Introduction

This specific component of the comprehensive plan highlights the current state of the county's infrastructure, from the several public water and wastewater facilities in several of its political subdivisions and the county's thoroughfare network, to addressing optimal strategies for the placement of telecommunication facilities.

Miami and Erie Canal looking east from Perry Street, the present State Route 424.

Information and the resultant strategies in this section are designed to mesh well with the Land Use component to ensure the county- at the bare minimum- embraces a paradigm in which places land use issues at the forefront when planning and maintaining its current infrastructure. The placement of infrastructure often guides land use and it is very important for the county's public and private officials take this important correlation into consideration.

Planning Issues

Developing a base of infrastructure suitable to accommodate planned and future growth is of absolute importance to the county's economic vitality and overall quality of life. However, also tied to the county's current quality of life is the rural lifestyle that has derived from the county's strong link to agriculture. Therefore the development of this suitable infrastructure must be developed and maintained in a fashion in which takes this agrarian lifestyle into consideration, all under the assumption that growth will occur in the future and the best way to accommodate it is only through a thorough public process of planning.

The current endeavors of the county in creating a regional water and sewer district is a good example of county efforts in accommodating growth and development in a proactive manner. All growth trends indicate the market is preferential to the northern areas of the county where the thoroughfare network provides for easy ingress and egress to the Toledo MSA. The plan of operation by which will guide this new regional water and sewer district takes these growth patterns into consideration. The Operational Plan addresses not only to mitigate current water and sewer issues that have caused health hazards in locations such as Okolona and Washington Township, but also notes potential areas of the county where new growth would best be served by public facilities, all to limit health and safety problems from arising in the future.

Planning and maintaining a safe and expeditious thoroughfare network is also of prime importance to Henry County. Due to increased traffic patterns caused by new, and often unplanned residential growth, health and human safety issues have emerged as a current problem soon-to-be addressed by the County's Engineer. To mitigate future road hazards, this department is planning to undergo future studies to address access management on the county's road network. To date, road fatalities in Henry County are among some of the highest in area and among county's its size.

Other very important planning issues include the future realignment of US 24, otherwise known as the "Fort-to-Port" project. Expected to begin construction in 2009.

Goals and Objectives

Goal: To maintain and enhance the County's infrastructure by;

General

- ✓ Assisting local governments in their on-going effort to develop and manage their respective infrastructure;
- ✓ Developing an inventory of county facilities and structures in need of rehabilitation and repair in the on-going development of the capital improvement plan;
- ✓ Facilitating inter-agency and local government coordination in the planning, development, and repair of county-owned facilities and structures; and,
- ✓ Pursuing the feasibility of utilizing impact, development, and other fees.

Transportation

- ✓ Promoting the County's highway system to facilitate safe and adequate traffic flow;
- ✓ Continuing to monitor unsafe roads, intersections, roadway segments, and railroad grade crossings, and make recommendations to the appropriate authorities;
- ✓ Pursuing the feasibility of developing a Thoroughfare Plan to develop and maintain access management strategies; and,
- ✓ Supporting a transportation system that corresponds to and is consistent with patterns of land development, and in accordance with adopted land use plans.

Water and Sewer

- ✓ Pursuing the feasibility of developing a proactive countywide regional water and sewer system;
- ✓ Cooperating with utility and public services providers in the location of facilities for new and alternative services; and,
- ✓ Defining water and sewer service areas for respective Henry County purveyors in order to facilitate cooperation and long range planning.

Telecommunications

- ✓ Promoting and facilitating the proper development of telecommunications throughout Henry County.

Current Conditions

A. Transportation

Henry County's transportation network is vital to the movement of goods and people through the County.

Under the 2003 road improvement program, eight road projects have been recommended for repair, with a project on County Road 16 from roads U to W and one on Road S from

roads 6C to 4A being the two longest projects at two miles. Five of the eight projects are to widen roads and the total estimated cost of all the projects, which measure eight and half miles, is $950,000.

Three bridge projects have been also recommended for replacement or repair. One project, bridge 13-18.95 in Liberty Township, will tie in with the road project on County Road 13 from roads S to T and has been submitted for 50% funding through Issue 2. The estimated cost of all three bridge projects is $475,000.

Of the 292 current county bridges, 43 have load limits and four are closed, meaning 15% of the county's bridges are structurally deficient or functionally obsolete. In addition, the board of county commissioners approved placing load limit signs mandating a 25% reduction in the legal load limits on all county roads to prevent them from being damaged during the spring thaw. The Henry County Engineer's Office is also planning several new repairs and improvements to the existing road and bridge network. This capital improvement program for roads and bridges until 2007 is illustrated on **Map: Transportation Capital Improvement Plan, 2003-2007**.

The illustrated road and bridge improvements were excerpted from the County Engineer's 5 Year Capital Improvement Plan, which is used to guide and prioritize transportation improvements. The plan is under perpetual review and is also subject to revision as conditions and transportation needs dictate.

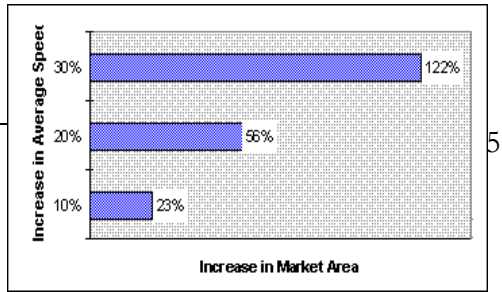
Functional Classification System

Functional Classification is the grouping of roads, streets, and highways in a hierarchy based on the type of highway service they provide. Streets and highways do not operate independently. They are part of an interconnected network, and each one performs a service in moving traffic throughout the system. Generally, streets and highways perform two types of service. They provide either traffic mobility or land access and can be ranked in terms of the proportion of service they perform (**See Map: Thoroughfare Plan**).

A properly developed and maintained thoroughfare system is not only important for the health and human welfare of residents, but is also very important in setting the stage for sustained economic development and the development of quality neighborhoods. One of the most important uses of functional classification is to identify those streets and roads that are eligible for federal funds.

Access Management

The primary purpose of access management is to preserve traffic flow in terms of safety, capacity and speed by managing the location, design and operation of driveways, median openings and street connections to a roadway. Proper access management improves subdivision layouts, discourages poor development patterns, improves on-site circulation systems, reduces accidents and improves a community's ability to manage the overall transportation system. To promote health and human safety on Henry County's road network, the Henry County Engineer's office is planning to develop an access management plan sometime during 2003.



Motorists experience fewer accidents, less congestion, and improved travel time on roads with good access controls. Studies over several decades have shown that access management can reduce accidents as much as 50% while safely increasing access to the market area by up to 122%.

Henry County taxpayers will also benefit. Access managed highways are more efficient. The county's roadway capacity and the volume of traffic they can carry, could be safely improved by 25% to 35%. This means almost 10,000 more cars per day on a four-lane road with good access controls than on a four-lane road with poor controls. Getting more out of the roads we have means fewer tax dollars spent trying to keep up with traffic demands.

Fewer delays and accidents cut transportation costs for businesses, and business locations remain more accessible and attractive to customers when there is less congestion. Access Management can even help expand the market area of a business. If the average speed on an area's highways is 21 mph, a business is within a 20-minute drive for customers living in a 7-mile radius. However, if access management improves the average speed on the highway system to 30 mph, the same 20-minute drive puts the business within reach of customers living in a 10-mile radius, an area fully twice as large.

B. Water and Sewerage Systems

1. Public Water Systems

The City of Napoleon

The City of Napoleon's public water and distribution plant was constructed in 1965, with the original system dating back to 1895. Past, present and future improvements on the system include a new intake and wash water basin in 1997, costing $3 million, GAC Treatment facility for TTHM control, costing $3.5 million, new future water tower on the Southside, anticipated cost $50,000, plant improvements, controls for filter, new feeder, etc., anticipated cost $1-2 million, and a need to look at the grid system and size and loop to provide maximum pressure in order to be within new EPA regulations of disinfection byproducts, enhanced treatment regulations (surface water), etc.

The present size/capacity of the storage tank is 750,000 gallons, with an additional storage tank planned to hold 500,000 gallons located on the south side of the river. The City of Napoleon currently has a potential funding project, which includes Issue Two or CDBG. The current design of the water source and treatment method for the City of Napoleon is through conventional lime soda ash softening plant and one MG clear well and ¾ MG elevated tank. Main lines consist of CIP, DIP, and PVC, asbestos cement (sizes from 1" to 20", one 8" river crossing, and one 16" river crossing.

The City of Napoleon's main source of water is the Maumee River. The current design capacity of the current water system is 4.5 MGD. The average daily flow for the City of Napoleon is estimated at 1.3 MGD. The City of Napoleon has witnessed a particular demand increase for water, and their pattern of flow rates in MGD is as follows: 1985 – 1.30; 1990 – 1.13; 1995 – 1.18; and estimated for 2005 – 1.8.

The Village of Deshler

The Village of Deshler's public water system was constructed in the 1920's, and has had a number of improvements on its water system components over the past years, including expansion in the 1960's to include two towers, both of which have been refurbished in the last five years. As well, sections of the waterlines are upgraded every year. The current design for Deshler does not include any type of water, facilities, capital, or comprehensive plan. The current design of the water source and treatment method is through two ground water wells, with the treatment process including aeration, filtration, chlorination, and softening with ion exchange.

