utilities and Services (B$)

Region or quintile	Utility			Service	
	Water	Electricity	Telephone	Sewerage	Garbage collection
All Bahamas	20.69	142.10	96.55	1.54	1.45
Region					
1	21.56	143.90	95.29	1.80	1.53
2	20.07	144.33	109.06	0.07	1.33
3	12.23	90.14	93.22	0.00	0.42
4	3.87	121.37	90.32	0.52	0.13
Quintile					
1	18.37	105.12	64.79	1.19	0.34
2	20.00	109.75	74.30	2.77	1.06
3	20.53	141.94	73.08	1.20	1.52
4	20.68	130.99	88.68	2.31	1.68
5	21.94	175.32	126.36	0.75	1.81

TABLE 8-16A Mean Monthly Expenditure on Shelter Costs and Real Property Tax (B$)

Region or quintile	Tenure type				Property tax	Mean monthly exp.
		Mortgage type				
	Rent	Both types	Private mortgage	Gov't.-guaranteed mortgage		
All Bahamas	498.58	938.83	1,032.15	544.02	9.39	660.20
Region						
1	507.82	950.09	1,049.91	543.25	11.24	669.36
2	391.74	789.52	818.28	572.37	3.37	548.21
3	468.00	700.04	716.51	500.00	0.00	564.64
4	337.63	658.86	658.86		0.00	454.64
Quintile						
1	284.81	473.55	466.71	528.82	0.00	313.81
2	394.30	553.76	632.77	417.68	0.94	433.22
3	454.19	612.00	676.64	419.27	1.01	526.22
4	473.22	688.12	722.21	551.41	4.85	562.51
5	688.81	1,439.94	1,521.18	802.08	23.26	1,003.09

TABLE 8-16B Expenditure on Shelter Costs and Real Property Tax as Percentage of Total Monthly Expenditure

Region or quintile	Tenure type				Property tax
		Mortgage type			
	Rent	Both types	Private mortgage	Gov't.-guaranteed mortgage	
All Bahamas	23.55	25.14	26.19	20.72	0.16
Region					
1	23.86	25.27	26.36	20.80	0.20
2	20.43	23.55	24.19	18.76	0.03
3	20.44	23.16	23.93	13.79	0.00
4	18.32	20.28	20.28	0.00	0.00
Quintile					
1	25.03	31.86	31.37	35.86	0.00
2	25.33	24.77	27.11	20.74	0.02
3	23.53	20.72	22.62	15.07	0.03
4	22.69	22.71	22.41	23.89	0.13
5	22.42	28.44	29.25	22.08	0.35

TABLE 8-17 Mean Monthly Expenditure on Other Household Operational Expenses

Region or quintile	Total mo. mean exp. ($)	General expenditure categories			Percentage distribution							
					Household operational expenditure categories							
		Food	Housing	Other	Water	Electricity	Telephone	Sewerage	Garbage collection	Rent or mortgage	Real property tax	Other
All Bahamas	2,968.01	26.71	40.00	33.28	0.83	5.25	3.35	0.07	0.05	24.27	0.16	6.02
Region												
1	3,067.40	25.98	39.64	34.38	0.83	5.23	3.19	0.08	0.05	24.41	0.20	5.65
2	2,560.64	29.73	42.76	27.51	0.96	5.53	4.19	0.00	0.06	22.53	0.03	9.46
3	2,354.85	30.43	42.62	26.95	0.65	4.09	4.37	0.00	0.02	22.58	0.00	10.91
4	2,089.51	33.87	37.88	28.25	0.21	5.70	4.28	0.03	0.01	21.56	0.00	6.09
Quintile												
1	1,374.16	36.38	39.06	24.56	1.26	7.29	4.23	0.06	0.03	26.13	0.00	0.06
2	1,928.16	33.18	39.18	27.64	1.03	5.57	3.73	0.14	0.06	25.20	0.02	3.43
3	2,484.41	27.87	37.74	34.39	0.93	6.07	2.86	0.06	0.06	22.31	0.03	5.42
4	2,798.41	24.54	39.15	36.31	0.79	4.86	3.21	0.09	0.06	22.74	0.13	7.27
5	4,392.92	21.03	42.44	36.52	0.54	4.32	3.35	0.03	0.05	25.18	0.35	8.62

on electricity, whilst those in the wealthiest quintile spent 4 cents for every dollar.

Table 8-15 indicates that Region 2 households spent more on electricity than those in the other three regions. Region 3 had the lowest mean monthly outlay for electricity, B$90.14, compared to B$144.3 in Region 2. Households in quintile 5 spent significantly more on electricity (B$175.3) than did any other quintile; household in the two lowest quintiles spent about 60% of what those in the highest quintiles spent.

Telephone Service

The mean monthly expenditure on telephone service was B$96.55 (3.4 cents for every consumer dollar spent by Bahamian households). Data from Tables 8-15 and 8-17 indicate that Region 2 households spent more (B$109.06 per month) on telephone service than did households in any other region. This amount, however, represented 4.2% of their total monthly expenditure. In Region 4, households spent B$90.32 (about 4.3% of their monthly expenditure) on telephone service. Region 4 households spent 4.2–4.4 cents out of every consumption dollar on telephone service, compared to 3.2 cents for Region 1 households.

Households in the highest quintile spent the most (B$126.36), about 3.4% of total consumption expenditure. On the other hand, households in the lowest quintile had a mean monthly expenditure of B$64.79, which was equivalent to 4.2% of these households' monthly outlay.

Sewerage and Garbage Collection

Across all regions and quintiles, waste disposal cost households less than 1 cent per dollar of mean monthly expenditure. This finding is not surprising, given that 79.6% of households had their garbage collected free of charge by the Government, and only 16.2% used a private collection service. Similarly, only 12.7% of households were linked to a sewerage system, thereby incurring a sewerage cost. Since, in most cases, the sewerage bill was included with the water bill, it is likely that many households overlooked the distinction and reported the entire bill as water. Consequently, expenditure on sewerage services was negligible for all households.

Shelter Costs: Mortgage and Rent

Along with real property tax, shelter costs—mortgage and rent—accounted for the highest percentage of expenditure on household operations across all regions and quintiles. According to Table 8-17, shelter costs accounted for 61.1% of household operating expenditure and 24.3% of total consumption expenditure. Region 1 households spent a higher proportion on shelter costs than did households in any other region. Households in the lowest quintile spent 66.9% of household operating costs for shelter (26.1% of total consumption expenditure), whilst households in the highest quintile spent 60.2% (25.2% of total consumption expenditure).

Table 8-16A shows that, across The Bahamas, the mean expenditure paid by renters was B$498.58. Households in the highest quintile spent more than twice what those in the lowest quintile spent on rent (B$688.81 versus B$284.81).

The mean mortgage expenditure for households was B$938.83; this amount varied between B$950.09 and B$658.86 across the four regions. Region 1 households spend 20% more than the next highest region. Households in the lowest quintile had a mean mortgage expense of B$473.55, compared to B$1,439.94 for those in the wealthiest quintile.

Tables 8-16A and B illustrate, home owners had access to both private and Government-guaranteed mortgages. Owners with private mortgages spent nearly twice as much as those with Government-guaranteed mortgages (B$1,032.15 versus B$544.02 per month). The gap between the two groups was slightly narrower (about 1.4 times) in Regions 2 and 3. In the poorest quintile, owners with Government-guaranteed mortgages paid more than those with private mortgages. However, this finding may have resulted from the small number of observations in the sample. Table 8-16A also shows that the amount of Government-guaranteed mortgages varied little between regions or quintiles. This could reflect the cap on the amount of these loans.

Bahamian households spent 24.3 cents out of every consumption dollar on mortgage or rent (Table 8-17). Region 1 households spent the highest proportion (24 cents per consumption dollar). In addition, households in the poorest quintile spent a higher proportion of their consumption dollars on mortgage or rent (26.13 cents per dollar) than did any other quintile.

