NEW YORK ENERGY $MART℠
LOW-INCOME ENERGY AFFORDABILITY PROGRAM

EVALUATION AND STATUS REPORT
(JULY 1998 THROUGH JUNE 2002)

REPORT TO THE NEW YORK STATE
DEPARTMENT OF PUBLIC SERVICE

SEPTEMBER 2002

NYSERDA

New York Energy $mart℠
PUBLIC SERVICE COMMISSION — NYSERDA

NEW YORK ENERGY $MART℠ LOW-INCOME ENERGY AFFORDABILITY PROGRAM
Evaluation and Status Report
September 2002

Table of Contents

EXECUTIVE SUMMARY

CONTEXT OF THE LOW-INCOME ENERGY AFFORDABILITY PROGRAM S-2

PROGRAM OUTCOMES S-4

SECTION 1. INTRODUCTION TO THE NEW YORK ENERGY $MART℠ LOW-INCOME ENERGY AFFORDABILITY PROGRAM

PROGRAM OVERVIEW 1-1

REPORT CONTENTS AND INTENT 1-5

ORGANIZATION OF THIS REPORT 1-5

SECTION 2. MARKET OVERVIEW

CHARACTERIZATION OF LOW-INCOME HOUSEHOLDS 2-1

STATEWIDE GEOGRAPHIC COMPOSITION OF LOW-INCOME HOUSEHOLDS 2-1
ENERGY USE CHARACTERISTICS OF RESIDENTIAL HOUSEHOLDS 2-3
ENERGY EXPENDITURES OF RESIDENTIAL HOUSEHOLDS 2-4

LOW-INCOME AWARENESS OF, AND BARRIERS TO, STATEWIDE ENERGY ASSISTANCE PROGRAMS 2-7

AWARENESS OF ENERGY ASSISTANCE PROGRAMS, PRE-AND-POST BASELINE RESULTS 2-8
IMPLICATIONS OF THE AWARENESS STUDY 2-12
BARRIERS TO ENERGY ASSISTANCE PROGRAMS FOR LOW-INCOME HOUSEHOLDS 2-13
RESIDENTIAL, LOW-INCOME, AND PUBLIC HOUSING BARRIERS 2-14

SECTION 3. THE LOW-INCOME ENERGY AFFORDABILITY PROGRAM

PROGRAM GOALS AND OBJECTIVES 3-1
LOW-INCOME ENERGY AFFORDABILITY PROGRAM GOALS 3-1

PROGRAM INITIATIVES 3-4

DIRECT INSTALLATION PROGRAM 3-4

LOW-INCOME PUBLIC AWARENESS PROGRAM 3-7

LOW-INCOME FORUM ON ENERGY 3-8

PUBLICLY ASSISTED HOUSING PROGRAM 3-9

LOW-INCOME AGGREGATION PROGRAM 3-11

LOW-INCOME OIL BUYING STRATEGIES PROGRAM 3-14

COORDINATION OF THE LOW-INCOME ENERGY AFFORDABILITY PROGRAM PORTFOLIO 3-17

NEW PROGRAM INITIATIVES 3-19

SECTION 4. DETAILED PROGRAM RESULTS

PROGRAM EVALUATION DESIGN 4-1

GOALS OF THE LOW-INCOME EVALUATION 4-1
Evaluation Guidelines and Process 4-1

DEFINING EVALUATION INDICATORS AND METRICS 4-2

EVALUATION TOOLS AND METHODOLOGY 4-3

EVALUATION RESULTS 4-6

THE DIRECT INSTALLATION PROGRAM 4-6
Purpose of the Program 4-6
Program Specific Results 4-7
Electric Savings 4-7
Environmental Benefits 4-8
Health and Safety Benefits, Customer Perceptions 4-9
Training WAP Agency Representatives 4-9
Training of Building Owners and Low-Income Residents 4-9
Installation of Electric Reduction Measures 4-9
Leveraging of Funds for Energy Reduction Measures 4-11
Baseline/Market Assessment and Evaluation Studies 4-11
Lessons Learned from the Direct Installation Program 4-14

LOW-INCOME PUBLIC AWARENESS PROGRAM 4-16
Purpose of the Program 4-16
Program Budget 4-16
Program Specific Results 4-17
Low-Income Public Awareness Caller Survey 4-21
Lessons Learned from the Low-Income Public Awareness Program 4-24

LOW-INCOME FORUM ON ENERGY 4-27

PUBLICLY ASSISTED HOUSING PROGRAM 4-31
Purpose of the Program 4-31
Progress Toward Program Goals 4-31
Program Budget 4-33
PAHP/AMP Program Goals 4-34
Program Specific Results 4-34
Baseline/Market Assessment and Evaluation Studies 4-34
Publicly Assisted Housing Program Market 4-35

Program Impacts 4-37
Lessons Learned from the Publicly Assisted Housing Program 4-39

OIL BUYING STRATEGIES PILOT PROGRAM 4-40
Purpose of the Program 4-40
Program Budget 4-41
Baseline/Market Assessment and Evaluation Studies 4-41
Oil Buying Strategies Project Specific Results 4-41
Lessons Learned from the Oil Buying Strategies Program 4-45

LOW-INCOME AGGREGATION 4-47
Purpose of the Program 4-48
Program Budget 4-49
Program Goals 4-49
Program Specific Results 4-49
Baseline/Market Assessment and Evaluation Studies 4-50
Program Impacts 4-50
Aggregation Pilot Project Coordination Efforts 4-52
Lessons Learned from the Low-Income Aggregation Program 4-52

SECTION 5. THE FUTURE OF LOW-INCOME PUBLIC BENEFITS PROGRAMS IN NEW YORK

INTRODUCTION 5-1

NEW LOW-INCOME ENERGY AFFORDABILITY PROGRAM INITIATIVES 5-1

ENERGY EFFICIENCY INITIATIVES 5-2
COMMUNITY-BASED INITIATIVES 5-3
ENERGY AWARENESS INITIATIVES 5-5

LOW-INCOME ENERGY AFFORDABILITY SBC FUNDING 5-5

NEXT STEPS IN LOW-INCOME PROGRAM EVALUATION 5-6

OVERVIEW 5-6
FUNCTIONAL AREA A. PROGRAM AND PORTFOLIO ANALYSES EVALUATION 5-7
FUNCTIONAL AREA B. PROCESS EVALUATION AND MARKET RESEARCH 5-7
FUNCTIONAL AREA C. PROGRAM OUTCOME, MARKET IMPACT, AND CAUSALITY EVALUATION 5-8
FUNCTIONAL AREA D. DATA COLLECTION AND DATABASE MANAGEMENT 5-9
FUNCTIONAL AREA E. MEASUREMENT AND VERIFICATION OF PROGRAM OUTCOMES 5-9
FUNCTIONAL AREA F. CASE STUDIES 5-10
EVALUATION BUDGET 5-10
EVALUATION INDICATORS 5-11
CONCLUSION 5-12

APPENDICES

APPENDIX A. LOW-INCOME ENERGY AFFORDABILITY EFFICIENCY PROGRAMS A-1
APPENDIX B. NYS RESIDENTIAL HOUSEHOLD CENSUS DATA B-1
APPENDIX C. RESIDENTIAL ENERGY STATISTICS C-1
APPENDIX D. OTHER STATEWIDE LOW-INCOME PROGRAM SUMMARIES D-1
APPENDIX E. INITIAL 3-YEAR NEW YORK ENERGY $MART℠ LOW-INCOME ENERGY AFFORDABILITY PROGRAM LOGIC MODEL E-1