

Benchmarking Our Future

Update 2006

Benchmarking or defining a set of standards to be achieved and then measuring progress in reaching those benchmarks is a common practice in the business world. To become more competitive, companies often look at the very best of their competitors to define benchmarks in areas such as customer service, product reliability and employee productivity. Benchmarking in *Legacy* is used to set targets and measure our community's progress and success in achieving its goals and objectives. Benchmarking will help the community monitor implementation of *Legacy* in future years.

We have identified twenty-three indicators and benchmarks related to the goals and objectives of *Legacy*. We have selected those for which data is already being collected or can readily be obtained. New ones can either replace or

supplement existing ones. Progress in reaching the benchmarks will be assessed annually and a major review of indicators and benchmarks will take place in 2005 when a review of *Legacy* is scheduled to take place.

The proposed indicators, existing and historic data for these indicators and benchmarks for 2005 follow. The benchmark figures for the year 2005 were derived by combining projections available from relevant agencies with City-County Planning Board projections based on implementation of the policies and actions proposed in the plan. In some instances, projections were not available from other sources and City-County Planning Board projections were used. Brief explanations of how the benchmarks were determined and data sources are given below each benchmark.

Update: A data column containing 2005 data (or latest available data) has been added to the table for each set of benchmark indicators. In some cases there is no data in this column because the original data source no longer exists and an alternative source was not identified.

A short note indicating the community's progress in achieving each benchmark, for which data is available, follows each group of benchmark indicators.

-  A check plus indicates Benchmark met.
-  A check mark indicates progress.
-  An X mark indicates lack of progress.
-  An equal sign indicates no change.
- NA** Indicates Data Not Available.

Compact Development

| Indicator | Past Trends | 2000 or Latest Data | Benchmark Year 2005 | 2005 Data |
|---|--|---------------------|---------------------|------------|
| 1. Percentage of new residential subdivisions approved in the Municipal Services Area (MSA). | <ul style="list-style-type: none"> • 1995 - 85.9% • 1996 - 93.6% • 1997 - 98% • 1998 - 91.6% • 1999 - 95% | 82% | 95% | 84.1% ✓ |
| 2. Density of new single-family development in the MSA | <ul style="list-style-type: none"> • 1995 - 2.0 lots/ac • 1996 - 2.5 lots/ac • 1997 - 2.8 lots/ac • 1998 - 1.8 lots/ac • 1999 - 2.1 lots/ac | 2.7 lots/acre | 3.0 lots/ac | 2.32 ✗ |
| 3. Density of new multifamily development in the MSA | <ul style="list-style-type: none"> • 1995 - 10.5 units/ac • 1996 - 7.2 units/ac • 1997 - 8.2 units/ac • 1998 - 8.6 units/ac | 17.72 (1999) | 10 units/ac | 5.8 ✗ |

These three indicators set targets that will be used to determine the extent to which we succeed in achieving the goal of limiting sprawl and concentrating development within the Municipal Services Area (MSA). The MSA is the area currently served by adequate infrastructure and services and shown on the Growth Management Plan Map. The benchmarks will measure the extent to which policies in *Legacy* concentrate residential development more than in the past and more efficiently utilize existing infrastructure. Data to measure success in achieving benchmarks for these three indicators will be obtained annually from the City-County Planning Board (CCPB).

Existing data shows that most new residential subdivisions approved are located in the MSA. The highest percentage of new approved residential subdivisions located in the Municipal Services Area in the last five years was 98 % in 1997. Although the percentage has dropped since then it is assumed that implementation of policies to discourage rezonings to more intense development in the Rural Area and to stimulate new development in slow growth areas of the Municipal Services Area would at least facilitate attainment of the 1999 level of 95 %. The benchmark is therefore set at 95%.

Concentrating development within the Municipal Services Area includes increasing densities of both single-family and multifamily development in the MSA. Data on past trends

show that in the recent past densities for both single-family and multifamily development in the MSA have varied quite a lot. The density of approved single-family residential subdivisions for the year 2000 was 1.9 lots per acre. There have, however, been higher densities in the recent past, as high as 2.8 lots per acre in 1997. The benchmark density for 2005 is, therefore, set at 3 lots/acre considered achievable within the time frame allowing for implementation of *Legacy's* recommendations. The intention is to try by 2005 to exceed the 1997 level.

The benchmark density for multifamily development is 10 dwelling units per acre (du/ac). Although this has been achieved in the recent past, multifamily density has not been consistently at or above that level. Implementation of plan recommendations on infill development, bonus densities, design guidelines and other policies should result in multifamily densities more consistently at or above this level between 2002 and 2005.