Real Property Tax

Expenditure on property tax, as a percentage of total household consumption, was less than 1% (Table 8-17). Households in the highest quintile had a mean monthly

tax of B$23.26 (0.35% of expenditure); those in the lowest quintile paid none. This is the result of exemptions based on property values, income qualifications, and level of compliance with tax regulations.[2]

SELECTED INDICATORS

Durable Goods Ownership

To analyse differences between households, it is useful to describe the availability of certain assets to households. Consequently, the BLCS examined household ownership of 22 consumer durable goods (Table 8-18). Survey results showed that ownership of durable goods was largely a function of tenure type and how common certain goods were, rather than wealth (Table 8-19). Of the 22 items examined, 11 were consistently amongst the 10 most commonly owned (Table 8-20). Only two items, freezer and water heater, were not common to the top 10 for all regions and quintiles. Television ranked first across all regions and quintiles, except for Region 3 and the lowest quintile, where it ranked third and second, consecutively. In the poorest quintile and in Region 3, the stove ranked first. The fan enjoyed a high degree of ownership in all regions and quintiles. More than 52% of households in quintile 5 owned a per-

[2] See Real Property Tax Act, Sections 3 and 39.

TABLE 8-18 Percentage Distribution of Durable Goods Ownership, by Region and Quintile

Item	All Bahamas	Region				Quintile				
		1	2	3	4	1	2	3	4	5
Television	91.9	93.4	84.2	77.3	83.2	80.5	89.3	93.6	95.2	94.0
Fan	84.0	84.6	81.4	76.9	79.4	78.9	85.7	90.8	88.2	78.8
Stove	80.5	80.4	83.0	80.9	76.2	87.7	84.1	84.9	83.0	72.7
Refrigerator	80.1	80.4	80.7	79.2	71.1	74.2	81.9	84.2	86.0	75.5
Car or truck	72.6	75.0	59.1	62.3	52.3	39.3	61.2	72.6	80.2	84.3
Microwave oven	67.2	69.2	59.1	48.2	54.4	39.8	54.3	71.6	77.2	74.2
Tape player/ CD player	58.3	57.6	64.2	52.3	62.4	42.8	45.0	60.4	62.2	65.6
Video player/ DVD player	49.9	51.4	40.6	37.9	48.6	29.7	38.8	52.6	52.5	59.0
Washing machine	47.8	47.2	54.0	40.0	49.0	22.0	36.3	54.4	54.3	54.3
Water heater	46.6	47.4	45.7	32.4	35.5	15.8	28.2	51.0	55.2	57.4
Air conditioner	36.5	36.9	34.1	26.8	42.9	18.2	26.4	42.9	41.0	41.8
Personal computer	36.1	38.1	26.4	20.1	19.3	3.6	18.3	30.5	44.1	52.5
Vacuum cleaner	35.1	36.6	31.7	14.0	16.7	9.6	16.6	36.6	39.7	47.9
Freezer	33.3	30.5	47.4	46.2	53.0	30.3	36.1	35.3	34.8	30.8
Camera/ Video camera	27.9	28.4	28.0	15.9	22.4	11.1	14.6	26.4	32.3	38.2
Bicycle	25.7	24.5	32.6	27.2	38.3	17.5	21.9	34.2	29.5	23.7
Lawnmower	21.4	20.4	30.5	26.1	16.3	9.4	12.8	24.3	20.5	28.0
Video game (Sony, Nintendo)	21.1	22.4	14.4	12.4	13.0	14.6	18.2	29.0	25.2	17.7
Clothing dryer	20.6	20.6	25.1	10.4	12.9	2.7	8.2	14.4	23.2	33.3
Sewing/knitting machine	19.7	20.1	18.1	19.3	14.6	9.2	14.3	25.2	23.3	20.8
Boat	7.1	4.9	20.3	18.7	21.4	3.2	3.4	5.1	7.3	11.2
Motorcycle/scooter	1.3	0.9	4.3	0.8	3.2	1.3	0.4	0.6	1.7	1.5

TABLE 8-19 Percentage Distribution of Consumer Durables Ownership

Characteristic	Consumer status	
	None owned	One or more owned
All Bahamas	1.6	98.4
Region		
1	1.3	98.7
2	2.4	97.6
3	4.4	95.6
4	2.7	97.3
Quintile		
1	3.2	96.8
2	2.1	97.9
3	1.0	99.0
4	0.9	99.1
5	1.1	98.9
Tenure Type		
Owned	1.1	98.9
Private rented	1.2	98.8
Gov't. rented	11.5	88.5
Rent-free	7.7	92.3
Squatted	18.2	81.8
Other	4.8	95.2

sonal computer, compared to only 3.6% in quintile 1. Wealthier households were more likely to own cars or trucks than poorer ones; these durable goods ranked second in the highest quintile and seventh in the poorest. Ranking of the washing machine was probably affected by wide accessibility of laundromats in most urban areas; this item ranked tenth overall, and tenth in Region 1 in the highest and two lowest quintiles.

Ownership of durable goods was not an ideal indicator of level of well-being since many households, even in the higher quintiles, occupied rented quarters where durables were included in the rent. When classified by type of tenure (Table 8-19), it was found that 1.1% of owner-occupied households and 12.7% of renter households owned no consumer durables. A further 19.8% of households who claimed to be squatters and another 4.8% of households with undetermined tenure owned no durable goods.

Housing Quality Index

The variables used to measure housing stock (type of dwelling, construction material of outer walls, toilet facilities, water supply, lighting, kitchens, and tenure type), combined in a simple summary HQI, provided a useful tool for comparing housing conditions across regions and quintiles. The HQI, a simple average of the percentage of households meeting stated standards, included living in

TABLE 8-20 Ranking of the 10 Most Commonly Owned Durable Goods, by Region and Quintile

Item	Bahamas overall	Region				Quintile				
		1	2	3	4	1	2	3	4	5
Television	1	1	1	3	1	2	1	1	1	1
Fan	2	2	4	4	2	3	2	2	2	3
Stove	3	4	2	1	3	1	3	3	4	6
Refrigerator	4	3	3	2	4	4	4	4	3	4
Car or truck	5	5	6	5	8	7	5	6	5	2
Microwave oven	6	6	7	8	6	5	6	5	6	5
Tape player/CD player	7	7	5	6	5	6	7	7	7	7
Video player/DVD player	8	8		10	10	8	8	9	10	8
Water heater	9	9	10	—	—	—	—	10	8	9
Washing machine	10	10	8	9	9	10	10	8	8	10
Freezer	—	—	9	7	7	9	9	—	—	—

TABLE 8-21 Housing Quality Index, by Region

Indicator	Bahamas overall	Region 1	2	3	4
Detached units	63.4	60.7	74.9	87.1	79.2
Walls of concrete block/slab	71.4	73.6	59.9	58.1	61.6
Exclusive use of flush toilets	89.5	90.0	88.4	86.7	80.0
Indoor running water	88.0	89.2	84.8	71.8	77.0
Electricity for lighting	96.0	96.6	92.2	94.6	95.4
Exclusive room as kitchen	92.4	93.0	89.4	89.0	90.4
Level of crowding	90.0	89.6	91.7	94.1	91.7
Ownership of dwelling unit	57.8	55.0	71.7	75.5	72.2
Garbage collection	95.7	97.5	85.8	84.6	90.3
Total	**744.2**	**745.2**	**738.7**	**741.4**	**737.8**
HQI	**82.7**	**82.8**	**82.1**	**82.4**	**82.0**

detached units, dwellings with walls made of concrete, ownership of dwellings, access to indoor running water, access to electricity, exclusive use of flush toilet inside the dwelling, level of crowding, exclusive use of kitchens, and garbage collection (Tables 8-21 and 8-22).

