

**THE COST OF
COMMUNITY
SERVICES IN
LEXINGTON-
FAYETTE
COUNTY,
KENTUCKY**

September, 1999



American Farmland Trust

INTRODUCTION

Lexington-Fayette County, Kentucky is known throughout the world as the center of the thoroughbred horse industry. Horse breeding and racing are ingrained in the culture of county residents and contribute a unique sense of place to this region. The rolling hills and traditional white plank fences of local farms create a picturesque landscape throughout the county. The land is valued not only for its scenic beauty, but also for its contribution of more than \$1 billion to the regional economy through agriculture and tourism.⁴ This study provides evidence that, in addition to its direct and indirect economic impacts, farm and open land in Fayette County provides a net fiscal surplus to the county government due to its modest demand for public services.

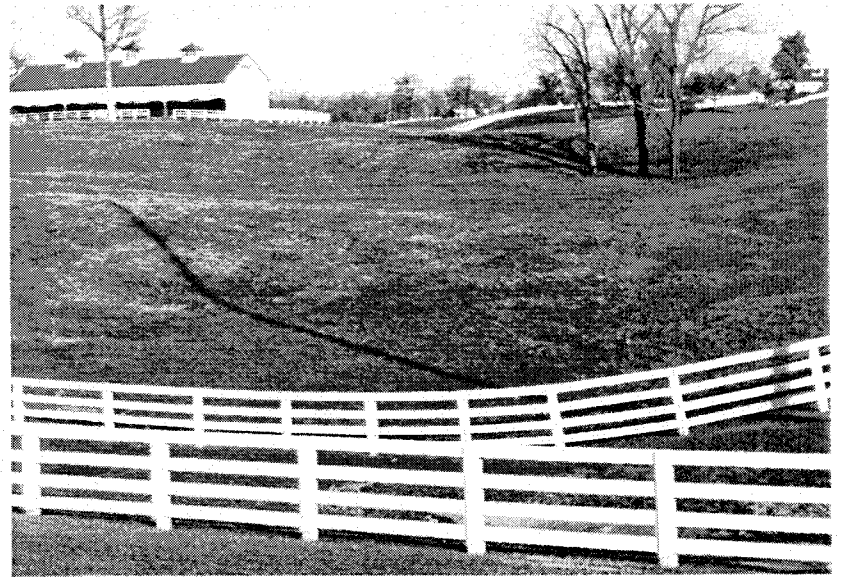
Fayette County's 283 square miles are located in central Kentucky, bordered by Scott County to the north, Clark and Bourbon Counties to the east, Madison and Jessamine Counties to the south and Woodford County to the west. At the center of the county is the city of Lexington, which is 76 square miles, surrounded by approximately 207 square miles.⁵ Lexington is 81 miles south of Cincinnati, Ohio and 78 miles east of Louisville, Kentucky.⁶ The surrounding rural area of the county is approximately 207 square miles.⁷

Fayette's beautiful landscape, mild climate, fertile soils and access to metropolitan centers consistently attract new residents. The population in the county has increased 83 percent over the last 40 years.⁸ Since 1980, population has grown 18.4 percent, to a 1998 estimated total of 241,749.⁹ This recent rise in population has resulted in a much greater increase in residential construction. In 1980, there were 1,941 building permits issued, and in 1998 there were 4,851 permits issued,¹⁰ an increase of 150 percent in less than two decades. The majority (68 percent) of these permits were for single-family homes,¹¹ a trend that has led to a sprawling pattern of residential development.

Fayette County has been progressive in regional planning, creating its first Planning and Zoning Commission in 1928. This commission adopted its first subdivision control regulations in 1929, followed by the first comprehensive plan for the county in 1931. In 1958, Fayette County created an "urban service area boundary" around the city of Lexington to "separate urban intensity uses from horse farms and other rural activities, reduce sprawl development along major roadways, provide for better cost control of government infrastructure and services, reduce impacts on fragile environments and maintain the central focus of the downtown".¹²

The urban service area boundary shows the progressive nature of the county government in taking action early to control development and protect farms and other natural resources.

INTRODUCTION



Calumet Farm - Photo by Dag Ryen

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The boundary is intended to keep intensive development within the urban core, while protecting the more sensitive land in surrounding rural areas. This planning tool has served as a model for other communities across the country.

