

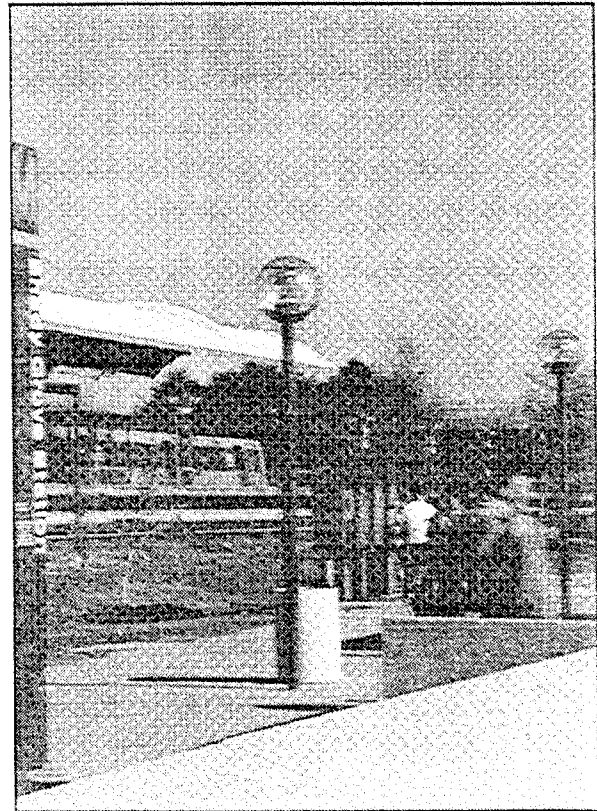
APPROVED AND ADOPTED
JULY 1990

Shady Grove Study Area

M A S T E R P L A N

published by

MONTGOMERY COUNTY DEPARTMENT OF PARK AND PLANNING
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION 8787 GEORGIA AVENUE SILVER SPRING, MARYLAND 20910-3760

