

Guide to the James J. McDonnell transportation collection, 1939-1995

James J. McDonnell transportation collection

1939-1995

A Collection in Special Collections and Archives COLLECTION NUMBER

George Mason University Libraries

2006

Author: FINDING AID AUTHOR

History

Processed by: Special Collections and Archives Staff

Title Statement

Guide to the James J. McDonnell transportation collection, 1939-1995

Subtitle: James J. McDonnell transportation collection

Collection: C0104

Author: FINDING AID AUTHOR

Publication Statement

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Profile Description

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Revision Description

2019-02-13 Converted to schema conforming EAD by dtd2schema.vh.xsl.

Descriptive Summary

Collection number

C0104

Date

1939-1995

Language

English

Abstract

The McDonnell collection contains materials related to McDonnell's work on the Shirley Highway project and other materials from his work at the United States Bureau of Public Roads (BPR) and Federal Highway Administration (FHWA). Types of materials include correspondence, reports, government publications, black-and-white photographs, and 35mm black-and-white negatives.

Creator

James J. McDonnell

Physical Characteristics

6 linear feet (9 boxes)

Repository

George Mason University. Special Collections and Archives.

Administrative Information

Access Restrictions

There are no access restrictions.

Use Restrictions

There are no restrictions on personal use. Permission to publish material from the James J. McDonnell transportation collection must be obtained from Special Collections Research Center, George Mason University Libraries.

Acquisition Information

Collection donated by Laurie McDonnell through John Gifford in February 1996.

Processing Information

Processed by Special Collections and Archives staff. Additional processing by Eron Ackerman in 2010. EAD markup completed by Eron Ackerman and Jordan Patty in August 2009. Additional EAD markup by Eron Ackerman in 2010.

Preferred Citation

James J. McDonnell transportation collection, C0104, Special Collections and Archives, George Mason University Libraries.

Adjunct Descriptive Data

Related Material

Special Collections and Archives also holds many other [transportation collections](#).

Biographical Information

Born in 1930, James McDonnell worked as a civil engineer for the Army Corps of Engineers in the 1950s, then built an extensive career as a highway engineer for the Bureau of Public Roads (which would become the Federal Highway Administration). During his 33-year career with U.S. government transportation agencies, McDonnell was recognized as a national expert in transportation data collection and use. In the late 1950s and early 1960s, he directed the Shirley Highway corridor study in Northern Virginia. His study led to the widening of the four-lane, World War II-era freeway into the first freeway with reversible high-occupancy-vehicle (HOV) lanes in the median. In 1964, McDonnell was called back to Washington to fill a key vacancy as Chief of BPR's Planning Procedure Branch. During his 20-year tenure in this position, he became nationally recognized for his many accomplishments, one of which was the development of a new Home Interview Survey Manual, that brought the practice of conducting surveys, and analyzing results into the computer age. He died in 1995.

Scope and Content

The McDonnell collection contains materials related to McDonnell's work on the Shirley Highway project and other materials from his work at the US Bureau of Public Roads (BPR) and Federal Highway Administration (FHWA). Types of materials include correspondence, reports, government publications, black-and-white photographs, and 35mm black-and-white negatives.

Series 1: Printed Materials contains studies, reports, correspondence, and conference proceedings on highway and urban transportation planning mostly in the Washington, D.C., metropolitan area. Included are statistical studies of the Public Roads Administration from the 1940s, reports on a Pentagon area transportation study from 1960-61, several Fairfax, Virginia household surveys from 1986, and McDonnell's 1958 Master's thesis, "Characteristics of Traffic on a 3 Lane One-Way Roadway Entering a 2 Lane Constriction."

Series 2: Photographs contains photographs, negatives, and presentation slides of various junctures on the northbound and southbound routes of Shirley Memorial Highway. Some of the photographs show heavy

traffic on Shirley Highway and the bridge leading to US 1.

Series 3: Oversize contains oversized printed materials including transportation studies and reports. Some of the reports include maps of roadways in the National Capital Region and charts and graphs of traffic patterns.

Index Terms

Corporate Names:

United States. Bureau of Public Roads.

United States. Federal Highway Administration.

Geographical Names:

Henry G. Shirley Memorial Highway (Va.)--Photographs.

Subjects:

Highway engineering--United States.