Overall, farming contributes more than \$1 billion to the regional annual economy.

In 1974, the city of Lexington merged with Fayette County to form a single unit of government called the Lexington-Fayette Urban County Government, which still exists today. The urban service area boundary and continued updates to the comprehensive plan have helped keep the rural areas of Fayette County in farming, and encouraged economic development in downtown Lexington. However, even with good planning, the county is experiencing growth pressures. The urban service area was recently expanded to include 5,400 additional acres. Although the county continues to grow in population, the number of residents living within the urban area is declining.¹³ From 1990 to 1998, 4,700 acres were converted into 10-acre residential lots.¹⁴ As a result, sprawl threatens to overtake existing farmland and the county's beautiful landscape.

Conversion of productive farmland to house lots in the county is of major concern not only for the cultural and scenic values of this land, but also because of the economic values associated with farming that would be lost. Fayette County was ranked first in Kentucky for agricultural sales in 1997 with 4.5 percent of the state's receipts, totaling \$139.3 million.¹⁵ The highest value crops grown in the county are horses and tobacco, which together accounted for 91 percent of agricultural sales in 1997. Thoroughbred horses were ranked first in total agricultural sales in 1997 with \$107.6 million in receipts, the highest sales on record.¹⁶ Tobacco was ranked second in total sales for 1997 with receipts of \$16.9 million.¹⁷



Mare and Foal
*Photo by James Archambeault
courtesy of Lexington Convention
and Visitors Bureau*

The horse industry also generates significant secondary economic impacts. It is the region's main tourist attraction. The Kentucky Horse Park, a major enticement for tourists of the Bluegrass Region, had 750,000 - 800,000 visitors in 1998.¹⁸ The park has an annual economic impact of \$98 million and creates 2,444 jobs.¹⁹ Tourism in Fayette County generated more than 14,000 jobs and contributed \$584 million to the local economy in 1997.²⁰ Overall, farming contributes more than \$1 billion to the regional annual economy.²¹ Therefore, the local and regional economy will suffer significantly if existing farmland is converted to residential development.

Farmland and open space contributes to the quality of life in Fayette County through its environmental, aesthetic, cultural and economic values. Growth in the region threatens to replace this valuable land with development. Concerned residents want to plan for future growth in order to preserve Fayette County's distinctive rural character. In response to these concerns, the Land and Nature Trust of the Bluegrass and the Bluegrass Conservancy commissioned American Farmland Trust to conduct this Cost of Community Services study.

The Land and Nature Trust of the Bluegrass is a nonprofit organization that has been working for more than 20 years to protect the rural environment and scenic natural areas in the Bluegrass.

The Bluegrass Conservancy is a non-profit regional land trust committed to the conservation and preservation of the unique rural and cultural resources of the Inner Bluegrass Region. The Conservancy's mission is to promote the conservation of Bluegrass farmland.

American Farmland Trust (AFT) is the only national private, nonprofit conservation organization dedicated to protecting the nation's strategic agricultural resources. Founded in 1980, AFT works to stop the loss of productive farmland and to promote farming practices that lead to a healthy environment. American Farmland Trust developed the Cost of Community Services (COCS) study methodology in the 1980's and has since conducted 19 studies nationwide.

What is a Cost of Community Services study?

A "Cost of Community Services (COCS)" study determines the overall fiscal contribution of current land uses. Findings are a snapshot in time of costs versus revenues based on existing land use patterns. Unlike a traditional fiscal impact analysis, COCS studies do not predict the future impact of decisions. Instead, they assess current conditions based on existing budgets and real dollars. In this way, they provide hindsight from past land use decisions. While COCS studies do not judge the intrinsic value of one land use over another, they do specifically evaluate the fiscal contribution of privately owned farm, forest and open land. These productive land uses are generally ignored in other types of fiscal analysis.

The COCS process is straightforward and findings are easy to understand. Local budgetary information is allocated to land use categories, and then revenues and expenditures are compared. The studies rely on recent financial records and interviews with local officials to determine how revenues were generated and how appropriations were spent for a given year.