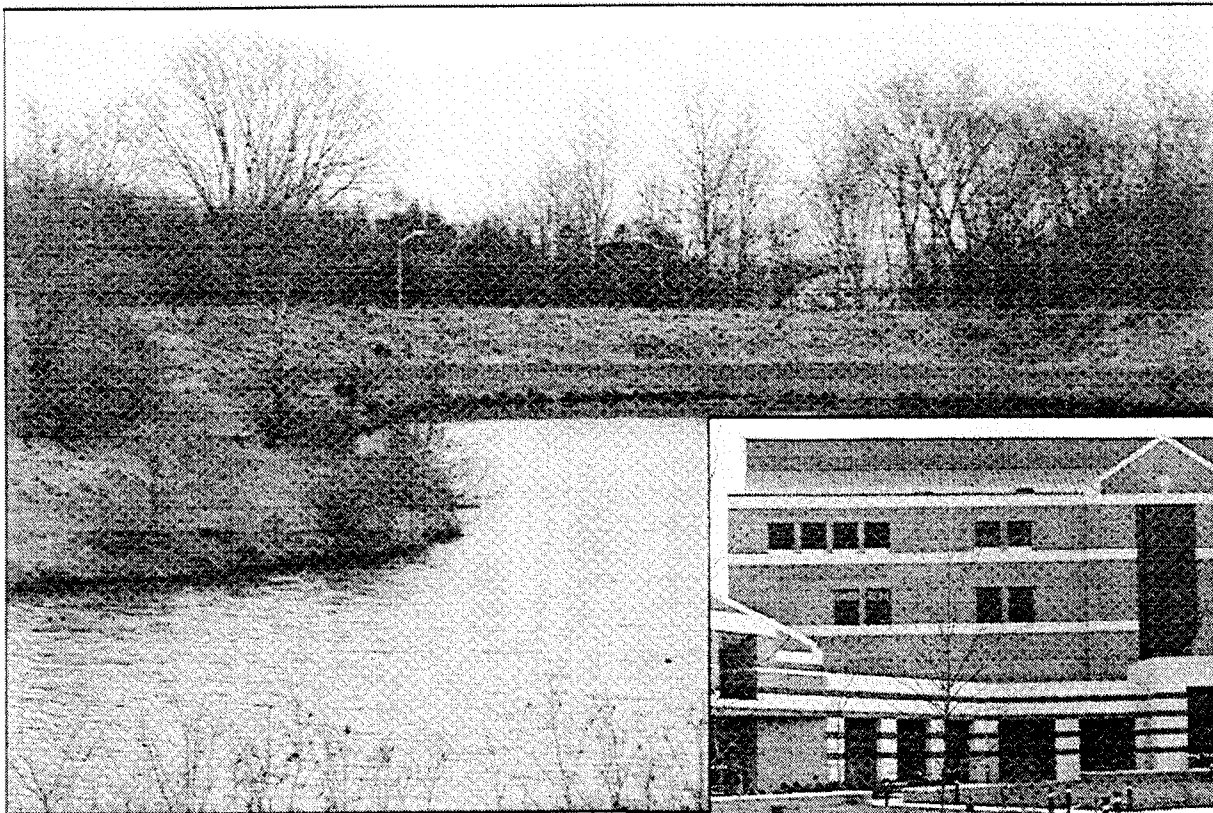


Shady Grove Study Area

MASTER PLAN

APPROVED AND ADOPTED
JULY 1990

published by
MONTGOMERY COUNTY
DEPARTMENT OF PARK AND PLANNING
THE MARYLAND-NATIONAL CAPITAL
PARK AND PLANNING COMMISSION
8787 GEORGIA AVENUE
SILVER SPRING, MARYLAND 20910-3760



APPROVED AND ADOPTED

Shady Grove Study Area Master Plan

An Amendment to the Gaithersburg Vicinity Master Plan, 1985, as amended; a portion of the Potomac Subregion Master Plan, 1980, as amended; a portion of the Sector Plan for the Shady Grove Transit Station Area, 1977 as amended; Master Plan for Historic Preservation, 1979, as amended; the Master Plan of Bikeways, 1978; being also an amendment to the General Plan for the Physical Development of the Maryland-Washington Regional District, as amended; and the Master Plan of Highways within Montgomery County, as amended.

Prepared By:

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION
Montgomery County Department of Park and Planning
8787 Georgia Avenue
Silver Spring, MD 20910-3760
November 1989

Revised By:

THE MONTGOMERY COUNTY EXECUTIVE
January 1990

Approved By:

THE MONTGOMERY COUNTY COUNCIL
July 1990

Adopted By:

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION
September 1990

Abstract

TITLE

Shady Grove Study Area Master Plan

AUTHOR

The Maryland-National Capital Park and Planning Commission

SUBJECT

Master Plan for the Shady Grove Study Area

DATE

July 1990

PLANNING AGENCY

The Maryland-National Capital Park and Planning Commission

SOURCE OF COPIES

The Maryland-National Capital Park and Planning Commission
8787 Georgia Avenue, Silver Spring, MD 20910-3760

NUMBER OF PAGES

219

ABSTRACT

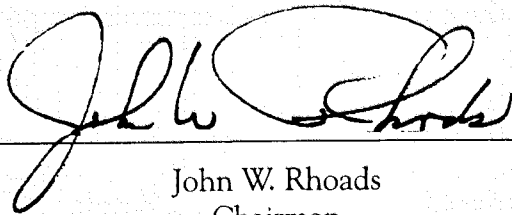
This document contains the text, with supporting figures, for the Shady Grove Study Area Master Plan. This Amendment to the Gaithersburg Vicinity Master Plan affects the Shady Grove Study Area, one of the few areas in the I-270 Corridor with a large amount of vacant land suitable for employment and residential development which is close to I-270, a Metro station, and the center of the County. The Gaithersburg Vicinity Master Plan designates most of the area as a "Research and Development (R&D) Village" and promotes the creation of a "high quality environment not only for research and development firms, but also for offices, corporate headquarters, light manufacturing and business support services."

One of the key features of the Plan is the emphasis on transit to implement the Plan land use recommendations, thereby encouraging additional economic growth. In addition to designating three separate transit rights-of-way in the Study Area, the Plan proposes high priority regional bus routes and two neighborhood bus "loops." The Land Use Plan proposes higher intensity uses at designated transit stations.

Certificate of Approval and Adoption

The Shady Grove Study Area Master Plan Amendment, being an amendment to the 1985 Gaithersburg Vicinity Master Plan, as amended; a portion of the Potomac Subregion Master Plan, 1980, as amended; a portion of the Sector Plan for the Shady Grove Transit Station Area, 1977, as amended; the General Plan for the Physical Development of the Maryland-Washington Regional District; and the Master Plan of Highways within Montgomery County, Maryland; has been approved by the Montgomery County Council, sitting as the District Council, by Resolution No. 11-2131 on July 8, 1990, and the Montgomery County Executive on July 13, 1990; and has been adopted by the Maryland-National Capital Park and Planning Commission by Resolution No 90-28 on September 12, 1990, after a duly advertised public hearing pursuant to Article No. 28 of the Annotated Code of Maryland, 1986 (1988 Supplement).

