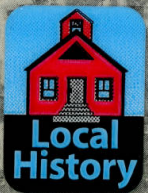


Final Report
Henderson Center Plan
Planning Commission
City of Upper Arlington
Upper Arlington, Ohio 43221
4 March 1974

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Final Report
Henderson Center Plan
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4 March 1974

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Prepared by: The Harpham • Elmer Partnership, Columbus, Ohio

LIST OF OFFICIALS

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Frank L. Elmer, Planning Officer

ACKNOWLEDGEMENTS

In addition to the listed City Officials, the efforts and contributions of Robert J. Holland, past member of City Council and Planning Commission, were most valuable in conducting this study. City of Columbus Officials, including N. Jack Huddle, Director, Department of Development, and members of his Transportation Planning, Zoning, Project Planning and Land Use Planning staffs contributed useful information, reviewed initial concepts and provided coordination services in other ways. Mr. Ted Wallace, Columbus, City Engineer, was helpful in review of planned and proposed Henderson Road area, street improvements; William C. Habis, Executive Director, Mid-Ohio Regional Planning Commission, and selected members of his Transportation Planning Staff provided review services of planning concepts and preliminary plan proposals.

The graduate student planning staff of The City of Upper Arlington is also acknowledged for having conducted the many data gathering tasks so essential to this type of study.

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1. Planning Area History

- 1.1 Annexation of the land between Lane and Henderson Roads was originally suggested to The City of Upper Arlington in the 1962 Master Plan. Because of the projected rapid growth of the Columbus metropolitan area, Upper Arlington was expected to be under great pressure to expand its population. In order to maintain its largely suburban residential character, annexation was deemed necessary. Ladislas, Segoe and Associates, retained by the City to prepare the 1962 Master Plan, proposed annexing north to Henderson Road. This allowed the City room to grow, but did not expand the population to such an extent (an estimated 40,000 to 50,000 persons) that industrial land use within the City would be necessary to support the facilities and services required by this expanded population.
- 1.2 On February 17, 1966, the City requested a land use and engineering study for the area north of Lane Road, east of Riverside Drive, south of Henderson Road and west of the 1966 east corporation line of The City of Upper Arlington. This was the area most strongly recommended by Segoe and Associates for annexation. The completed **Land Use and Engineering Study**, prepared by Marion V. Packard, Frank S. Baum, and Burgess and Niple, Limited, reported that 656 acres were in the proposed area of annexation with potentially 8,000 additional residents. This area coincided with the existing Board of Education boundaries and created a uniform physical boundary for the City. However, since the projected utility demand for the area was expected to be high, The City of Upper Arlington was expected to incur a higher than average dollar participation in utility construction costs.
- 1.3 The potential strain upon the City's Capital Improvements Program resulted in a controversy over how to zone the new area. One proposal suggested residential land uses, while another proposal recommended that a 100-acre section be devoted to a modified (less intense or restricted) industrial use. The **Supplementary Report to the Land Use and Engineering Study**, prepared the same year as the original study, and authored by Messrs. Wells, Pride, Hyrne and Jones, showed that income tax valuations for industrial uses are often of lesser value from an income standpoint than planned residential, office or commercial uses.
- 1.4 An **Amendment to the Supplementary Report to the Land Use and Engineering Study** was then prepared by Messrs. Wells and Pride (early in 1967) to determine if other cities had evaluated the benefit of industry in their community. It was concluded that Upper Arlington was the only central Ohio city to have sought this information. The study suggested that 105 acres of restricted industrial development would generate an

estimated \$34,125.00 in revenues for the City's use. It would also save the school district more than \$340,000.00. Upon recommendation of the Planning Commission, Council adopted the modified industrial proposal of the **Land Use and Engineering Study**. Final annexation of the area north of Lane Road was completed on July 14, 1969.

- 1.5 Ordinance 11-67, establishing an office/research center zoning classification (commonly referred to as the "ORC" district), was passed by Council on June 12, 1967. The primary motivation behind its creation was to establish a zoning classification to be used in newly-annexed, modified industrial development.

2. An Overview of Current Conditions

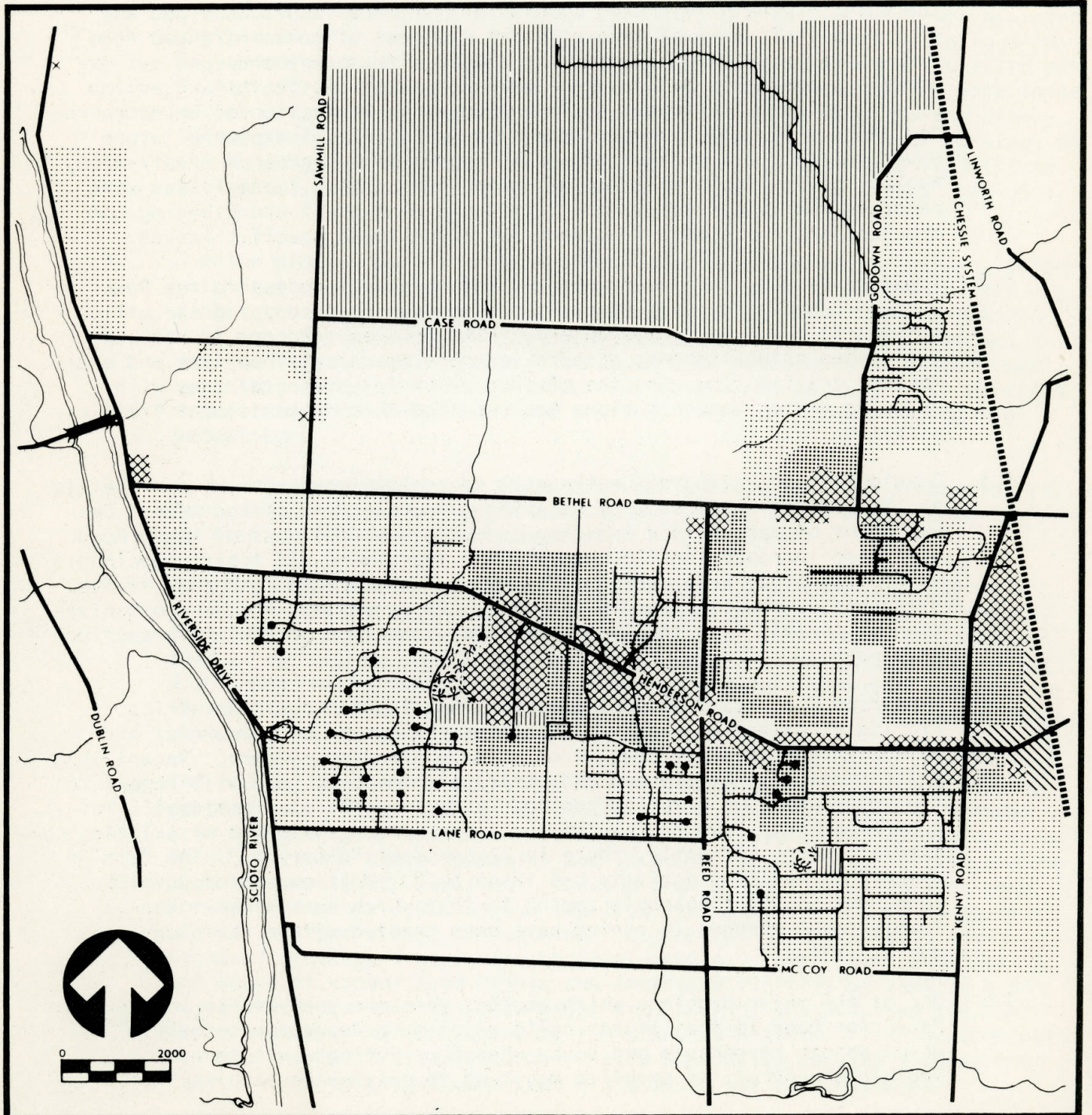
- 2.1 The Henderson Road area has become hazardous and perceptually displeasing to pedestrian and driver alike. Among the factors responsible:
 - 2.1.1 Henderson Road itself is under the control of two abutting jurisdictions (Franklin County and The City of Columbus) while the land abutting Henderson Road is split among three jurisdictions (the former two plus The City of Upper Arlington);
 - 2.1.2 There has been a lack of uniform land use planning and development policy formulation for the area, and;
 - 2.1.3 Rapid growth in the Henderson Road area has generated traffic congestion and resulted in confused circulation patterns.
- 2.2 At the present time, most traffic generation results from commercial and business uses north and south of Henderson Road and east of Dierker Road. However, as the Upper Arlington ORC continues to develop, employee traffic to and from that area will, undoubtedly, increase. Area realtors estimate that 4,000 employees will work in the ORC when the entire 80 acres has been developed. This number of employees would generate more than 5,000 vehicle trips per day not counting visitor and normal service traffic.
- 2.3 One of the most important problems for Upper Arlington in the immediate future will be to find quick and safe ingress and egress for ORC traffic. While many employees will probably find residences outside The City of Upper Arlington and will reach the ORC via Henderson Road, there is no direct southern access to the site. Arlington Centre (as the ORC has been named by its developers) was purposely created without southern access so that residential streets would not become major routes to the site. However, it seems that such traffic flow might occur regardless of the original intentions. Gateway Drive to Stonehaven Drive, travelling north, will be one possible route to Henderson, as will Coach Road to Dierker Road.
- 2.4 Upper Arlington's **Crossroads of Riverside Drive**, prepared by The Harpham-Elmer Partnership in 1971, emphasized the maintenance of Riverside Drive as an arterial carrying high volumes of through traffic. Scenic values associated with the highway were considered of sufficient importance to warrant limitations to frontage access and restrictions upon further commercial development. The City of Columbus has adopted these basic