Purpose of Study

The purpose of this study is to measure the overall financial impact of current land uses in Lexington-Fayette County. Study findings are intended to provide officials and residents with baseline information that they can use to make informed decisions. Land use policies and planning decisions will have important consequences for the future environment and quality of life of residents. Reliable information about how current land uses affect local finances can help guide these decisions.

The purpose of this study is to measure the overall financial impact of current land uses in Lexington-Fayette County.

The results of more than 60 COCS studies, conducted by AFT and other organizations across the country, refute the following three misconceptions or "myths" about growth.



Urban Sprawl
Photo by Dag Ryen

Myth #1: Residential development lowers property tax bills by increasing the tax base

Residential development does contribute revenue to the tax base through property taxes, but it also increases the amount of expenditures necessary for public services such as public safety and education. When these costs are taken into account, COCS findings consistently show that, overall, residential development does not pay for itself.

Myth #2: Farm and forestland receive an unfair tax break when they are assessed at their current use instead of at their potential use for development

Current Use, or Differential Property Tax programs, tax land that is actively used for farm or forestry at their use value rather than their market value. Because of the modest demand of farm and forestland for public services, COCS findings show that most of these programs tax open land at a fair value based not only on the land's current use, but also on its modest cost to the community.

Myth #3: Open land, including productive agricultural and forestland, is an interim use awaiting conversion to its "highest and best" use

Findings prove that keeping farm and forestland productive is a viable economic use of the land. Studies find that farm, forest and open land have a modest demand for services, and therefore require a low level of expenditures from local government. In addition, agriculture and forestry provide numerous economic and environmental benefits. Therefore, keeping land open is often the best use from a fiscal, economic and environmental perspective.

Organization of Report

The rest of the report includes a description of the Cost of Community Services study method, Fayette County findings and a discussion of the implications of these findings. Appendix I describes the analysis to allocate the county's employee withholding tax into land use categories. Appendix II contains spreadsheet tables with budget allocations used to calculate the findings. Appendix III is a table of findings of COCS studies previously completed throughout the country.

METHOD

A Cost of Community Services study requires the following basic steps:

METHOD

- 1) Meet with local sponsors
- 2) Collect data: Obtain relevant reports, contact officials, boards and departments
- 3) Allocate revenues by land use
- 4) Allocate expenditures by land use
- 5) Analyze data and calculate ratios

The publication *Is Farmland a Community Investment? How to do a Cost of Community Services Study* (American Farmland Trust, 1993) explains how to conduct a study in general terms. The following description explains how this process was conducted in Fayette County.

Cost of Community Services Process in Lexington-Fayette County

1) Meet with local sponsors

On March 12, 1999 a meeting took place in Lexington, Kentucky with representatives from the Land and Nature Trust of the Bluegrass, the Bluegrass Conservancy, the Lexington-Fayette Urban County Government, American Farmland Trust, the Kentucky Thoroughbred Association and other local farmers. American Farmland Trust gave a presentation on Cost of Community Services (COCS) studies. Participants discussed the COCS process and how it could be applied in Fayette County.

Based on this discussion, the Land and Nature Trust of the Bluegrass and the Bluegrass Conservancy decided to commission American Farmland Trust to conduct a COCS study in Fayette County. Funding assistance was provided by the Kentucky Thoroughbred Association. The main objective of the study was to understand the net financial impact of various land uses from the perspective of a taxpaying resident. Since the merged urban-county government delivers public services to urban and rural residents and collects taxes, it was agreed that the study should be done at the urban-county government level. Actual numbers from the fiscal year 1998 (FY98) budget were used in the study because this was the most recent year with closed books.

The following land use categories were used: 1) residential development, 2) commercial and industrial development and 3) farm and open land. Residential development includes property used for dwellings, including farmhouses, employee housing and rental units. Commercial development includes property actively used for business purposes. Industrial development includes property actively used for wholesale production and utilities, usually goods-producing. Farm and open land includes property used or designated for open space, forest or agriculture. Although agriculture and forestry are both industries that contribute to the local economy, they tend to be neglected when included with other commercial and industrial activities. Thus in a COCS study, they are analyzed separately from other commercial and industrial development.