Update:

Indicator 1

The 2005 data shows improvement since the 2000 time period; however, it is less than the benchmark goal. While the percentage of residential subdivisions approved within the MSA (84.1%) appears to be significantly lower than the 2005 benchmark of 95%, this number can be misleading. The Municipal Services Area refers to Growth Management Areas 1, 2, and 3. GMA 4 (the Future Growth Area), however, is served by municipal services such as sewer. Almost all of the residential subdivisions studied were located in the MSA or GMA 4. The percentage of subdivisions approved in the MSA and GMA 4 was 95.2%.

Indicator 2

The benchmark for the density of new single-family development in the MSA (3.0 lots/acre) has not been achieved for 2005 and the density has actually gone lower than the 2000 time period. There appears to be significant variation from year to year on single-family density. An interim calculation done for 2002 showed the density for that year to be 3.09 lots/acre.

Indicator 3

The density for new multifamily development in 2005 is significantly lower than the proposed benchmark density of 10 units per acre. The average density of new multifamily development within the MSA in 2005 was 5.8 units per acre (3156 units on 544.52 acres). While multifamily density was significantly less in 2005 than it was from 1995-1999, it is

slightly more than the multifamily density for 2004 (5.7 units/acre). The decreased density of multifamily development in recent years signals a shift in demand from larger walk-up multifamily products to smaller, single family scaled townhouse products. The predominant zoning of approved multifamily developments in 2004 and 2005 was RM-8. Although this zoning allows a maximum of eight units per acre, most RM-8 development does not approach this level of density.

This shift towards decreased multifamily density should not be seen as source of concern, but instead should be recognized as a local extension of national trends. Even though average multifamily density has been decreasing, a greater amount of multifamily development has been built recently than in the past. This signals increasing acceptance of multifamily living as a viable alternative to single-family suburban development by the citizens of Forsyth County. Additionally, a renewed interest in urban living has been experienced both nationally and locally. Urban multifamily densities are typically higher than those found in suburban environments, and the multifamily development currently under construction in downtown Winston-Salem may have a significant effect in the future on the average multifamily density in the MSA.

Data Source: 2000, 2005 and Benchmark Data: City-County Planning Board, Winston-Salem, NC.

Balanced Development

| Indicator | Past Trends | 2000 or Latest Data | Benchmark Year 2005 | 2005 Data |
|---|-------------|-----------------------------|---------------------|---|
| 4. Industrial/office/retail space built in East Winston. | | 485,000 sq. ft. (1990-2000) | | 106,409 sq. ft. (2001-2005) X |

This indicator is designed to assess the success in achieving the objective of more balanced growth and development in Forsyth County. No significant new office or industrial development has taken place in east Winston-Salem in the last five years. Only one modest sized shopping plaza was built in 1996. The City is already leading the way in encouraging new development in the area with the Liberty Street Redevelopment Plan and its focus on the development of an airport business park. It is hoped that through private/public partnerships, the provision of infrastructure, and other incentives such as those associated with brownfield redevelopment, a greater share of private investment will be attracted to this area.

Update:

Indicator 4

Current data reveals that approximately 67,460 sq. ft. of industrial/office/retail space has been built in East Winston (from Smith Reynolds Airport to Lowery Park) in 2001-2002, 38,950 sq. ft. in 2004-2005 for a total of 106,409 sq. ft. since 2001. Almost all of this (100,000 sq. ft.) was in the Lowery Business Park. This is less nonresidential space than was built in the period 1990-2000. An additional 240,000 sq. ft. of space is planned at the Airport Industrial Park. Retail space built was minimal.

Data Sources: 2001-2005 Data: City-County Planning Board, Winston-Salem, NC.

Transit Use and Vanpooling

| Indicator | Past Trends | 2000 or Latest Data | Benchmark Year 2005 | 2005 Data |
|---|---|---------------------|---------------------|-----------------------|
| 5. Annual fixed route transit passenger trips | <ul style="list-style-type: none"> • 1992/93 - 3,795,934 • 1993/94 - 3,808,051 • 1994/95 - 3,720,421 • 1995/96 - 3,396,644 • 1996/97 - 3,370,065 • 1997/98 - 2,785,195 • 1998/99 - 2,641,454 | 2,702,567 | 3,062,180 | 2,850,727 ✓ |
| 6. Annual regional vanpool/transit passenger trips | <ul style="list-style-type: none"> • 1992/93 - 209,037 • 1993/94 - 147,120 • 1994/95 - 260,448 • 1995/96 - 325,435 • 1996/97 - 417,358 • 1997/98 - 424,164 • 1998/99 - 413,485 | 485,536 | 600,000 | 774,686 ✓+ |

These indicators will be used to determine whether the *Legacy* objective of expanding public transit services is being met by setting benchmarks for ridership levels for the year 2005. Annual transit passenger trips are limited to bus users. Existing data and projections for transit passenger trips to 2005 were available from the Winston-Salem Transit Authority (WSTA). Existing data on transit passenger trips shows a decline in trips over the last few years. It is hoped that implementation of policies proposed in *Legacy* to increase transit ridership can contribute to reversing this trend.