The current design capacity of the water system (storage) is 350,000 gallons, with no additional capacity indicated. Approximately 15% of Deshler's water main distribution system is less than 6 inches in diameter. The average daily flow for Deshler is 150,000 GPD, with a peak demand daily flow of 250,000 GPD. At this time, current minimum water rates per unit per month are $4.75 per 1,000 gallons, with a $12.45 monthly minimum. Water service is not available to areas outside the corporation limits. The Village of Deshler does not currently utilize any capital improvement or related funds establishments for its water system. The Village of Deshler has not witnessed a particular demand increase for water, and their pattern of flow rates in GPD are as follows: 1980 – 164,000; 1985 – 175,000; 1990 – 205,000; 1995 – 144,000; and 2000 – 153,000.

The Village of Florida

The Village of Florida's public water system was constructed in the fall of 1981 by connecting to Napoleon's water system. To check for needed repairs and upkeep, the water supervisor performs monthly checks of distribution and chlorination. He also performs maintenance on the water tower annually, and replaces pressure pumps, etc., as necessary. In July 2000, there was a complete refilling of the water tower after repairs were made, a thorough cleaning performed, and an inspection.

The current design has a water master plan that was implemented in August 2001 and is currently applicable. The current design of the water source and treatment method is through raw water source (Maumee River), and the treatment plant is a conventional lime soda ash softening plan with additional facilities to help cope with the extreme physical and chemical characteristics of the Maumee River. The current design capacity of the water system (storage) is 50,000 gallons. No additional capacity is anticipated. Approximately 14.4% of Florida's water main distribution system is less than 6 inches in diameter.

The average daily flow for Florida is .046 MGD, with a peak demand daily flow of .125 MGD. At this time, current minimum water rates per unit per month are $19.00. Water service is available to areas outside the corporation limits, with a $600 initial tap fee (currently under review), and the requirement is that property must be in close proximity of a water main line. No surcharges or annexation requirements are currently required. Presently, Florida services residents between Napoleon and Florida along Rt. US 424, and the subdivisions of Wayne Park, TR N, Hickory Lane, Coon Hollow, and Okolona.

The Village of Florida currently utilizes capital improvement or related funds for its water system in the following manner: Water debt service fund maintained at twice the annual payment of USDA/RD loan. Source is water funds from receipts of water billing – approximately 5 percent of overall budget. The Village of Florida has witnessed a pattern of

demand increase for water described in MGD as follows: 1982 - .013; 1985 - .018; 1990 - .026; 1995 - .041; and 2000 - .045.

The Village of Hamler

The Village of Hamler's public water system was constructed in 1940. Over the years, several improvements have been made to the water system such as installing two new wells, two new high-pressure filters, and four new high service pumps. The current design for Hamler does not include any type of water, facilities, capital, or comprehensive plan. The current design of the water source and treatment method is through wells, filtration, and chlorination. The current design capacity of the water system (storage) is 150,000 galloons. However, additional capacity is needed in the context of locating a new well site to accommodate future growth. Approximately 30% of Hamler's water main distribution system is less than 6 inches in diameter.

The average daily flow for Hamler is 70,000 GPD, with a peak demand daily flow of 100,000 GPD. At this time, current minimum water rates per unit per month are $12.00 per 1,000 gallon, and $2.00 per 1,000 after the first 1,000. Water service is available to areas outside the corporation limits, with a 100% surcharge and a $375 initial tap fee. The Village of Hamler currently does not utilize capital improvement or related funds establishments for its water system. The Village of Hamler has witnessed a pattern of demand increase for water described in GPD as follows: 1980 – 45,000 GPD; 1985 – 50,000 GPD; 1990 – 60,000 GPD; 1995 – 65,000 GPD.

The Village of Holgate

The Village of Holgate's public water system was constructed in the 1930's. Over the years, a number of improvements have been made to the water system components including installing new pumps, a pump house, ground storage tank and new aeration tank in 1990-91; increasing some mainlines and hydrants to 8 inches in diameter in 1995; increasing additional mainlines and hydrants to 8 inches in diameter in 1996-97; increasing remaining mainlines and hydrants to 8 inches in diameter, and facilitated Upton Street boring under rail lines in 1998. The current design for Holgate does not include any type of water, facilities, capital, or comprehensive plan. The current design of the water source and treatment method is through four wells, adding aeration, chlorination, and caustic soda. The water is then filtered after the chlorination process and stored in a ground-finished tank, which is then pumped to the tower, and then sent to consumers.

The current design capacity of the water system (storage) is 225,000 gallons. However, additional capacity is needed in the context of adding a new water tower to increase the storage to 350,000 gallons. Due to previous improvements, all of Holgate's water main distribution system is more than 6 inches in diameter. The average daily flow for Holgate is .070 MGD, with a peak demand daily flow of .075 MGD. At this time, current minimum water rates per unit per month are $12.50 from 0-1,600 gallons. Water service is not available to areas outside the corporation limits. The Village of Holgate currently does not utilize capital improvement or related funds establishments for its water system. The Village of Holgate has not witnessed a pattern of demand increase for water, as they replaced old mains, their usage actually dropped.

The Village of Liberty Center

The Village of Liberty Center's public water system was constructed in the 1937. Over the years, a number of improvements have been made to the water system components including connecting to the Napoleon water system in 1980-81; rebuilding the water tower tank in 1982; completing a 6" loop on Wabash Street to Cherry Street in 1987; completing a 6" loop on Briarcliff to Pleasantview Avenue in 1990; and between 1990 and 1999, water lines were installed on Road 9, 10, and 11 and north of the village to St. Route 109 to Road U and ¼ mile east on Road U, South of the Village on St. Route 109 to Route 24 and East on Rt. 24.

The Texas area water system that was created in 1988 was extended to Catharine Drive in 1993. Additionally, in 1997-1998, the inside and outside of the elevated storage tank was repainted. The current design for Liberty Center does not includes any type of water, facilities, capital, or comprehensive plan; although it is looking at creating a master plan for a service area to supply both water and sanitary service to its consumers in the near future. The current design of the water source and treatment method is that the Village purchases treated water from the City of Napoleon.

The current design capacity of the water system (storage) is 100,000 gallons. However, additional capacity is needed in the context of adding a second elevated storage tank, estimating a storage capacity of 200,000 – 250,000 gallons for future growth; and including a separate tank for the Texas water area system that would require 50,000 – 100,000 gallons of storage itself. Approximately 10% of Liberty Center's water main distribution system is less than 6 inches in diameter.

The average daily flow for Liberty Center is .092 MGD, with a peak demand daily flow of .150 MGD. At this time, current minimum water rates per unit per month is $16.00 per 1,200 gallon minimum for inside village rates; $24.00 per 1,200 gallon minimum for outside village rates; and $18.40 per 1,200 gallon minimum for Texas water system consumers. Water service is available to areas outside the corporation limits, with the stipulations that users outside the Village limits pay a 50% surcharge above inside users for all related water rates and fees. Annexation is not currently required, but has been discussed previously and is still being considered. Main lines extended outside the Village area are at the customer cost and dedicated back to the Village.

The Village serves customers south of the Village to US 24 and to the north to Road U and to the west to Road 11. The Village also serves areas to the east to the Village to Road 4 and Catharine Drive, which includes the Texas are water system. The Village of Liberty Center currently utilizes capital improvement or related funds establishments for its water system through the use of 12.5% of the interest money the Village earns plus 15% of the net receipts that are collected from monthly water bills. Even taking into account all of the improvements that the Village of Liberty Center has taken in response to water and pattern flow rates since the early 1980's, it continues to see a witnessed a pattern of demand increase for water.

<u>The Village of Malinta</u>

The Village of Malinta's public water system was constructed in 1990. Since that time, improvements have been made to the water system including providing water services to Grelton in 1999. The current design for Malinta does not include any type of water,

facilities, capital, or comprehensive plan. The current design of the water source and treatment method is purchasing its water from the City of Napoleon, and by adding disinfection liquid at two specific sites: Road 11 north of town, and Road L, east of town.

The current design capacity of the water system (storage) is 100,000 gallons, with no additional capacity noted. Approximately 5 percent of Malinta's water main distribution system is less than 6 inches in diameter. The average daily flow for Malinta is 33,000 GPD, with a peak demand daily flow of 60,000 GPD. At this time, current minimum water rates per unit per month are $40.00. Water service is available to areas outside the corporation limits, with a $1,200 tap fee, from State Route 109 North and South, Road L and Grelton, Ohio. The Village of Malinta currently does not use capital improvement or related funds for its water system. The Village of Malinta has witnessed a pattern of demand increase for water in the following pattern: 1990-1995, no change; 1999, put in waterline to Grelton and put in a bulk water fill.

The Village of McClure

The Village of McClure's public water system was constructed in 1974. Over the years, several improvements have been made to the water system including several water line extensions (Wagner Trailer Park) and the construction of a 250,000 gallon water storage tank. The current design of the water source and treatment method is through coagulation, sedimentation, filtration, and disinfection.

The current design capacity of the water system (storage) is 370,000 gallons, with no additional capacity noted. Approximately 75% of McClure's water main distribution system is less than 6 inches in diameter. The average daily flow for McClure is 70,000 GPD, with a peak demand daily flow of 120,000 GPD. At this time, current minimum water rates per unit per month are $12.00 per 500 gallons. Water service is available to areas outside the corporation limits, with additional tapping fees, and a surcharge paid on a monthly basis per consumer. The Village of McClure does not currently utilize any capital improvement or related funds for its water system. The Village of McClure has witnessed a slight pattern of demand increase for water within the past two years.