Transportation--United States--Planning.

Document Types:

Negatives.

Photographic prints.

Arrangement

This collection is divided into three series according to media format. Each series is arranged by subject.

- Series 1: Printed Materials, 1939-1995 (Boxes 1-5)
- Series 2: Photographs, 1949-1960 (Boxes 6-7)
- Series 3: Oversize, 1959-1967 (Boxes 8-9)

Contents List

Series 1: Printed Materials,

Unit Date 1939-1995

Extent

5 boxes

Scope and Content

This series contains studies, reports, correspondence, and conference proceedings on highway and urban transportation planning mostly in the Washington, DC metropolitan area. Included are statistical studies of the Public Roads Administration from the 1940s, reports on a Pentagon area transportation study from 1960-61, several Fairfax, Virginia household surveys from 1986, and McDonnell's 1958 Master's thesis, "Characteristics of Traffic on a 3 Lane One-Way Roadway Entering a 2 Lane Constriction."

Publications by J. J. McDonnell,

Unit Date 1986, 1995

Container 1 (Box)

Container 1 (Folder)

Scope and Content

Paper list of publications by McDonnell and summary of travel surveys

Census Data and Urban Transportation Planning in the 1980s,

Unit Date 1984

Container 1 (Box)

Container 2 (Folder)

Use of Census Data in Urban Transportation Planning,

Unit Date 1971

Container 1 (Box)

Container 3 (Folder)

Scope and Content

Report of a conference held July 9-10, 1970

Analysis of Urban Highway Needs,

Unit Date 1988

Container 1 (Box)

Container 4 (Folder)

The Graying of America and Its Implications for Travel,

Unit Date September 1, 1988

Container 1 (Box)

Container 5 (Folder)

Supply and Use of the Nation's Urban Highways,

Unit Date June 1988

Container 1 (Box)

Container 6 (Folder)

Scope and Content

Draft

Continuing Transportation Planning Data Requirements,

Unit Date 1970

Container 1 (Box)

Container 7 (Folder)

Scope and Content

Prepared for a Highway Research Board Conference, June 9-10, 1970

Demand: Populations, Households, Employment ...,

Unit Date ca. 1987

Container 1 (Box)

Container 8 (Folder)

Review of Paper: "Things Won't Get a Lot Worse: The Future of US Traffic Congestion,"

Unit Date 1990

Container 1 (Box)

Container 9 (Folder)

Travel Characteristics in Urban Areas; Forecasting for Highways,

Unit Date 1958, 1960

Container 1 (Box)

Container 10 (Folder)

Scope and Content

Highway Research Board, Bulletins 203 and 257, facsimile

Tri-State Transportation Study: Home Interview Survey,

Unit Date 1964

Container 1 (Box)

Container 11 (Folder)

Thesis Original: Development of Capacity Factors for Lane 2 in Construction,

Unit Date ca. 1958

Container 1 (Box)

Container 12 (Folder)

Scope and Content

Includes photographs and map of Queens County Grand Central Expressway

Thesis Equipment and Data,

Unit Date 1958

Container 1 (Box)

Container 13 (Folder)

BHT Thesis Analysis,

Unit Date 1958

Container 1 (Box)

Container 14 (Folder)

Characteristics of Traffic on a 3 Lane One-Way Roadway Entering a 2 Lane Constriction,

Unit Date 1959

Container 1 (Box)

Container 15 (Folder)

National Trends: Population, Employment and Vehicle Ownership,

Unit Date 1987

Container 1 (Box)

Container 16 (Folder)

National Data Sources and Their Usefulness to Metro Area Planners,

Unit Date 1987

Container 1 (Box)

Container 17 (Folder)

Reflections on the Passenger Flow Survey: Issues as Developed by by Phil Fulton,

Unit Date 1993

Container 1 (Box)

Container 18 (Folder)

Report of the Association of Public Data Users Conference (APDU),

Unit Date 1986

Container 1 (Box)

Container 19 (Folder)

List of Macdonald's Speeches

Container 2 (Box)

Container 1 (Folder)

Scope and Content

List of speeches by highway planner Thomas H. Macdonald from 1919 to 1952

National Conference on Decennial Census Data for Transportation Planning,

Unit Date 1984, 1993

Container 2 (Box)

Container 2 (Folder)