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PLATE I: EXISTING LAND USE

- LOW DENSITY RESIDENTIAL
- MEDIUM DENSITY RESIDENTIAL
- XXXXX COMMERCIAL
- ||||||| INSTITUTIONAL
- ////// INDUSTRIAL
- ~~~~~ OPEN SPACE



policies for Riverside Drive in the **Don Scott Area Plan**, prepared by the Division of Planning, Department of Development, City of Columbus, and has further suggested that Sawmill and Henderson Roads will, therefore, increase in importance with respect to accommodating future commercial and service-related development. Improvements to Sawmill and Henderson Roads west of Dierker Road will, no doubt, be required in the not-too-distant future.

3. The Context of Planning

- 3.1 During a meeting of 20 December 1972, held by the Ad Hoc Committee of the Upper Arlington Planning Commission, area residents outlined and discussed their view of area problems. Issues of concern ranged from the seemingly constant clutter associated with street and curb cut excavations generated by projects under construction, to the suggestion by one resident that Upper Arlington consider annexation of unincorporated lands north of Henderson Road to gain control of expected future developments. All parties generally expressed a degree of frustration, typical of residents of a rapidly-urbanizing area. These issues were recorded and integrated by the City's planning staff and Planning Commission into a skeletal framework for identifying specific issues.
- 3.2 Traffic volumes, turning movements, and points of access to the Reed Road / Henderson Road and Kenny Road/Henderson Road shopping and office concentrations have congested area thoroughfares. Access to various businesses establishments appears far more important than free and easy through traffic flow, and the mixture of strip commercial uses with shopping center concentrations has resulted in a dysfunctional traffic situation.
- 3.3 Development of Arlington Centre will generate almost as much new traffic as is currently generated by existing commercial and office uses. Development of vacant land fronting on Henderson Road west of Kenny Road will also increase traffic congestion. There were 137 traffic accidents within the study area during 1971-1972. There are no less than twelve different pavement widths in the area. It is obvious that a reorganization of traffic flow (including the improvement of several intersections) is mandatory.
- 3.4 Henderson Road typifies most suburban shopping and business strips. Finding an effective means to stabilize the spread of commercial and related high-intensity uses is of primary planning concern. Vacant land still remains to be planned and offers a glimmer of hope with regard to the development of a well-organized land use pattern. Problematic to such an effort, however, is the functional disorganization of existing commercial uses. Currently, there is no sense of "district." The "domino theory" of rezoning activity has taken hold. Most owners of developable land have sought comparable zoning to that which exists "next door." Twenty-seven changes in zoning have been granted within the study area during 1971.
- 3.5 One of the major problems which emerges when one analyzes an area such as Henderson Road is that of zoning in relation to development scale. Controls which appear reasonable and sound when considering a single use on an individual parcel, in practice may tend to only exacerbate the situation

when many, many uses agglomerate into a strip commercial development pattern. The problem, therefore, becomes one of:

- 3.5.1 Identifying those factors which are integral to the functioning of the suburban commercial district as a whole; and
 - 3.5.2 Developing mechanisms which will provide the City with control, at a larger scale, over both existing and emerging commercial developments.
- 3.6 The issue of aesthetics must be considered paramount in developing a plan for the Henderson Road area. The corridor of the Henderson business strip currently provides the primary image for the entire planning area. Confusion of traffic access is related to the variability of building setbacks, property size, and the intermixture of shopping centers with individual single-tenant buildings. The entire issue of signage and directional traffic flow devices relates to the overall functional workings of the shopping and business strip. Currently, however, there is not even a distinct, visual definition to where the business "district" begins and ends.
- 3.7 A major problem exists with regard to the overall form and interrelationship of the high-intensity uses (multi-family as well as commercial) within the planning area. The Henderson Road planning area epitomizes what can happen when planning and development hinge on vehicular and traffic flow considerations. The appearance everywhere of asphalt and vehicles, except for those residential neighborhoods which have remained sequestered from Henderson Road traffic, tends to totally negate the pedestrian.
- 3.8 As noted above, there are three distinct entities sharing responsibility for controlling planning and development in the study area. Clearly, a unified planning and development effort is required.