Vanpooling provides an alternative to single-occupancy vehicles and, therefore, contributes to reduced congestion. The regional vanpooling program has been fairly successful.

Vanpool passenger trips have been increasing over time though the rate of increase has varied widely. A 5% yearly rate of increase has been used to obtain a benchmark for 2005.

Update:

Indicator 5

Ridership for fixed route transit has gone up over 5% since 2000, but the benchmark has not been achieved.

Indicator 6

Annual regional vanpool trips have far exceeded the 2005 benchmark. This is an indication that the Piedmont Association for Regional Transportation (PART) is having some success in promoting regional transit services. Buses have replaced vans over the time period.

Data Sources: 2000 Data: Winston-Salem Transit Authority, Winston-Salem, NC; Benchmark Data: WSTA and City-County Planning Board, Winston-Salem, NC.

2005 Data - Winston-Salem Department of Transportation

Vehicle Use

| Indicator | Past Trends | 2000 or Latest Data | Benchmark Year 2005 | 2004 Data |
|---|-------------|--------------------------|--------------------------|---|
| 7. Ratio of growth in vehicle miles traveled to population growth. | | 2.94 to 1 (1994-1999) | 2.76 to 1 (1999-2005) | 2.45 to 1  |

This indicator will be used to determine whether one of the objectives of *Legacy* to reduce the number and length of automobile trips is being met. At present the growth rate of vehicle miles traveled is higher than the population growth rate. Based on population data and data on vehicle miles traveled from The 2025 Multi-Modal Long Range Transportation Plan for Forsyth County, the Piedmont Triad Regional Transportation Study for the Triad Region, and the 1998-1999 Air Quality Report for Forsyth County the ratio of growth in vehicle miles traveled to population growth between 1994 and 1999 has been calculated as 2.94 to 1. Projections indicate that, for the period 1999 to 2005, this ratio should decrease to 2.76 to 1. This projection is the benchmark for 2005 and is intended to reflect changing patterns of growth and development that reduce vehicle miles traveled.

Update:

Indicator 7

The ratio of growth in vehicle miles traveled (VMT) to population growth is calculated for 2004 because estimates made in the updated Piedmont Triad Regional Study and Air Quality Report are for 2004. Comparable data shows that the ratio of VMT to population decreased from 2.94 to 1 in 2000 to 2.45 to 1 in 2004. This indicates success in achieving the projected 2005 benchmark of reducing per capita VMT.

Data Sources: 2000 and Projected Data: Piedmont Triad Regional Transportation Study;

The 2025 Multi-Modal Long Range Transportation Plan for Forsyth County;

1998-1999 Air Quality Report;

Office of State Planning - State Demographics;

City-County Planning Board, Winston-Salem, NC.

2005 Data - Winston-Salem Department of Transportation

Economic Activity - Downtown Winston-Salem

| Indicator | Past Trends | 2000 or Latest Data | Benchmark Year 2005 | 2005 Data |
|-------------------------------------|---------------------------------|------------------------|--------------------------------|--|
| 8. New office space | 1,500,000 sq.ft. (1990-1998) | 345,000 (1999-2000) | 655,000 sq. ft. (2000-2005) | 625,500  |
| 9. Retail space vacancy rate | | 1995 - 20.3% | 10% | NA |
| 10. Number of employees | (1993) | 20,000 | 27,000 | 20,000  |

These indicators are a measure of progress in achieving the goal of a vibrant downtown Winston-Salem with a variety of uses and activities. The year 2005 benchmark for the number of people working downtown took into consideration existing data and the proposals for development in downtown. The latest data for new office space in downtown shows that approximately 345,000 square feet has been added in the last couple of years. The benchmark for new office space was, therefore, determined by assuming implementation of existing proposals for specific sites, taking into consideration proposals of the New Century Plan for Downtown Winston-Salem to create an additional 600,000 square feet of office space in the downtown in the next 5-10 years and proposals for the Piedmont Triad

Research Park. A job creation rate of 1 job per 150 square feet was applied to the benchmark for office space to calculate additional employment generated by office development.