Ridgeville Township Water and Sewer District1

The Ridgeville Township Water and Sewer District receives its water supplies from the Archbold. The Village of Archbold's public water system was constructed in 1982. Over the years, several improvements have been made to the water system components such as installing a Backwash Holding Tank in 2001. The current design is guided by a facilities plan that was adopted and last updated in 2000. The current design of the water source and treatment method is through raw water source (Tiffin River), and treatment methods are pretreatment with activated carbon and potassium permanganate, softening, clarification, recarbonation, filtration, fluoridation, and disinfection with chlorine.

The current design capacity of the water system (storage) is 300,000 MG, and 2.170 MG finished water. However, additional capacity is needed in the context of increasing the finished water storage capacity by .500 MG. Approximately 5 percent of Archbold's water

1 The Ridgeville Township Water and Sewer District is currently not part of the Henry County Water and Sewer District, and encompasses the entire township of Ridgeville.

main distribution system is less than 6 inches in diameter. The average daily flow for Archbold is 1.85 MGD, with a peak demand daily flow of 3.80 MGD. At this time, current minimum water rates per unit per month are $2.19 per 1,000 gallon.

Water service is available to areas outside the corporation limits, with a 50% surcharge. The Village of Archbold currently utilizes capital improvement or related funds establishments for its water system in the following manner: Annual Budgeted Amount - $300,000; Source of Funds – water sales, etc.; Percentage of Overall Budget – 2 percent. The Village of Archbold has witnessed a pattern of demand increase for water in the following pattern: 1990 - .540 MGD; 1995 – .798 MGD; 2000 – .736 MGD.

2. Public Wastewater Systems

The City of Napoleon

The City of Napoleon's public sewer/wastewater system was constructed in 1958, with the improvement of adding additional nitrification towers and dechlorination facilities, and a new aeration basin and a fluid final setting tank added in 1997. The current design for the City of Napoleon does include a sanitary sewer plan that is currently applicable, and a current problem that is being addressed is the non-point source of contaminants.

The current design capacity of the treatment plant is 2.5 MGD with an additional capacity indicated per recommendations from a wet weather stress capacity test for the CSO abatement, and any Ohio EPA restrictions that are put upon the plant that may cause increased expansion. Additionally, the City recognizes that future problems with the present system include removal of clean water connections, and that the central business district separation of sewers are not as complete as originally thought. Approximately 30% of the City of Napoleon's sewer lines are combined, and the remaining 70% are separated. The average daily flow for the City of Napoleon is 1.52 MGD, with a peak demand daily flow of 7.5 MGD.

The City of Napoleon has witnessed a particular demand of increase in their pattern of flow rates, with rates as follows: 1985 – 1.71 MGD; 1990 – 1.77 MGD; 1995 – 1.62 MGD; and anticipated 2005 – 1.80 MGD. The City of Napoleon addresses the following recommendations: SSO and CSO concerns in the collection system. The treatment plant should convert to a Class "A" bio-solids handling and update equipment for these changes. Lift stations should be updated or rebuilt at the following locations, Williams, Holiday Inn, Maumee Avenue, and on the West side, and rehabilitation or replacement of major interceptor sewers.

The City of Napoleon's public storm water management system includes ditches and catch basins. Its facilities are both combined with other subdivisions, yet some are completely separate. Total miles of curbs and gutters is estimated at 50.9 miles, with the watershed going into the Maumee River Watershed Basin. The City of Napoleon does not have its own storm water master plan. Currently, the City's present system is designed for a 10-year storm event. Problems with surcharging of the system occurs with higher year storm events. Storm design criteria is based on the City of Napoleon's Rules and Regulations.

The City itself has to face that with development comes drainage issues. In the past, the

storm and sanitary systems were combined. Presently, the City of Napoleon is doing sewer separations, but that endeavor will take many years and a few million dollars to complete. Future storm discharges will be regulated by the Ohio EPA storm water discharges, at which point the Council will need to address the issue to set up along-term public storm water management system.

The Village of Deshler

The Village of Deshler's public wastewater system was constructed in 1959, and has not made any repairs, replacements, or expanded the wastewater system since that date. The current design for Deshler does include a sanitary sewer plan, although the date the plan was adopted was not made available. The current wastewater treatment method is through wastewater lagoons. The current design capacity of the treatment plant/lagoons is 0.57 MGD, with no additional capacity indicated. Approximately 40% of Deshler's sanitary sewer collection system is combined.

The average daily flow for Deshler is .245 MGD, with a peak demand daily flow of .400 MGD. At this time, current minimum sanitary sewer rates per unit per month include a $10.00 minimum sewer rate, plus .70 per 1,000 gallons of water; therefore, rates are based on water usage. Sanitary sewer service is not available to areas outside the corporation limits, and Deshler does not currently utilize any capital improvement or related funds for its wastewater system. The Village of Deshler has not witnessed a particular demand of increase in their pattern of flow rates, with rates as follows: 1980 – .224 MGD; 1985 - .256 MGD; 1990 - .316 MGD; 1995 - .234 MGD; and 2000 - .245 MGD.

The Village of Florida

The political subdivision of Florida presently does not have its own public wastewater system. At this time, current minimum sanitary sewer rates per unit per month simply include a $10.00 monthly surcharge, with these funds targeted toward engineering services plus a soil testing survey for a lagoon site. The EPA placed Florida under "Findings and Orders" during the mid-90s due to the several health problems caused by the Florida's combined system.

The Village of Florida's public storm water management system was originally constructed in 1892 when streets were drained and the tile and plank was purchased for catch basins and sewer tiles. On June 14, 1934, a resolution was passed to prohibit any unsanitary sewerage in the Miami-Erie Canal. In August 1974, the council made applications to receive Federal Funding for sewer treatment facility. Since that date, the storm water system has been expanded including some lines being replaced and repaired as needed.

Florida does utilize a storm water master plan, which is still in effect, with no additional capacity noted. Its current storm water management system includes surface drainage and storm sewer/tiles, with one open ditch. The Village of Florida does not have combined stormwater lines, but some of its lines do connect to one main line that goes to the canal. At this time, the Village of Florida does include capital improvement or related funds established for the storm water management system, through a storm sewer fund that exists for maintenance and repair. These funds are derived through a $5.00 per month surcharge on all water bills, and there is no additional storm water management fees assessed.

The Village of Hamler

The Village of Hamler's public wastewater system was constructed in 1970. Over the years, several improvements have been made to the wastewater system components such as new sanitary lines added in 1980 and 1993. The current design for Hamler does include a sanitary sewer plan that was adopted or updated on January 2002. The current design of the wastewater treatment method is through wastewater lagoons. The current design capacity of the treatment plant/lagoons is .125 MPD, with no additional capacity indicated.

Approximately 90% of Hamler's wastewater, sanitary sewer collection system is combined. The average daily flow for Hamler is 66,000 GPD, with a peak demand daily flow of 100,000 GPD. At this time, current minimum sanitary sewer rates per unit per month include $6.00 for the first 1,000 units, and $2.00 per units after the first 1,000. Sanitary sewer service is available to areas outside the corporation limits, with a 50% surcharge, and a $3,000 tap fee. The Village of Hamler uses capital improvement or related funds for wastewater systems through a $10.00 fee per consumer per month. Village of Hamler has witnessed a particular demand of increase in their pattern of flow rates, with the increase primarily due to servicing new residential units.

The Village of Holgate

The Village of Holgate's public wastewater system was constructed between 1977-1979, and has not had any wastewater system components repaired, replaced or expanded since then. The current design for Holgate does not include a sanitary sewer/waste management plan, facilities plan, capital improvements plan or comprehensive plan. The current wastewater treatment method is where raw sewage is pumped into two five-acre lagoons. The current design capacity of the treatment plant/lagoons is 20,000,000 gallons, with no additional capacity indicated.

Holgate has no wastewater or sanitary sewer collection systems that are combined. The average daily flow for Holgate is .136 MGD, with a peak demand daily flow of .240 MGD. At this time, current minimum sanitary sewer rates per unit per month is $5.50 between 0-16,000 gallons. Sanitary sewer service is not available to areas outside the corporation limits, and Holgate does not currently utilize any capital improvement or related funds for its wastewater system. The Village of Holgate has not witnessed a particular demand of increase in their pattern of flow rates, with the only increase being from infiltration of ground water.

The Village of Liberty Center

The Village of Liberty Center's public wastewater system was constructed in 1978. Over the years, several wastewater system components have been repaired/replaced or expanded such as dechlorination equipment added per discharge permit in 1995, an increase in the sanitary sewer collection system to service a new housing subdivision in 1997, and funds are currently in place to replace the main pumping station, aerators, and other equipment in 2002-2003. The current design for Liberty Center does not include a sanitary sewer/waste management plan, facilities plan, capital improvements plan or comprehensive plan. The current wastewater treatment method is through an extended aeration treatment plant that consists of two oxidation and two final settling tanks, sludge drying beds, and a sludge storage lagoon. The current design capacity of the treatment plant/lagoons is .250 MGD, with a maximum flow rate of .780 MGD. No additional capacity is indicated. Liberty

Center has no wastewater or sanitary sewer collection systems that are combined.

