

# LTCP Affordability

Presentation to  
Clean Rivers Task Force

August 4, 2008

# Fundamentals

- Can the plan be implemented?
- EPA Guidance Document
  - *Combined Sewer Overflows – Guidance for Financial Capability and Assessment*
  - Residential Indicator: based upon the average annual cost per household relative to the projected median household income (MHI) for each year over the forecast period.



# Two Components

- Residential Indicator
  - Sewer rates as a percent of MHI
- Financial Capability Indicators
  - Debt Indicators
    - Bond Rating
    - Net Debt
  - Socioeconomic Indicators
    - Unemployment Rate
    - Service Area MHI v. National MHI
  - Financial Management Indicators
    - Property Tax Revenues as a Percent of Full Market Value
    - Property Tax Revenue Collection Rate

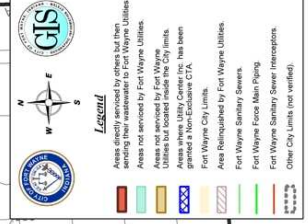


# Median Household Income

- Median household income is the amount which divides the income distribution of all households into two equal groups, half having incomes above the median, half having incomes below the median. The medians for people are based on people 15 years old and over with income.
- Household
  - Consists of all people occupying a housing unit
  - Includes related family members and all unrelated people
    - Lodgers
    - Foster children
    - Employees who share the housing unit
  - Does not include group quarters
    - Indiana State Developmental Center
- Housing Unit
  - Occupied or intended for occupancy as separate living quarters
  - Occupants do not live and eat with any other persons in the structure
  - Direct access from the outside or through a common hall
- 1999 MHI calculated by identifying each census tract in the service area and weighting its MHI based upon number of households relative to the total number in the service area







# Residential Indicator

- Residential Indicator
  - The ratio of the wastewater cost per household to MHI
  - $> 2\%$  = high burden;  $1-2\%$  = medium;  $> 1\%$  = low
- Wastewater Cost Per Household
  - \$1,138 during peak year (2023)
  - Estimated 2023 MHI: \$63,309
  - $\$1,138 / \$63,309 = 1.80\%$

Total Implementation Period	Peak Future Annual Costs (\$/yr) FV	Peak % MHI	U.S. EPA Residential Indicator
18	1,138	1.80%	Medium



# Analyzing Financial Capability Indicators

Indicator	Strong	Mid-Range	Weak
Bond Rating	AAA-A or Aaa-A	BBB or Baa	BB-D or Ba-C
Overall Net Debt	<2%	2% - 5%	> 5%
Median Household Income	>25% above National MHI	+/- 25% National MHI	More than 25% below National MHI
Property Tax Revenues	< 2%	2% - 4%	> 4%
Unemployment Rate	More than 1% below National average	+/- 1% National Average	More than 1% above National Average
Property Tax Collection Rate	> 98%	94% - 98%	< 94%





# Analyzing Financial Capability Indicators

Average Financial Capability Score: 2.33

Residential Indicator: 1.80%

Indicator	Low Residential Indicator (Below 1%)	Mid Residential Indicator (1.0 - 2.0%)	High Residential Indicator (Above 2.0%)
Weak Financial Capability (Below 1.5)	Medium Burden	High Burden	High Burden
Mid Financial Capability (Between 1.5 and 2.5)	Low Burden	Medium Burden	High Burden
Strong Financial Capability (Above 2.5)	Low Burden	Low Burden	Medium Burden





# Additional Considerations

The U.S. EPA encourages a community to include additional factors or alternative methods in assessing its financial capability and negotiating the CSO program implementation schedule by submitting, “...*any additional documentation that would create a more accurate and complete picture of their financial capability.*”



# Additional Considerations

- Increased Demand for Local Construction Services
- Effect of Competing Utilities/Urban Sprawl
- Local Economic Conditions Relative to Regional/National Economy
- Projected increase in overall net debt
- Impacts to Specific Communities