Although it is expected that new retail space will be built, particularly restaurant space, the indicator chosen was reducing the amount of vacant retail space. The high incidence of vacant space has a negative impact on downtown vibrancy and must be reduced. The proposal is to reduce it by one-half. Some additional jobs will accompany this reduction in addition to jobs created by new retail space.

Update:

Indicator 8

The amount of new office space created in downtown Winston-Salem in the period 2000-2005 just about made the benchmark. It should be noted, however, that as of July 2006 there is a vacancy rate in downtown office space of 26.7% with the higher vacancy rate in Class B office space. The office market is still recovering from a shift in office space used by Wachovia, due to its merger with First Union five years ago.

Update:

Indicator 9

Data for 2005 on “the vacancy rate of retail space located in downtown Winston-Salem” is not available because this data is currently not being collected. This benchmark indicator is, therefore, being eliminated. Consideration can be given in the future to an alternative benchmark indicator that identifies the total retail space in downtown Winston-Salem if this data is collected by the Downtown Winston-Salem Partnership or another organization

Indicator 10

The number of people working downtown in 2005 remained the same as 2000. Although the benchmark was not achieved, employment has picked up again after a fall in 2002/2003 due to the relocation of Wachovia Bank headquarters to Charlotte.

*Data Sources: Data: 1995 Forsyth County Commercial Space Survey, prepared by Bell & Gardner, Inc., Winston-Salem, NC; Just The Facts about Downtown Winston-Salem, prepared by the Downtown Winston-Salem Association and the Downtown Development Corporation; Guide to Downtown Business, Central Winston-Salem Association, 1995. Benchmark Data: City-County Planning Board, Winston-Salem, NC.
2005 Data - Downtown Winston-Salem Partnership*

Residential Development

| Indicator | Past Trends | 2000 or Latest Data | Benchmark Year 2005 | 2005 Data |
|---|--------------------------|---------------------|---------------------|--|
| 11. Number of residential units within the downtown area | 225 (1990) 253 (1997) | 313 | 500 | 549  |

This indicator is another measure of the vibrancy of downtown Winston-Salem and addresses the objective of having a varied mix of housing downtown. Census data from 1990 and 1997 updates by the CCPB showed a slight decrease in residential units during that period. However, between 1998 and 2000, several new residential units have been added to the inventory mostly taking the form of conversion of existing non-residential buildings to residential units. The benchmark is to increase to 500 by 2005 the total number of units in the area defined as downtown in *Legacy*. Proposed residential projects, and proposals in *Legacy* and the New Century Plan for Downtown Winston-Salem for increasing housing downtown were taken into consideration in setting the benchmark. It is expected that additional housing that could impact the vibrancy of downtown is likely to be developed in the urban neighborhoods immediately surrounding the downtown but these are not included in the benchmark.

Update:

Indicator 11

Residential units downtown have exceeded the 2005 benchmark of 500 units. In addition to the 549 units now located in the area defined as downtown in *Legacy*, there are an additional 138 units under construction in 2006 and 117 to be constructed in 2007. There are also approximately 100 units that have been constructed or are proposed on the immediate fringes of this area.

*Data Sources: 2000 and Benchmark Data: Decennial Census 1990; City-County Planning Board, Winston-Salem, NC.
2005 Data - Downtown Winston-Salem Partnership*

Housing Affordability

| Indicator | Past Trends | 2000 or Latest Data | Benchmark Year 2005 | 2000 Data |
|--|-------------|---------------------|---------------------|--|
| 12. Households paying more than 30 % of their income in housing | | 1990 - 21.7% | 18% | 18.1%  |

This indicator measures the percentage of households that are spending a large proportion (30% or more) of their income on housing and is used as a measure of the affordability of housing in the community. In 1990, 21.7% of county residents fell into this category. The benchmark is aimed at reducing this percentage over time. No yearly data is available but the year 2000 census will be used to evaluate the benchmark and adjust it as necessary.

Update:

Indicator 12

Data from the 2000 Census indicates that this benchmark has been achieved. The percentage of households paying more than 30% of their income on housing has been reduced from 21.7% to 18%. Additional data for this indicator will be available from the 2010 Census.

