MD 355/I-270 Corridor Project

RESEARCH WORK PROGRAM

Inventory and Analysis

Objectives: To provide information and analyses on existing demographic, economic and land use conditions.

Benefit: This work will communicate a corridor-wide perspective and inform decision-making during the plan making process.

Scope of Work: Inventory current land uses and zoning. Identify opportunities for change, and assess the relevance of zoning as it relates to anticipated future needs. Identify land use issues to be considered in the development of master plans within the Corridor (Shady Grove, Germantown, Gaithersburg Vicinity, Twinbrook and White Flint).

Deliverables: By early September 2006, Research and Technology Center staff will deliver the following:

- Existing land use inventory;
- Demographic profile; and
- COG 7.0 Forecast (jobs and housing).

By early October 2006, Research and Technology Center staff will deliver the following:

- Housing market profile;
- Senior housing market study;
- Land use trends report;
- Class A office market study;
- Industrially-zoned land market study;
- Industry and employment profiles; and
- Retail gap analysis.
Key Planning Goals

Develop a vision for the MD 355/I-270 Corridor that meets our present needs for environmental health, human well-being, and economic prosperity without compromising the needs and opportunities of future generations. This planning approach will examine the opportunities for a more sustainable environment. Sustainable systems integrate land use, mobility, water resources protection, renewable and efficient energy use, and air quality in order to preserve human health and future choices.

The MD 355/I-270 Corridor should integrate natural resources, recreational opportunities, and initiatives to support wider environmental and rural area protection goals.

Objectives: Describe the current environmental conditions in the MD 355/I-270 Corridor – Relate those conditions to the larger interconnected, environmental systems of the County and region. Identify further analyses to develop a framework to protect, enhance and restore the environment and create a healthy, sustainable urban corridor for the future.

Benefit: This work will provide a comprehensive, system-wide assessment of urban environmental issues that in many cases transcend individual planning area boundaries. This will allow the identification of more effective, comprehensive strategies to address environmental impacts that occurred as the Corridor developed, and develop a cohesive environmental strategy for sustainable development that can be implemented as individual master, sector or neighborhood plans are developed. Urban areas that do not lie within a specific planning area will also be addressed.

Boundary: The study area boundary generally coincides with the Community-Based Planning boundary provided, and is expanded to include subwatersheds that lie within or
adjacent to this area. Significant parkland or forest stands that directly abut the area are included. Important green infrastructure and alternative transportation linkages to the corridor will also be included.

**Scope of Work:** Staff will prepare an inventory of environmental resources in the subwatersheds that encompass the MD 355/I-270 Study area. The inventory will include the most detailed information available in tabular and map form regarding impervious cover, forests, wetlands, wildlife, protected or unique species and biological communities, water quality, geology, topography and soils information. These resources will be described, and unique or important information about their relevance countywide included. The state Green Infrastructure information (and information from the County’s Green Infrastructure Functional Master Plan, now underway) will be used to identify potential natural area hubs and connections. In urbanized areas, historical information will be examined to understand the area before extensive development, assessing losses and the opportunities for restoration. This information will be used in later planning stages to develop indicators to measure environmental progress as the MD 355/I-270 Corridor redevelops.

**Existing Conditions (based on existing data sources):**
- Environmental base maps summarizing and mapping environmental conditions and findings including existing information from relevant master plans/sector plans for
  - Streams and wetlands, hydric soils
  - Subwatershed boundaries and resource conditions
  - Forest and tree canopy
  - Drainage and stormwater management infrastructure
  - Significant environmental remnants
  - Buried streams
- Existing imperviousness calculations by subwatershed (CSPS, other relevant plans)

**Second Level assessments to be delivered as available (beginning Spring 2007):**
- Identification of environmental trends (2030 projection) for:
  - Imperviousness
  - Potential for stormwater management
  - Forest and tree cover
- Open space

Identification of problems and opportunities related to:
  - Urban water quality/stormwater management
  - Percent of built area with stormwater management controls
  - Stream restoration/daylighting
  - Integrated mobility choices
  - Urban tree canopy
  - Noise
  - Energy efficiency

**Deliverables:**
- Report (s)
- Maps
- Tables
- Illustrations

**Work Strategy:**
Work with the Project Advisory Group, Montgomery County Department of Environment Protection (DEP), the Cities of Rockville and Gaithersburg, and applicable Federal and State agencies to develop ideas, recommendations and deliverables.
MD 355/I-270 TECHNOLOGY CORRIDOR PROJECT

TRANSPORTATION PLANNING PROGRAM

Inventory and Analysis

Objectives: To affirm the state of transportation today in the I-270 Corridor and communicate opportunities to better serve the 'Corridor Cities' through: improvements to roads, transit, and expanded accommodations for bicycles and pedestrians.