# Increased Demand for Local Construction Services

## Midwest Cities' CSO Control Programs - Estimated Costs

City	Estimated CSO Control Program (\$ Billion)
Cincinnati	\$1.5
Toledo	\$0.8
Detroit	\$1.4
Cleveland	\$1.6
Akron	\$0.4
Columbus, Ohio	\$1.5
Youngstown	\$0.4
Pittsburgh	\$3.0
Indianapolis	\$1.8



# Increased Demand for Local Construction Services

## Major Moves

- Indiana's Ten-Year Transportation Plan
- \$3.85 billion lease of Indiana Toll Road
- 1/3 of the proceeds to be spent in seven northernmost counties
  - Close proximity to Allen County
- \$360,787,785 to be spent in Allen County alone



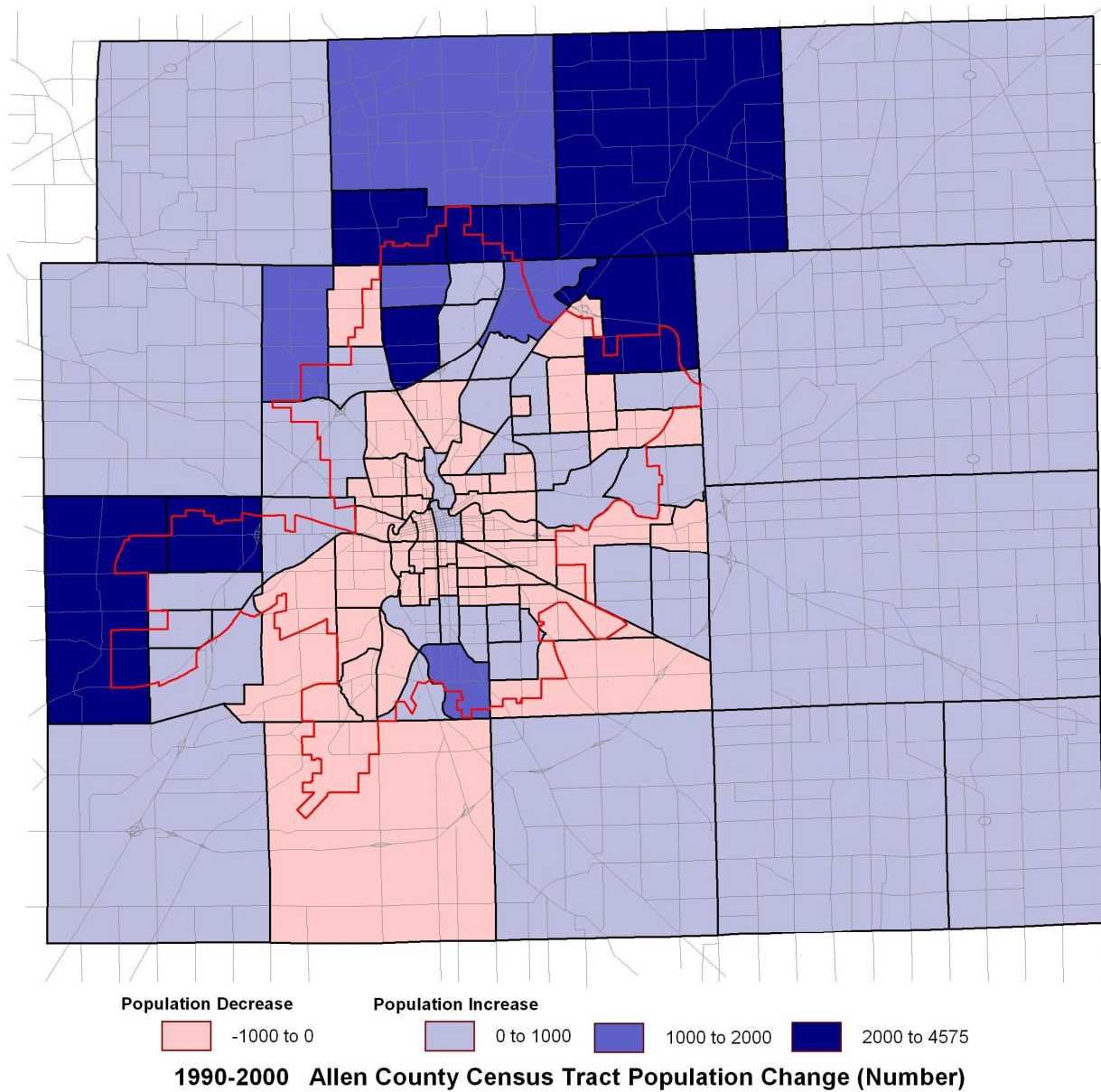
# Effect of Competing Utilities/Urban Sprawl