- 3.9 Several factors will bear directly upon study area development trends. These include the proposed regional shopping center at Sawmill Road and State Route 161, continued improvement to Don Scott Field, the development of Arlington Centre, and the anticipated growth in area population and concomitant demand for new housing. The time frame most appropriate to consider is The City of Columbus Capital Improvements Program of area sewer and water development and roadway improvements.
- 3.10 The new regional shopping center will be a venture of the F & R Lazarus Company and will consist of 700,000 to 1,000,00 square feet of leaseable area built on a site of over 100 acres. This type of center would contain 20-80 different establishments, and it would require a supporting population of over 10,000 families. Parking provisions would likely be made for approximately 5,000 cars. The impact of this center, in terms of generating "parasitic" or "spin off" commercial establishments along adjacent frontage lands, will be considerable. There are approximately 180 acres of vacant land within the immediate vicinity of Sawmill Road and State Route 161. This acreage, with that of the proposed regional center, equals that projected by the Mid-Ohio Regional Planning Commission as required by 1975 to serve the entire population located between the Scioto and Olentangy Rivers from State Route 161 to McCoy Road!

- 3.11 One might conclude from this information either that the study area (extended to State Route 161) is growing faster and more intensely than had been expected, or that the study area will be overbuilt with commercial uses if past development trends are permitted to continue. There are elements of truth to each of these alternatives. The development of Arlington Centre and other similar (though smaller-scaled) office complexes represent more intense land uses than had been expected. Likewise, the "captive market" of office workers will generate speculative service establishment development.
- 3.12 Don Scott Field is currently the most-heavily used general aviation airport within The State of Ohio. In terms of air traffic, it ranks fourth among all airports in the state. Though plans to extend the port's jet strip and to improve facilities are progressing, the airport will not offer commercial flight service in the foreseeable future. General aviation traffic can be expected to increase, however, and the port's general location will continue to increase in significance. Land readily accessible to the port will become more desirable for office/distribution and similar uses which desire convenient general aviation capability.
- 3.13 Traffic volume projections, generated by the Division of Transportation Planning, City of Columbus, are useful in underlining the significance of anticipated study area growth:

PRESENT AND PROJECTED TRAFFIC VOLUMES*

(In Vehicles per Day)

<u>ROADWAY</u>	<u>1971</u>	<u>1990</u>
Henderson Road	10,000	25,000
Bethel Road	3,800	20,000
State Route 161	6,000	25,000
Sawmill Road	1,900	20,000

*Taken from Don Scott Field Area Plan.
Prepared by the Planning Division, Department of Development, City of Columbus, Ohio.

These projections suggest a substantial increase in traffic flow, an increase which seems to imply that each of the roadways listed will be expected to serve an arterial function by 1985 or 1990. It should be made clear, however, that these projections illustrate a trend in traffic flow demand and reflect anticipated study area development in general. The figures do not require acceptance of the position that each of the roadways listed must change its function to that of an arterial highway.

- 3.14 Two factors intimately related to the future development and functioning of the study area are evident. First, the task of matching desire lines of travel with appropriate functional trip purposes will become more important. Secondly, identifying the role each roadway will be expected to play in providing for both traffic service and land access will require more precision. These two points are interrelated to the extent that the primary function of a roadway can be viewed as an integration of the

land access and through traffic service functions which it must serve.

- 3.15 Well over half of the land area north of Henderson Road to I-270 remains to be developed for various types of new residential communities. Medium-density residential development will likely follow past trends in locating adjacent to commercial and office concentrations. The trend toward planned unit development, which has become so popular throughout the metropolitan area, can be expected to continue. Market pricing will be in the medium to high range, and single-family housing will likely constitute the largest segment of land area in terms of new construction. Within the Upper Arlington study area, several large tracts of land remain to be developed for residential uses. Single-family developments are expected to predominate. Approximately 3,500 people reside within the study area. Over 7,000 people currently reside north of Henderson Road and south of I-270 in either Columbus or Franklin County. The population of the entire study area may reach 22,000 by 1985. Existing characteristics of medium income and under 35 age groups will not change significantly.