Data Source: Decennial Census 1990, 2000

Neighborhood Character

| Indicator | Past Trends | 2000 or Latest Data | Benchmark Year 2005 | 2005 Data |
|---|-------------|---------------------|---------------------|--|
| 13. Residential developments with traditional neighborhood character | | near 0 | 10% | See update note  |

Legacy encourages the development of Traditional Neighborhood Developments (TNDs), a compact form of development and an alternative to existing suburban subdivisions. This benchmark will measure progress in building residential developments with traditional neighborhood character. The Action Plan proposes the development of guidelines, design standards, and ordinance amendments to promote this form of development. Criteria to identify traditional neighborhood character could include the following:

- a mix of shops and offices at the edge of the neighborhood
- a discernible neighborhood center
- a range of density
- a variety of dwelling types
- a variety of street types from boulevards to neighborhood streets designed for safely accommodating automobiles, bicyclists and pedestrians
- an interconnected street network
- convenient and safe connections to public transportation
- pedestrian friendly sidewalks and streetscapes

- small community playgrounds and parks or other public amenities within walking distance
- siting of houses on smaller lots
- siting of residential and nonresidential buildings closer to streets
- streets lined with buildings and trees
- parking lots which are located at the sides and rear of buildings
- residential garages that do not dominate the street

At present, there are a very limited number of new developments that have some elements of a traditional neighborhood character but they are not classified as TNDs. A benchmark that 10% of new developments take the form of TNDs is considered by the CCPB as desirable and a good beginning to changing the character of neighborhood development.

Update:

Indicator 13

This benchmark has not been achieved, but trends toward this type of development are improving. While developments with traditional neighborhood characteristics are still in the minority, several developments initiated in the past five years have demonstrated characteristics of TNDs. Hillcrest Town Center, Northern Quarters, and Brookberry Farm, Caleb’s Creek, and Hampton Corners are significant mixed-use developments that are currently under development which demonstrate most of the characteristics of TNDs. Other residential-only developments such as Shelburne Village and Long Creek Village do not display all of the elements of TND but display key elements such as buildings placed closer to the street, rear-loaded garages with alleys, and common open space. There has, therefore, been some progress in this area.

Data Source: 2000 and Benchmark Data: City County Planning Board, Winston-Salem, NC

Trees Planted

| Indicator | Past Trends | 2000 or Latest Data | Benchmark Year 2005 | 2005 Data |
|---|--|---------------------|---------------------|---|
| 14. Trees per year planted by public agencies along major streets and in neighborhoods | 1200 (1995, W-S) 1200 (1996, W-S) 1500 (1997, W-S) | 2000 (W-S) | 2500 (FC) | 974 (FC)  |

This indicator addresses *Legacy* objectives of well designed and landscaped roadways and developments which promote a pleasing, livable, and sustainable community. The benchmark is based on the proposed projects and projections of the Department of Roadway Appearance, City of Winston-Salem, stated objectives of *Legacy*, and tree planting in other municipalities. At present, about one-third of trees planted in Winston-Salem are neighbor-

hood plantings and two-thirds are major new roadway projects, existing roadway enhancements and other community projects. Tree planting in Winston-Salem has increased from an annual total of 1,200 in 1995, when the Department of Roadway Appearance was established, to 2,000 in the year 2000. It is projected by the Department of Roadway Appearance that the number of trees planted in Winston-Salem will increase to an annual total of 2,200 by 2005. Three hundred additional trees are projected for other municipalities; therefore, the benchmark for publicly planted trees in Forsyth County for the year 2005 is 2,500.

Update:

Indicator 14

The number of trees per year planted by public agencies falls far short of the benchmark. The significant drop from 2000 trees planted in Winston-Salem to 974 for all of Forsyth County has been attributed to a change in policy with respect to tree planting in Winston-Salem, which plants the largest quantity of trees. The City’s policy in the last few years has been to focus on quality instead of quantity. The number of trees planted each year is therefore dependent on resources available to maintain them. A maximum of 950 trees stretch present resources. Public tree planting in the other municipalities varies by year ranging from 0 – 20 trees. UDO 142, the Street Standards Text Amendment, adopted by the City in 2005, includes a requirement to plant one street tree per lot within new residential subdivisions. This would result in more private tree planting. No trees were planted by the Town of Kernersville in 2005. The focus there is to get private developers to plant trees through the use of overlay districts and a Residential Landscape Ordinance adopted in 2005.

Data Source: 2000 and Projected Data: Department of Urban Forestry, Roadway Appearance, City of Winston-Salem, NC; City-County Planning Board, Winston-Salem, NC.