The average daily flow for Liberty Center is estimated at .100 MGD, with a peak demand daily flow of .250 MGD. At this time, current minimum sanitary sewer rates per unit per month inside the Village limits is $7.62 minimum up to 1,200 gallons; and $10.96 minimum up to 1,200 gallons outside the Village limits. Sanitary sewer service is available to areas outside the corporation limits, with a surcharge of approximately 50%. Annexation is not currently required, but is being debated. Sanitary sewer collection lines that extend outside the village are installed at the customer's cost and dedicated back to the Village. The Village serves customers at various locations outside the Village, but primarily at a housing subdivision north of the Village limits. The Village of Liberty Center currently utilizes capital improvement or related funds establishments for its wastewater system through the Sewer Capital Improvement fund that is funded by 12.5% of the interest money the Village earns. Liberty Center has witnessed a particular demand of increase in their pattern of flow rates since the 1980s.

The Village of Malinta

The political subdivision of Malinta presently does not have its own public wastewater system.

The Village of McClure

The Village of McClure's public wastewater system was constructed in 1996, and has had several wastewater system components repaired/replaced/expanded including the Woodlawn Trailer Court shut down their wastewater treatment facility and put up a new lift station that now pumps sewage to the Village of McClure system in March 2002. The current design for McClure does not include a sanitary sewer/waste management plan, facilities plan, capital improvements plan or comprehensive plan. The current wastewater treatment method is through three cell lagoons with controlled discharge and aerators. The current design capacity of the treatment plant/lagoons is 100,000 GPD, with no additional capacity indicated.

McClure has no wastewater or sanitary sewer collection systems that are combined. The average daily flow for McClure is 50,000 GPD, with a peak demand daily flow of 80,000 GPD. At this time, current minimum sanitary sewer rates per unit per month is $16.00 per 500 gallons. Sanitary sewer service for the Village of McClure is not available to areas outside the corporation limits, does not currently utilize any capital improvement or related funds establishments for its wastewater system, and has not witnessed a particular demand of increase in their pattern of flow rates.

Ridgeville Township Water and Sewer District

The Ridgeville Township Water and Sewer District's wastewater system was constructed in 1981, and has had several wastewater system components repaired/replaced/expanded including one lagoon rebuilt and an irrigation system installed in 1998. The current design for Ridgeville Township includes a sanitary sewer/waste management plan that was adopted and/or last updated in 2001. The current design of the wastewater treatment method is through an aerated lagoon system. The current design capacity of the treatment plant/lagoons is 198,000 GPD, with no additional capacity indicated. Ridgeville Township has no wastewater or sanitary sewer collection systems that are combined.

The average daily flow for Ridgeville Township is 70,000 GPD, with a peak demand daily flow of 190,000 GPD. At this time, current minimum sanitary sewer rates per unit per month is $9.00 per the first 1,000 gallons. Sanitary sewer service for Ridgeville Township is made available to areas outside the corporation limits, such as the jails, where the entity is charged an initial impact fee and then charged by total water usage to determine sewer fee usage totals. Ridgeville Township does not currently utilize a capital improvement or related funds for its wastewater system, and has witnessed a particular demand of increase in their pattern of flow rates from 1980-1995 of 34,000 GPD to approximately 65,000 GPD to date.

C. Telecommunications

On February 8, 1996, the Telecommunications Reform Act was enacted into law. The Telecommunications Reform Act of 1996 created a policy framework for local governments in three ways. First, the law defined the ability of local government to regulate telecommunications through zoning. It forbids local government from using zoning to prohibit such uses as communications towers. Local officials may not consider presumed health risks from high frequency transmissions in regulating the location of towers. At the same time, the Telecommunications Act asserts the right of local government to protect public interest through zoning, by encouraging the co-location of transmission devices operated by different and competing companies on the same tower.

Second, the law stipulated that local governments must deal with requests to construct communications towers in a timely manner, and cannot use unreasonable delay to restrict telecommunications activity. Lastly, the county must deal with requests to locate towers on a nondiscriminatory basis. If a community allows one applicant to use a site for no charge, for example, it will be difficult under the law to charge a significant fee to another applicant.

Strategies and Recommendations

Water and Sewerage Services

Increase Operational Resources for the Regional Water and Sewer District

The need for centralized wastewater treatment facilities throughout Henry County has been officially recognized by the OEPA through findings and orders issued to three (3) communities in the area. These findings and orders are based on investigations by the OEPA into unsanitary waste entering waterways. Findings and orders were issued to the Village of Florida in July of 1998, the Henry County Commissioners for the unincorporated area of Okolona in October of 2001 and the Village of Malinta in March of 2002. Also, in July of 1999 the Village of New Bavaria was notified by the OEPA that unsanitary conditions existed in local drainage ways and that sampling will be conducted in the area. To date, no additional correspondence has been provided to the Village of New Bavaria. All of these findings and orders set a schedule for the planning, design and construction of wastewater collection and treatment facilities.

In most of these cases, the unsanitary conditions are the result of failing septic tank systems that are connected to field tiles or storm drains discharging into local waterways. Generally, it is not practical to replace the existing septic systems with new systems in concentrated areas of development, because the vast majority of Henry County has soil conditions

considered to be severe, or poor, for on-site septic systems. Severe soil conditions cause the need for alternative treatment systems such as mound systems that require additional amounts of space for construction and greater isolation distances from wells and residences. Failing septic systems should be seen as an issue that will only increase and worsen over time. There is a need for wastewater collection and treatment facilities to be provided, not only to meet OEPA requirements, but also to maintain the environmental quality of Henry County

Wastewater treatment is not the only issue facing many areas of Henry County. As noted above, poor quality and a limited supply of readily accessible potable drinking water is also a problem. Many rural residents are experiencing problems of low flow and the lowering of the water table in their wells as concentrated development occurs and rainfall is limited, as in this past summer. An example of this is the unincorporated area of Colton, located in northeastern Henry County. As shown in Figure 3, Colton lies in an area of very low well yield. Recent complaints have also been logged by the Henry County Health Department from residents along County Road U, east of the Colton area. Another drinking water problem is in the Village of McClure. Their current treatment facility is in need of major repair and the necessary funding is not currently available.

Funding for the Henry County Regional Water and Sewer District can come from the combination of several sources. These sources include local revenues, tap charges and assessments, as well as grant and loan funds administered by the Ohio EPA Division of Environmental and Financial Assistance (DEFA), the Ohio Water Development Authority (OWDA), USDA/Rural Development (formerly Farmer's Home Administration), the Ohio Water and Sewer Rotary Commission and the Ohio Department of Development (ODOD).

At the time of final project development and planning for each phase of the District, each of the potential funding programs will need to be evaluated in detail for consideration and applicability. The following is a general summary of some of the various programs that may be available to the Henry County Regional Water and Sewer District (2).

ODOD Business Development (412) Account

This ODOD program was created to assist counties, municipalities, townships and other political subdivisions in the creation or retention of jobs and may be utilized for the installation of sanitary sewer, sewage disposal, water distribution and water treatment. The project must be related directly to job creation or retention. Funding is in the form of a grant and is generally in the range of $1,000 per job.

OWDA Community Assistance Fund

The OWDA Community Assistance Fund provides below-market financing when other means will create an economic hardship and is available only for drinking water projects. In order to qualify for this funding, the proposed project must meet an existing need and cannot include provisions for oversizing and the anticipated annual costs from the system must meet or exceed economic hardship criteria of 1.5% of the median household income (MHI) for Henry County.

2 The following funding sources were taken from the Henry County Operational Plan prepared by Adam Hoff, PE, of RD Zande and Associates.

OWDA Loan Fund

The Community Assistance Fund noted above is for those situations that create economic hardship. The OWDA also has a loan fund that can be used in most any situation for the construction of wastewater or drinking water facilities, as well as engineering design, legal fees and inspection. OWDA charges a one-time administrative fee of 0.35% or the total loan amount. The interest rates associated with these loans are generally higher than other forms of financing and, once the final loan is determined, the debt may not be retired ahead of schedule. The advantage to the OWDA loan is that most every applicant is funded and the cost and time associated with the approval process is limited.

Drinking Water Assistance Fund (DWAF)

Administered by the Ohio EPA Division of Drinking and Ground Waters and the OWDA, the DWAF provides funding assistance to publicly owned community water systems to upgrade or replace water systems, address violations of the federal or state Safe Drinking Water Act (SWDA) or prevent future violations of the SDWA. Short-term loans are also available for planning and design.

USDA Rural Development

Rural Development funding can be in the form of grants or loans and may be utilized for the installation of sanitary collection and treatment and water distribution and treatment for rural areas and towns of up to 10,000 people. Loan terms can extend up to 40 years at varying rates, depending upon the median household income of the area to be served. Supplemental grants of up to 75% of eligible costs are also available to areas with an MHI below 80% of the State MHI and up to 45% for those areas between 80% and 100% of the State MHI. Currently, Henry County generally exceeds the State of Ohio MHI and therefore would most likely not qualify for a USDA grant.

Water Pollution Control Loan Fund (WPCLF)

The Ohio EPA DEFA administers the WPCLF, with assistance from the OWDA. The purpose of the program is to provide low interest loan funds for water pollution control. These monies can be applied to upgrading existing facilities or installing new. Planning and design loans are also available for up to three (3) years and may be incorporated into the final 20-year construction loan. Technical assistance from the Ohio EPA is also available and WPCLF may be used in conjunction with other forms of funding assistance.

Ohio Water and Sewer Rotary Commission

The Ohio Water and Sewer Rotary Commission offers interest-free loans to pay the portion of costs from a sanitary sewer or water main extension that is to be assessed against agricultural lands, with a minimal up-front administrative cost. The primary emphasis of this program is to balance the preservation of valuable farmland, while allowing the governing authority to extend needed infrastructure. Another major goal of the program is job creation or retention. It should be noted that the Rotary Loan money does not reduce the total cost of the project to the District, nor does it

reduce the assessments to other properties. This money is strictly applied to cover the assessments on properties that qualify.