Shirley Highway,

Unit Date 1960

Container 2 (Box)

Container 3 (Folder)

Pentagon Area Transportation Study,

Unit Date 1960-1961

Container 2 (Box)

Container 4 (Folder)

Scope and Content

Contains two photographs mounted on paper

Pentagon Area Transportation Study,

Unit Date 1961

Container 2 (Box)

Container 5 (Folder)

Pentagon Area Transportation Study,

Unit Date 1960-1961

Container 2 (Box)

Container 6 (Folder)

Pentagon Area Transportation Study,

Unit Date 1960-1961

Container 2 (Box)

Container 7 (Folder)

Pentagon Area Transportation Study,

Unit Date 1960-1961

Container 2 (Box)

Container 8 (Folder)

Pentagon Area Transportation Study,

Unit Date 1960

Container 3 (Box)

Container 1 (Folder)

Washington Bypass Study,

Unit Date 1989

Container 3 (Box)

Container 2 (Folder)

Scope and Content

Virginia Department of Transportation (VDOT)

Virginia Shirley Highway Improvement - Preliminary Engineering,

Unit Date undated

Container 3 (Box)

Container 3 (Folder)

New Jersey Citizens Highway Committee,

Unit Date 1962

Container 3 (Box)

Container 4 (Folder)

The NCTA Plan for Transportation,

Unit Date 1962

Container 3 (Box)

Container 5 (Folder)

Traffic Forecasting and Origin-Destination Trip Assignment Techniques,

Unit Date 1958, 1961

Container 3 (Box)

Container 6 (Folder)

Use of the Telephone in Gathering Data in Transportation Studies,

Unit Date 1966

Container 3 (Box)

Container 7 (Folder)

Bias Control of a Bus-Rider Origin-Destination Postcard Survey,

Unit Date 1967

Container 3 (Box)

Container 8 (Folder)

Cost-Saving Techniques for Collection and Analysis of Origin-Destination Survey Data,

Unit Date undated

Container 3 (Box)

Container 9 (Folder)

The Ohio Procedure ... New Concepts in Home Interviews and Automatic Zoning for Origin-Destination Studies,

Unit Date 1966

Container 3 (Box)

Container 10 (Folder)

Scope and Content

Cleveland

Computer Coding of Origins and Destinations,

Unit Date undated

Container 3 (Box)

Container 11 (Folder)

1986 Household Survey Special Report on Income,

Unit Date 1987

Container 3 (Box)

Container 12 (Folder)

Scope and Content

County of Fairfax, Virginia

1986 Household Survey Special Report on Rental Housing,

Unit Date 1987

Container 3 (Box)

Container 13 (Folder)

Scope and Content

County of Fairfax, Virginia

1986 Household Survey Special Report on Household Size,

Unit Date 1987

Container 3 (Box)

Container 14 (Folder)

Scope and Content

County of Fairfax, Virginia

1986 Household Survey Special Report on Employment,

Unit Date 1987

Container 3 (Box)

Container 15 (Folder)

Scope and Content

County of Fairfax, Virginia

1986 Household Survey Special Report on Households with Children,

Unit Date 1987

Container 3 (Box)

Container 16 (Folder)

Scope and Content

County of Fairfax, Virginia

1986 Household Survey Special Report on Age,

Unit Date 1987

Container 4 (Box)

Container 1 (Folder)

1986 Household Survey Special Report on Mobility,

Unit Date 1987

Container 4 (Box)

Container 2 (Folder)

Recent Origin-Destination Surveys and Data Collection in North Carolina,

Unit Date ca. 1987

Container 4 (Box)

Container 3 (Folder)

Sampling Strategies for Small Sample Surveys,

Unit Date 1987

Container 4 (Box)

Container 4 (Folder)

Metropolitan Planning for Land Use and Transportation,

Unit Date 1959

Container 4 (Box)

Container 5 (Folder)

Toll Roads and Free Roads,

Unit Date 1939

Container 4 (Box)

Container 6 (Folder)

Evolution of Urban Transportation Planning,

Unit Date 1976

Container 4 (Box)

Container 7 (Folder)

Work of the Pulbic Roads Administration,

Unit Date 1949

Container 4 (Box)

Container 8 (Folder)

Work of the Public Roads Administration,

Unit Date 1947

Container 4 (Box)