2005 Data - Department of Vegetation Management, Winston-Salem; Town Managers

Air Quality

| Indicator | Past Trends | | 2000 or Latest Data | Benchmark Year 2005 | 2005 Data |
|---|-------------|------------|---------------------|---------------------|-----------|
| 15. Days per year rated as having good air quality | 1988 - 203 | 1989 - 206 | 189 | 246 | 193 |
| | 1990 - 193 | 1991 - 219 | | | |
| | 1992 - 230 | 1993 - 205 | | | |
| | 1994 - 244 | 1995 - 235 | | | |
| | 1996 - 238 | 1997 - 232 | | | |
| | 1998 - 246 | 1999 - 183 | | | |

This indicator measures the level of achievement of the objective of improved air quality to protect the health and enhance the economic development potential of our community. Air Quality Index Data which stipulates the number of days with good, moderate or unhealthful air quality based on levels of air pollutants is available from the Forsyth County Environmental Affairs Department. Recent data shows that the highest number of good air quality days was 246 days in 1998. There has been a decrease in good air quality days to 183 days in 1999 and 189 days in 2000. This change was due to a significant extent to change in the method for assessing air quality. The benchmark aims to increase good air quality days to the 1998 level.

Update:

Indicator 15

The days per year rated as having good air quality have fallen far short of the benchmark. However, the year 2005 shows a small improvement over 2000. It is expected that there should be some more improvement in the longer term because of the current focus on strengthening the city transportation infrastructure including bus, bicycle and rail (streetcar and regional) transportation, purchasing hybrid or alternative fueled city vehicles, and other actions to improve air quality as part of the Early Action Compact.

Data Sources: 2000 and 2005 Data: Forsyth County Environmental Affairs Department, Winston-Salem, NC;

Benchmark Data: City-County Planning Board, Winston-Salem, NC.

Water Quality

| Indicator | Past Trends | 2000 or Latest Data | Benchmark Year 2005 | 2003 Data |
|---|-------------|---------------------|---------------------|------------|
| 16. Miles of streams classified as impaired (only partially supporting or not supporting their uses) | | 13.4 miles | 10 miles | 27.2 miles |

The water quality of our streams is one indicator that can be used to measure whether we are achieving the goal of preservation of our environmental resources and the objective of available clean, high-quality water to meet the domestic, economic and recreational needs of the community. Use support ratings are a method used by the State to determine whether the quality of streams is adequate to support uses such as swimming, fishing or water supply. Streams in Forsyth County have been rated by the NC Division of Water Quality.

Salem Creek and Reynolds Creek are rated only as partially supporting their uses. Ratings of streams can be changed from impaired (only partially supporting or not supporting their uses) to fully supporting with improvement in water quality. At present, Forsyth County has 13.4 miles of streams rated as impaired. The benchmark is to reduce by approximately twenty-five percent the miles of impaired streams in Forsyth County.

Update:

Indicator 16

There is no data available on this indicator for 2005. The latest available data is for 2003 when the NC Division of Water Quality completed a study of the Yadkin-Pee Dee River Basin. The update of this study will be completed in 2008. Data for 2003 indicates that the miles of streams classified as impaired have increased from 13.4 miles to 27.2 miles. The impaired rating in 2003 included habitat degradation not included in 2000. It is to be noted that Forsyth County no longer does water quality monitoring because of budget constraints. The City, however, monitors some creeks including Muddy Creek, which was rated as impaired in 2003.

Data Sources: 2000 Data: Yadkin-Pee Dee River Basinwide Water Quality Management Plan - 1997, prepared by the Water Quality Section, NC Division of Water Quality, Raleigh, NC; Benchmark Data: City-County Planning Board, Winston-Salem, NC.

2005 Data - Fourteen-year Water Quality Trends for Forsyth County Streams

Waste Disposal

| Indicator | Past Trends | 2000 or Latest Data | Benchmark Year 2005 | 2005 Data |
|---|----------------------------|---------------------|---------------------|-----------------|
| 17. Increase/ in tons per capita waste generated above base year 1988 - 1989 | 1997/98 16% 1998/99 15% | 1999/00 9% | 5% | 21% X |

This indicator measures the extent to which the community has achieved the objective of improving environmental quality by reducing the amount of solid waste going to landfills. *Legacy* outlines a number of initiatives aimed at achieving this reduction. State statute allowed each community to choose a baseline year for waste reduction calculations. Forsyth County chose 1988-1989 considered to be representative of typical waste generation in the county. In that year, the tons of waste generated per capita was 1.34. This has increased since then and was 1.54 in 1999, which was 15 % above the base year. The *10*

Year Solid Waste Plan for Forsyth County and Municipalities has set a goal for 2005 to reduce this percentage increase to 5% above the base year. Reduction of tons of waste generated per capita to below that of the baseline year is projected for the 2005-2010 period. The Solid Waste Plan's goal for 2005 is the benchmark used here.