- Fort Wayne is in a unique situation, because it has a competing utility (AqualIndiana)
  - Competing utilities not burdened with legacy costs
- Increased rates could cause customers to move to areas with other providers, causing a “donut-effect”
- Past outmigration
  - 57% direct recapture
  - 16% indirect (contract customers)

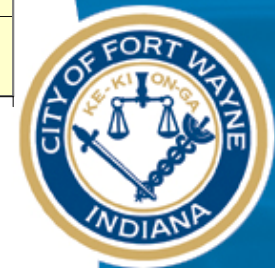
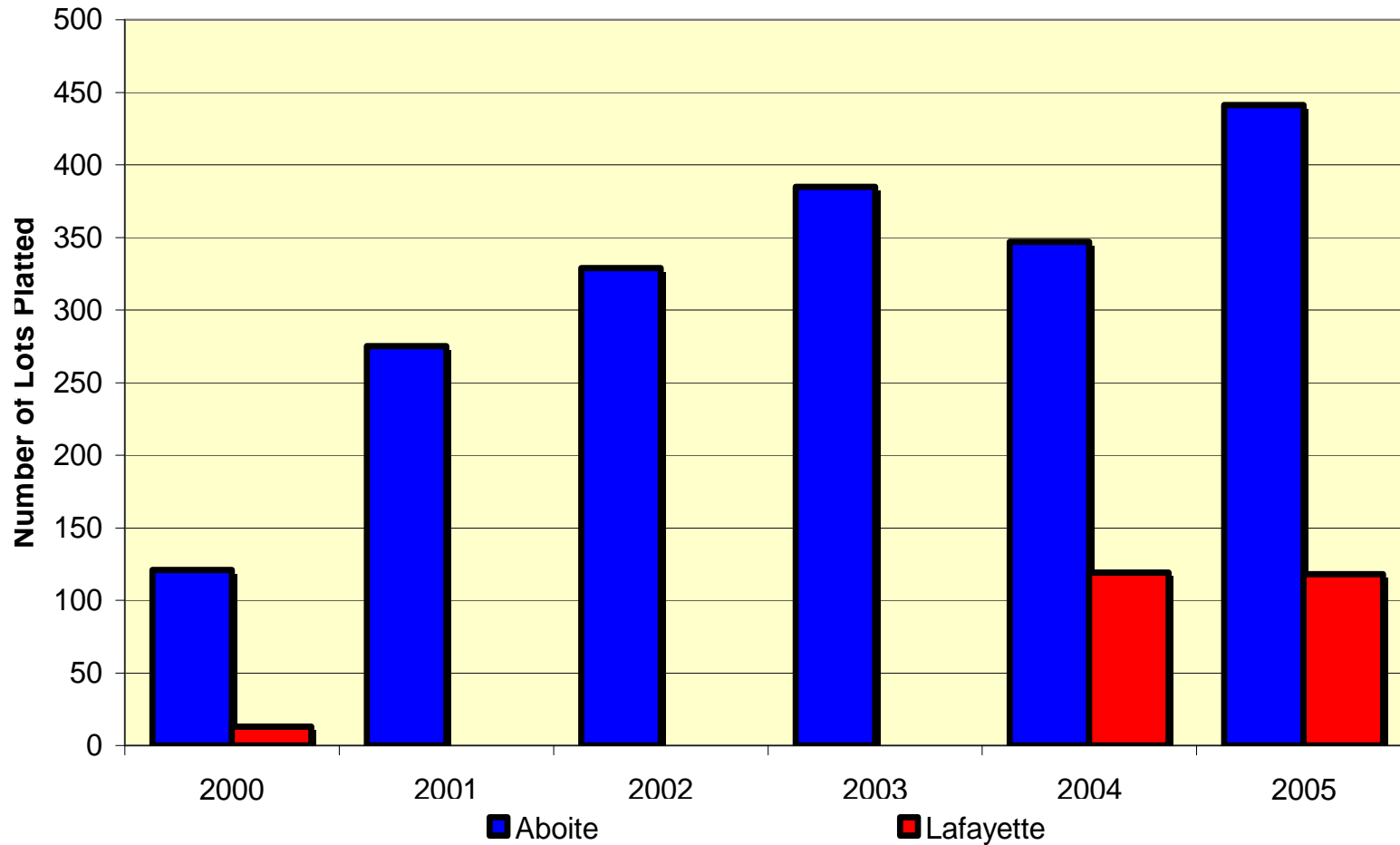