Nationwide, households scored relatively high, with indices for all regions above 80% and only those households in the two lowest quintiles scoring below 80% (68.8% and 78.7%, respectively). Individual components of the HQI varied somewhat. Such items as "Ownership of Dwelling Unit" and "Detached Unit" had indices of 57.8% and 63.3%, respectively; whilst "Electricity for Lighting," "Exclusive Room as Kitchen," "Garbage Collection," and "Level of Crowding" all had indices above 90%. The single detached dwelling (index of 63.3) will likely continue to decline in percentage share, as successive censuses have shown that the townhouse or condominium continues to gain in popularity.

TABLE 8-22 Housing Quality Index, by Quintile

Indicator	Quintile 1	2	3	4	5
Detached unit	71.3	66.3	72.8	63.3	55.1
Walls of concrete block/slab	42.6	57.6	73.0	79.9	81.0
Exclusive use of flush toilets	71.0	88.6	90.8	91.8	94.7
Indoor running water	61.5	82.4	90.5	91.4	961
Electricity for lighting	84.8	94.4	96.0	98.0	99.4
Exclusive room as kitchen	88.1	92.0	91.0	94.3	94.4
Level of crowding	61.4	82.2	91.1	95.9	99.5
Ownership of dwelling unit	46.4	50.6	65.6	59.8	59.4
Garbage collection	91.7	94.6	95.4	96.1	97.5
Total	**618.9**	**708.6**	**766.3**	**770.6**	**777.0**
HQI	**68.8**	**78.7**	**85.2**	**85.6**	**86.3**

TABLE 8-23 Percentage Distribution of Crowding, by Region and Quintile

Persons per bedroom	All Bahamas	Region				Quintile				
		1	2	3	4	1	2	3	4	5
Fewer than 1.0	22.9	21.2	30.2	38.6	31.4	2.0	6.1	9.2	19.4	48.6
1.0–1.9	47.6	48.0	45.0	41.8	50.3	28.2	42.4	52.8	60.1	45.9
2.0–2.9	19.6	20.4	16.5	13.8	10.0	31.2	33.6	29.1	16.4	5.0
3.0–3.9	6.0	6.1	5.7	4.0	4.9	19.3	11.6	5.8	3.6	0.2
4 or more	4.0	4.3	2.6	2.0	3.4	19.3	6.2	3.1	0.5	0.3

Housing conditions are closely related to a group's purchasing power; households in the lowest quintile, whose average monthly expenditure on housing costs was B$1,374, had a HQI of only 69; whilst those in the highest quintile, with an average monthly expenditure of B$4,393, had an HQI of 86. Several variables contributed to the lower index in the poorest quintile. "Indoor Running Water" measured only 62 in the poorest quintile and was almost 21 points below the next lowest quintile; "Level of Crowding" also measured more than 20 points lower than the index for the next quintile. The poorest quintile also scored lowest on "Walls of Concrete Block/Slab" and "Ownership of Dwelling Unit."

Overcrowding

According to the BLCS, overcrowding,[3] another indicator of housing needs, was present in 10% of dwelling units. Whilst only 0.5% in the highest quintile, it was 38.6% in the lowest. As Table 8-23 shows, 22.9% of households nationwide had fewer than one person per bedroom, 70.5% accommodated fewer than two persons per bedroom, and 90% accommodated fewer than three persons per bedroom. Overcrowding was more prevalent in Region 1, where 10.4% of households had three or more persons per bedroom (the range of overcrowding for the other three regions was 5.9–8.3%).

Level of crowding by quintile provides a more meaningful description of the overcrowding problem. Households in the poorest quintile experienced significantly more crowding (a level of 38.6%) than those in any other group. Households in the second poorest quintile also reported significant levels of overcrowding, with a mean of 17.8%. By contrast, the wealthiest and second wealthiest quintiles had crowding levels of less than 1% and 4.1%, respectively.

SUMMARY OF FINDINGS

The BLCS found that most Bahamian households occupied separate detached houses; however, in the two major population centres of Region 1, apartment dwellers comprised a significant percentage of households. Overall, distinct variations in housing types were observed between Region 1 and the other three regions. Structural variations were related to standard of living, as dwelling types occupied by households in the wealthiest quintile differed markedly from those in the other four quintiles. The propensity to occupy a single detached unit decreased as level of wealth increased.

With regard to the types of materials used to construct outer walls, the wealthiest and poorest quintiles differed significantly. In quintile 5, 81% of dwelling units were made of concrete block or slab, compared to only 43% in quintile 1, which were more likely made of wood or stucco.

In terms of tenure type, households in the poorest quintile had the lowest percentage of owner-occupied dwellings and the highest percentage of rented and rent-free dwellings.

Substandard housing generally lacks one or more of the following: piped water, private flush toilet, and private shower or bath. Survey data showed that slightly more

[3] *Overcrowding* is defined as having three or more persons per bedroom

than 12% of dwellings lacked piped water, whilst 10.5% lacked exclusive use of a flush toilet.

Amongst quintiles, more than 96% of households in the wealthiest quintile lived in dwelling units with running water, compared to only 62% of those in the poorest quintile. With regard to the HQI, quintile 1 households had an HQI of 61.52 for indoor running water, compared to 96 for quintile 5 households and 87.98 for the nation overall. Similarly, whilst more than 98% of households in the wealthiest quintile used a flush toilet, only 76% of those in the poorest quintile did; a further 19% used a pit latrine and as many as 2% had no facility. These data raise the question of how best to expand water supply and sanitary services to households in this group.

The Survey found that quintile 1 households spent proportionately more consumption dollars on water, electricity, and telephone services than did quintile 5 households. Whilst the total mean monthly expenditure for wealthy households was B$4,393, poor households spent less than one-third of that amount; however, they spent more than 7% of consumption dollars on electricity and 4% on telephone services, compared to 4% and 3%, respectively, spent by wealthy households. Finally, households in the wealthiest quintile had more than 42% of consumer dollars available to spend on such amenities as health, education, transportation, and entertainment; compared to only 27% of those in the poorest quintile (see chapter 3).

THE CHALLENGES AHEAD

As the above findings show, action is urgently needed to achieve universal coverage for water supply and sanitary services. In addition, research is needed to determine the condition of housing stock to ensure its acceptability for occupancy (the Survey found that an average of 15% of housing units—and nearly 33% in some areas—were more than 30 years old). Moreover, given the Government's stated aim to ensure that many more Bahamians can afford to buy their own homes, policies must be implemented to reduce mortgage-loan rates and borrowing costs.[4] In this regard, efforts must also be made to keep the price of construction materials and housing amenities at affordable levels. Finally, the biggest challenge is ensuring that the country's housing programmes adequately meet the population's changing needs.

REFERENCES

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[4] See *Our Plan 2002*, p. 47.

Technical Appendix

Leona Wilson

A. SURVEY DESIGN AND METHODOLOGY

The Bahamas Living Conditions Survey (BLCS) 2001 aimed at obtaining information on households throughout the country. These included household expenditure on food and non-food items, use of health facilities and social programmes, and general characteristics of the population. It is expected that the data gathered will provide a general picture of the conditions under which Bahamians live. In particular, it will produce a poverty line with which to estimate that proportion of the population or households unable to afford the basic necessities for living.

The Survey aimed at just over 2000 households, randomly selected throughout the country. Selected households were interviewed by specially trained interviewers over a month-long period.

Survey Design

The frame for the survey design was based on data from the 2000 Census,[1] which provided information on the number of households in the country at Enumeration District (ED) level, conditions of the dwelling units, and basic population characteristics (e.g., age, sex, education, and economic activity). The ED was the smallest area used in the collection of Census data and formed an integral part of the survey design.

Certain areas (mainly cays) were excluded from the survey frame: EDs 01, 09, 14, and 15 (South Abaco); EDs 01, 02, and 03 (Exuma); and Berry Island and Ragged Island. Additionally, EDs 01, 02, and 03 (Shirlea) and EDs 01 and 02 (Delaporte), both located in New Providence, were excluded.

Sample Size and Methodology

The islands were first grouped by size: Group 1 (New Providence and Grand Bahama), Group 2 (Abaco, Andros, and Eleuthera [including Harbour Island and Spanish Wells]), Group 3 (Exuma and Long Island), and Group 4 (remaining or Other Family Islands). Household groups or clusters were to be interviewed in the various EDs selected from each of the four groups.