4. Planning Objectives

- 4.1 The following planning objectives are a response to existing (and probable future) conditions within the Henderson Road planning area:
 - 4.1.1 While planning is somewhat "after the fact" with regard to Henderson Road, a basis for planning which combines both land use and thoroughfare considerations should be identified as a framework for a development (and redevelopment) policy.
 - 4.1.2 Proposals to correct inadequate pavement widths, dangerous drainage ditches, inadequate traffic controls, excessive curb cuts, and the like, should be based upon least-cost criteria, but should be related to long-range development policy.
 - 4.1.3 Geographic limits to the Henderson commercial district should be defined to eliminate speculative zoning proposals, to stabilize the area land use pattern, and to change the district's image from that of an "out of site, out of mind" section to that of a community asset.
 - 4.1.4 Implementation considerations must transcend political jurisdictions and must provide development and redevelopment incentives to the private sector.

5. Achieving the Objectives: A Functional Roadway Classification System

- 5.1 All of the primary issues of planning concern found within the Henderson Road area share the common denominator of being related to the dual role of heavily-travelled roadways: land access and traffic service. Past attempts to guide development have not taken adequate account of the relationships between land use and thoroughfare planning principles. A basis for planning which combines both land use and thoroughfare considerations must be employed to frame a solution to area problems.
- 5.2 Most people have come to recognize the logic behind the separation of transportation modes. Railroad lines, and rail transit should have rights of way different from those which accommodate the motor vehicle. The pedestrian walkway network should have its own priority in relation to a

community's street and roadway system. Airports, water ports, and terminals (including warehousing and distribution centers) are, by definition, the proper linkage points for the different means of travel and transport so necessary to urban life.

This rationale, characterized above, can be extended to provide a logical format for considering land use and thoroughfare planning issues concurrently. If one considers a hierarchy of access in terms of the various origins and destinations served by a roadway system, one can consider the separation of roadways by functional categories of access that they should be designed to serve.

5.3 A well-balanced thoroughfare system should maintain a strict separation of roadways which provide the following, functionally-distinct kinds of access:

- 5.3.1 Access to Region
- 5.3.2 Access to Community
- 5.3.3 Access to Services and Conveniences
- 5.3.4 Access to Activities and Community Facilities
- 5.3.5 Access to Residence

Each of these functionally-different types of access require differing roadway design standards and traffic volume maintenance controls. Each also varies characteristically in terms of: (1) priority given to traffic service versus land access and (2) **environmental capacity** -- environmental impact features which relate to both the traveller's capacity for perception at roadway speeds and the physical manner in which land access can be designed to facilitate environmental quality and traffic service.

The following chart and sketches are illustrative:

ROADWAY	FUNCTION	DESIGN STANDARDS	PRIORITY OF TRAFFIC SERVICE TO LAND ACCESS
Expressway	Access to Region	Totally limited access. 300' ROW. 4 Travel Lanes Divided. 70 MPH Speed	100% Traffic Service
Arterial Highway	Access to Community	Controlled Access. 120' ROW. 4 Travel Lanes 45-50 MPH Speed	75% Traffic Service 25% Land Access
Collector Street	Access to Community Services and Conveniences	Controlled Access. 80 to 100' ROW. 2-4 Travel Lanes. 35-45 MPH Speed	50% Traffic Service 50% Land Access
Neighborhood Street	Access to Activities and Community Facilities	60-80' ROW. 2-4 Travel Lanes. No Curb Parking 35 MPH Speed	25% Traffic Service 75% Land Access
Residential Street	Access to Residence	One Curb Cut per Property, 50-60' ROW. 2 Travel lanes. 2 Lanes Curb Parking. 20-30 MPH Speed.	100% Land Access

5.4 To apply the functional classification of roadway access, it is necessary to consider travel desire lines (preferred routes) from types of origins to types of destinations. Such consideration can lead to a delineation of roadways in terms of primary functional purpose.

Plate II suggests a functional classification of roadway access for the Henderson Road area.

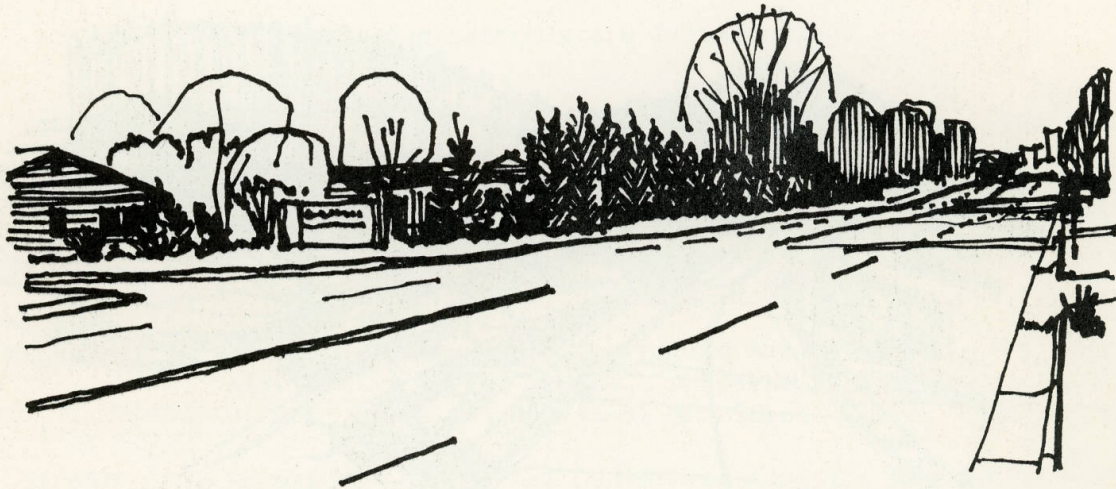
5.4.1 I-270 provides access to the region. It is an expressway.



ACCESS TO REGION

5.4.2 Riverside Drive, State Route 161, Kenny Road, and the new Henderson Road provide (or will provide) access to community. These roadways are arterials, primarily designed to serve traffic. Bethel Road will serve this function also upon the implementation of the planned connections of Hayden Run and Morse Roads to Bethel Road.