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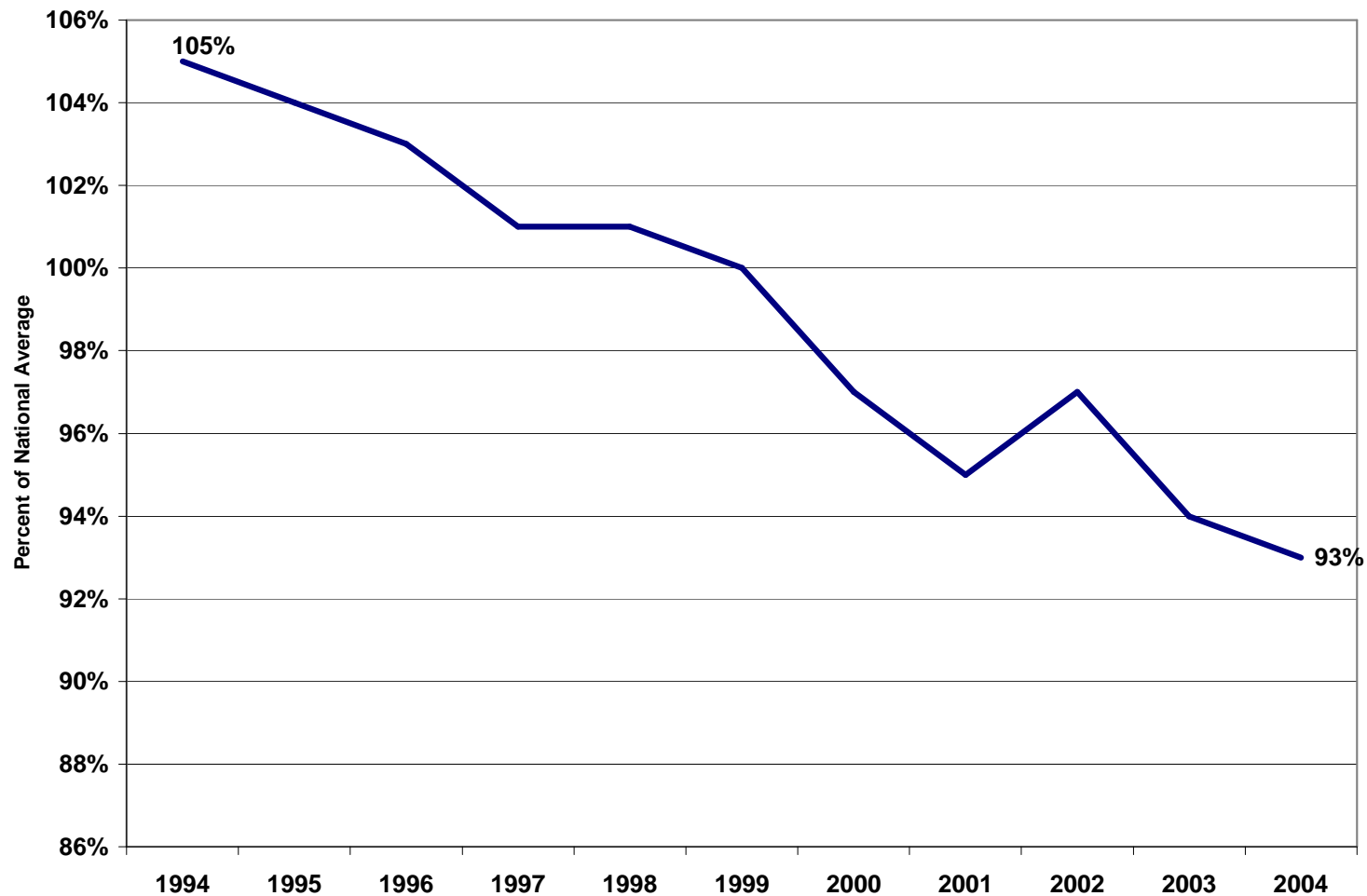