[1] See *Commonwealth of the Bahamas: Report of the 2000 Census of Population and Housing*. Department of Statistics, Ministry of Economic Development, Nassau, 2002.

Because of cost constraints and other difficulties associated with data collection, particularly in the Family Islands, it was agreed that large, workable cluster sizes of 20–25 households would be more effective in reducing the number of primary sampling units or EDs to be visited. In addition, it was necessary to keep the cluster sizes as close as possible to reduce the sampling error.

Two-stage Design

The design consisted of two stages of selection: 1) Primary Sampling Unit (PSU) and 2) Ultimate Sampling Unit (USU) or the cluster of households to be interviewed. The PSUs (EDs) were selected with probability proportional to size; that is, the number of households in the ED at the time of the Census. The design also took into account the need to make statements about the groups and the larger islands amongst the first two groups. Therefore, each of these was given at least 220 households, including 10% for non-response. This means that the sampling fraction varied by group.

An estimate of the number of households to be surveyed was assigned to each group of islands, taking into consideration the criterion mentioned above. Initially, Group 1 was assigned approximately 1,100 households; Group 2, 660; Group 3, 220; and Group 4, 220. However, at the completion of the design, these figures had changed slightly.

The proportion of persons 15 years and older, with four years of high-school education or higher, was used to arrange the EDs within supervisory districts in each of the islands. The EDs were arranged in descending order of these proportions.

Each group was allocated a number of clusters determined by the number of households in the group, the sampling fraction to be used, and an initial approximate cluster size in order that the desired number of households in the survey for each group, as indicated above, could be achieved.

EDs were assigned clusters based on their size or the number of households in the ED.

To allocate the cluster assigned to a group among the EDs, the number of households in each ED was divided by the average cluster size for the group. This number was rounded up or down to the nearest whole number. These, when summed, had to equal the total number of clusters assigned to the group. For example, Group 4 (Other Family Islands) had 1,979 households. A sample of 1 in 9 would yield 220 households. The total of 1,979 households would result in 81 clusters, with an average size of 24.4 households.

Assignment of Clusters and Sampling Fractions

Group 1: Total number of clusters, 3,660. A sampling fraction of 1/60 will yield 61 clusters, with an average size of 20.0 households or approximately 1,220 households.
Group 2: Total number of clusters, 312. A sampling fraction of 1/13 will yield 24 clusters, with an average size of 27.6 households or approximately 662 households.
Group 3: Total number of clusters, 72. A sampling fraction of 1/8 will yield 9 clusters, with an average size of 25.0 households or approximately 225 households.
Group 4: Total number of clusters, 81. A sampling fraction of 1/9 will yield 9 clusters, with an average size of 24.4 households or approximately 226 households.

Thus, the total number of households expected to be interviewed for the BLCS was about 2,334. This number may have varied because of changes that occurred in EDs between the time of the Census and the Survey (e.g., increase or decrease in households) and because the sampling interval was fixed.

Before selecting the households for the sample, EDs were systematically selected within each group. This was done by accumulating the number of clusters in the EDs and placing the cumulated number next to the ED (Table A-A1). A random number was selected between 1 and the inverse of the sampling fraction of the group that was between 1 and 60, 1 and 13, 1 and 8, and 1 and 9 for the respective groups. The inverse of the sampling fraction was the sampling interval. The sampling interval was added to the randomly selected number; the process was repeated until the number of clusters for the group was reached (but not exceeded).

In the case of Group 1, the random number selected was 27. With an interval of 60, this meant that clusters 27, 87, 147, 207, etc. were selected. The EDs within which these clusters fell became a selected ED. For example, in Group 1 (New Providence and Grand Bahama), EDs with # were selected EDs because clusters 27, 87, 147, 207, and 267 fell within these EDs.

During the second stage of the design (selection of the USU [households to be interviewed]), the same procedure was used to select households within EDs, with the interval

TABLE A-A1 Systematic Selection of Enumeration Districts

Group	ED no.	% 15+ pop. with 4+ years high school	No. HHs	No. clusters assigned	Cumulated clusters	EDs selected RS = 27
New Providence						
Yamacraw						
	11601	100.0	88	4	4	
	12001	97.7	53	3	7	
	11501	95.7	124	6	13	
	11901	94.3	61	3	16	
	10701	92.5	147	7	23	
	10601	92.2	111	6	29	#
	10901	89.0	145	7	36	
	10801	88.2	103	5	41	
	11001	88.0	160	8	49	
	11201	86.7	75	4	53	
	10201	86.4	118	6	59	
	11101	85.7	106	5	64	
	11701	84.0	115	6	70	
	11401	82.1	103	5	75	
	11801	80.6	72	4	79	
	10301	79.1	113	6	85	
	10401	78.8	91	5	90	#
	10101	76.8	105	5	95	
	11301	74.8	120	6	101	
	10501	73.7	161	8	109	
Malcolm Creek						
	22601	97.8	187	9	118	
	21101	92.4	235	12	130	
	20801	89.8	117	6	136	
	21301	88.4	126	6	142	
	22301	87.3	143	7	149	#
	20401	86.6	97	5	154	
	22401	85.7	44	2	156	
	21701	85.0	63	3	159	
	20301	84.7	148	7	166	
	21001	84.3	133	7	173	
	20501	83.9	154	8	181	
	21201	82.9	89	5	186	
	20601	81.5	112	6	192	
	22501	80.3	149	8	200	
	20201	80.1	106	5	205	
	20701	80.1	86	4	209	#
	21401	78.0	222	11	220	
	21601	78.0	143	7	227	
	22101	75.3	99	5	232	
	20901	70.6	175	9	241	
	21801	66.1	109	6	247	
	20101	53.3	121	6	253	
	22201	48.9	115	6	259	
	22001	45.7	21	1	260	
	21501	30.8	140	7	267	#

being the number of clusters assigned to the ED. For example, in ED 10601 of Yamacraw, the number of clusters assigned was 6 because there were 111 households (Table A-A1). The randomly selected number between 1 and 6 was 4, therefore households 4, 10, 16, 22, 28, 34, 40, 46, 52, 58, 64, 70, 76, 82, 88, 94, 100 and 106 were selected. (It should be noted that, if 6 were added to 106, then household 112 would have become eligible for interviewing; however, that would exceed 111—that is, there was no household 112. If the listing of the ED were done as required while the survey was being carried out, and there were now 115 households, then household 112 would have become eligible for being selected and interviewed.)

Sampling Errors

The BLCS sampling design is self-weighting. This means that the probability of a household being selected is the same for all households in the population, which, in effect, means a fixed sampling interval for all strata. The sampling fraction differs for each strata (group).

At the time of the design, preliminary Census data were available and the undercount adjustment was taken into consideration. In hindsight, the undercount adjustment was not necessary in several areas of Group 1 (New Providence and Grand Bahama); hence, the discrepancies were between what the design said should be found and what was actually found on the ground. Adjustments had to be made prior to adjustments for legitimate non-response.

Of the total planned questionnaires, 1,881 were analyzed, indicating a non-response rate of 15.4% from dwellings identified from the listing exercise and 18.6% required by the design. An analysis of the reasons for non-response showed that the majority of cases resulted from vacant/demolished dwellings (36.5%). Other factors were refusals (33.3%) and rejects at the data-cleaning stage (3.5%). Table A-A2 shows the distribution of non-response.

To preserve the self-weighting nature of the sample, adjustment factors were applied at the ED level for non-responses. The adjustment factor is the total number assigned under the self-weighting design, divided by the number of dwellings for which data are finally accepted for analysis (the underlying assumption of this method is that both the non-responding and responding households have similar features):

Adjustment factor = Sampling fraction for each stratum **X** (no. assigned dwellings ÷ no. dwellings accepted for analysis).

Estimation Procedures

The formulae for estimating the sample mean and its variance are described below.