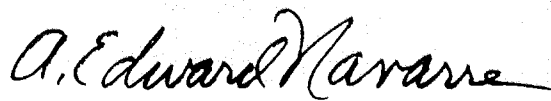
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION



John W. Rhoads
Chairman



Gus Bauman
Vice Chairman



A. Edward Navarre
Secretary-Treasurer

The Maryland-National Capital Park and Planning Commission

The Maryland-National Capital Park and Planning Commission is a bi-county agency created by the General Assembly of Maryland in 1927. The Commission's geographic authority extends to the great majority of Montgomery and Prince George's Counties; the Maryland-Washington Regional District (M-NCPPC planning jurisdiction) comprises 1,001 square miles, while the Metropolitan District (parks) comprises 919 square miles, in the two Counties.

The Commission has three major functions:

- (1) The preparation, adoption, and, from time to time, amendment or extension of the *The General Plan (On Wedges and Corridors) for the Physical Development of the Maryland-Washington Regional District in Montgomery and Prince George's Counties*;
- (2) The acquisition, development, operation, and maintenance of a public park system; and
- (3) In Prince George's County only, the operation of the entire County public recreation program.

The Commission operates in each county through a Planning Board appointed by and responsible to the county government. All local plans, recommendations on zoning amendments, administration of subdivision regulations, and general administration of parks are responsibilities of the Planning Boards.

Elected and Appointed Officials

COUNTY COUNCIL

William E. Hanna, Jr., *President*
Isiah Leggett, *Vice President*
Rose Crenca, *President Pro Tem*
Bruce Adams, *Council Member*
Michael L. Gudis, *Council Member*
Neal Potter, *Council Member*
Michael L. Subin, *Council Member*

COUNTY EXECUTIVE

Sidney Kramer

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

COMMISSIONERS

Montgomery County

Planning Board

Gus Bauman, *Chairman*
Richmond M. Keeney, *Vice Chairman*
Nancy M. Floreen
Carol G. Henry
John P. Hewitt

Prince George's County

Planning Board

John Rhoads, *Chairman*
Roy I. Dabney, Jr., *Vice Chairman*
Samuel Y. Botts
Morgan Wootten
Margaret Yewell

Notice to Reader

An area master plan, after approval by the County Council and adoption by The Maryland-National Capital Park and Planning Commission, constitutes an amendment to The General Plan for Montgomery County. As such, it provides a set of comprehensive recommendations and guidelines for the use of publicly and privately owned land within its planning area. Each area master plan reflects a vision of future development that responds to the unique character of the local community within the context of a County-wide perspective.

Area master plans are intended to provide a point of reference with regard to public policy. Together with relevant County-wide functional master plans, they should be referred to by public officials and private individuals when decisions are made that affect the use of land within the plan boundaries.

Master plans generally look ahead about 20 years from the date of adoption, although they are intended to be updated and revised about every 10 years. It is recognized that circumstances will change following adoption of a plan and that the specifics of a master plan may become less relevant over time. Any sketches or drawings in an adopted master plan are for illustrative purposes only and are intended to convey a general sense of desirable future character rather than a specific commitment to a particular detailed design.

The Master Plan Amendment Process

STAFF DRAFT PLAN — This document is prepared by the Montgomery County Department of Park and Planning for presentation to the Montgomery County Planning Board. The Planning Board reviews the Staff Draft Plan, makes preliminary changes as appropriate, and approves the Plan for public hearing. When the Board's changes are made, the document becomes the Public Hearing (Preliminary) Draft Plan.

PUBLIC HEARING (PRELIMINARY) DRAFT PLAN — This document is a formal proposal to amend an adopted master plan or sector plan. Its recommendations are not necessarily those of the Planning Board; it is prepared for the purpose of receiving public hearing testimony. The Planning Board holds a public hearing and receives testimony on the Draft Plan. After the public hearing record is closed, the Planning Board holds public worksessions to review the testimony and to revise the Public Hearing (Preliminary) Draft Plan as appropriate. When the Board's changes are made, the document becomes the Planning Board (Final) Draft Plan.

