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Addressing Infrastructure Needs in New Orleans

BGR

The Bureau of Governmental Research is a private, non-profit, independent research organization dedicated to informed public policy making and the effective use of public resources for the improvement of government in the New Orleans metropolitan area.

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INTRODUCTION

Public infrastructure is the backbone of a metropolis, the physical support system that sustains modern urban civilization. Private property and activities, as well as public services and amenities, depend on infrastructure. It is a prerequisite for a robust economy and a high quality of life.

For this reason, New Orleans' recovery and long-term sustainability depend on the rehabilitation of its infrastructure. To the extent that its infrastructure is inadequate and degraded, the city will struggle to support and retain its residents and businesses. Needless to say, it will also be difficult to draw new investment and residents.

Even prior to Hurricane Katrina and the failure of the levees in 2005, New Orleans had decaying school facilities, crumbling streets and leaking subsurface infrastructure, among other physical weaknesses. The flooding following Hurricane Katrina exacerbated these problems immensely.

BGR undertook this study out of concern that New Orleans' infrastructure needs are receiving inadequate attention and consideration. None of the citywide planning processes conducted since Katrina has yielded a substantive analysis of local infrastructure needs, much less concrete priorities. The previous City administration repeatedly failed to produce a comprehensive and lucid capital plan, and there was no discernible logic behind the planned expenditure of flexible federal funds. Meanwhile, government entities have been pursuing infrastructure programs in silos, without regard to competing needs. Under these circumstances, New Orleans runs the risk of misallocating scarce public resources.

In conducting this study, BGR attempted to pull together a comprehensive picture of the infrastructure needs in Orleans Parish and the resources available to meet them. But because of weaknesses or inconsistencies in the source data and key entities' failure to respond, the information that BGR collected does not present a definitive picture of the community's infrastructure needs.

Nevertheless, the available information is sufficient to convey the gravity of the infrastructure funding challenges facing New Orleans, particularly in the areas of drainage, sewerage and water systems, and streets. In this report, BGR presents that information. It then discusses certain factors that affect the community's ability to incur additional debt and examines how the City government is spending federal recovery dollars.

SCOPE AND LIMITATIONS

This report focuses on core public infrastructure funded in whole or in part by local tax dollars and service charges. It examines the bare essentials of modern civilization, such as drainage, sewerage and water systems, streets, schools, and jails.

The report does not address amenities, such as parks, playgrounds, libraries and cultural institutions, that play a vital role in furnishing a high quality of life. Their exclusion from the scope of this study should not be interpreted as diminishing their importance.

The report excludes infrastructure funded primarily by commercial user fees or state and federal funds, such as the Port of New Orleans, and the Louis Armstrong International and Lakefront airports. It also excludes the hurricane protection system so critical to the community. Given the regional nature of that system and the astronomical cost, the challenge of providing this critical protection necessarily falls to the state and federal governments.

In preparing this report, BGR relied on local entities' own evaluations of their capital needs and the resources available. Some could offer only outdated information. Some did not respond at all. As a result, the report lacks information in areas such as the justice system and public safety.

In addition, different entities may have used different standards for determining what projects constitute "needs." A project that one agency considers a critical necessity might be treated by another merely as a wish list item. Because of the potential for differing interpretations of need, this report refers to entities' stated needs as their needs assessments.

METHODOLOGY

BGR gathered information for this report through surveys of relevant local entities and interviews with key personnel. BGR also relied on official government documents such as capital and operating budgets, master plans, capital improvement plans, audits and annual reports. Information presented at public meetings, technical reports, academic publications and previous BGR research also informed the report.

INFRASTRUCTURE NEEDS & FUNDING SHORTFALLS

This section discusses the needs assessments of several key entities responsible for components of New Orleans' core infrastructure. These include the Sewerage & Water Board, the City's Department of Public Works, the local public school districts and the Sheriff's Office. Due to the limitations noted above, it does not address other needs, such as those of the court systems and various City departments.