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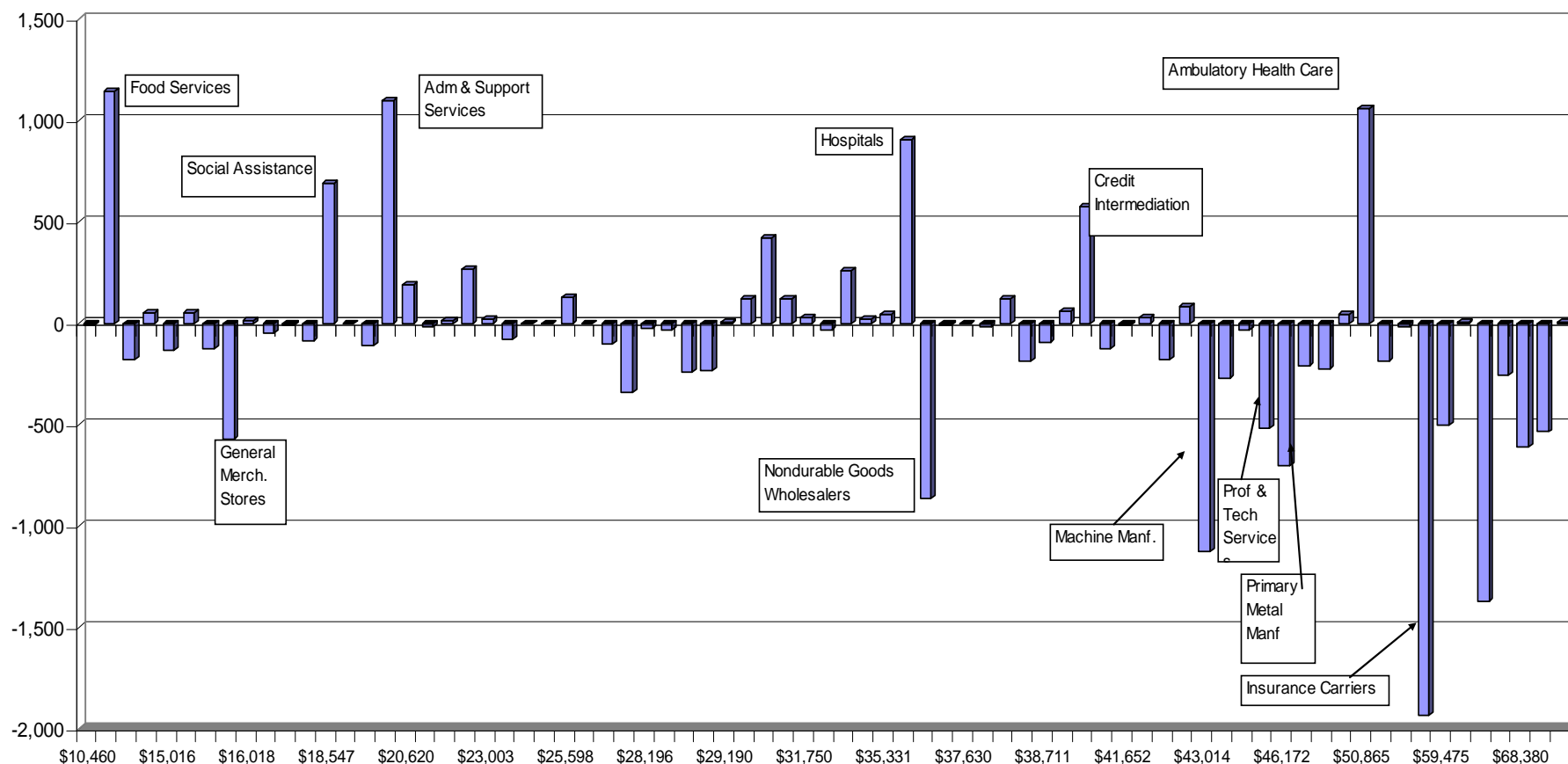
# Local Economic Conditions