2) Collect data: Obtain relevant reports, contact officials, boards and departments

On May 10, 1999 AFT's economic research specialist arrived in Lexington to begin collecting data. She conducted interviews with division directors and county officials to determine how revenues were generated and how expenditures were spent in fiscal year 1998. To conduct the analysis, she gathered documents including:

- * Lexington-Fayette Urban County Government Annual Budget for FY98
- * Comprehensive Annual Report for the year ended June 30, 1998
- * Department of Property Valuation Certification of Equalized Assessment for FY98
- * Fayette County Public Schools 1999-2000 Tentative Budget (with 1997-1998 actuals)
- * FY1998 reports of Lexington-Fayette Urban-County departmental activity
- * Lexington-Fayette Urban County Government Single Audit Reports for the year ended June 30, 1998

The researcher interviewed county officials and analyzed budget records to determine how to allocate FY98 revenues and expenditures into land use categories. Some line items had straightforward allocations because records were available by land use. For example, building permits were allocated according to the percentage of fees generated from residents versus businesses and industries. For other line items that were not directly tied to land use, this allocation process was more difficult and required more extensive record searches. Wherever possible, determinations were made strictly based on financial records. However, in some cases, allocations relied partially on the experience and judgement of the division or department head interviewed.

3) Allocate revenues by land use

The researcher asked the Urban County Commissioner (Department of Finance) how each revenue was generated in FY98: by residents, businesses, industries or open land, including farm and forest land. For some revenue sources, one land use was attributed with generating the entire amount. For example, revenues generated by businesses, such as liquor licenses, were considered commercial so were allocated entirely to the commercial and industrial category. If a combination of land uses generated the funds, a percentage breakdown was determined to allocate the correct portion of revenue to each land use. For some items, such as fees and licenses, detailed reports were analyzed to determine the most accurate percentage breakdown.

To calculate the relative portion of property taxes paid by each land use, the total FY98 assessed value broken down by land use,²² provided by the Fayette County Department of Property Valuation, was adjusted to include both multi-family residences and farmhouses in Residential development. For FY98 in Fayette County, the resulting percentages were:

Residential Development	.7343
Commercial/Industrial Development	.2481
Farm/Open Land	.0176
	<u>100 %</u>

These percentages were used to allocate only property tax related revenues.

The employee withholding tax is a major revenue source in Fayette County. In FY98 this tax generated \$91.9 million, which was 58 percent of total revenues. This tax is 2.25 percent of the gross wages of each employee working within the county. It is collected from each employee's payroll by the employer and then paid directly to the county government. To allocate this revenue, payroll amounts sorted by Standard Industrial Classification (SIC) Code were used. For FY98 in Fayette County, these percentages were:

Residential Development:	.2675
Commercial/Industrial Development:	.7038
Farm/Open Land:	.0287
	<u>100 %</u>

See Appendix I for a detailed explanation of the analysis conducted to determine this percentage breakdown. Since the employee withholding tax was the county's primary revenue source, the relative portion of payroll generated by each land use was also applied as a "fall-back" percentage to allocate some revenues. After extensive interviews and financial analysis, if a particular revenue, such as Investment Income, could not be reliably tracked by land use these "fall-back" percentages were used.

4) Allocate expenditures by land use

The researcher carefully investigated how FY98 expenditures in each division were spent: on residents, businesses, industries or open land, including farm and forest land. For each line item, the land use—or combination of land uses—that required the funds was determined. Expenditures serving residents, such as Education, were considered residential. Expenditures serving businesses or industries, such as Local Economic Assistance to industries, were considered commercial and industrial. Expenditures for farms, such as current planning for the rural land management plan, were allocated to farm and open land. As with revenues, some expenditures were not spent entirely on one land use. In these cases, the researcher consulted division directors and analyzed detailed reports to determine the most accurate breakdown between the different uses.

Some expenditures could not be tracked directly to a specific land use. Examples of this are administrative salaries and public buildings, which serve the entire county in a general capacity. In these situations, "fall-back" percentages were applied based on the percentage of total revenues allocated to each land use.²³ These percentages were only used to allocate expenditures if a more accurate breakdown could not be determined from financial records and interviews. For FY98 in Fayette County, the "fall-back" percentages for expenditures were:

Residential Development	.4951
Commercial/Industrial Development	.4819
Farm/Open Land	<u>.0230</u>
	100 %

Budget Components of Analysis

All line items in the Lexington-Fayette Urban County Government General Fund were included in the analysis. These include the following categories:

Revenues

- * Licenses and Permits
- * Taxes
- * Charges for Services
- * Fines and Forfeitures
- * Intergovernmental
- * Property Sales
- * Investment Income
- * Other Income

Expenditures

- * General Government
- * Administrative Services
- * Department of Finance
- * Department of Public Works
- * Department of Public Safety
- * Department of Social Services
- * Department of General Services
- * Department of Housing and Community Development
- * Department of Law
- * Outside Agencies
- * Debt Service
- * Other Financing Resources

In addition to the general budget, the following additional revenues and expenditures were included:

- * Grants (State and Federal)
- * Special revenues
- * Education
- * Component Units (outside agencies)

See Appendix II for a listing of the subheadings under each of these general categories. Funds, such as Enterprise funds, that have equal revenues and expenditures as well as having the same land use allocations on both the revenue and expenditure side were not included in the analysis as they would have had no effect on the findings.

5) Analyze data and calculate ratios

Once all necessary data was collected and interviews were completed, the dollar amount for each budget line item was allocated across the three land use categories according to the associated percentage breakdown agreed upon with the relevant county official. Once the percentages were entered for all line items, total revenues and total appropriations were summed for each land use category. By comparing these totals, an expenditure-to-revenue land use ratio was calculated for each land use, which shows the cost per dollar raised. This comparison also shows the net dollar loss or contribution of each land use to the local budget. These findings are found on page 16 as well as in the spreadsheet in Appendix II, which shows detailed budget allocations.

FINDINGS

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Study findings are presented in the table below. The first two rows of the table show the total dollars that were allocated to each land use for revenues and expenditures, respectively. The third row subtracts the expenditures from the revenues in each column to show the net gain or loss in dollars for each land use. The final row of the table presents this same information in ratio form, which shows the cost per dollar of revenue raised by each land use.

FY1998 FAYETTE COUNTY FINDINGS	Total	Residential Development	Commercial / Industrial Development	Farm / Open Land
Total Revenues*	\$341,186,726	\$168,921,664	\$164,409,956	\$7,855,107
Total Expenditures*	\$320,010,113	\$276,667,287	\$36,028,212	\$7,314,614
Net gain/loss	\$21,176,613	\$-107,745,623	\$128,381,744	\$540,493
Land use ratio **		\$1.00 : \$1.64	\$1.00 : \$0.22	\$1.00 : \$0.93

* Includes special revenues, grants and schools

** For every one dollar of revenue generated: Expenditures in dollars

In fiscal year 1998, residential development generated \$168.9 million in revenues and required \$276.7 in expenditures, creating a net loss of \$107.8 million for Fayette County. Commercial development generated \$164.4 million in revenues and required \$36 million in expenditures, creating a net gain of \$128.4 million. Farm and open land generated \$7.9 million in revenues and required \$7.3 million in expenditures, creating a net gain of \$540 thousand for the county.

Land use ratios, in the last row of the table, give the cost of services per one dollar of revenue generated in FY98. For every dollar of revenue from residential development, \$1.64 was required in expenditures. For every one dollar of revenue from commercial and industrial development, 22 cents was required in expenditures. For every dollar of revenue from farm and open land, 93 cents was required to cover associated services.

It is important to understand the assumptions and scope of this study when interpreting the ratios. This study was carried out using fiscal year 1998 data and should be used to understand the current fiscal situation for the both the urban services area and rural areas of Fayette County. This analysis determined the overall net fiscal impact of each land use on the total urban-county budget. Therefore the findings should not be applied to specific development projects or be used as a forecast for future land use scenarios.

DISCUSSION

Study findings in Lexington-Fayette County follow the same general pattern of more than 60 COCS studies that have been conducted across the nation. Although ratios vary, all COCS studies have found that farm and other open lands generate a fiscal surplus for their communities. In all cases, residential development as a general category creates a net loss due to its high demand on public services and commercial and industrial development pay more than their direct costs. See Appendix III for a summary of findings from COCS studies completed by AFT and others.

This study differs from other COCS studies in that the Lexington-Fayette Urban County Government depends primarily upon the employee withholding tax as a source of revenue. Therefore, commercial and industrial land uses generate considerably more revenue here than in previous studies where property taxes were the communities' primary funding source. In this study the "fall-back percentage" was based on payroll rather than assessed value (as with previous COCS studies). Thus, it is important to remember that this is an individual case study of a real place in real time, and not to directly compare it with other COCS studies.