This section also gives the key entities' estimates of funding shortfalls in undertaking their capital priorities. The shortfalls, in some cases, are extraordinary.

Sewerage & Water Board

Drainage, sewerage and water systems are among New Orleans' most fundamental infrastructure needs. Weak internal drainage systems make neighborhoods more vulnerable to flood threats. Weak sewerage systems cause environmental threats, and weak water systems waste money by producing water that leaks away rather than reaching ratepayers. Leaking subsurface infrastructure also undermines streets and damages private property.

The Sewerage & Water Board (S&WB) is charged with construction, operation and maintenance of New Orleans' sewerage and water systems and most of the drainage system.

Sewerage and Water. Years of deferred maintenance and the flooding following Hurricane Katrina have left the sewerage and water systems in deplorable condition. Since 1998, the S&WB has been under a consent decree[1] to fix extensive problems with its sewer system. The water system, while not under a judicial decree, also poses severe challenges. In 2009, the volume of unaccounted-for water (which includes water escaping from leaks and water used for purposes such as street cleaning and sewer flushing) was an astonishing 70.85% of metered production.[2] This does not include water the S&WB provides free of charge to various public entities.[3] In other jurisdictions, the volume of water both lost and provided free to public entities is normally closer to 15%.[4]

Since Katrina, the S&WB has been deploying Federal Emergency Management Agency (FEMA) grants and other funds to address some of its problems.[5]

The S&WB's 2010-2014 capital program calls for $665 million in sewerage and water projects.[6] Sewerage projects include replacing parts of the sewerage collection system and upgrading the treatment facilities, per the consent decree. Water projects include replacing parts of the waterworks and water distribution systems. The S&WB's capital program indicates that it is short $406.5 million for the sewerage and water projects planned in the next five years.

A 2006 report prepared for the S&WB projected long-term needs at $320 million for sewerage infrastructure.[7] According to the S&WB, that investment is no longer needed. The 2006 report also projected capital needs of $2.07 billion for water infrastructure.[8] The S&WB informed BGR that this number is also outdated, but it declined to provide a more current estimate pending completion of a 10-year capital plan and a long-range financial plan and rate study. These plans and studies are under way and should be completed in November.

Internal Drainage. The S&WB is responsible for underground drainage pipes 36 inches in diameter and larger, open canals and water pumps. The Department of Public Works (Public Works) is responsible for underground drainage pipes less than 36 inches in diameter, catch basins, open ditches and culverts. Public Works' infrastructure needs assessment is discussed in the following section.

The S&WB's five-year capital program calls for $2.3 billion in drainage infrastructure projects, including work on canals and pumping stations. It estimates a funding shortfall of $534.5 million. As with its sewerage and water infrastructure, the S&WB is developing a 10-year capital plan.

S&WB in Total. The S&WB's five-year capital program calls for sewerage, water system and internal drainage projects totaling $3 billion, with an estimated funding shortfall of approximately $941 million for these projects. The S&WB has additional infrastructure needs beyond those included in its five-year capital plan, but it has not provided BGR with current information on its longer-term capital requirements. Past estimates suggest that these could total in the billions of dollars.

Department of Public Works

The condition of the local street grid is perhaps the most visible indicator of the city's structural health. Poor street conditions can cause increased traffic congestion and safety issues, diminish neighborhood appeal, decrease property values, and give the impression that the city is decaying. Poor street conditions can also lead to damage of subsurface infrastructure.

New Orleans' streets have been in poor condition for years. In 2004, when the City government last surveyed its 1,600 linear miles of streets, it found that two-thirds of the city's streets required some level of roadwork. The disaster of 2005 exacerbated this situation.