Per Capita Income in Allen County as a Percentage of U.S.



# Local Economic Conditions

While unemployment is similar to national average, Fort Wayne is experiencing significant underemployment.



# Projected Increase in Overall Net Debt

Fort Wayne Community Schools in need of capital to replace aging buildings

Two facility studies, conducted in 2005 and 2006, showed that:

- 85% of FWCS buildings need upgrades to infrastructure
- at least 58% need HVAC systems upgraded or replaced
- at least 36% have roofs near or past their estimated service life
- at least 46% need new windows or have single-pane or uninsulated windows
- at least 25% need more electrical outlets or circuits

Total capital necessary: \$500 million

Northwest Allen County Schools is growing rapidly and will need to finance new construction to alleviate overcrowding





# Impact to Specific Communities

## Wayne Township

Contains over half of population served by City Utilities  
(44,156 households)

Residential Indicator = 2.49% (High Burden)

Community	Estimated 2005 MHI (Dollars)	Estimated 2023 MHI (Dollars)	Peak Impact 18-Year Implementat ion (Percent MHI)	U.S. EPA Residential Indicator
Wayne Township	30,873	45,677	2.49%	High



# Impact to Specific Communities

Community (Census Tract)	Estimated 2005 MHI (Dollars)	Estimated 2023 MHI (Dollars)	Peak Impact 18-Year Implementation (Percent MHI)	U.S. EPA Residential RI
West Central (12)	13,535	20,025	5.68%	High
Hanna - Creighton (17)	18,058	26,717	4.26%	High
East Central (14)	26,025	38,504	2.96%	High
Harvester Neighborhood (15)	27,104	40,100	2.84%	High
Oakdale (25)	42,441	62,792	1.81%	Medium
Glenwood Park (108.05)	53,126	78,600	1.45%	Medium
Arlington Park (108.08)	73,025	108,041	1.05%	Medium
Autumn Ridge (103.04 BG2)	95,662	141,532	0.80%	Low



# Capital Projections



# Total Capital Needed

Capital Program	Present Dollar Value	Future Dollar Value
LTCP (4/18, 1/12 events/year)	\$239.4 million	\$361.7 million
Wastewater Improvements CIP	\$454.6 million	\$566.0 million

Over next 18 years, total capital needed to fund both CSO improvements required by the LTCP, as well as other wastewater collection and treatment needs, is \$927.7 million (inflation-adjusted).

Average annual increase in revenue requirements:

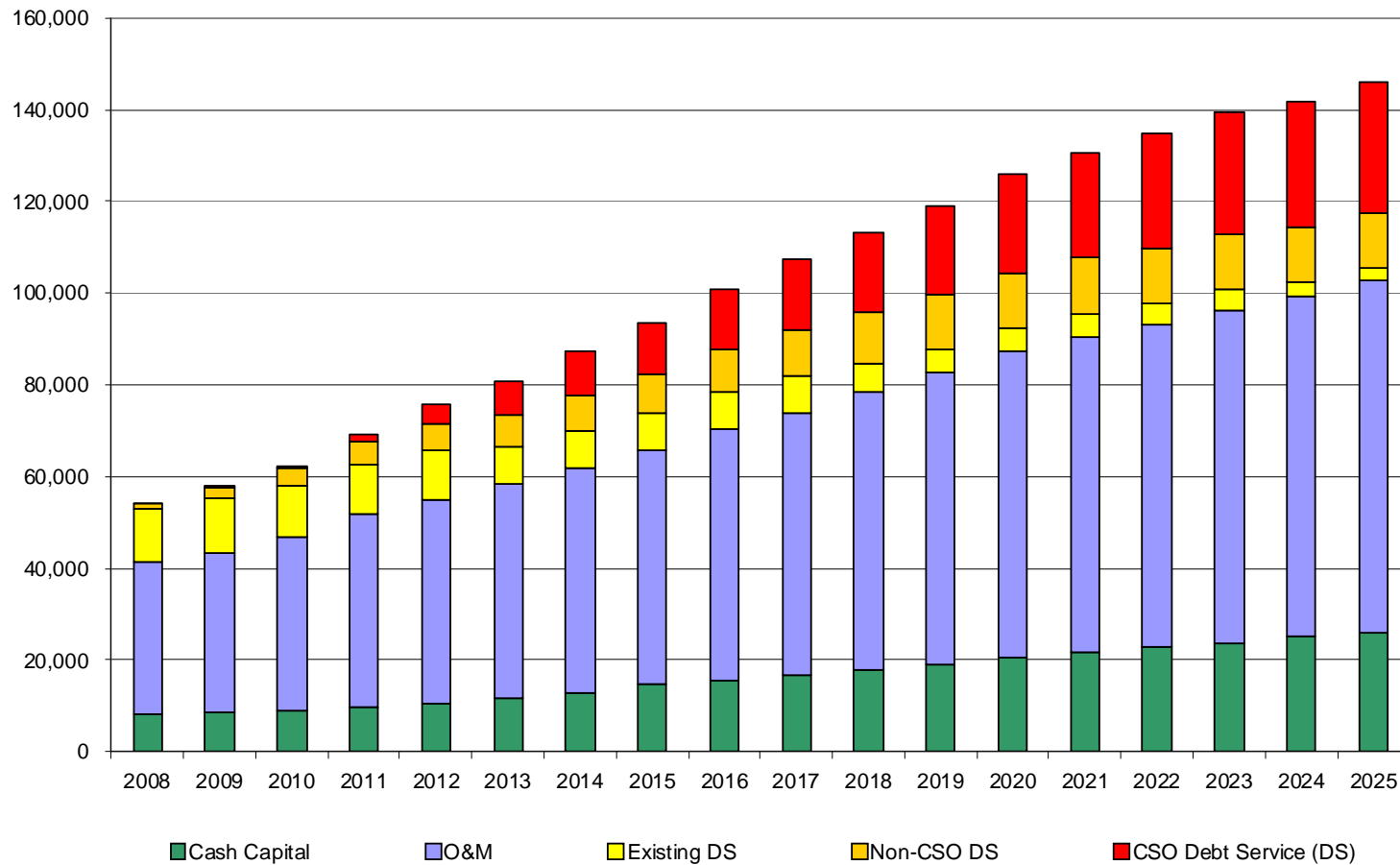
2008 – 2014: 10.5 percent annually

2008 – 2025 Average: Seven percent annually

Including operations and maintenance costs, an overall revenue increase of 383% is necessary over the 18-year period.



# Projected Revenue Requirements (\$,000)





# The Ideal Sewer System

- A well maintained collection system and treatment program:
  - Does not combine sanitary sewage and stormwater
  - Minimizes inflow and infiltration (I&I)
  - Does not pollute rivers
  - Does not have basement backups
  - Does not have overflows (SSO or DWO)



# The Ideal Sewer System

- Effluent is always within legal limits
- Is easy to maintain
  - well designed
  - accessible
  - well constructed with quality material
- Cost effective to collect and treat sewage and dispose of by-products



# Consent Decree

- Attempts to be comprehensive
- Resolves combined sewer overflows and sanitary sewer overflows AND causes no other harm
  - No new CSOs or SSOs
  - Don't skimp on maintenance
  - Don't skimp on treatment