Any loan funds acquired for a project must be secured in the form of revenue bonds or assessment bonds issued on behalf of the District. Revenue bonds are generally paid back through the income generated from monthly user fees charged to customers. Revenue can also be contributed from tap charges collected from new customers. That is, the income generated from the operation of the system pays back the loan (bond) used to finance the system. Assessment bonds are paid back from the collection of assessments applied to the properties that benefit directly from the improvements. These assessments are an expense to the property owner regardless of whether he/she uses the available service and may be calculated by several different methods, but must be applied only to those properties receiving a special benefit from the improvements.

Encourage the Use of Alternative Sewage Collection and Treatment Systems
There are several alternative methods of sanitary sewer collection and treatment available to address the issues throughout Henry County (3). Examples of alternative methods of sanitary collection include septic tank effluent pump (STEP) systems, pressure or grinder pump systems and conventional gravity systems.

A STEP system utilizes individual septic tanks for each residence or business, with pumps for each septic tank. The septic tanks intercept the majority of the solids discharged from a customer and provide some primary treatment. The pumps convey the liquid effluent from the septic tanks to the main collection system. The solids that remain in the septic tank need to be removed periodically, as with typical septic systems. The advantage to a STEP system is that existing septic tanks can be utilized and the construction is generally shallower than conventional gravity and, therefore, less expensive. However, this method of collection does have a high operating and maintenance cost associated with it.

A pressure or grinder pump system also has individual pumps on each lot. However this pump replaces the septic tank and handles both the liquid and solid wastes. Although slightly less expensive in initial capital cost than a STEP system, a grinder pump system does have a high amount of operation and maintenance cost associated with it.

The third method, a conventional gravity system, is the most common form of wastewater collection. Generally, all existing septic systems are abandoned at existing homes and businesses and four (4) inch or six (6) inch service connections are installed. These service connections are then connected to a series of eight (8) inch and larger collector sewers and that network of collector sewers conveys the flows to a pumping station or directly to a treatment facility. The greatest advantages to a conventional gravity system are the low operation and maintenance expenses and the ability to expand the system. The greatest disadvantage to a conventional gravity system is the initial capital cost for installation.

There are several alternative methods of wastewater treatment available to address the needs of Henry County. The selection of the appropriate system for each application depends on a number of factors including the quality of effluent required, the location of the facility, the

3 Strategy prepared by Adam Hoff, PE, of RD Zande and Associates.

availability of land to construct the facility and available funding. The following is a brief overview of some of the treatment options. These treatment options can primarily be broken down into mechanical treatment and lagoon systems.

There are three (3) basic types of lagoon systems, controlled discharge, flow through and aerated. A controlled discharge, or facultative, lagoon system relies upon natural biological treatment of the wastewater from photosynthesis and surface aeration. By the Recommended Standards for Wastewater Facilities (1997 edition), also known as 10 States Standards, a controlled discharge lagoon facility is required to have at least 180 days of storage capacity, based upon the design average daily flow. Controlled discharge lagoon facilities are permitted to discharge to a receiving stream twice each year. These discharges generally occur for two (2) weeks each in the spring and fall.

A flow through system is very similar to a controlled discharge lagoon, except that it discharges continuously to surface water and requires a detention time of 90 to 120 days at a maximum depth of six (6) feet in the primary cells. Due to the shorter detention time, flow through systems are often followed by filtration systems for the additional removal of solids. An aerated system is essentially a smaller facultative lagoon that employs aeration equipment to increase the efficiency of the treatment of the wastewater and allow for deeper ponds.

The greatest advantages to lagoon facilities are their ease of operation and low operation and maintenance costs. Lagoon facilities can also easily manage fluxuations in flow rate and wastewater quality. The disadvantages to a lagoon facility include the land area required for construction, the potential for odors and the limited ability to expand easily. Another disadvantage to lagoon systems is that the effluent quality is generally not good enough to discharge directly into designated "State Resource Water" sources such as the Maumee River. However, it is acceptable to discharge to the various tributaries throughout Henry County.

Mechanical treatment or package plants can be constructed in several different types. These include extended aeration, contact stabilization, sequencing batch reactors and rotating biological contactors, among others. Mechanical treatment plants are generally suited to each specific site and situation. The effluent quality from most mechanical facilities is very high and suitable for most any type of effluent disposal. Mechanical plants also use less land area than lagoon systems. However, the operating costs for a mechanical plant are high due to the use of electricity uses and the fact that these systems require a large amount of skilled supervision.

After treatment, the treated wastewater must be disposed of. There are two (2) basic options for effluent disposal in Henry County, surface water discharge or land application. Surface water discharge is the most straightforward method of disposal. Treated wastewater is discharged directly from the treatment facility into an existing stream. When doing this, the effluent must meet Ohio EPA requirements for various wastewater constituents. These limitations are especially stringent if the receiving stream is a designated "State Resource Water" source such as the Maumee River. Requirements for discharging into tributaries of the Maumee River are attainable. A greatest advantage to surface water discharge is that there is no cost associated with effluent disposal.

Land application consists of many possible methods such as spray irrigation and constructed wetlands. Spray irrigation uses irrigation equipment to distribute treated wastewater over fields containing crops. These crops are usually grasses or alfalfa for feed for livestock. Costs associated with spray irrigation include the required land (~17 acre / MGD), site improvement and the associated irrigation equipment. There are also operation and maintenance costs for equipment maintenance and mowing.

Constructed wetlands use natural processes to further polish and somewhat diminish treated wastewater flows. These wetlands vary in depth, mostly dependant on the climate. They usually run from one (1) to two (2) feet deep in the summer and up to six (6) feet deep in the winter. It should be noted that there is still effluent discharge from constructed wetlands. Costs associated with constructed wetlands include the required land (20-67 acre / MGD) and construction of the wetland. There are also some operation and maintenance costs, however they usually are not as high as those for spray irrigation.

Transportation

Develop Access Management Regulations and update the Thoroughfare Plan

As growth continues to occur within the county and region, Henry County's existing network of roads will encounter more congestion and additional demands. This congestion and traffic flow problems will be amplified by poorly located driveways, inadequate setbacks, and poor signalization. As growth occurs along key arterials in selected portions of the county, it is important that proper land use controls that address traffic impacts, setbacks, and driveway locations be in place in order to maintain roadway capacity and safety.

The primary purpose of access management is to preserve traffic flow in terms of safety, capacity and speed by managing the location, design and operation of driveways, median openings and street connections to a roadway. Proper access management improves subdivision layouts, discourages poor development patterns, improves on-site circulation systems, reduces accidents and improves a community's ability to manage the overall transportation system.

However, access management should not be viewed as substitute for growth management. It is not intended to govern the type or intensity of development that occurs; it is only intended to manage the way in which that development accesses the local street system.

Henry County taxpayers will benefit from such a program, as access-managed highways are more efficient. Roadway capacity, the volume of traffic a road can carry, can be safely improved by 25% to 35%. This means almost 10,000 more cars per day on a four-lane road with good access controls than on a four-lane road with poor controls. Getting more out of the roads we have means fewer tax dollars spent trying to keep up with traffic demands. In addition, motorists experience fewer accidents, less congestion, and improved travel time on roads with good access controls. Studies over several decades have shown that access management can reduce accidents as much as 50% while safely increasing travel speeds by as much as 40%.

The recent passage of H.B. 366 allows boards of county commissioners and boards of township trustees to adopt access management regulations for the purposes of promoting traffic safety and efficiency and maintaining proper traffic capacity and traffic flow. It is recommended that Henry County pursue this endeavor during 2003.

County access management regulations will apply to both county and township roads in the unincorporated area of the county. In addition, the same regulations that apply to county roads must also apply to township roads. Township access management regulations apply only to township roads in the unincorporated area of the township. Given the fact that both counties and townships are given the same basic enabling authority under the act, the legislation includes special provisions to assure that either county or township regulations will apply, not both.

The legislation includes different provisions that are applicable to urban townships and other townships, which we will refer to as non-urban townships. Once access management regulations are adopted, a county or township may regulate any construction, reconstruction, use, or maintenance of any point of access from public or private property onto those roads.

Generally, the regulations cannot affect any access point that exists or on which construction has begun before the regulations become effective. However, once adopted, those regulations can affect the reconstruction or relocation of access points and can apply when land use is changed in a way that significantly increases the types of traffic or traffic volume on a street or highway. (ORC5552.02 (A) and (B) and 5552.11(A) and (B)).

Access management regulations may require the issuance of permits, including interim and temporary permits. If county commissioners or township trustees adopt regulations that require permits, the regulations must include standards that will be used for the approval or denial of a permit. Any regulations regarding the approval or denial, and must specify a reasonable period of time for the approval or denial of a permit, and must provide that a failure to approve or deny, in whole or in part, any permit, license, or other approval sought within that period constitutes a granting of approval for the permit, license, or other approval (ORC 5552.02(A) and (B), and 5552.08.).

County access management regulations must, to the extent possible, be consistent with county zoning regulations and must be coordinated with any existing township zoning regulations. Township access management regulations must, to the extent possible, be consistent with any county or township zoning regulations that are in effect in the township (ORC 5552.03(E)).

Access management regulations also must designate a board to do the following: (1) to hear appeals from any administrative officials order or other action in their enforcement; and (2) to grant variances from the regulations due to special conditions, if the variances are not contrary to the public interest. Violation of the regulations will result in a fine of not more than $500 for each offense, and each day of violation is a separate offense (ORC5552.07 and 5552.99.).