Estimator of Total

The estimator of a given total Y for a given subpopulation A is

$$Y_A = \Sigma_h \Sigma_i \Sigma_{j \in A} w'_{hijyhij}$$

where:

Y_A = estimated total for variable Y in subpopulation A
h = substratum within the estimation domain: 1 − 4
i = sample PSU, 1 − n_h
j = unit of analysis or element, 1 - A
A = subset of elements possessing a given attribute; that is, belonging to a given subpopulation A (e.g., persons within a given age group)
y_{hij} = observed value of the variable "y" for the j-th element of the i-th sample PSU in substratum h
w'_{hij} = final (adjusted) sampling weight for the element, including all stages of selection

TABLE A-A2 Non-response Distribution

Stratum	Design planned	Identified in listing	Vacant, closed, or demolished	Refusal	Other	Rejected during data cleaning	Total
I	1,203	1,129	43	87	42	2	174
II	658	649	59	20	29	6	114
III	228	226	12	3	8	3	26
IV	222	219	11	4	12	1	28
Total	**2,311**	**2,223**	**125**	**114**	**91**	**12**	**342**

Estimator of Variance for Total

Under the ultimate clusters approach, the variance of an estimator of total for a given subpopulation A, within any domain of estimation is estimated by

$$v(Y_A) = \left[\Sigma \frac{n_h}{n_h - 1} \left[\Sigma\, Y_{Ahi} - \frac{Y_A}{n_h} \right]^2 \right]$$

where:

$Y_{Ahi} = \Sigma_{j \in A}\, w'_{hij} y_{hij}$
$Y_{Ah} = \Sigma_i \Sigma_{j \in A}\, w'_{hij} y_{hij}$

Other notation is as previously defined.

Estimator for a Proportion (p)

For a proportion (e.g., households with a given characteristic, such as poverty),

$$P_h = \Sigma w_h p_h$$

where:

p_h = proportion of households with the given characteristics (i.e., in stratum # (group) h
$w_h = F^*_h n_h / \Sigma F^*_h n_h$
f_h = sampling fraction for stratum (group) h
$F_h = 1/ f_h$
F^*_h = F_h adjusted for non-response
= F_h × number of households selected ÷ number of households interviewed
n_h = number of elements (households)

Variance of Proportion

Variance of a proportion is expressed as:

$$\text{Var}\,(P_h) = \Sigma w_h^2 (1 - f_h) \cdot \frac{P_h\,(1 - p_h)}{(n_h - 1)}$$

B. OTHER TECHNICAL CONSIDERATIONS

Construction of an Annualized Consumption Data Set

Household Expenditures were collected in Sections 4, 7, 8, and 11. Section 4 relates to Housing and Utilities, Section 7 to Health Expenditures, Section 8 to Education Expenditures, and Section 11 to Food and Non-food Expenditures and Consumer Durables.

To calculate the total consumption expenditure figure, the consumption data (for those sections not already quoted by the householders on an annual basis) were annualized and the parts were summed.

Deflators

The expenditure aggregates were calculated at the prices faced by the household. To allow for comparisons across households, island deflators (New Providence = 100) were compiled (Table A-B1).

The annual household consumption was grouped under nine commodity groups and two food subgroups.

TABLE A-B1 Island Deflators Used, BLCS 2001

	Item group			
Island	**Water bill**	**Electricity bill**	**Telephone bill**	**All other items**
New Providence	100.0	100.0	100.0	100.0
Grand Bahama	34.1	85.8	100.0	98.7
Abaco	58.2	100.0	100.0	126.4
Acklins	58.2	100.0	100.0	126.5
Andros	58.2	100.0	100.0	117.2
Bimini	58.2	100.0	100.0	127.1
Cat Island	58.2	100.0	100.0	113.2
Eleuthera	58.2	100.0	100.0	125.9
Spanish Wells	58.2	100.0	100.0	112.9
Harbour Island	58.2	100.0	100.0	128.4
Exuma	58.2	100.0	100.0	112.5
Inagua	58.2	100.0	100.0	121.3
Long Island	58.2	100.0	100.0	112.8
San Salvador	58.2	100.0	100.0	131.1

Table A-B2 shows the items included in each commodity group and subgroup.

Annualized Expenditure Data Set

The annualized expenditure data is given in the STATA dataset AGGREGATES.dta. Table A-B3 lists and briefly describes the variables.

Identification Variables

The identification variables were edno, hhid, stratum, quintile, decile, and factor in the STATA file "aggregates."

STATA Data Sets

One STATA data set was usually created for each page of the questionnaire, except for Consumption: Food Expenses at Home (Section 11B) and Consumption: Non-Food Expenses (Section 11C), where one data set was created for the entire section (because the same questions were asked for all items in the section). The two questions for the Other Income Sources (Section 10) were on one page; however, question 1 was a household-level question and question 2 was an individual-level question. Therefore, Section 10 has two data sets (Table A-B4).

TABLE A-B2 Items Included in Commodity Groups and Subgroups, BLCS 2001

Group/subgroup	Section and item codes
Commodity Groups	
1. Food and beverages	
1a. Food at home	Section 11B: See below for items
1b. Food away from home	Section 11A
2. Housing	
2a. Rent-imputed rent	Section 4
2b. Utilities, household fuels, repairs and maintenance to house, yard	Section 4, Section 11C: Items 201–203, 249, 268
2c. Household linens and supplies	Section 11C: Items 214–216, 226, 236–239, 241–244
3. Durable goods	Section 11D
4. Health and personal care	Sections 7B, 7C, Section 11C: Items 209, 211–213, 271
5. Clothing and footwear	Section 11C: Items 217–219, 221–225, 227–228
6. Education	Section 8C
7. Transportation	Section 11C: Items 204–207, 234, 248 + (trans. related to health care) + (trans. related to education)
8. Recreation	Section 11C: Items 208, 229, 231–233, 235, 245–247, 253–254, 257, 267, 269
9. Other consumption	Section 11C: Items 261, 265–266
Subgroups (under food at home)	Section 11B
1. Cereals	Items 11–19
2. Starchy fruits/roots/tubers	Items 67, 74, 76, 91–93, 98
3. Sugars and syrups	Items 81–87, 89, 102, 104–106
4. Legumes	Items 64, 83
5. Vegetables	Items 61, 63, 65–66, 68–69, 71–73, 75, 77, 81–82, 95
6. Fruits	Items 54–59, 62, 78–79, 101
7. Food from animals	Items 21–29, 31–39, 47–49, 51–53, 99
8. Fats and oils	Items 41–46, 88
9. Other food at home	Items 94, 96–97, 103, 107