# Stipulated Penalties

- CD has penalties for:
  - Failure to meet infrastructure milestones
  - Failure to complete SEPs (rain gardens and septic elimination)
  - Failure to report changes in the work plan
  - Failure to file progress reports on timely basis
  - Failure to meet effluent limits (NPDES permit)
  - Failure to conduct prescribed O&M
  - Occurrence of unpermitted CSOs, new SSOs, or DWOs



# Costs to Comply With CD

- Capital Costs
  - CSO solutions – reduce discharge to rivers
  - Solution to existing SSOs
  - SEPs (rain gardens and septic elimination)
- O&M Costs
  - Additional maintenance efforts to avoid SSOs and DWOs
  - Additional maintenance for new infrastructure
  - Need to do some maintenance better
    - More preventive maintenance
    - More frequent maintenance
- Compliance-driven administrative costs
  - Sampling, inspecting, reporting, etc.





# Long Term Control Plan Schedule

Fort Wayne City Utilities  
Clean Rivers Task Force  
Consent Decree - Capital Spending

		Estimate Capital @ 2005 Cost	Estimate Average Annual O&M @ 2005 Cost
#	Project Description		
<b>Long Term Control Plan (LTCP)</b>			
1	Primaries	funded	
2	Plant Phase III (85 MGD)	\$25,820,000	
3	Early Floatables Control	1,410,000	
4	CSSCIP - Basins w/ future SS or SD	11,780,000	
5	Pond Storage & Dewatering	38,074,264	
6	CSSCIP - Basins Tributary to future PI	61,130,000	
7	Satellite Storage - St Joe River	16,400,000	
8	Satellite Disinfection - St Joe River	2,720,000	
9	Satellite Disinfection	3,869,868	
10	Morton Street/O10101 Reroute	8,750,000	
11	Wayne Street Parallel Interceptor	44,456,005	
12	St. Marys Parallel Interceptor	19,211,345	
13	Late Floatables Control	4,762,100	
14	Satellite Storage	1,937,500	
	Total	240,321,082	
<b>SSD Elimination</b>			
1	Rothman	635,000	
2	Warfield	1,375,000	
3	North Maumee	28,800,000	
	Total	30,810,000	
<b>SEP</b>			
	Cash Payment	296,109	
	Local Investment	945,000	
	Total	1,241,109	
	<b>Grand Total</b>	<b>\$272,372,191</b>	<b>\$1,953,152</b>



# Cash Flow Schedule

Fort Wayne City Utilities  
Clean Rivers Task Force  
Consent Decree - Capital Spending - Cash Flow

<u>Cash Need</u> <u>Year</u>	<u>Disbursement</u> <u>Amount</u>	<u>Financing Cost</u> <u>Inflation @ 3%</u> <u>Interest @ 5%</u> <u>Issue Costs @ 2%</u>
2008	3,820,609	
2009	8,841,789	452,783
2010	16,181,214	1,353,329
2011	25,813,588	2,828,702
2012	21,866,588	4,151,887
2013	21,071,088	5,396,312
2014	23,811,250	6,791,518
2015	12,705,000	7,521,286
2016	15,419,829	8,320,355
2017	22,977,961	9,619,416
2018	25,112,025	11,111,404
2019	15,236,250	11,924,701
2020	17,530,000	12,787,861
2021	17,625,000	13,654,548
2022	8,375,000	13,798,169
2023	8,102,500	13,795,583
2024	7,882,500	13,737,378
2025	0	12,990,996
Grand Total	272,372,191	

↓
<u>237,240,706</u>
<u>@ 6%</u>
<u>289,969,240</u>
<u>@ 4%</u>
<u>186,647,527</u>



# Funding

- Current funding plans only include revenue bonds backed by existing customer base
- Other funding options\*
  - Alternative Revenue Streams – state and federal grants, other taxes
  - Subsidized debt – streamlined process, best market rates
  - Sell or lease certain assets
- \* Alternative funding does not have to be available on day one – will be useful whenever it can be obtained