5.4.3 Sawmill Road, Henderson Road, Reed Road, and a portion of Godown Road are providing access to community services and conveniences. These roadways should be considered collectors, and should equalize emphasis on



ACCESS TO COMMUNITY

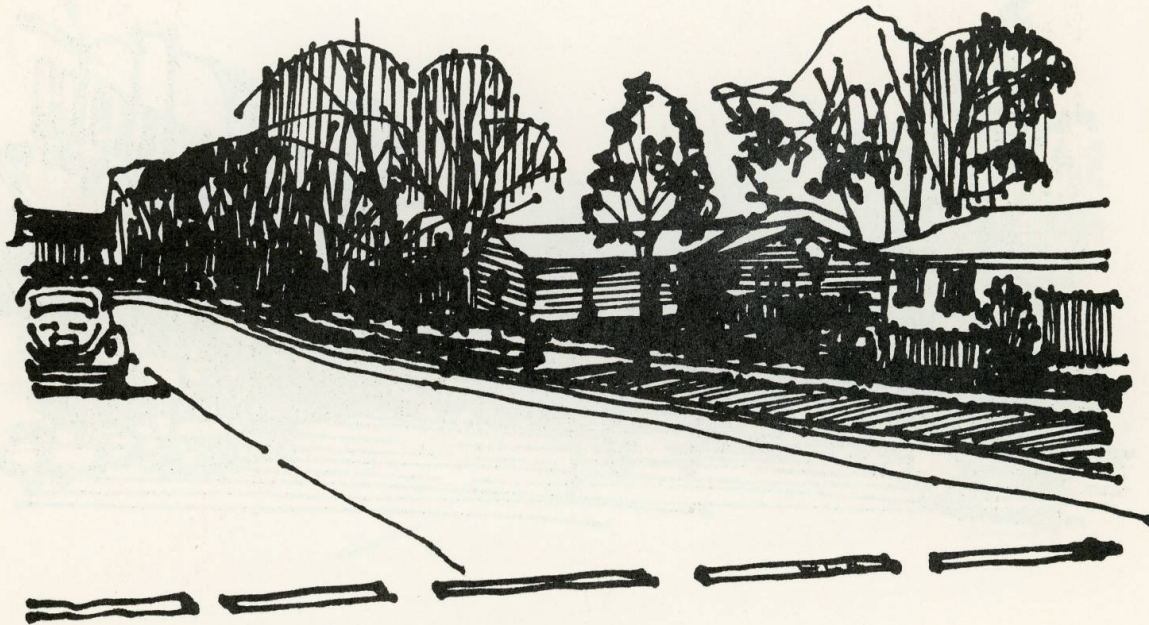
- land access and traffic service.
 - 5.4.4 Case Road, Lane Road, McCoy Road, and the balance of Godown Road serve primarily as neighborhood streets and should provide access to activities, community facilities, and residential streets.
 - 5.4.5 All other streets within the study area are residential streets, providing total emphasis on land access for residential uses.
- 5.5 Planning for the Henderson Road area must be guided by an understanding of the functionally-distinct nature of collector roadways. All land use



**ACCESS TO SERVICES
AND CONVENIENCES**

proposals and suggested roadway improvements, as well as all other planning proposals, should be geared to facilitate an equal balance between land access and traffic service for all roadways serving to provide access to community services and conveniences. Likewise, performance standards and implementation procedures must set direction for the development and maintenance of environmental quality appropriate to the collector roadways.

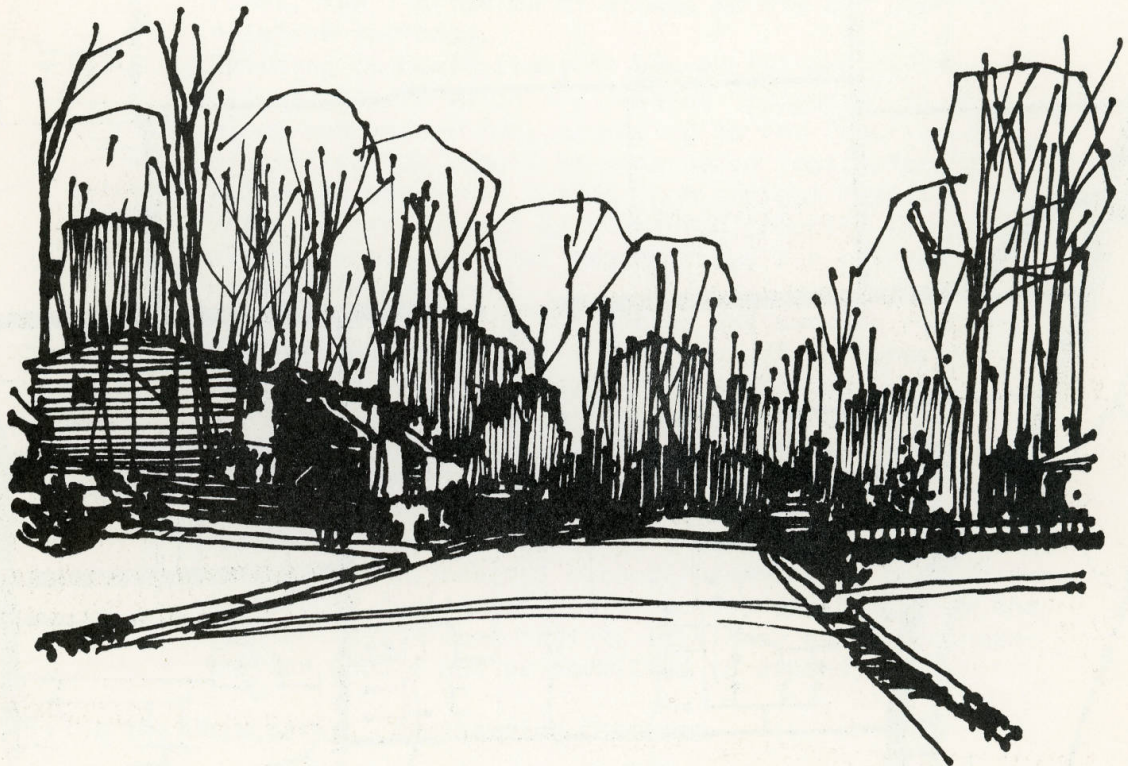
- 5.6 The Crossroads of Riverside Drive depicted U. S. 33 as an arterial roadway devoted primarily to the function of providing access to the community. That study was a plan for a functionally-distinct arterial roadway, consistent with the above described basis and concept for planning Hen-



**ACCESS TO ACTIVITIES AND
COMMUNITY FACILITIES**





derson Road. It should also be noted that, to this time, Riverside Drive continues to provide an approximate 75/25 priority ratio of traffic service to land access. The thoroughfare and land use recommendations advanced through the Riverside plan were geared to maintaining this ratio. Recommendations for Henderson Road and its planning area roadway collectors will be similar, but will reflect a 50/50 priority ratio of traffic service to land access.

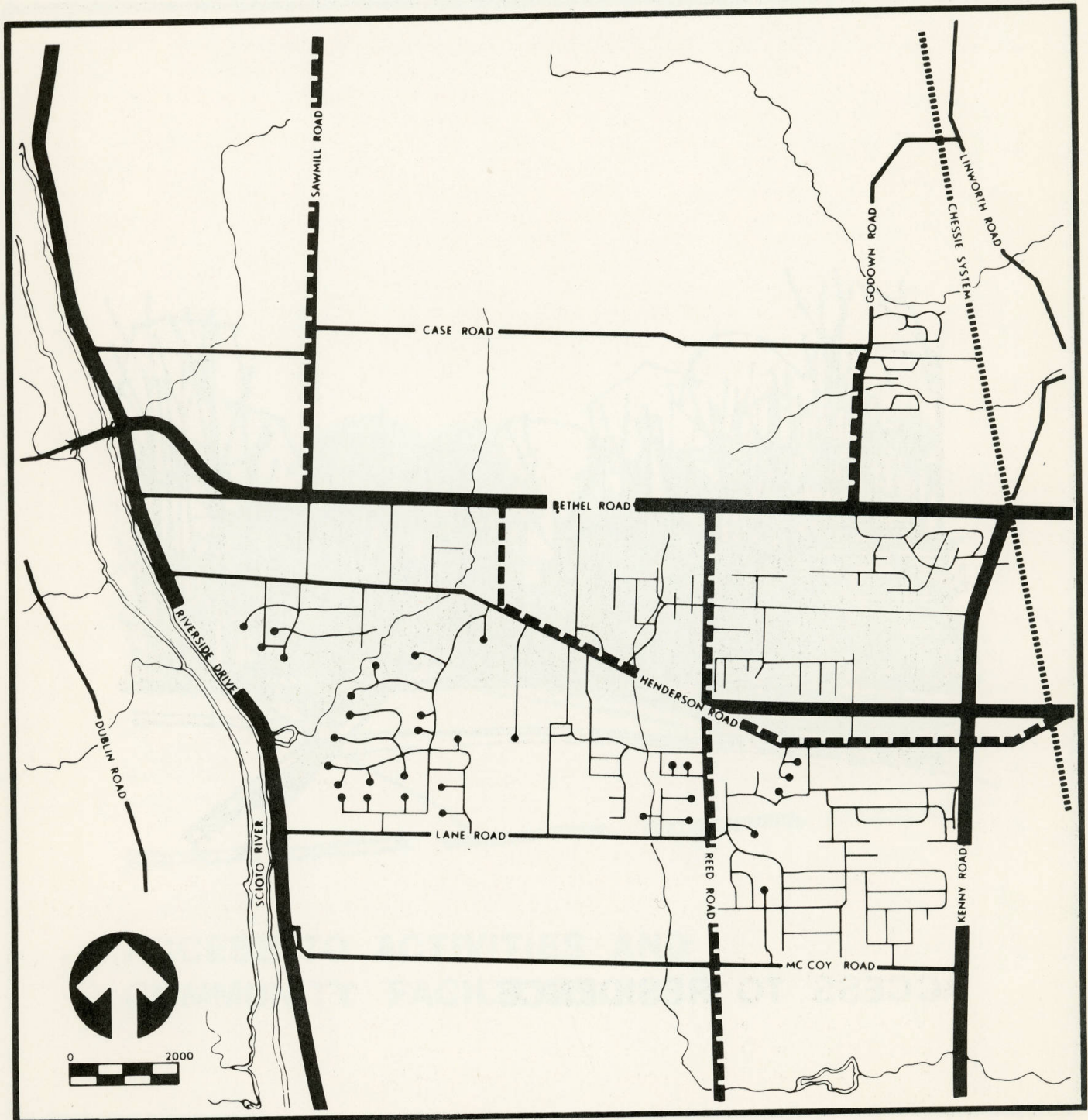
- 5.7 It is suggested that the Planning Commission and the City Council officially adopt the functional roadway classification system, as set forth in this document, for all existing and future streets in The City of Upper



ACCESS TO RESIDENCE

PLATE II: CLASSIFYING ROADWAY ACCESS

-  ACCESS TO COMMUNITY
-  ACCESS TO SERVICES AND CONVENIENCES
-  ACCESS TO ACTIVITIES AND COMMUNITY FACILITIES
-  ACCESS TO RESIDENCE



Arlington. Following traditional traffic engineering criteria, current and projected traffic **volumes** (as the only factor considered), would lead to the classification of Sawmill Road, Henderson Road and Reed Road as major arterial roadways. Such a classification system reflects neither the functional interrelationship between land access and traffic movement demands nor a consideration of what function within the City's overall transportation net such roadways **should** perform, both now and in the future.

- 5.8 Such a policy decision carries with it both short-range and long-range planning implications (framed here within the context of the Henderson Road planning area):

5.8.1 Each rezoning and/or development proposal for land within the planning area should be evaluated in light of its appropriateness relative to the functional classification of the streets which will serve it (i.e., is the proposed use one which is compatible with the land access and through traffic **balance** established for the street(s) upon which it is located; obviously, such factors must be considered as off-street circulation proposals by the owner/developer, the presence of parallel access roads, the limitation of access points and such correlative factors).

5.8.2 Existing concentrations of commercial and service establishments which are located "properly" (i.e., along roadways which, according to the functional classification, would be considered "collectors") but which currently suffer from serious traffic deficiencies, should be given top priority in terms of programming capital expenditures for related roadway improvements.

5.8.3 A number of existing commercial and service concentrations are functionally "mislocated" in terms of their land access/through traffic balance (e.g., a store located along a "neighborhood" street). Certain of these concentrations should be the focus of redevelopment or reuse efforts. For those concentrations where redevelopment is unlikely (due to the nature of the use, non-cooperation of the owner, and so forth), capital expenditures should be programmed to correct functional deficiencies resulting from the land access/through traffic imbalance but the concentration **should not be permitted to expand.**

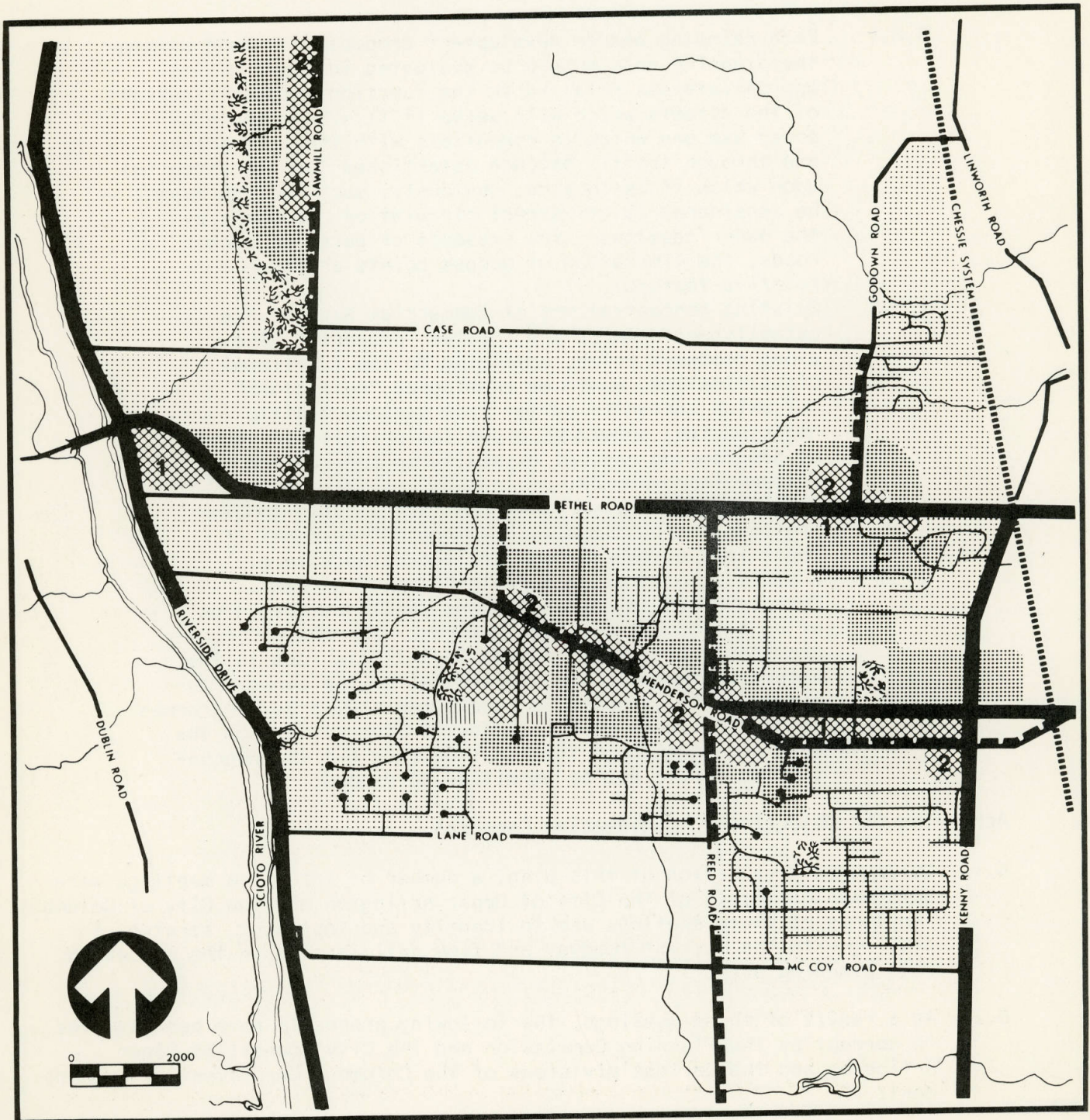
6. Achieving the Objectives: Engineering Concerns

6.1 During the preparation of this plan, a number of intensive meetings were held with officials of The City of Upper Arlington and The City of Columbus. The focus of these meetings was to identify and implement strategy for dealing with the current roadway and flow deficiencies in the Henderson Road planning area.