As was previously stated, county and township access management regulations apply only to county or township roads in the unincorporated area of the county or township. The act specifically provides that the county or township access management regulations or amendments to the regulations do not apply to:

1. The state highway system. In addition, such regulations do not modify any access management standards or procedures of ODOT under ORC Sections 5501.31 and 5515.01 (ORC 5552.11(C)).

2. To any streets, highways or other roadways located in a municipal corporation (ORC 5552.11(D)).

The application of county or township access management regulations are governed by the following provisions of the new law:

- ✓ Access management regulations do not apply to subdivisions that are subject to plat approval under ORC Sections 711.05 or 711.10. Under this provision, platted major subdivisions are not subject to the new regulations. The statute also provides that nothing in ORC Chapter 5552 limits the authority granted

in the subdivision law to provide for the proper arrangement of streets or other highways in relation to existing or planned streets or highways or to the county or regional plan (ORC 5552.03(A)).

- ✓ Access management regulations do apply to subdivisions subject to approval without a plat under ORC Section 711.131. Under this provision, minor subdivisions or lot splits are subject to access management regulations. In addition, the act amends ORC Section 711.131 to specifically require the designated representative of a county or regional planning commission to assure that the lot split is not contrary to access management regulations as a part of the minor subdivision approval process (ORC 5552.03(B) and711.131). The law also specifies that if the regulations apply to a minor subdivision and an access management permit request is filed pertaining to it, the access management permit must be approved or disapproved within the 7day approval period for a minor subdivisions under ORC 711.131 (ORC5552.10).

- ✓ Access management regulations do apply to any parcel of property that is not subject to regulations adopted under ORC Chapter 711. Under this provision of the act, the regulations apply to parcels of land that are not defined as subdivisions under ORC Section 711.001, which generally means parcels over five acres in area.

Because both counties and township are granted the same general enabling authority to adopt access management regulations, the new law includes special provisions to guarantee that either county or township regulations apply to county and township roads, not both. In addition, the act includes different provisions as it relates to urban townships. An urban township is a township that has a population in the unincorporated area of the township of at least 15,000 and has adopted a limited home rule government under ORC Section504.02.

Following is a summary of the special provisions as they relate to non-urban townships and urban townships:

Non-Urban Townships

Non-urban townships may not adopt township access management regulations if the county has adopted county access management regulations. Essentially, county regulations take precedence over non-urban township access management regulations. A non-urban township may initiate the process to adopt township access management regulations if the county has not taken action to initiate the process of adopting county access management regulations before October 24, 2003. In addition, if a county initiates the process to adopt county access management regulations before October 24, 2003, but does not actually adopt the regulations within one year of that date, a non-urban township may then proceed to initiate the process to adopt township access management regulations (ORC 5552.02 (A) and (C)).

In addition, if a non-urban township adopts township access management regulations in the absence of county regulations and the county subsequently adopts regulations, the

township's access management regulations become void one year after the effective date of the county regulations. Likewise, the county regulations apply to such a township one year after the effective date of the county regulations (ORC 5552.02 (C)).

The law also allows the board of township trustees to adopt a resolution to make the township access management regulations void on an earlier date. If the township chooses to take this action, it must notify the board of county commissioners of the earlier date by sending a certified copy of the resolution to the commissioners (ORC 5552.03(C)).

Urban Townships

In the case of township roads in an urban township (although none currently exist in Henry County), the access management regulations adopted by an urban township take precedence over county access management regulations on such township's roads. An urban township may adopt regulations at anytime, and need not wait for the county to adopt county regulations or initiate the process to adopt county regulations, as is the case for non-urban townships. If an urban township adopts access management regulations after the county has adopted its regulations, the county's regulations remain in effect on township roads for one year after the effective date of the urban township access management regulations.

The board of county commissioners may, however, establish an earlier expiration date for the county regulations on township roads to expire within the urban township. The urban township regulations would then apply to township roads in the township, but the county regulations would continue to apply to county roads in the urban township (ORC 5552.03 (D)).

Adoption of Access Management Regulations

Initiation of the Process

The process of adopting county access management regulations may be initiated in the following ways:

1. The board of county commissioners may adopt a resolution on its own initiative proposing the consideration of access management regulations.

2. The board of county commissioners must adopt a resolution proposing the consideration of access management regulations if the county engineer certifies to the board a request in writing.

3. The board of county commissioners must adopt a resolution proposing the consideration of access management regulations if a majority of boards of township trustees in the county certify resolutions to the commissioners requesting the county to do so.

Adoption of Resolution to Proceed

The first step in the process of adopting access management regulations is for the board of county commissioners to adopt a resolution proposing the consideration of county access management regulations. This resolution shall include a request for the county engineer to draft proposed regulations.

Appointment of Advisory Committee

Upon adopting the resolution to proceed, the county commissioners appoint an advisory committee to review the county engineer's proposed access management regulations. Mandatory members of the advisory committee include:

a. The county engineer or his designee.
b. A registered surveyor in private practice.
c. A representative of the homebuilding industry.
d. A licensed realtor.
e. A representative of the county or regional planning commission.
f. A professional engineer with expertise in traffic engineering.
g. A representative of the Metropolitan Planning Organization (MPO), where applicable. An MPO must be designated under Section 9(a) of the Federal Highway Act of 1962.
h. At least three township trustees from the county. The county township trustees and clerks association select the three trustees.
i. A member of the board of county commissioners, and,
j. Any other persons the board of county commissioners chooses to appoint.

Preparation of Access Management Regulations

After adoption of the resolution to proceed, the county engineer prepares a set of proposed regulations. When the engineer has completed his proposal, he must send a copy to the members of the advisory committee. This transmittal shall include a notice of the time and place of the initial meeting of the advisory committee. The meeting must take place within 30 days of the completion of the proposed regulations. At the initial meeting of the advisory committee, the committee shall select one member to serve as the chair of the committee.

Transmittal to Board of County Commissioners

The advisory committee then reviews the engineer's proposed access management regulations, and within 270 days after the initial meeting of the advisory committee, must provide the board of county commissioners with the following:

1. A copy of the regulations originally proposed by the county engineer.
2. The advisory committee's recommendations about each of the proposed regulations.
3. Any other recommendations about the access management regulations the committee considers appropriate (ORC 5552.04).

Public Hearings by the Board of County Commissioners

Prior to adopting the regulations, the commissioners must hold at least two public hearings. The hearings may be held at either a regular or special session of the board. Notice of the public hearings must be published in a newspaper of general circulation in the county once a week for at least two weeks immediately preceding the hearings. The notice must include the date, time and place of each hearing. In addition, copies of the proposed regulations shall be made available to the public at the board's office, and if the county engineer is proposed to administer the regulations, in the county engineer's office. In addition to this notice, at least 30 days before holding the public hearing, the county commissioners must

send a copy of the engineer's proposed regulations and a copy of the advisory committee's recommendations, and a request for written comments to:

1. The board of township trustees of each township in the county.
2. The ODOT district deputy director.
3. The MPO, where applicable.

At a minimum, the following local professional associations must be represented:

- ✓ Homebuilders.
- ✓ Realtors.
- ✓ Professional surveyors.
- ✓ Attorneys.
- ✓ Professional engineers

Adoption of Access Management Regulations by County Commissioners

Prior to adoption of the access management regulations, the commissioners must consider the county engineer's proposed regulations and all comments on the regulations. After the public hearings, the commissioners have discretion to adopt any or all of those proposed regulations, or they may decide not to adopt any access management regulations (ORC5552.06). If the commissioners adopt the regulations, they become effective on the 31st day following their adoption, unless another date is indicated in the regulations.

The commissioners must then publish a notice of their adoption in at least one newspaper of general circulation in the county within 10 days of the adoption of the regulations. The notice must include a statement that the regulations are available at the board's office. A copy of the adopted regulations must also be provided to the ODOT district deputy director (ORC5552.09).

Finally, the same general adoption procedure applies when a board of township trustees adopts access management regulations. In this case, a county commissioner serves on the township advisory committee and the county engineer also has significant involvement in the process of adopting township access management regulations.

Administration of Access Management Regulations

The law specifies that the board of county commissioners must designate the county engineer to administer county access management regulations. In the event the county engineer declines to administer the regulations, the commissioners may designate another person or a planning commission to administer the access management regulations.

If a board of township trustees adopts access management regulations, the board may administer the regulations or may appoint the township clerk or any other person to administer them, with the advice of the county engineer (ORC 5552.10).

Appeals and Variances

County access management regulations must include the designation of a board to hear and decide appeals and variances. This appellate board may be a separate new board provided for in the regulations or it may be some other board, including the board of county

commissioners, acting in an administrative capacity. If the board of county commissioners serves as the appellate board, appeals of its decisions would thus become subject to appeal under ORC Chapter 2506 to the court of common pleas and would not be subject to a referendum.

The appellate board would hear appeals where it is alleged that the administrative official of the access management regulations made an error in the enforcement of the access management regulation. The appellate board would also hear requests from applicants for variances from the regulations. Variances to the regulations can be granted if not contrary to the public interest and where, owing to special conditions, a literal enforcement of the regulations will result in unnecessary hardship, and so that the spirit of the regulations will be observed and substantial justice done (ORC 5552.07).

Provisions Related to Access Management Permits

An access management permit must prescribe permitted uses and limitations on the permit. Once a permit is issued, no modifications or amendments to the permit are possible. If an applicant wants changes from a previously approved access management permit, the applicant must apply for a new permit. The new permit then supercedes the original permit (ORC 5552.08).