Benefit: This work will communicate a corridor-wide perspective at the same time individual master plans are updated including: describing a cohesive transportation vision, demonstrating the impacts of land use on the transportation system, identifying the location, status, and implementation schedules for master planned transportation elements.

Scope of Work: The intent of the transportation planning for this project is to coordinate the transportation planning of MD 355/I-270 plans (Germantown, Gaithersburg Vicinity, Twinbrook, and White Flint master plans), and transportation issues that span master plan boundaries within the Corridor. This work will describe a cohesive transportation vision for the future, address land use impacts on the transportation system, and foster the implementation of transportation projects that contribute to the creation of desirable communities.

Affirm the state of transportation in the MD 355/I-270 Corridor by:

- Summarizing and mapping the transportation recommendations in approved master plans/sector plans, including:
  - Master Plan of Highways elements (including transitways and transit stations)
  - Countywide Bikeways Functional Master Plan
  - Countywide Park Trails Plan
  - Local bikeways and planned pedestrian paths
  - Other key recommendations

- Summarizing the transportation elements of the 2030 COG Constrained Long Range Plan (CLRP).

- Summarizing local improvement plans and programs below the level of CLRP, including
  - County Council's 10-year transportation plan
  - CIP projects for County, Rockville, and Gaithersburg
Active / proposed TMD programs

- Identifying forecast travel trends (existing and 2030 CLRP) for the corridor, including
  - Mode splits and roadway travel (VMT and average V/C ratios) by Policy Area
  - Transit Demand and line capacity and station capacities for the western portion of the Metrorail Red Line and the Brunswick MARC line
  - Congestion at key intersections (updating the I-270 Corridor Local Network Analysis)
- Summarizing and mapping bus routes and service schedules for the MD 355/I-270 Corridor.
- Summarizing the Countywide Bikeways Functional Master Plan and Countywide Park Trails Plan

Synthesize the data into a report(s), tables, illustrations and mapping.

Deliverables: Report(s), Maps, Tables, and Illustrations

Work Strategy: Work with other M-NCPPC Divisions including Community Based Planning master planning teams, WMATA, the Cities of Rockville and Gaithersburg, and Federal and State agencies to develop ideas, recommendations, and deliverables.

Time Frames: September/October/November 2006

Coordination: M-NCPPC Community-Based Planning Division
M-NCPPC Research and Technology Division
DPWT
WMATA
FHWA
MDOT (SHA, MTA)

Contact: Tom Autrey, Transportation Planning 301-495-4533

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MD 355/I-270 Corridor Project

PARK AND TRAIL PLANNING WORK PROGRAM

Inventory and Analysis

Objectives: To provide information and analyses on park and trail plans recommended in the existing and approved master plans along the I-270 Corridor.

Benefit: A corridor-wide perspective of park and trail planning that will inform decision-making during the I-270 Corridor planning process.

Scope of Work: The work effort will include the following:

- Review and comment on maps showing existing and proposed park and trail systems in corridor;
- Identify areas where park trails and bikepaths should be linked;
- Identify opportunities to “green” the corridor, both in terms of private and public open space;
- Identify park and trail issues to be considered in the development of master plans within the Corridor, (Shady Grove, Germantown, Gaithersburg Vicinity, Twinbrook and White Flint.), including recreation facility needs and natural and cultural area preservation needs.

Deliverables: A written narrative to accompany the map

- A generalized description of existing park and trail pattern
- Relationship of PROS to the corridor study
- Identification of areas where the opportunity exists to integrate parks and trails more fully into the life of the corridor
- Identification of areas where gaps exist between trails and bikeways
- Identification of areas where natural and cultural resource preservation is necessary
MD 355/ I-270 Corridor Project

URBAN DESIGN WORK PROGRAM

Inventory and Analysis

Objective: To identify and analyze the variety of existing physical characteristics along MD 355.

Benefit: To help inform the creation of a framework for the MD 355 Corridor.

Scope: Analyze the physical characteristics, and the current land use and master plan recommended land use. Identify design opportunities and constraints for change. Identify future needs. Identify potential issues.

Deliverables: Existing conditions and analysis maps, illustrations, and sketches, including:

- Illustrative plan of existing and pipeline development
- Existing circulation systems character analysis and design (pedestrian, bikeway, roadway, and transit)
- Existing inventory and analysis of community character, (land use, intensity and form, vegetation, landmarks, natural features, and other areas of interest)
- Opportunities and constraints