6.2 As a result of these meetings, the following proposals have been adopted in concept by the Planning Commission and the City Council of Upper Arlington and the various divisions of the Columbus Department of Development:

PLATE III: LONG-RANGE PLAN

- | | | | |
|--------|----------------------------|------|-----------------------|
| ⋯⋯⋯⋯⋯ | LOW DENSITY RESIDENTIAL | //// | INDUSTRIAL |
| ⋮⋮⋮⋮⋮⋮ | MEDIUM DENSITY RESIDENTIAL | ⌘⌘⌘⌘ | OPEN SPACE |
| ⌘⌘⌘⌘ | COMMERCIAL | 1 | PREDOMINANTLY OFFICES |
| | INSTITUTIONAL | 2 | PREDOMINANTLY RETAIL |



6.2.1 The City of Columbus is currently executing an improvement program for Henderson Road (including a partial realignment of the roadway) from Olentangy River Road to Reed Road and plans had been prepared for continuing this improvement from Reed Road to Gettysburg Road. As a result of effort expended during the execution of this planning program, the improvement has been redesigned as a four-lane boulevard (with a median planting strip) providing for controlled cross traffic (through signalization) at the entrance to the two commercial and service shopping centers west of Reed Road.

6.2.2 Off-street circulation must be improved to permit safe and convenient traffic flow between commercial and service concentrations (across existing property lines). Simultaneously, present points of congestion and turning movement conflicts would be eliminated. Key factors in improving the Henderson Road planning area, and off-street circulation system would be:

- [a] The construction of a rear-access service road linking Gettysburg Road with Henderson Road (See Plate IV);
- [b] A master parking plan should be developed to be used as a guide to property owners in implementing 6.2.2 [a] above;
- [c] Establish three "focal" or identity points for the "Henderson Center" planning area which would also coincide with optimal points of access from Henderson Road to commercial and service concentrations (and the off-street circulation system).

6.2.3 A continuation of the boulevard concept from Gettysburg Road to Bethel Road (as shown on Plate IV) should be programmed to coincide with the development of the proposed regional shopping center at State Route 161 and Sawmill Road.

7. Achieving the Objectives: A Community Asset

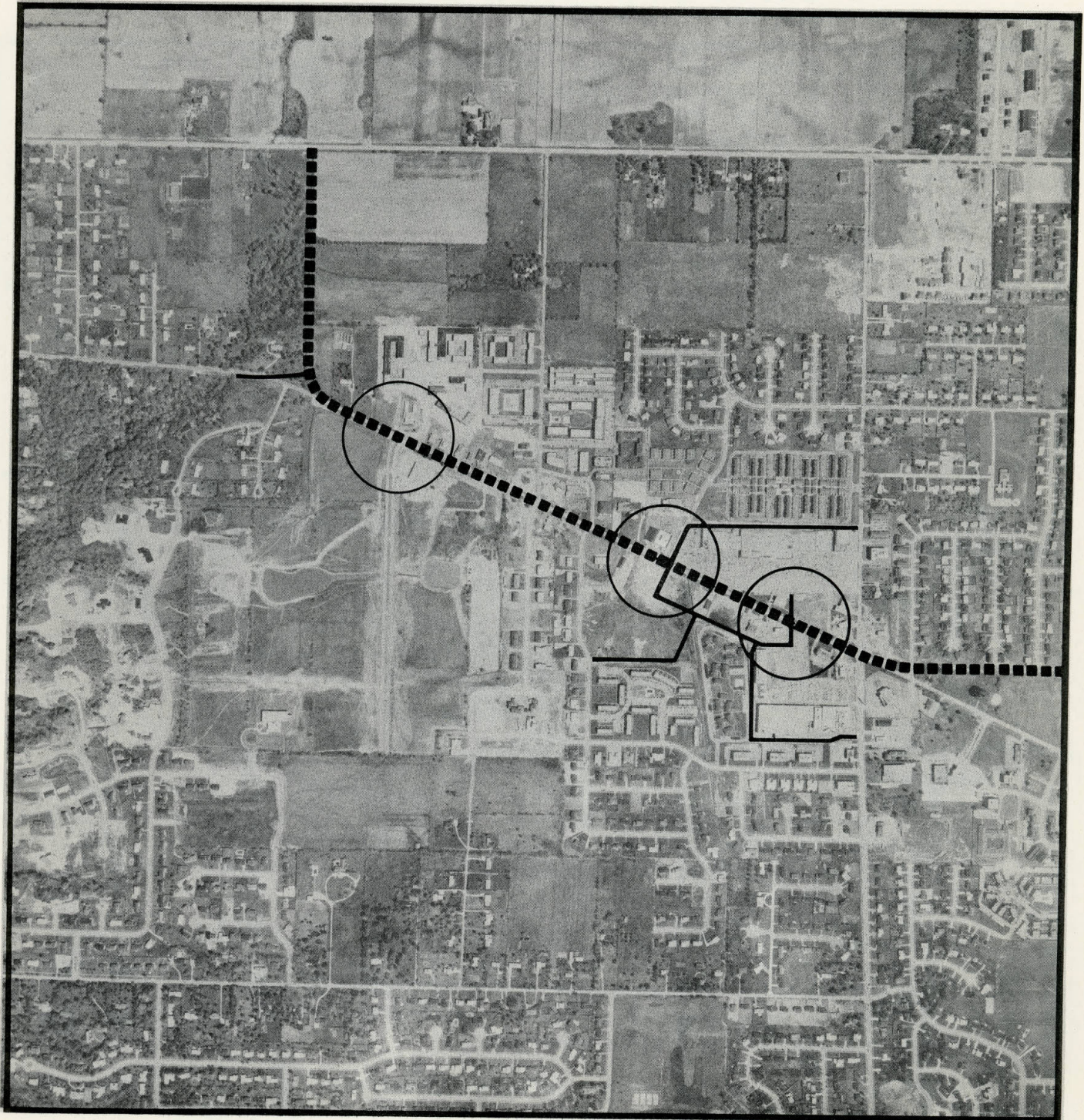
- 7.1 There are two primary components to the concept of achieving an "identity" or positive image for the Henderson Road planning area's panoply of shops, offices, eateries and related establishments. The first is the issue of geographic limits, and the second deals with the area's predominant physical character.
- 7.2 The maximum size of a concentration of commercial and service uses must be controlled if only to prevent the **area's own traffic demand and generation** from building to the point which necessitates further capital expenditure to improve public access and restore the balance between land access and through traffic movement.
- 7.3 Accessibility may be thought of as the relationship between the maximum design capacity of the area's roadway network and the number of vehicles

PLATE IV: HENDERSON CENTER

■■■■■ MEDIAN-DIVIDED BOULEVARD

— SERVICE ROUTES AND ACCESS IMPROVEMENTS

○ FOCAL ENTRANCES TO HENDERSON CENTER



seeking to enter and stop within the area served by the network. In general, accessibility is the ratio between the supply of road "space" and the demand for this space where supply is framed in terms of peak hour roadway capacity and demand is framed in terms of peak hour traffic generation (Appendix I below). Effective management of the growth of commercial and service concentrations, therefore, hinges upon the planned maintenance of a maximum level of traffic at all points during the development of such a concentration or district. The appropriate maximum level of traffic is a function of roadway capacity and traffic generated by the uses which depend upon the roadway. Overall district size and growth will depend upon a schedule of improvements in accessibility, but the ratio of traffic supply and demand should never change significantly.

- 7.4 The relative measure of road space supply and demand suggested above is further conditioned by the use characteristics resulting from how well an area has been planned. The location and configuration of buildings, parking areas, walkways, directional signals and how these are planned and designed in relationship, one to the other, all result in and dictate a maximum level of internal and external traffic circulation and accessibility. The composite of these factors also establish, to a large degree, the environmental character of a commercial area. Within any commercial and service concentration, therefore, the establishment of environmental standards (open space, amount of parking required, maximum building heights, locations of building(s) on a site, and access points to public thoroughfares, relationship of pedestrian to vehicular traffic, etc.) are essential in determining the environmental character of the commercial district. Appendix II sets forth new "sample" criteria for the development of an environmental character more appropriate to Henderson Center's current importance as a fully-developed suburban commercial district.