Update:

Indicator 17

The percentage increase in tons per capita waste disposed failed to meet the benchmark for 2005, which was based on the goals of the *10 Year Solid Waste Plan FY 2001-2002*. The *10 Year Solid Waste Plan 2006-2016* indicates that per capita waste disposal was 1.62 tons in FY 2004-2005, compared with 1.34 tons in the baseline year 1989, and the 2005 goal of 1.41 tons per capita. It acknowledges that the increase in the waste disposal rate moves Forsyth County in the opposite direction of achieving the waste reduction goals in its FY 2001-2002 Solid Waste Management Plan. It notes that although the goals were thought to be reasonable and attainable, some Forsyth County waste is being managed by organizations that are not required to develop or attempt to achieve waste reduction goals. Higher waste generation and higher rates of disposal out of the county have combined to cause a substantial increase in the county's per capita disposal rate. The 2005-2006 Solid Waste Management Plan has, therefore, adopted new waste reduction goals which are considered more realistic for 2006-2016.

Data Source - 2000 and Benchmark Data: 10 Year Solid Waste Plan for Forsyth County and Municipalities; Solid Waste Management Department, Winston-Salem and Forsyth County Utility Commission.

2005 Data - 10 Year Solid Waste Plan 2006-2016

Parks

| Indicator | Past Trends | 2000 or Latest Data | Benchmark Year 2005 | 2005 Data |
|------------------|-------------|-------------------------|-------------------------|--------------------------------------|
| 18. Acres | | 6360 acres (cumulative) | 7200 acres (cumulative) | 5816 acres (cumulative) == |

This indicator measures the extent to which the community provides parks for its residents. The benchmark is based on the calculated acreage of parkland required to meet the needs of the projected population for 2005. Standards used are adopted standards for the provision of the various categories of parks outlined in Chapter 11. These adopted standards are

adapted from the National Recreation and Parks Association standards and the North Carolina Outdoor Recreation Plan. Existing park acreage includes City of Winston-Salem, Forsyth County and other municipal parks. It also includes acres of school property that are available for public recreational use, including ball fields, tennis courts and other facilities.

Update:

Indicator 18

The benchmark for total acres of park land in 2005 has not been achieved. Updating the database to more accurately reflect what is on the ground accounts for most of the difference in acreage between 2000 and 2005.

Data Sources: 2000 and 2005 Data: Winston-Salem and Forsyth County Recreation and Parks Departments.

Benchmark Data: City-County Planning Board, Winston-Salem, NC.

Open Space

| Indicator | Past Trends | 2000 or Latest Data | Benchmark Year 2005 | 2005 Data |
|-----------------------|-----------------------------------|-------------------------|-------------------------|------------------------------|
| 19. Open Space | 1211 acres (cumulative 1984-1996) | 1651 acres (cumulative) | 1921 acres (cumulative) | 1880 acres (cumulative) ✓ |

This indicator measures the extent to which the community sets aside open space for passive recreation and enjoyment of natural areas, protection of environmentally sensitive areas and maintaining rural character. This has been done in the past through the Farmland Preservation Program and other preservation initiatives such as those undertaken by the Piedmont Land Conservancy. This benchmark is based primarily on the recommendations of the Forsyth County Department of Conservation of Natural Resources. It includes the acreage of farmland in the top priority applications to the farmland preservation program for purchase of development rights. It also assumes purchase by nonprofit organizations of easements or development rights of smaller amounts of open space or environmentally sensitive land.

Update:

Indicator 19

The acreage in open space has increased since 2000 although the benchmark has not been achieved. The increase has been due mainly to open space easements acquired primarily by the Piedmont Land Conservancy. Failure to reach the benchmark is due to the lack of County funding of the Farmland Preservation Program and the lack of alternative funding sources to purchase the development rights of farmers willing to sell them.

Data Sources: 2000 and 2005 Data: Forsyth County Department of Conservation of Natural Resources, Farmland Preservation, Winston-Salem, NC; Piedmont Land Conservancy; Benchmark Data: City-County Planning Board, Winston-Salem, NC.

Greenways

| Indicator | Past Trends | 2000 or Latest Data | Benchmark Year 2005 | 2005 Data |
|-----------------------------------|-------------------------|-----------------------|-----------------------|------------------------------|
| 20. Greenways/ bike trails | 15.7 miles (cumulative) | 16 miles (cumulative) | 26 miles (cumulative) | 18.2 miles (cumulative) ✓ |

Legacy proposes a network of greenways designed to enhance the community's quality of life. Greenway trails provide recreational opportunities and are also considered bicycle trails that form an integral part of a transportation system, providing an alternative means of transportation. This indicator measures progress in adding to the existing greenway system.

The benchmark for greenways is based on improving the rate of greenway trail development where a substantial number of easements have already been obtained and where there is a demand for trails. Trails projected to be developed by 2005 include sections along the Brushy Fork, a section along the Muddy Creek, the Waughtown Connector, the Strollway extension and possibly a section of the regional Piedmont Trail.