PLANNING BOARD (FINAL) DRAFT PLAN — This document is the Planning Board's recommended Plan and it reflects the revisions made by the Board in its worksessions on the Public Hearing (Preliminary) Draft Plan. The Regional District Act requires the Planning Board to transmit the Plan directly to the County Council with copies to the County Executive. The Regional District Act then requires the County Executive, within sixty days, to prepare and transmit a fiscal impact analysis of the Planning Board (Final) Draft Plan to the County Council. The County Executive may also forward to the Council other comments and recommendations regarding the Planning Board (Final) Draft Plan within the sixty-day period. After receiving the Executive's fiscal impact analysis and comments, the County Council may hold a public hearing to receive public testimony on the Plan. After the record of this public hearing is closed, the Council's Planning, Housing, and Economic Development (PHED) Committee holds public worksessions to review the testimony and then makes recommendations to the County Council. The Council holds its own worksessions, then adopts a resolution approving the Planning Board (Final) Draft Plan, as revised.

ADOPTED PLAN — The Master Plan approved by the County Council is forwarded to The Maryland-National Capital Park and Planning Commission for adoption. Once adopted by the Commission, the Plan officially amends the various master or sector plans cited in the Commission's adoption resolution.

Table of Contents

CHAPTER ONE

Plan Summary	1
Plan Challenge	1
Transit Concepts	3
Plan Highlights	3
Land Use and Design Concepts	3
Zoning Plan	4
Transportation and Mobility Plan	5
Community Facilities	5
Environment	6
Implementation	6

CHAPTER TWO

Plan Background	7
Definition of Study Area	7
Major Properties in Study Area	7
Planning History of Study Area	7
The Amendment Process	10
Influential External Factors	12
Moderately-Priced Dwelling Units	12
Inter-Jurisdictional Issues	13

CHAPTER THREE

Development Profile	15
Existing and Approved Development	15

CHAPTER FOUR

Land Use and Design Objectives	19
A Vision of the Future	19
Vision Statement	19
Plan Concepts	21
Land Use and Design Objectives	21

CHAPTER FIVE

Land Use Plan Recommendations	47
Overview	47
Employment and Housing Characteristics	48
Housing Types	48
Jobs/Housing Mix	51
Retail Recommendations	54
Land Use Plan Recommendations by Property	54

CHAPTER SIX

Zoning Plan	73
Zoning Plan Objectives	73
Zoning Plan Recommendations	73
Zoning Recommendations by Parcel	75
Zoning Implementation Strategy	78

CHAPTER SEVEN

Transportation and Mobility Plan	83
Objectives	84
Transit Plan	86
Existing Service	86
Transit Plan Recommendations	86
Exclusive Transitways	86
Neighborhood Bus Loops	89
Other Transit Recommendations	89
Relation of Corridor Cities Transit Easement Study to Plan Process	90
Street and Highway Plan	90
Local Streets and Neighborhood Concept	97
High Occupancy Vehicle (HOV)	98
Intersection Conditions	99
Bikeway/Pedestrian System	104
Heliport Recommendations	105
Acreage Requirements	109
Heliport Location Criteria	109

CHAPTER EIGHT

Community Facilities	111
Parks, Recreation and Open Space	111
Public Schools	116
Human Services	119
Elderly	119
Child Day-Care	120
Housing for Special Populations	121
Other Community Facilities	121
Library Services	121
Shady Grove Life Sciences Center	121
Public Safety	122

CHAPTER NINE

Environmental Plan	123
Stream Valley Protection	123
Erosion, Stormwater Management, and Flood Control	125
Soil Limitations	126
Noise Impacts	127
Water Supply and Sewerage	129

CHAPTER TEN

Implementation 131
 Sectional Map Amendment (SMA) 131
 Zoning Text Amendments 132
 Capital Improvements Program (CIP) 132
 Subdivision Regulations 133
 Staging of Development 134
 Annual Growth Policy 134
 Transferable Development Rights (TDR) 135
 Interjurisdictional Cooperation 135

APPENDICES

A. Intersection Analysis 141
 Possible Grade Separations 141
B. Transportation Systems Analysis 147
 Analysis Results 147
 Average Areawide Level of Service 150
 Methodology 153
C. Existing Child Care Centers 157
D. M-NCPPC Retail Study Findings 159
E. Capital Projects 161
F. Glossary of Terms 165
G. Summary of Zoning Classifications 173
 Explanation of Euclidean and Floating Zones 175
H. Interim Bus Transit System 177
I. Montgomery County Council Resolution No. 11-2131 179
J. M-NCPPC Resolution to Adopt MCPB No. 90-31,
 M-NCPPC No. 90-28 217