- 7.5 Two additional considerations (more in the realm of intangibles) are important to the future image of Henderson Center. The first deals with the full range of ancillary environmental features (landscaping, street graphics, etc.) normally, though incorrectly, considered "frosting on the cake". The second deals with business vitality, merchandising, and the attitude of area owner/merchants. While much of this report has been devoted to the concerns of the automobile, the end product of this planning process must take full account of the pedestrian. Consequently, few of the suggestions proposed to correct the operational deficiencies of Henderson Center will have a significant impact unless correlated improvements to the pedestrian-scaled environment are also made. The Upper Arlington Tree Planting Commission should work with the Planning Commission and Henderson Center merchants and businessmen to devise a schedule of sidewalk-scaled environmental improvements. Key components would consist of seating areas, widened walkways, landscaped courts or planting strips, public transportation shelters, bicycle stands, and other street furniture such as trash receptacles, outdoor display cases, and the like.
- 7.6 Major and minor area improvements have been set forth as necessary to achieve a properly-functioning Henderson Center. Henderson Center, as the name implies, will require unity in merchandising appeal if the district is to assume a vibrant image within the community. There is no reason for individual businessmen to advertise in total isolation. Henderson Center must be sold as a "place to be". It is suggested that a Henderson Center Merchants' Association be formed by area businessmen. Their task should be to convince the public, through action and promotion, to shop

Henderson Center. The creation of a development fund to provide organized street graphics and many of the pedestrian-scaled environmental improvements mentioned above, joint advertising, and sponsoring community events are but a few of the activities which should be considered.

8. Achieving the Objectives: Implementation

- 8.1 Implementing effective land use controls has been a top priority objective of this planning study. Throughout the work process, many options have been identified (including "overlay zoning", special district controls and planned commercial zoning) and discussed with Columbus and Upper Arlington officials. As a result of this process, The City of Columbus is currently preparing an ordinance to create a planned commercial zoning district.
- 8.2 It is proposed that The City of Upper Arlington revise and expand its existing commercial zoning district to apply more realistically to the identifiable shopping **districts** within the community. Single parcel development requirements, as codified currently under the B-1 and B-2 commercial use districts, should give way to standards more applicable to commercial use districts. Likewise, the City's existing planned business district (PB-3) should be expanded to incorporate planning or development standards more appropriate to the contemporary understanding of traffic generation and roadway access relationships.
- 8.3 As a first priority in the process of determining proper zoning revisions, it is suggested that development plan approval should be implemented. This may be accomplished in one or more of the following ways:
 - 8.3.1 City Council could designate by ordinance each of the primary business districts within the community as a "special planning district." Each district designation would require the Planning Commission to prepare a plan for the district and a set of development standards "tailor made" to its specific problems. The standards so derived would serve as a guide for the plan approval procedure which developers would be required to follow.
 - 8.3.2 A second option would consist of merging all existing commercial use zones into one commercial use ordinance which would require plan approval of developers' proposals and which would set forth development criteria applicable to various commercial area characteristics: neighborhood scale; community scale; or primary commercial district.
 - 8.3.3 A third alternative would be the elimination of specific commercial use zones in favor, once again, of one commercial designation which would permit the widest range of commercial development by conditional use permit. This option would also require development standards as in 8.3.2 above; but it would, in addition, require the development of performance standards. Administration of this option would, perhaps, seem more complex, but periodic review of required conditions (established by ordinance) would provide the City with the opportunity of planmaking before commercial area problems may develop.

- 8.4 As a final suggestion, it would seem most appropriate to consider the adoption of an organized procedure of joint referral to planning bodies of record of development proposals among the various political jurisdictions which exist in a specific area. The future of Henderson Center, for example, hinges upon such cooperation between The City of Columbus and The City of Upper Arlington.