Fees For Permits

The act specifically authorizes the county to charge a fee for the processing of a permit. The amount of the fee, however, may not exceed the actual cost of administering the access management permit (ORC 5552.08).

Amendments to Access Management Regulations

Once a board of county commissioners has adopted access management regulations, they may be amended. ORC 5552.06 specifically requires county commissioners to hold two public hearings on the proposed amendments and to make the amendments available for review at the board's office. It is unclear under the statute whether the advisory committee must be convened and whether various other provisions required when originally adopting regulations must be met. In such instances, we recommend that you get a ruling from the county prosecutor, however, full compliance with the procedures required for original adoption should eliminate any question (ORC 5552.06).

Access Management Regulations Checklist

While the law is a basic enabling statute for the adoption of county access management regulations, the statute does include some specific provisions that must be included in the body of the regulations. County access management regulations should include the following specific provisions to comply with the statute:

1. The regulations must be for the purpose of promoting traffic safety and efficiency and to maintain proper traffic capacity and flow.

2. County access management regulations apply to only county and township roads in the unincorporated area of the county. The regulations do not apply to streets, roads or highways within municipal corporations or to roads on the state highway system.

3. The same access management regulations that apply to county roads must also apply to township roads.

4. Urban township access management regulations take precedence over county access management regulations on township roads.

5. The regulations do not apply to platted major subdivisions, but do apply to minor subdivisions or lot splits. The regulations also do apply to parcels that are not defined as subdivisions under ORC Section 711.001, which generally means parcels over five acres in area.

6. County access management regulations may regulate any construction, reconstruction, use or maintenance of any point of access from public or private property onto county or township roads.

7. Access management regulations must, to the extent possible, be consistent with existing county zoning regulations, and must be coordinated with existing township zoning regulations.

8. The regulations may not apply to any access point that exists or on which construction has begun prior to the effective date of the regulations.

9. The regulations may affect the reconstruction or relocation of access points and can apply when land use is changed if the land use change significantly increases the types of traffic or traffic volume on the street or road.

10. County access management regulations may require the issuance of permits, including temporary or interim permits.

11. The regulations may provide for charging a permit fee, but the amount of the fee may not exceed the actual cost of administering the regulations.

12. If the regulations require permits, the regulation must also include standards that will be used for the approval or denial of permits.

13. The regulations must include a reasonable period of time for the approval or denial of a permit, and must include a provision that failure to grant or deny the permit within that time period constitutes the granting of the permit.

14. Access management permits must prescribe the permitted uses and limitation of the permit. Amendments or modifications to a permit are not allowed. Changes sought to a previously granted permit require the applicant to apply for a new permit that supercede the original permit. The regulations must designate a board to hear appeals and variances to the regulations. The appellate board may be the board of county commissioners, however, if the regulations so provide, the board of county commissioners are acting in an administrative capacity.

15. Violation of the regulations will result in a fine of not more than $500, and each day of violation is considered a separate offense.

16. The board of county commissioners must designate the county engineer to administer county access management regulations, unless the engineer declines. In this event, they may designate another person or a planning commission to administer the regulations.

Ensure Transportation Funding

A variety of funding sources exists which can assist Henry County in maintaining its transportation infrastructure.

Sales Tax: Increasing local sales tax has been done in several Ohio counties with varying success. Since current law requires that revenues cannot be dedicated solely to a single purpose, as time passes pressure from other needed services increase, often times diminishing monies available for roads and bridges.

Property Tax: A levy on property taxes, however, can be earmarked for roads and bridges. Since property taxes support a number of community needs and services such as schools, the community must decide if its transportation system is of comparable importance. Where this method has been used, it appears that people have been in support of its renewal.

General Fund: Some counties in Ohio have allocated monies to roads from their general fund budgets.

Bed Tax: Erie County is utilizing part of the countywide bed tax (paid by visitors at lodging) to fund a highway improvement locally justified based upon tourism traffic. Such a tax could be used in Henry County.

Transportation Improvement District: A district can be formed as a funding mechanism to assess the cost of transportation improvements to all properties that benefit within the district.

State Issue Two: The Ohio Public Works Commission was created to assist in financing local public infrastructure improvements under the State Capital Improvements Program (SCIP) and the Local Transportation Improvements Program (LTIP). These programs provide financial assistance to local communities for the improvement of their basic infrastructure systems. Through the two programs, the Commission provides grants, loans, and financing for local debt support and credit enhancement. Eligible projects include improvements to roads, bridges, culverts, water supply systems, wastewater systems, storm water collection systems, and solid waste disposal facilities.

To apply for State Capital Improvements Program funds or Local Transportation Improvements funds the subdivision must apply to its District Public Works Integrating Committee (DPWIC). Each DPWIC evaluates and scores applications using a locally developed methodology based on criteria listed in Chapter 164 of the

Ohio Revised Code. These evaluation criteria focus on the financial need of the subdivision, the project's strategic importance to the district and subdivision, and emphasize the repair and replacement of infrastructure rather than new and expansionary infrastructure.

Impact Fees: Another potential source of funding is impact fees. Although often contested in the past, Ohio courts have held the use of impact fees for clearly defined and publicly-beneficial uses are constitutional. An impact fee permits a jurisdiction to exact a fee on a development at the building permit stage to fund directly-related public improvements, such as road widening and intersection reconstruction (as well as for water and sewer infrastructure improvements).

Tax Increment Financing: Utilizing this method allows a community to expend TIF-raised revenues for a public improvement unrelated to the subject project. Under TIFs a community can capture a portion of the increased property taxes that result from the development and use those funds for related public improvements, such as road projects. TIF agreements could be subject to approval of the respective Board of Education of the district in which the project is located.

Federal Highway Administration Discretionary Funds: The FHWA administers the following discretionary programs through its various offices. These discretionary programs represent special funding categories where FHWA solicits for candidates and selects projects for funding based on applications received. Each program has its own eligibility and selection criteria that are established by law, by regulation, or administratively. More information on each of these programs is available under the FHWA Discretionary Program Information. Information is also available on Current Solicitations for Projects and Recent Awards.

- ✓ Bridge
- ✓ Corridor Planning and Development and Border Infrastructure (Corridors & Borders)
- ✓ Ferry Boats
- ✓ Innovative Bridge Research and Construction
- ✓ National Historic Covered Bridge Program
- ✓ ITS Deployment Program
- ✓ Interstate Maintenance
- ✓ Public Lands Highways
- ✓ Scenic Byways (program also supported by the National Scenic Byways Program, which also has $25,000 "seed" money and grant funding: requires a 20% local match. For more information, see www.byway.org)
- ✓ Transportation and Community and System Preservation Pilot Program
- ✓ Transportation Infrastructure Finance and Innovation Act (TIFIA)
- ✓ Value Pricing Pilot Program

TEA-21: The Transportation Efficiency Act (TEA) encompasses a section that provides government funding for scenic, environmental, and historic preservation along transportation corridors. TEA allocates funds to the states to expand and maintain the federal highway system and conduct other transportation planning and improvements.

TEA activities eligible for funding include bicycle and pedestrian facilities; acquisition of scenic easements and scenic or historic sites; scenic or historic highway programs; landscaping and other scenic beautification programs; historic preservation programs; rehabilitation of historic transportation structures; preservation of abandoned railway corridors; control and removal of outdoor advertising; archaeological planning and research; and mitigation of water pollution due to highway runoff. To access this money, organizations must have an official government sponsor.

The TEA provides 80% of the funding for natural and cultural conservation efforts. The TEA enhancements are not limited to just existing transportation rights-of-way. Projects eligible for funding include any site that is near or accessible to a road, railroad, canal, or other transportation route. A final advantage is that state transportation agencies must develop comprehensive plans with local officials.

Special Levy: The county could enact a special levy earmarking the funds for improvements to county maintained roads, bridges, and other highway-related projects.

Gas Taxes: This type of funding is authorized under ORC and must be first authorized by the legislature. The Henry County Engineer already receives gas taxes, and has indicated a need to pursue the increase of this funding source in the future to maintain its inventory of roads, bridges, and highways.

Motor Vehicle License Taxes: This funding source is also authorized under ORC. The Henry County Engineer currently receives all funding available under this program.

Continue to Improve and Update the Thoroughfare Network
Over the next 10 years, it is expected that Henry County residents will witness major transportation improvements to the county thoroughfare network, like the realignment of US 24, the replacement of the Perry Street bridge in Napoleon, and the construction of a new river crossing and bridge (4). These major road and bridge improvements will assist in promoting the safer and more expeditious flow of goods, services, and pedestrians throughout the county and region.

It is also recommended in this Plan that the county's vast network of railroad infrastructure be upgraded and modified so that county businesses get the full benefit of it as an economic development tool.

In light of these new capital improvements, it is quite possible that the existing pattern and flow of traffic could be altered due to such new improvements.

Telecommunications

Encourage the Proper Location of Telecommunication Technologies
It is anticipated that Henry County and its several political subdivisions will receive many requests in the future to construct telecommunication towers. It is important for the county to develop comprehensive policies to deal with these requests.

Personal Wireless Service Facilities
Several new wireless communications technologies have developed in the past few years. Regardless of telecommunication service, they will all require, to varying degrees, the construction of either transmitting equipment (placed either on towers or smaller "mono-poles") or receiving equipment on public or private land. Most services also require construction in the right-of-way's to lay wires to connect the towers with studios, switches, and computer control points. Rules adopted by the FCC and clarified in Section 253 (a) of the 1996 Act prevent local governments from restricting a consumer's ability to receive video programming, using satellite dishes, television antennas, and multipoint multichannel service antennas.