TABLE A-B3 Contents of Dataset AGGREGATES.dta, BLCS 2001

Variable	Description	Variable	Description
1. edno	Enumeration District Number	44. grp02c_2	Annual Household Linen and Supplies Expenditure
2. weight	Household Weight		
3. Hhid	Household Identification Number	45. grp03_1	Annual Durable Goods Current Consumption Expenditure (if purchased 12 months or more ago)
4. stratum	Region		
5. island	Island		
6. Fgrp1	Cereals	46. grp03_2	Annual Durable Goods Current Consumption Expenditure (if purchased less than 12 months ago)
7. Fgrp2	Starchy fruits/roots/tubers		
8. Fgrp3	Sugars and syrups		
9. Fgrp4	Legumes	47. grp04_1	Annual Personal Care Expenditure
10. Fgrp5	Vegetables	48. grp04_2	Annual Outpatient Health Expenditure
11. Fgrp6	Fruits	49. grp04_3	Annual Inpatient Health Expenditure
12. Fgrp7	Food from animals	50. grp04_4	Annual Health Insurance Expenditure
13. Fgrp8	Fats and oils	51. g01	Annual Food Expenditure (grp01_1+ grp01_2)
14. Fgrp9	Other food at home		
15. Age	Age of head	52. g02a	Annual Rent-Imputed Rent Expenditure (grp02a_1+ grp02a_2)
16. Fhh	Female headed household		
17. marital	Head's marital status	53. g02b	Annual Utilities Bill (grp02b_1+grp02b_2+grp02b_3+ grp02b_4+grp02b_5+grp02b_6)
18. national	Head's nationality		
19. Noo_4	Number of persons aged 0–4		
20. no5_14	Number of persons aged 5–14	54. g02c	Annual Household Operation, Linens and Supplies Expenditure (grp02c_1+grp02c_2)
21. no15_19	Number of persons aged 15–19		
22. no20_34	Number of persons aged 20–34		
23. no35_54	Number of persons aged 35–54	55. g02	Annual Housing Expenditure (g02a+g02b+g02c)
24. no55_64	Number of persons aged 55–64		
25. no65ov	Number of persons aged 65 and over	56. g03	Annual Durable Goods Current Expenditure (grp03_1+grp03_2)
26. no0_14	Number of persons aged 0–14		
27. no15_64	Number of persons aged 15–64	57. g04	Annual Health Expenditure (grp04_1+grp04_2+grp04_3+grp04_4)
28. agedep	Age dependency ratio: (no0_14+no65ov)/no15_64	58. g05	Annual Clothing and Footwear Expenditure
		59. g06	Annual Education Expenditure
29. totdep	Total dependency ratio: (no0_14+no65ov)/hhsize	60. g07	Annual Transportation Expenditure
		61. g08	Annual Recreation Expenditure
30. hhsize	Household Size	62. g09	Other Consumption Expenditure
31. Shh	Single Person Household	63. consumption	Total Annual Consumption Expenditure
32. Fact_per	factor*hhsize	64. con_pc	Annual Per Capita Consumption Expenditure
33. grp01_1	Annual Food at Home Expenditure		
34. grp01_2	Annual Food Away From Home Expendiure	65. deflator	Regional Price Deflator
		66. pwat_index	Regional Price Index for Water Bill
35. grp02a_1	Annual Rent Expenditure	67. pele_index	Regional Price Index for Electricity Bill
36. grp02a_2	Annual Imputed Rent Expenditure	68. ptel_index	Regional Price Index for Telephone Bill
37. grp02b_1	Annual Garbage Collection Expenditure	69. rcon_pc	Real Annual Per Capita Consumption Expenditure
38. grp02b_2	Annual Water Bill		
39. grp02b_3	Annual Sewerage Bill		
40. grp02b_4	Annual Electricity Bill	70. decile	Per Capita Population Decile
41. grp02b_5	Annual Telephone Bill	71. quintile	Per Capita Population Quintile
42. grp02b_6	Annual Repair & Maintenance to House and Yard Expenditure	72. tcon_pc	Annual Per Capita Consumption Trimmed by Top and Bottom 1%
43. grp02c_1	Annual Household Operation Expenditure	73. rtcon_pc	Real Annual Per Capita Consumption Trimmed by Top and Bottom 1%

TABLE A-B4 Data Sets, BLCS 2001

Data set	Description
AGGREGATES.DTA	Annualized Consumption Data
CONSUMPTION.DTA	Annualized Consumption Data
DEFLATOR.DTA	Island Deflator
DEMO.DTA	Household Characteristics
HEADS.DTA	Head of Household Characteristics
POVERTY.DTA	Poverty Characteristics (by household)
QUINTILES.DTA	Quintiles (by household)
S00.DTA	Cover Data: Household Questionnaire I
S01A1.DTA	Section 1A: Respondents ID Code
S01A2.DTA	Section 1A: Listing of Individuals Who Might Be Household Members
S01B.DTA	Section 1B: Household Roster
S02.DTA	Section 2: Parents of Household Members
S03.DTA	Section 3: Migration
S04.DTA	Section 4: Housing (S041, S042, S043 combined)
S041.DTA	Section 4: Housing (Part 1)
S042.DTA	Section 4: Housing (Part 2)
S043.DTA	Section 4: Housing (Part 3)
S05.DTA	Section 5: Access to Community Facilities
S06.DTA	Section 6: Access to Social Programmes
S07.DTA	Section 7: Health (S07A, S07B, S07C combined)
S07A.DTA	Section 7A: Health: Self Reported Health Status
S07B1.DTA	Section 7B: Health: Health Care Utilization Expenditures (Part 1)
S07B2.DTA	Section 7B: Health: Health Care Utilization Expenditures (Part 2)
S07C.DTA	Section 7C: Health: Insurance Coverage
S08A.DTA	Section 8A: Education: School Attendance and Completion (S08A1, S08A2, S08A3 combined)
S08A1.DTA	Section 8A: Education: School Attendance and Completion (Part 1)
S08A2.DTA	Section 8A: Education: School Attendance and Completion (Part 2)
S08A3.DTA	Section 8A: Education: School Attendance and Completion (Part 3)
S08B.DTA	Section 8B: Education: School Expenses
S08C.DTA	Section 8C: Education: National School Lunch Programme (S08C1, S08C2 combined)
S08C1.DTA	Section 8C: Education: National School Lunch Programme (Part 1)
S08C2.DTA	Section 8C: Education: National School Lunch Programme (Part 2)
S09A.DTA	Section 9A: Employment and Income: Labour Force Participation
S09A.DTA	Section 9A: Employment and Income: Labour Force Participation
S09B.DTA	Section 9B: Employment and Income: Employment in the Past 12 Months
S09C.DTA	Section 9C: Employment and Income: Wage Employment Earnings
S09D.DTA	Section 9D: Employment and Income: Self-Employment Earnings
S101.DTA	Section 10: Other Income Sources (question 1)
S102.DTA	Section 10: Other Income Sources (question 2)
S11A.DTA	Section 11A: Consumption: Meals Away From Home
S11B.DTA	Section 11B: Consumption: Food Expenses At Home
S11C.DTA	Section 11C: Consumption: Non-Food Expenses
S11D.DTA	Section 11D: Consumption: Durable Goods
SNU00.DTA	Cover Data: Household Questionnaire II
SNU12.DTA	Section 12: Child Health
SNU13.DTA	Section 13: Reproductive Health
SNU14.DTA	Section 14: Anthropometry

Tabulation Programme

STATA tabulation programmes (do files) were created to produce tables for each of the chapters in the report.

Estimation of Consumption Expenditure Aggregates

The estimation of aggregates using BLCS data were straightforward and followed established procedures for consumption expenditure aggregation. Table A-B5 lists the variables used in the construction of the consumption aggregates, while Table A-B6 shows how each aggregate was estimated.

Quintiles and Deciles

The quintiles and deciles were formed from the sample household members after arranging them in ascending order of per-capita household expenditure. Dividing the total household expenditure by the number of household members results in the per-capita expenditure. All members of the household were assumed to have the same per-capita expenditure. The decile classification of households

TABLE A-B5 Variables Used To Construct Consumption Expenditure Aggregates, BLCS 2001

Section	Variable	Description
4	s04213	Amount of last water bill
	s04214	Months covered by last water bill
	s04219	Amount of last sewerage bill
	s04220	Months covered by last sewerage bill
	s04222	Amount of last electricity bill
	s04223	Months covered by last electricity bill
	s04227	Amount of last telephone bill
	s04228	Months covered by last telephone bill
	s04339	Estimate rent paid for the dwelling (if not rented)
	s04341a	Amount paid for rent
	s04341b	Time period for rent paid
	s04345a	Amount paid for garbage collection
	s04345b	Time period for garbage collection
7B	s07b113a2	Amount paid for outpatient visits (public hospital)
	s07b113b2	Amount paid for outpatient visits (public clinic)
	s07b113c2	Amount paid for outpatient visits (private hospital)
	s07b113d2	Amount paid for outpatient visits (private doctor, clinic)
	s07b113e2	Amount paid for outpatient visits (private allied health professional)
	s07b113f2	Amount paid for outpatient visits (foreign)
	s07b113g2	Amount paid for outpatient visits (traditional medicine)
	s07b114	Transportation related to outpatient visits
	s07b116a	Amount paid for medicines (public facility)
	s07b116b	Amount paid for medicines (private facility)
	s07b220	Amount paid for inpatient visits (public hospital)
	s07b223	Amount paid for inpatient visits (public clinic)
	s07b226	Amount paid for inpatient visits (private hospital)
	s07b229	Amount paid for inpatient visits (foreign)
	s07b230	Transportation related to inpatient visits
7C	s07c34	Amount paid per month for medical insurance
	s07c34	Amount paid per month for dental insurance