Residential development generated a significant amount of revenues for the Lexington-Fayette Urban County Government in FY98. However, the cost of services associated with residential as a general land use category were more than one and a half times the revenues - creating a net loss of \$107.8 million, which had to be subsidized by the surplus from farms and other businesses.

Commercial and industrial development has a relatively low ratio for FY98, which is typical of most COCS studies. However, because of the county's tax structure, this category was disproportionately lucrative. Agriculture is a commercial enterprise as well. Farms were analyzed separately from other businesses to measure the impact of this land use with other natural resources. However, it is important to remember that farm operations are local businesses that also contribute more than their share to county coffers. County farms generate about \$140 million a year directly²⁴ and, including secondary impacts, contribute more than \$1 billion annually to the regional economy.²⁵

When interpreting the ratios for commercial and industrial development, it is important to understand that this study analyzes current, direct costs to the county. Long-term, indirect impacts of development are not within the scope of this COCS study, but they should be considered when making land use decisions. New industries attract new workers to the region, which results in rising population, additional housing, traffic congestion and additional demands for public services, thus increasing government expenditures over time. As an existing business, agriculture does not drive new population growth and increased spending in this way. Therefore, when deciding whether to develop new businesses and industries or to invest in farming, agriculture has two clear advantages. It provides surplus revenues and does not tend to increase population. Before pursuing any land use strategy, it is important to consider several related factors. For example, although commercial and industrial development provides annual fiscal benefits, it affects residential development over time, which may have negative fiscal consequences. Also, the placement of new development may conflict with other goals, such as protecting environmentally sensitive areas. Much of the land in the rural areas of Fayette County should be appreciated as a precious resource because of its ability to grow crops, support wildlife habitat, maintain scenic beauty and attract tourists. The pattern and

DISCUSSION

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location of new development will have a considerable impact on both the quantity and quality of Fayette's agricultural land.

The findings of this study should not be used to stop residential development. Everyone deserves a decent place to live. However, given the current pattern of development and the vastly disproportionate consumption of land for new housing relative to the increase in population, these findings do suggest that planning the timing, phasing and placement of new development can improve fiscal and economic stability while protecting the beautiful landscape. Furthermore, findings suggest the merit of developing new housing within the urban service area boundary. Investing in vacant urban properties is a strategy that would help stimulate the economy in downtown Lexington without using up precious agricultural resources or contributing to sprawl.



Country Road
Photo by James Archambeault
courtesy of Lexington
Convention and Visitors
Bureau

By understanding demands for public services in relation to tax revenue generated, informed decisions can be made to balance land uses to the county's best advantage.

tural values that define quality of life in the county, the economic value of the farmland is also very important, for this pastoral landscape would not exist without it. To preserve the agricultural heritage of the county, immediate actions must be taken to protect valuable farmland against the threat of conversion.

Across the country, uncontrolled development is making many communities indistinguishable from each other with "cookie-cutter" housing developments, strip malls and chain stores. So far, Fayette County has been able to retain its unique sense of place. This is partially attributable to the fact that the county has had land use planning in place for more than 60 years. It can also be credited to the thoroughbred industry and the strong community support behind it. However, to preserve its community character while controlling future growth, the county must continue proactive planning.

These findings provide new and valuable financial information about Fayette County's current land use distribution. By understanding demands for public services in relation to tax revenue generated, informed decisions can be made to balance land uses to the county's best advantage. Combined with information about long-term impacts of growth, these findings should help the county direct balanced growth while protecting the natural landscape that is so important to the economy, character and quality of life in the Bluegrass Region.

Development interests often claim that residential development is the "highest and best use" of land because it brings tax revenue into communities. However, these claims ignore the other side of the equation by failing to include the ongoing costs of public services and infrastructure that housing imposes on the community. The findings of this study should serve as a caution to communities trying to increase gross tax revenues through development without considering the associated costs of this type of growth.

Ninety-four percent of Fayette County voters surveyed in April of 1999 strongly agreed or somewhat agreed that farmland and open space are important to their quality of life.²⁶ In addition to the environmental, social, scenic and cul-