The City's Department of Public Works is responsible for most streets in New Orleans and part of the drainage system. Since Katrina, Public Works has been deploying federal funding from the South Louisiana Submerged Roads Program, the American Recovery and Reinvestment Act, disaster Community Development Block Grants (disaster CDBG), and FEMA, as well as State Capital Outlay funds and local bond funds, to repave streets and rebuild drains across the city.

While these funds are helping to deal with some major problems, they are insufficient to bring New Orleans' streets and drains up to an acceptable level. Public Works estimates that it will cost an additional $1.4 billion to reconstruct the remaining streets in poor to failed condition and to fix the drainage infrastructure for which the City government is responsible.[9] Public Works has put together a $400 million capital program to run from 2013 until 2016. Most of the funding in that program – approximately $350 million – would go toward major roadways and collector streets that do not require reconstruction. Maintenance and repair work of the type planned for these streets is cost-effective, because it forestalls far more costly repairs in the long run.[10] However, it leaves little funding – approximately $50 million – available to reconstruct the poor to failing streets included in the $1.4 billion estimate.

Funding for the anticipated 2013-16 capital program is uncertain. Public Works hopes to secure additional disaster CDBG, FEMA and Federal Highway Administration funds.

Beyond the funds needed for major repairs, the director of Public Works estimates a need of $40 million annually for regular maintenance.[11]

Public School Districts

Prior to Katrina, New Orleans' public school facilities were among the worst in the nation.[12] In the aftermath of the disaster, officials seized the opportunity to rebuild and rehabilitate the system's facilities.

In 2008, the Recovery School District (RSD), the state-operated entity that took control of most New Orleans public schools after Hurricane Katrina, and the Orleans Parish School Board (School Board) jointly created a facilities master plan.[13] The plan calls for the rehabilitation and construction of approximately 84 school facilities at an estimated cost of $1.8 billion to $2 billion.

The first phase of the six-phase plan, with an estimated cost of approximately $700 million, is fully funded. School officials believe that FEMA will provide the vast majority of the funds needed for the latter phases of the plan and that disaster CDBG monies and tax credits will provide the rest.

Sheriff's Office

In New Orleans, the Sheriff owns some of the local jails and detention facilities, while the City government owns others. The Sheriff oversees all of them.

Prior to Hurricane Katrina, parts of the prison complex suffered from inadequate maintenance and other problems. When the disaster struck, high winds and flood waters ruined electrical facilities, mechanical equipment and the contents of several buildings.[14]

The Sheriff has embarked on a three-phase building program. The first phase, costing an estimated $90 million, is for the construction of a kitchen, warehouse and central power plant. That phase is currently under way. The second phase, estimated to cost $80 million, is for an intake-and-processing center, administrative offices and a housing unit with 1,438 beds. Phase 3, estimated to cost $80 million, is to replace a 1,834-bed, city-owned housing facility damaged by the floods following Hurricane Katrina.

Part of the financing for the program will come from bonds that voters authorized in 2008 for the Orleans Parish Law Enforcement District, which the Sheriff controls. The balance comes from FEMA Public Assistance grants.[15]

The Sheriff said that the current building program addresses his most pressing infrastructure needs.

The City did not provide information on the jails and detention facilities it owns.

In Summary: The Shortfall

The data limitations discussed earlier in the report mean that the numbers on infrastructure funding shortfalls are by no means definitive. They do, however, provide a sobering picture of New Orleans' infrastructure challenges. And the picture is only a partial one.

The S&WB anticipates capital funding shortfalls for the next five years totaling $941 million. It is currently reassessing its long-term needs, which past estimates suggest could run into billions of dollars. Public Works anticipates a funding shortfall of $1.4 billion for reconstruction projects. If it fails to secure funding for routine maintenance and repairs, the number could rise as neglected streets deteriorate.