Container 9 (Folder)

Public Roads Administration,

Unit Date 1944

Container 4 (Box)

Container 10 (Folder)

Public Roads Administration,

Unit Date 1946

Container 4 (Box)

Container 11 (Folder)

Twentieth-Century Experience in Urban Transit,

Unit Date 1960

Container 4 (Box)

Container 12 (Folder)

Highway Statistics,

Unit Date 1945

Container 4 (Box)

Container 13 (Folder)

Scope and Content

Public Roads Administration

Transportation for Urban America,

Unit Date 1967

Container 4 (Box)

Container 14 (Folder)

Highways,

Unit Date 1987-1988

Container 4 (Box)

Container 15 (Folder)

Scope and Content

Report

Changes in Mobility in American Cities,

Unit Date 1970

Container 4 (Box)

Container 16 (Folder)

Highways and Urban Development,

Unit Date 1965

Container 4 (Box)

Container 17 (Folder)

Variation of Driver Characteristics at Intersections,

Container 4 (Box)

Container 18 (Folder)

Scope and Content

Unpublished study

National Highway Needs Study: Nature of Urban Transportation Problem,

Unit Date 1967

Container 4 (Box)

Container 19 (Folder)

Express Highways in the United States,

Unit Date 1945

Container 4 (Box)

Container 20 (Folder)

Highway Travel Forecasts,

Unit Date 1979

Container 5 (Box)

Container 1 (Folder)

Private Sector Involvement in Virginia's Nineteenth Century Transportation Improvement Program,

Unit Date undated

Container 5 (Box)

Container 2 (Folder)

Changes in Urban Areas,

Unit Date 1987

Container 5 (Box)

Container 3 (Folder)

Rapid Transit in the United States,

Unit Date 1967

Container 5 (Box)

Container 4 (Folder)

Review of Papers for Theme II: Urban Transportation and Its Future,

Unit Date 1961

Container 5 (Box)

Container 5 (Folder)

Highway Needs After 1972,

Unit Date 1966

Container 5 (Box)

Container 6 (Folder)

Urban Transportation Planning Procedure,

Unit Date 1961

Container 5 (Box)

Container 7 (Folder)

Special Reports on Major Business Problems,

Unit Date ca. 1964

Container 5 (Box)

Container 8 (Folder)

Transportation Data Needs: Programs for a New Era, Proceedings of a Conference,

Unit Date 1993

Container 5 (Box)

Container 9 (Folder)

**Recommendations for the South Leg Freeway Alignment;
Recommendations for a Freeway in the Northern Sector; Recommended
action on North Leg Freeway,**

Unit Date 1970

Container 5 (Box)

Container 10 (Folder)

Scope and Content

District of Columbia Department of Highways and Traffic,

Rail Rapid Transit for the Nation's Capital,

Unit Date 1965

Container 5 (Box)

Container 11 (Folder)

The Regional Development Guide,

Unit Date 1966

Container 5 (Box)

Container 12 (Folder)

Scope and Content

National Capital Regional Planning Council

Public Roads, a Journal for Highway Research, Vol. 30, No. 7,

Unit Date 1959

Container 5 (Box)

Container 13 (Folder)

Transportation Planning in the District of Columbia, 1955-1965,

Unit Date 1966

Container 5 (Box)

Container 14 (Folder)

Secretary Skinner Salutes James McDonnell on Veterans Day,

Unit Date 1990

Container 5 (Box)

Container 15 (Folder)

Series 2: Photographs,

Unit Date 1949-1970s

Extent

2 boxes

Scope and Content

This series contains photographs, negatives, and presentation slides of various junctures on the northbound and southbound routes of Shirley Memorial Highway. Some of the photographs show heavy traffic on Shirley Highway and the bridge leading to US 1.