(continues)

TABLE A-B5 *(Continued)*

Section	Variable	Description
8B	s08b20a	Amount paid for school expenses (tuition)
	s08b20b	Amount paid for school expenses (extra classes)
	s08b20c	Amount paid for school expenses (transportation)
	s08b20e	Amount paid for school expenses (uniforms)
	s08b20f	Amount paid for school expenses (books)
	s08b20g	Amount paid for school expenses (other supplies)
	s08b20h	Amount paid for school expenses (room and board)
	s08b22a	Amount received for school tuition and fees (government)
	s08b22b	Amount received for school tuition and fees (private school)
	s08b22c	Amount received for school tuition and fees (private company)
	s08b22e	Amount received for school tuition and fees (non-profit organization)
11A	s11a02	Value of breakfasts outside the home
	s11a04	Value of lunches outside the home
	s11a06	Value of dinners outside the home
	s11a06	Value of beverages and snacks outside the home
11B	s11b04	Number of months in past 12 months that purchase food item
	s11b05	How spent in typical month on food item
	s11b06	Number of months in past 12 months that consumed home produced food item
	s11b07	Value of consumption in typical month of home produced food
	s11b06	Value of food gifts in past 12 months
11C	s11c04	Amount spent on item in past 12 months
	s11c06	Value of item received as gift (12 months)
11D	s11d02a	Number of years had durable good
	s11d02b	Number of months had durable good (if less than 3 years)
	s11d06	Estimated current market value of durable good

is shown in the STATA data set with label "aggregates." Each quintile comprises two deciles (e.g., quintile 1 comprises deciles 1 and 2) (Table A-B7).

The quintiles and deciles are comprised of an equal number of household members, not an equal number of households. Twenty-three households were ignored in the analysis of variables according to quintiles or deciles because they either had too much expenditure data missing or abnormally high, health-outpatient expenditure.

Standard Errors

Estimates of Mean Per-capita Consumption

The mean per-capita consumption expenditure and its standard error were compiled for the four regions (Table A-B8).

The standard errors were compiled for the mean per-capita consumption estimates at Region 1 (New Providence and Grand Bahama) prices.

Mean Household Composition

Table A-B9 presents the standard errors of the estimates of mean household size; and number of adult males, adult females, and children.

Tests Of Significance

Difference in Means in Two Regions

The broad principles in testing the means obtained from two samples (regions) are described below.

TABLE A-B6 Estimation of Consumption Expenditure Aggregates, BLCS 2001

Aggregate	Estimation
Annual Food at Home Expenditure	For each item in Section 11B calculate:{[(s11b04 × s11b05) + 9s01b06 × s01b07)] × 12} + s11b08, then aggregate over the items
Annual Food Away From Home Expenditure	From each individual in household calculate: (s11a02 + s11a04 + s11a06 + s11a08) × 12, then aggregate over individuals
Annual Rent Expenditure	Question s04341 annualized
Annual Imputed Rent Expenditure	Question s04339 annualized
Annual Garbage Collection Expenditure	Question s04344 annualized
Annual Water Bill	Question s04213 annualized
Annual Sewerage Bill	Question s04219 annualized
Annual Electricity Bill	Question s04222 annualized
Annual Telephone Bill	Question s04227 annualized
Annual Repair & Maintenance to House and Yard Expenditure	Question s11c04 for items 201– 203, 268, 249
Annual Household Operation Expenditure	Question s11c04 for items 214–216, 226, 236, 252
Annual Household Linen and Supplies Expenditure	Question s11c04 for items 237–239, 241–244
Annual Durable Goods Current Consumption Expenditure (if purchased 12 months or more ago)	For each item in Section 11D calculate: s11d06 × (discount rate − inflation rate + depreciation rate) then aggregate over items
Annual Durable Goods Current Consumption Expenditure (if purchased less than 12 months ago)	For each item in Section 11D calculate: [s11d06 × (discount rate − inflation rate + depreciation rate)]/ 12 × s11d02b, then aggregate over items
Annual Personal Care Expenditure	Question s11c04 for items 209, 211–213, 271
Annual Outpatient Health Expenditure	For each individual and item, annualize and aggregate
Annual Inpatient Health Expenditure	For each individual: (s07b220 + s07b223 + s07b227 + s07b229), then aggregate over individuals
Annual Health Insurance Expenditure	For each individual and item, annualize and aggregate
Annual Food Expenditure	(grp01_1+ grp01_2)
Annual Rent-Imputed Rent Expenditure	(grp02a_1+ grp02a_2)
Annual Utilities Bill	(grp02b_1+grp02b_2+grp02b_3+grp02b_4+grp02b_5+grp02b_6)
Annual Household Operation, Linens and Supplies Expenditure	(grp02c_1+grp02c_2)
Annual Housing Expenditure	(g02a+g02b+g02c)
Annual Durable Goods Current Expenditure	(grp03_1+grp03_2)
Annual Health Expenditure	(grp04_1+grp04_2+grp04_3+grp04_4)
Annual Clothing and Footwear Expenditure	Question s11c04 for items 217–219, 221–225, 227–228
Annual Education Expenditure	For each individual, calculate (s08b20a + s0b20b + s08b20e + s08b20f + s08b20g + s08b20h + s0s0b22a + s08b22b + s08b22c + s08b22d), then aggregate over individuals
Annual Transportation Expenditure	Question s11c04 for items 204–207,234, 248, plus for the household aggregate individual [(s07b114 x13) + s07b230 + s08b20c]
Annual Recreation Expenditure	Question s11c04 for items 208, 229, 231–233, 235, 245–247, 253–254, 257, 267, 269
Other Consumption Expenditure	Question s11c04 for items 261, 265–266

TABLE A-B7 Definition of Quintiles and Deciles, Showing Per-capita Expenditure Ranges

Quintile	Decile	Per-capita expenditure ($) From	To
1	1	0.00	2,915.99
	2	2,916.00	3,967.99
2	3	3,968.00	4,986.99
	4	4,987.00	5,947.99
3	5	5,948.00	7,070.99
	6	7,071.00	8,523.99
4	7	8,524.00	10,762.99
	8	10,763.00	13,446.99
5	9	13,447.00	19,658.99
	10	19,659.00	infinity

Hypothesis

The hypothesis in testing for significance is that there is no difference in the means of the populations from which the two samples were selected. If it is known that the standard deviations of the two populations are equal, it will test whether these two samples came from the same population.

This hypothesis, also called the "null" hypothesis, states that the difference in the population means is zero, although there is some observed difference in the sample means.

Assumptions

The assumptions involved in the test were that 1) the two samples are independent and 2) the population distributions are approximately normal.

TABLE A-B9 Mean and Standard Error of Household Size and No. of Adult Males, Adult Females, and Children, BLCS 2001

Variable	Mean	Standard error	Standard error (%)
Sample Size = 1,881			
Household size	3.49	0.10	2.89
Adult males	1.12	0.03	2.89
Adult females	1.27	0.03	2.67
Total adults	2.39	0.05	2.28
Number of children	1.10	0.06	5.28

Results of the tests of significance are shown in Table A-B10.

Data Cleaning

The previous section described the expenditure components at aggregate level, which were estimated for the BLCS. However, calculation of these components was complex. In general, expenditure variables were collected at a highly disaggregated level, mainly to facilitate more accurate estimates of expenditure. Prior to estimating the expenditure aggregates, three issues had to be taken into account. First, because the variables collected in the questionnaire related to various reference periods, standardization (i.e., expressing all variables on a consistent annual basis) was needed. Second, outliers had to be identified and re-estimated across the sample. Third, missing values of the variables had to be re-estimated, where appropriate.