Update:

Indicator 20

There has been a small increase in the miles of greenway trails constructed since 2000. The process of acquiring easements, obtaining funding and constructing trails is slow. However, implementation of the Greenway Plan is underway and another mile, the Little Creek Greenway, is expected to be added to the system in 2007.

Data Sources: 2000 and 2005, and Benchmark Data: City-County Planning Board, Winston-Salem, NC; Forsyth County Parks and Recreation Department; City of Winston-Salem Parks and Recreation Department.

Open Space Subdivisions

| Indicator | Past Trends | 2000 or Latest Data | Benchmark Year 2005 | 2005 Data |
|--|-------------|---------------------|---------------------|-----------|
| 21. Subdivisions with open space design | | near 0 | 10% | 0% |

This benchmark measures the number of open space subdivisions built where houses are physically grouped on part of a site while leaving significant open space undeveloped. This open space contributes to the total open space available in our community. Data has not been collected to date on subdivisions with open space designs. It is proposed that data collection begin with plan approval and the adoption of open space subdivision regulations for inclusion in the *Unified Development Ordinances*. A benchmark that by year 2005, 10% of all subdivisions are of an open space design is considered desirable.

Update:

Indicator 21

The benchmark for open space subdivisions has not been achieved. *Legacy* proposed that data collection for open space subdivisions begin with adoption of open space regulations in the UDO. Staff is currently in the final stages of developing these regulations, and anticipates that they will be presented to the Planning Board in 2007. These standards will be based on the Planned Residential Development (PRD) ordinance currently in our UDO. While there are many existing PRDs that conserve some type of open space, none of these would qualify as open space subdivisions. Open space subdivisions preserve a greater quantity and a higher quality of open space than that required by our current PRD regulations. There have been several changes to the PRD standards proposed that will preserve meaningful open space,

such as increasing the minimum required amount of open space, requiring that multiple types of open space (such as passive and active open space) be present within each development, and requiring that open space between adjacent developments be connected.

Data Source: City-County Planning Board, Winston-Salem, NC.

Educational Facilities

| Indicator | Past Trends | 2000 or Latest Data | Benchmark Year 2005 | 2005 Data |
|--|--------------|---------------------|---------------------|-----------|
| 22. Percentage of total classrooms that are mobile classrooms | 1998 - 12.1% | 9% | 5% | 12.6% |

A high quality education system requires the provision of adequate school facilities. The percentage of total classrooms that are mobile classrooms can, therefore, be considered one indicator of the availability of adequate school facilities for the county's school children. In 1998, there were 311 mobile classrooms used to supplement existing classrooms because of the shortage of permanent classroom space. This represented approximately 12% of total public school classrooms. There has, however, been an improvement in this situation. In 2000, mobile classrooms numbered 237. The objective here is to further improve this situation over the next few years. The benchmark for 2005 is that mobile classrooms do not exceed 5% of total classrooms.

Update:

Indicator 22

The increased percentage of total classrooms that are mobile classrooms from 9% in 2000 to 12.6% in 2005 means that not only has the benchmark of 5% not been achieved but that the lack of adequate classrooms has become worse in the last 5 years. This has been attributed to the increased demand for classrooms because of increase in the student population as well as a reduction in classroom size in some school districts. Funding to build additional schools has not kept pace with the demand for school places. A new school bond issue for Forsyth County was passed by voters in November, 2006, will allow a reduction in the number of mobile classrooms from the present level.

Data Sources: 2000 and 2005 Data: Operations Manager, Winston-Salem/Forsyth County Schools, Winston-Salem, NC; Benchmark Data: City-County Planning Board, Winston-Salem, NC.

Integration

| Indicator | Past Trends | 2000 or Latest Data | Benchmark Year 2005 | 2005 Data |
|---|-------------|---------------------|---------------------|---|
| 23. Census blocks that are 75-100% white residents | | 63% (1990) | | 55%  |

This indicator measures the extent of integration by census blocks and is relevant to an objective of the plan to increase levels of integration and racial harmony. The data for this indicator is only available from the decennial Census.

Update:

Indicator 23

1990 and 2000 Census block group data has been used to map the spatial distribution of white and non-white residents countywide. In 1990, 63% of census block groups were 75 - 100% white residents. This was reduced to 55% in 2000. The data indicates that between 1990 and 2000 there has been increased integration in identified areas of the county, particularly areas located off some major transportation corridors, such as Peters Creek Parkway, US 52 north, and I-40, as well as Kernersville. Since data is obtained from the Census, new data will be collected again in 2010.

Data Sources – 1990 and 2000 Census Data