List of Figures

1.1	Shady Grove Study Area Location Map	2
2.1	Major Properties in Study Area	8
2.2	Corridor Cities Diagrams	9
3.1	Development Profile as of November 1988.....	16
4.1	Transit System	22
4.2	Land Use and Design Concepts	24
4.3	Conceptual Neighborhood Diagram	26
4.4	Mix of Retail, Office, Residential and Public Spaces.....	27
4.5	Interconnected Street System.....	28
4.6	Diversity of Housing Types	29
4.7	Street Oriented Buildings.....	30
4.8	Mix of Active and Passive Open Space Areas.....	31
4.9	Key Roads Concept.....	33
4.10	Key West Avenue	34
4.11	Redland Road.....	35
4.12	Auto and Transit Oriented Development Options	36
4.13	Roadway Network	38
4.14	Park and Open Space Systems	40
4.15	Historic Sites	42
4.16	Potential Shuttle Bus Route to Link Educational Facilities	44
4.17	Executive Conference Center.....	46
5.1	Land Use Plan	49
5.2	Comparison of Silver Spring and Bethesda CBD Land Areas to Shady Grove Study Area	50
5.3	J/H Ratios Based on CGPS "Trend" Scenario	52
5.4	Major Properties in Study Area.....	55
6.1	Zoning at the Time of Master Plan Adoption	74
6.2	Recommended Base Zones at Sectional Map Amendment	76
6.3	Properties Proposed for Optional Zones	77
6.4	Zoning and Highway Plan.....	80

List of Figures (cont.)

7.1	Transit Plan	87
7.2	Generalized Location of Recommended Alignments.....	91
7.3	Highway Plan	92
7.4	Typical Highway Cross Sections	93
7.5	Potential High Occupancy Vehicle Lane Network	100
7.6	Pattern of Projected Intersection Congestion	101
7.7	Bikeway Plan	106
7.8	Typical Bikeway Cross Sections.....	108
7.9	Alternative Future Locations for a Heliport	110
8.1	Parks, Recreation and Open Space	112
8.2	Existing and Proposed School Sites.....	117
9.1	Environmentally Sensitive Areas	124
9.2	Projected Roadway Noise Contours	128
10.1	Transferable Development Rights Process.....	136
A.1	Schematic Grade Separation Proposal: Sam Eig Highway and Fields Road	142
A.2	Schematic Grade Separation Proposal: Great Seneca Highway and Key West Avenue.....	144
A.3	Schematic Grade Separation Proposal: Shady Grove Road and Darnestown Road.....	145
C.1	Child Care and Senior Facilities	158
D.1	Existing Retail Centers	160
H.1	Interim Bus Transit System (Illustrative).....	177

List of Tables

2.1	Montgomery County Master Plan Development Process	11
3.1	Shady Grove Study Area Development Profile 1988	17
5.1	Summary of Employment and Housing Characteristics in Shady Grove Study Area	48
5.2	Summary of Housing Types in Shady Grove Study Area	48
5.3	Jobs/Housing Mix	51
5.4	Comparison of J/H Ratio of Shady Grove Study Area and Gaithersburg Policy Area	51
6.1	Zoning Implementation Strategy	79
7.1	Transportation Facility Function for Local Access and Through Traffic	84
7.2	Identification of Master Plan Strategies for Improved Transportation in the Study Area	85
7.3	Highway and Transitway Plan Inventory in Shady Grove Study Area and Vicinity	95
7.4	Samples of Likely Congested Intersections	102
7.5	Bikeways in the Study Area Vicinity	107
8.1	Summary of Parks, Recreation and Open Space Recommendations	113
8.2	Public Schools by High School Cluster Serving Shady Grove Study Area	118
B.1	Summary of AM Peak Hour Trips	148
B.2	Estimated Transit Use for the Shady Grove Study Area	149
B.3	Correspondence Between Transit Availability and Average Level of Service Standards	151
B.4	Summary of Results of Areawide Analysis	152
B.5	Mode Split Assumptions – Shady Grove Study Area Outbound A.M. Peak	154
B.6	Current Transit Services in the Study Area Vicinity	155
C.1	Child Care Facilities In and Near the Shady Grove Area	157
E.1	Capital Projects for the Shady Grove Study Area and Vicinity	161
G.1	Summary of Zoning Classifications	173

Acknowledgements

Montgomery County Planning Department

Richard E Tustian, * *Planning Director*

Project Team

Lyn Coleman, *Project Coordinator*

John Carter, *Urban Design*

Nellie Maskal, *Community Planning North*

Rebecca Sherblom*, *Community Planning North*

Signy Schou*, *Community Planning North*

Technical Staff

Charles Coleman, *Reproduction*

Mary Goodman, *Proofreading*

Romesh Puri, *Mapping & Graphics*

Sheila Sampson, *Word Processing*

And special thanks to all the Planning Department staff who contributed to this Plan.

* *No longer with the Planning Department.*



0000000214

SHDYGRV STDY AREA 90