Shirley Highway - H Road Southbound from Ridge Road to US 1,

Unit Date 1960

Container 6 (Box)

Container 1-9 (Page)

Mt. Vernon Highway - Alexandria to Key Bridge,

Unit Date 1960

Container 6 (Box)

Container 10-21 (Page)

Shirley Highway - H Road Southbound from Ridge Road to US 1

Unit Date 1960

Container 6 (Box)

Container 21-23 (Page)

End of B Road from Arlington Blvd. to Memorial Bridge,

Unit Date 1960

Container 6 (Box)

Container 23-26 (Page)

Shirley Highway - H Road Northbound from US 1 to Ridge Road,

Unit Date 1960

Container 6 (Box)

Container 27-29 (Page)

Start of Shirley Highway Northbound from Rt. 7 to 14th St. Bridge,

Unit Date 1960

Container 6 (Box)

Container 30-35 (Page)

End of Shirley Highway Southbound,

Unit Date 1960

Container 6 (Box)

Container 35-41 (Page)

Miscellaneous photographs, mostly of Shirley Highway,

Unit Date 1960

Container 6 (Box)

Container 41-63 (Page)

Scope and Content

Photos show highway and bridge traffic

Shirley Highway and Rt. 1,

Unit Date 1949-1952

Container 7 (Box)

Container 1-3 (Page)

Scope and Content

5" x 7" photographs

Shirley Highway,

Unit Date 1950-1952

Container 7 (Box)

Container 4-24 (Page)

Scope and Content

8.5" x 11" photos of highway traffic in different weather conditions

Shirley Highway,

Unit Date ca. 1950-1960

Container 7 (Box)

Container 25-27 (Page)

Scope and Content

Negatives

Images from presentations on transportation planning,

Unit Date 1960s-1970s

Container 7 (Box)

Container 28-34 (Page)

Scope and Content

Slides; includes dozens of slides for DC area studies and 91 slides from Upstate New York studies "for Crighton's AASHO talk at Portland, Oregon"

Series 3: Oversize,

Unit Date 1959-1968

Extent

2 boxes

Scope and Content

This series contains oversized printed materials including transportation studies and reports. Some of the reports include maps of roadways in the National Capital Region and charts and graphs of traffic patterns.

The Region's Growth,

Unit Date May 1967

Container 8 (Box)

Container 1 (Folder)

Scope and Content

Regional Plan Association

Urban Transit Development in Twenty Major Cities,

Unit Date March 1968

Container 8 (Box)

Container 2 (Folder)

Scope and Content

Automotive Safety Foundation

What Freeways Mean to Your City,

Unit Date January 1964

Container 8 (Box)

Container 3 (Folder)

Scope and Content

Automotive Safety Foundation

Urban Freeway Development,

Unit Date August 1964

Container 8 (Box)

Container 4 (Folder)

Scope and Content

Automotive Safety Foundation

Washington Metropolitan Area Transportation Study, Vol. 4: A Recommended Highway Improvement Program,

Unit Date 1952

Container 8 (Box)

Container 5 (Folder)

Scope and Content

Regional Highway Planning Committee

Public Participation in Regional Planning,

Unit Date October 1967

Container 8 (Box)

Container 6 (Folder)

Scope and Content

Regional Plan Association

Baltimore Area Mass Transportation Plan: Phase II-Long-Range Program,

Unit Date October 1965

Container 8 (Box)

Container 7 (Folder)

Scope and Content

Metropolitan Transit Authority of Maryland

Henry G. Shirley Memorial Highway Improvement: Bus Facility Study,

Unit Date September 1964

Container 8 (Box)

Container 8 (Folder)

Scope and Content

Commonwealth of Virginia Department of Highways

F.A.I Route 95 Cost Summary Sheets,

Container 9 (Box)

Container 1 (Folder)

Scope and Content

Commonwealth of Virginia Department of Highways

Henry G. Shirley Memorial Highway Improvement: Preliminary Engineering Report,

Unit Date July 1962

Container 9 (Box)

Container 2 (Folder)

Scope and Content

Commonwealth of Virginia Department of Highways

Transportation Plan: National Capital Region, The Mass Transportation Survey Report,

Unit Date 1959

Container 9 (Box)

Container 3 (Folder)

Scope and Content

National Capital Planning Commission, National Capital Regional Planning Council

Atlas of New York City: Five Boroughs, No.1445

Container 9 (Box)

Container 4 (Folder)

Mass Transportation Survey National Capital Region: Civil Engineering Report,

Unit Date January 1959

Container 9 (Box)

Container 5 (Folder)

Scope and Content

National Capital Planning Commission, National Capital Regional Planning Council

Mass Transportation Survey National Capital Region:Traffic Engineering Study,

Unit Date 1958

Container 9 (Box)

Container 6 (Folder)