TABLE A-B8 Number in Sample, Mean, and Standard Error of Estimates of Per-capita Consumption, by Region; BLCS 2001

Region	Sample HHs (no.)	Mean cons. ($)	Standard error (%)
1 (New Providence and Grand Bahama)	929	14,999.59	4.2
2 (Abaco, Andros, and Eleuthera)	515	11,033.89	4.1
3 (Exuma and Long Island)	198	10,416.56	6.9
4 (Other Family Islands)	187	9,069.69	5.6
All Bahamas	1,829	14,292.74	2.9

TABLE A-B10 Results of Tests of Significance, by Region, BLCS 2001 (mean per-capita consumption)

Region	Sample size (N =)	Mean cons. ($)	Standard error %	Standard error ($)	Diff. in means ($)	Standard error of diff. ($)	t-statistic	P> | t |
1	929	14,920.82	9.2	1,374.80				
2	515	12,664.05	7.3	924.60	2,256.77	1,656.79	1.36	0.1760
1	929	14,920.82	9.2	1,374.80				
3	198	12,329.04	15.4	1,893.24	2,591.78	2,339.75	1.11	0.2710
1	929	14,920.82	9.2	1,374.80				
4	187	10,796.75	10.4	1,127.19	4,124.07	1,777.81	2.32	0.0220
2	515	12,664.05	7.3	924.60				
3	198	12,329.04	15.4	1,893.24	335.01	2,106.95	0.16	0.8740
2	515	12,664.05	7.3	924.60				
4	187	10,796.75	10.4	1,127.19	1,867.30	1,457.89	1.28	0.2030
3	198	12,329.04	15.4	1,893.24				
4	187	10,796.75	10.4	1,127.19	1,532.29	2,203.39	0.70	0.4880

Standardization

For many variables, the standardization process was trivial because they had already been quoted by respondents on an annual basis. For example, all the education expenses were collected for "the last 12 months." In other cases, the reference period was less than a year; therefore, responses had to be converted into an annual basis (e.g., expenditure on meals away from home, where expenditure was quoted for the "past 30 days"). While most of the annualization calculations were straightforward, the annual flow of services (use values) from consumer durables was calculated on the basis of estimated depreciation rates. The depreciation rates were estimated with straight-line deprecation for the 90th percentile year of acquisition for the item.

Treatment of Outliers

After the variables had been standardized, they could then be compared across households. This meant that it was now possible to search for any outliers that may have been present amongst these standardized variables. Outliers were deemed as those observations lying more than three standard deviations above or below the mean value. The search for outliers was made at either the ED level (e.g., rents paid), or item level (e.g., food at home items). Furthermore, for expenditure variables considered likely to depend on household size (such as food at home and non-food items), the search for outliers was based on per-capita, rather than household, level of the variables. Any outliers were replaced with the mean, median, or predicted value, depending on which was deemed the typical value.

Treatment of Zero and Missing Observations

The stages of the calculations discussed earlier relate exclusively to situations in which respondents reported a value for a variable. However, two types of non-response to questions may occur, which generally appear in the data sets as missing observations. The first type of non-response arises when a respondent is either unable or unwilling to answer a particular question or when the data-entry operator fails to enter the data for a particular question. This may be interpreted as a genuine missing value. The second type of non-response occurs when a question is not applicable and, given the skip pattern of the questionnaire, is not posed. In the case of monetary variables, this is best interpreted as a zero value.

It is highly desirable that genuine missing values be re-estimated to enable all aggregates to be estimated (including zero values) for all households. The re-estimate used was the mean, median, or predicted value of the standardized

variable in the ED in question, these typical values being calculated at the commodity level where considered appropriate. As with outliers, for those expenditures deemed likely to depend on household size, the re-estimate used was the mean, median, or predicted per-capita value, multiplied by the size of the household in question.

FOR FURTHER READING

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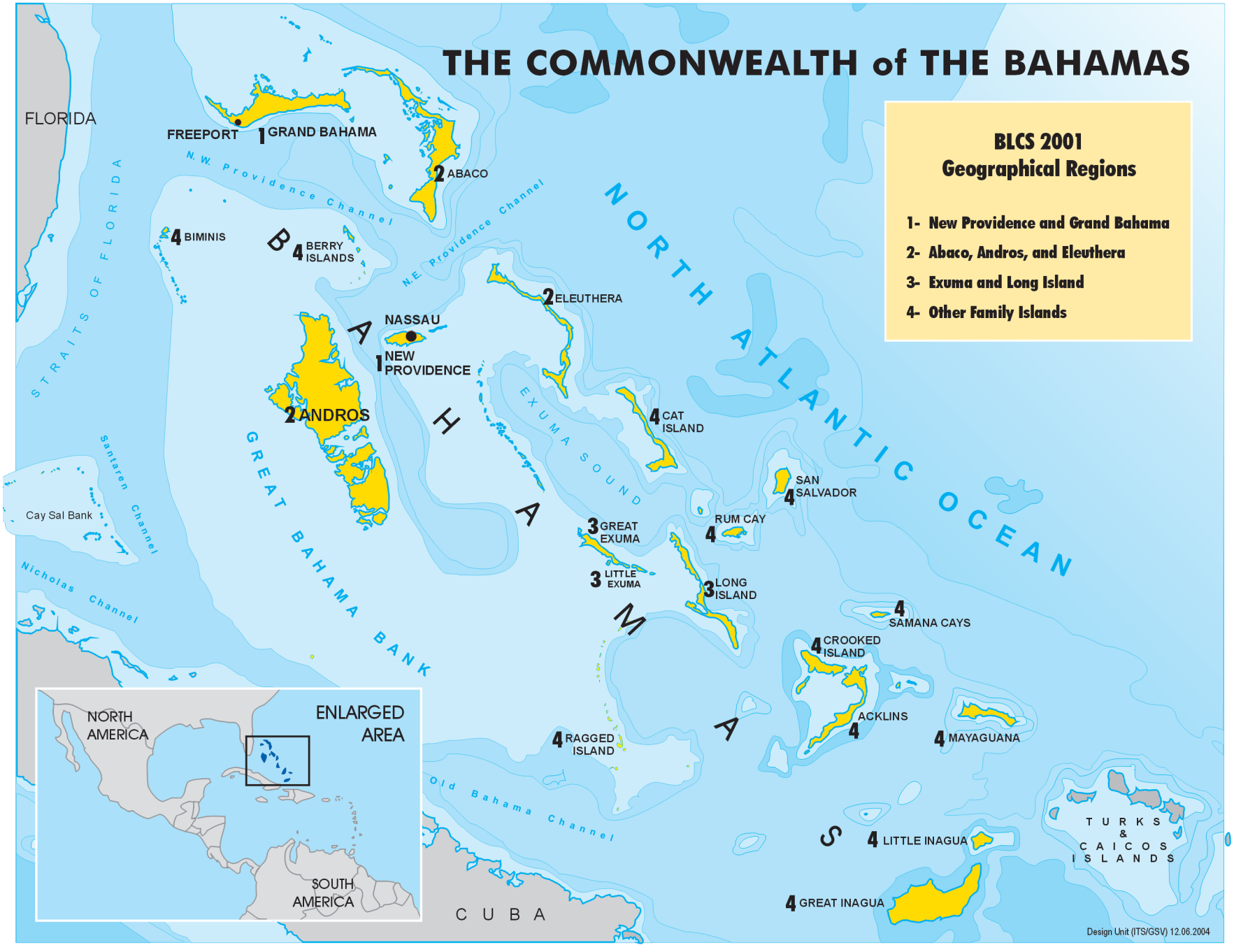

This map, prepared by the Inter-American Development Bank, has not been approved by any competent authority and its inclusion in this study has the exclusive objective of indicating the regions surveyed under the BLCS 2001.