APPENDIX I
ESTIMATED VEHICLE TRIP GENERATION*

Land Use	Sample Size	Peak Site Hour	Daily
Fast-Food Restaurants	n =7/6	73 Trips/1000 sq.ft. GFA ¹ .	561 Trips/1000 sq.ft. GFA
Sit-Down Restaurants	n =8/7	33 Trips/1000 sq.ft. GFA	237 Trips/1000 sq.ft. GFA
Discount Stores	n =7/6	6.7 Trips/1000 sq.ft. GFA	69 Trips/1000 sq.ft. GFA
Community Shopping Center	n=1	4.2 Trips/1000 sq.ft. GFA	N.A.
Regional Shopping Center	n=1	1.5 Trips/1000 sq.ft. GFA	20 Trips/1000 sq.ft. GFA
Food Store	n=1	16.6 Trips/1000 sq.ft. GFA	N.A.
Auto Supply Store	n=1	10.0 Trips/1000 sq.ft. GFA	137 Trips/1000 sq.ft. GFA
Motel	n=1	0.6 Trips/Room	9 Trips/Room
Hospital	n=1	1.0 Trips/Bed	9 Trips/Bed
Suburban Office	n=1	2.5 Trips/1000 sq.ft. GFA	17 Trips/1000 sq.ft. GFA
Service Stations	n=2/1	622 Trips/1000 sq.ft. GFA	43 Trips/1000 sq.ft. GFA
Single Family	n=6	0.91 Trips/Dwelling Unit	10.5 Trips/Dwelling Unit
Multi Family	n=6	0.85 Trips/Dwelling Unit	8.1 Trips/Dwelling Unit

* Taken from Trip Generation Study, Ohio Section, Institute of Traffic Engineers, May 1972, Page 2.
1. GFA = Gross Floor Area of Building

1. Sample Development Criteria

1.1 The following criteria are offered as a guide in determining an appropriate range of consideration of the factors involved in planning a successful business district:

1.2 Accessibility Characteristics

- 1.2.1 There should be no conflicts in vehicle movement at links between internal roads and the public roadway network.
- 1.2.2 Conflicts between internal vehicle movement and pedestrian flow should not be permitted at stopping places and should be clearly designated at safety crossings.
- 1.2.3 Loading, waiting, and service areas should be clearly designated, adequately distributed, and separated from primary traffic circulation routes.
- 1.2.4 Parking areas should be so distributed to provide equivalent pedestrian travel distances.
- 1.2.5 The internal roadway system should permit penetration close to buildings for accommodation of designed waiting and loading areas.
- 1.2.6 Internal circulation should facilitate movement from one part of a district to another without total reliance upon the public roadway network.
- 1.2.7 The internal roadway network should make ample provision (whether through access roads, turning or storage lanes, etc.) for ease of movement, turning and maneuvering.
- 1.2.8 The roadway system and its primary components (parking location, waiting areas, pedestrian crossing, main travel and directional routes, entrances and exits, waiting and loading areas, etc.) should be easily-identifiable by the motorist. Graphics, signage and and traffic flow devices should be considered integral to the roadway design.

1.3 Characteristics of Use

- 1.3.1 Pedestrian walkways should be planned and designed as a system providing separation from the internal roadway system.
- 1.3.2 Service and through traffic should not be permitted within the primary shopping and business district.
- 1.3.3 Excessive speeds should not be facilitated through roadway alignment. Speeds should be rigorously controlled at points of conflict between the vehicular and pedestrian circulation systems.

- 1.3.4 Pedestrian areas and building entrances should not abut medium to heavy traffic flows.
 - 1.3.5 Primary land uses which, through their compatibility or complementarity, experience a high degree of customer interchange, and should be linked by primary walkways which should not be severed by intervening roadways.
 - 1.3.6 Pedestrian walkways and bicycle paths should be planned along rights of way, separate from the roadway system, to provide direct linkages between medium density residential developments and primary commercial uses within the business center. The pedestrian walkway system within the business district should link conveniently with the pedestrian walkway system of surrounding areas.
 - 1.3.7 Safe and convenient access for pedestrians to public transportation stops should be provided.
- 1.4 Characteristics of the Pedestrian-Scaled Environment
- 1.4.1 Sidewalk and street elements should be incorporated within any multiple-tenancy commercial development, and they should be located convenient to their primary use. Such elements include sidewalk display cases, trash receptacles, planters and planting beds, sidewalk lighting, information kiosks, sidewalk bicycle stands, clocks, benches, drinking fountains, telephone booths, mail and postal service facilities and landscaping or vegetation.
 - 1.4.2 Partial or complete weather protection should be incorporated with the walkway system where possible, particularly at locations of high pedestrian activity.
 - 1.4.3 Major commitments to pedestrian-scaled environmental design, such as tot lots, courtyards primarily for sitting, public transit stops, public rest facilities, and park-like areas should be planned for any commercial development of over 40,000 square feet of building space or two acres of development site area.
 - 1.4.4 All primary signage within a business district should be scaled to the pedestrian. A street graphic system should be devised for any multi-tenant development.