However, Section 253 (c) preserves and affirms local authority over the placement, construction and modification of cellular telephone facilities and other "personal wireless telecommunications service facilities." To prevent possible service providers from filing grievances against the county or any one of its municipalities, it is recommended that zoning ordinances/resolutions of the county's political subdivisions be reviewed and, where necessary, amended to take into consideration both the welfare of the citizenry and the desire of the FCC to remove entry barriers and heighten competition among all

4 Although the exact location of this bridge has been finalized, Napoleon and County officials have recommended CR 12 as a preferred location.

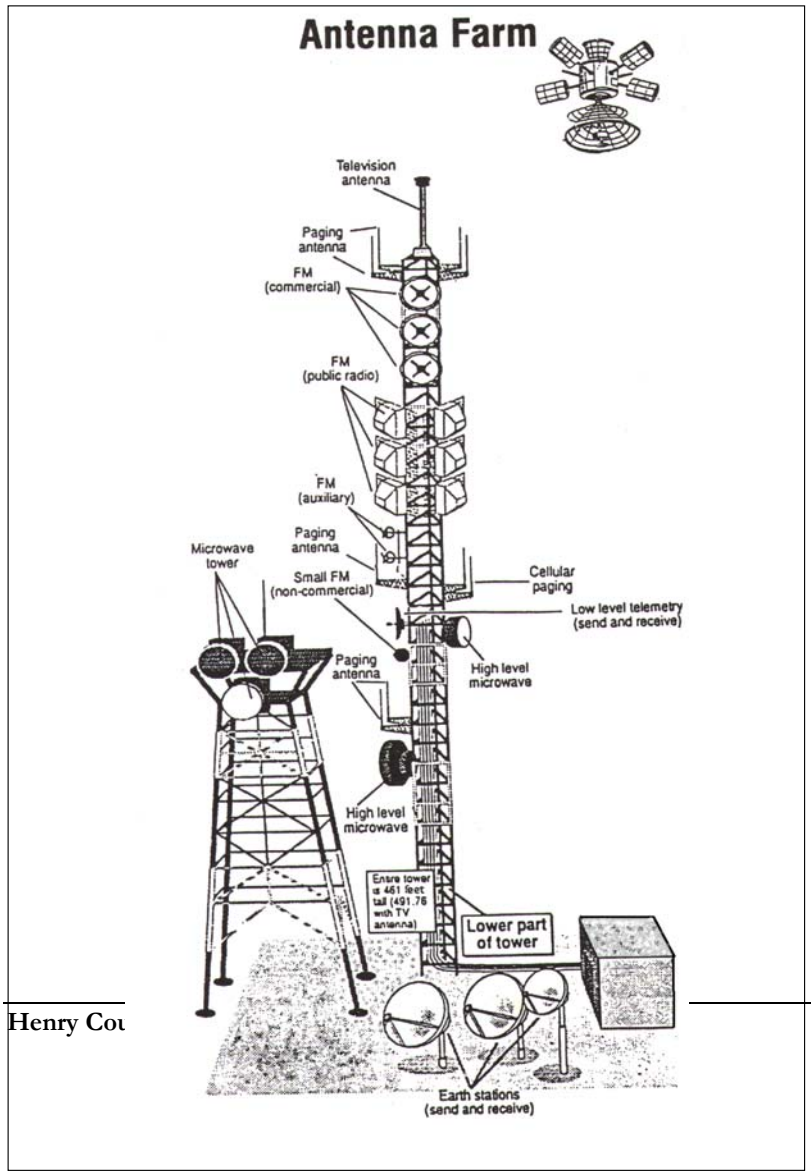
telecommunications vendors. It is recommended that Henry County and its several political subdivisions:

- ✓ Review the current zoning ordinance and propose cellular sitting language to determine if the ordinance "unreasonably discriminates among providers of functionally equivalent service."

- ✓ Determine if the zoning ordinance totally "prohibits or has the effect of prohibiting" the provision of personal wireless services.

The best method to prevent discrimination is to adopt measures that treat similar facilities in the same manner. Different treatment based on good reasons such as year of entry into the market, or first come, first served, for sites and towers with limited capacity should be more defensible.

While the Act bans local governments from prohibiting telecommunication services, it doesn't mean that every locality must allow a cellular tower. For example, a community that is very small geographically and completely residential might be able to show that its residents will be able to attain satisfactory service from cellular towers placed in nearby communities. So prohibiting the sitting of towers in any town may not have the effect of prohibiting the provision of the service to its residents. It is the "provision of the service that must be allowed, not the sitting of the facility." The county and its several local governments can embrace several techniques to accommodate telecommunication facilities and still maintain community attractiveness and a high quality of life.



Co-Location

Co-location means that a number of different providers locate their transmitting facilities together in the same place or on the same towers or mono-poles. Co-location, as illustrated by Antenna Farm illustration, also can include the use of the

same tower or pole for a number of different kinds of telecommunications services.

It should be noted that if the county or any community wants to encourage co-location that it ***cannot*** "unreasonably discriminate" among personal wireless communication service providers. To protect a policy of co-location from charges of discrimination, the county or local government might:

- ✓ Enact the policy into an ordinance.
- ✓ Provide for incentives for co-location. These could include: A shorter processing time for applicants who want to locate on a tower that has already been approved, based on a reasonable conclusion that such a site requires less additional evaluation compared to the legitimate evaluation and review needed for a new site.
- ✓ Place in writing the application process and other procedures for the use of public property.
- ✓ Offer the use of public structures and property, if made available to one provider, to other providers on reasonable similar terms and conditions—no exclusive contracts.

Advance Planning

Political subdivisions can require or encourage companies to lay out their expected needs for multiple tower sites over a reasonable time into the future, rather than applying for one tower site at a time. Localities might provide incentives for applicants willing to submit long-range plans and multiple site applications. The application fee structure can be used to that end, as can a commitment to expedite processing time. As with co-location, intergovernmental cooperation is the key to success in sharing limited resources across multiple jurisdictions.

Predetermination and Identification

Identifying and "mapping" of appropriate facility sites might be a useful tool. The public works director, county engineer, or other county officials could determine appropriate sites for cellular and other personal wireless communications facilities. Small communities might pool resources to prepare an area-wide list of appropriate sites. This kind of information will be very useful when a jurisdiction evaluates a particular application. It will also help when the county reviews and revises its zoning ordinance. With such a survey in hand, county and local public officials will be in a better position to approach the cellular industry for its cooperation in agreeing to the sitting plan.

Some help is also available from the FCC to assist county and local governments in implementing this kind of advance planning. The FCC maintains a general database that lists the location and owner of all towers over 200 feet, towers over 20 feet on existing structures, such as on a building or water tower, and towers that are close to airports. The FCC also maintains a database of cellular and SMR licensees that contains some, but not all, information on existing tower locations.

Joint Ventures with Local Government

Some governmental entities have invited private telecommunications providers to bid on the construction of towers to be shared by the local government for public safety

communications and by the private sector for its own needs. As a "win-win" situation for all parties, the private sector ultimately gets a tower site on public property, and the county or local government receives a facility built at little or no cost.

In selecting a "joint venture" option the county or its political subdivisions should consider undertaking the following measures: consider conducting a study to assess telecommunication needs; conduct a survey of potential sites for construction; consider a lease purchase arrangement that transfers the facility to government ownership after a certain time; provide for non-discriminatory use of the facility by all eligible telecommunications providers; develop a set of specification for joint venture proposals; issue a request for joint venture proposals that is publicly circulated, and; accept competitive bids and evaluate them through regular contract procedures.

Satellite Dishes

The Telecommunications Act deals with satellite service reception antennas differently than it does with wireless telecommunications towers and antennas. Overall, the FCC has interpreted the Act's provisions relating to satellite dishes as being far more restrictive of local regulations. Section 207 of the act prohibits most state and local restrictions on satellite dishes, MMDS antennas, and television reception antennas. These restrictions are similar to those that govern most telecommunications services insofar as they prohibit governmental bodies from acting arbitrarily and under few, if any, ascertainable standards. A list of these restrictions is defined in Section 207 (a).

Certain restrictions can be imposed on small satellite dishes and antennas however. A restriction is permitted, even if it impairs or prevents reception, or imposes unreasonable cost or delay, under the following conditions if:

1.) It is necessary to accomplish a clearly defined and articulated safety objective, or;

2) It is necessary to preserve a historic district listed or eligible for listing in the National Register of Historic Places (for historic places not listed with the national register, the county or local government must first obtain an FCC waiver).

Several strategies that were highlighted in this section should be used to compliment any or all telecommunication strategies the county may have already. As mentioned before, the act placed several restrictions on local governments in the different types of telecommunication services. Regardless of service, however, the county and its municipalities do retain certain regulatory powers, most of which pertain to their rights to ensure public safety and regulate rights-of-ways and land-usage. It is highly recommended that policies be developed that are non-discriminatory and clearly articulated.

The manner in which Henry County embraces the information age at both another level and century will be determined by how it develops its telecommunication strategies today. A current assessment of the county highlights the fact that the county has developed its infrastructure tremendously over the course of the last two decades. To ensure future development and smooth transition into the next century, it is imperative that the county takes a proactive stance toward developing a telecommunications environment that both

intensifies the quality of life and is ultimately conducive to the growth of its business community.