Other entities within the city face capital shortfalls. For example, the juvenile court system and the Coroner's Office both have plans to rebuild and re-equip their facilities, but the available funding is inadequate.[16] Years of deferred maintenance and the Katrina disaster have left a number of facilities owned by the City of New Orleans – including City Hall and public safety facilities – in need of repair or replacement. The Regional Transit Authority is seeking capital funds to continue updating its fleet of buses and vans and to add several streetcar lines.

While some of the needs remain uncalculated, it is clear that the community faces a major shortfall in infrastructure funding. It is also clear – given the shortfalls facing drainage, sewerage and water systems, and streets – that the greatest challenges fall to the S&WB and the Department of Public Works. In the following section, this report turns to the local capacity to address the funding shortfalls.

THE LOCAL CAPACITY TO MEET NEEDS

With massive shortfalls in funding for infrastructure needs, the immediate question is, what capacity does New Orleans have to cover the funding gaps?

A community can pay for infrastructure improvements on a pay-as-you-go basis or by issuing debt. New Orleans has long relied on the latter approach. The pay-as-you-go approach depends on a community's ability to generate significant revenue for capital on an annual basis. A government entity's ability to borrow depends on a complex set of factors, such as the local government's debt position, the community's financial condition and economic prospects, and the quality of governance.

While a full-blown analysis of local financial capacity is beyond the scope of this report, this section will discuss several key factors that influence local capacity to finance infrastructure. These include state-imposed limits on local government debt; the debt burden of government entities in Orleans Parish; bond ratings; absolute and relative tax rates; and the level of service charges. This section will also discuss limitations on the tax base.

State-Imposed Debt Limits

State law imposes limits on the amount of bonded indebtedness payable solely from ad valorem property

WHAT'S IN A BOND?

Local government entities in Orleans Parish deploy three types of bonds to finance infrastructure: general obligation bonds, limited tax bonds and revenue bonds.

General obligation bonds are backed by an issuer's commitment to levy property taxes at whatever rate is necessary to pay principal and interest.

Limited tax bonds are different from general obligation bonds in that they are secured by a capped property tax, rather than the unlimited taxing authority of the jurisdiction.

Revenue bonds are secured by and paid from specific and limited revenue streams, such as the revenue generated by user fees or a sales tax.

taxes. The limits are set at a percentage of the total assessed value of the property in the jurisdiction. It is 35% in the case of the City government; 25% in the case of the School Board; 20% for the Orleans Levee District; and 10% in the case of other political subdivisions, such as the Law Enforcement District and the Sewerage & Water Board.[17]

Government bodies in New Orleans have substantial room under those limits to incur additional debt. For example, the City of New Orleans and the School Board, the two largest issuers of bonds supported by ad valorem taxes, are more than half a billion dollars below their respective statutory limits. Both the Sewerage & Water Board and the Law Enforcement District are under their limits by more than $250 million.

While substantial, the existing borrowing capacity under the debt limits is insufficient to meet New Orleans' needs. But even if it were sufficient, there are other constraints of a more practical nature.

The Local Debt Picture

Currently, the proceeds from bond issues supported by property taxes are the main source of locally generated infrastructure funding. As of June 1, 2010, government entities that collect taxes on a citywide basis (Tax Recipient Bodies) had outstanding $756 million of general obligation and limited tax bonds. They also had outstanding other forms of debt, including revenue bonds, certificates of indebtedness and loans provided by the state and federal governments to address post-Katrina financial issues. Collectively, the outstanding debt of Tax Recipient Bodies in Orleans Parish totals approximately $2 billion.[18] Table 1 provides a breakdown of debt by issuer and category.

Table 1: Total Debt of Tax Recipient Bodies (in millions)

Entity	General Obligation and Limited Tax Bonds	Revenue Bonds	Certificates of Indebtedness and Other Debt Instruments	State Loans to Pay Post-Katrina Debt Service	Community Disaster Loans (Federal)	Total Debt
City of New Orleans	$552.4	$149.8	$75.4	$79.9	$240.0	$1,097.5
Sewerage and Water Board	21.5	209.6	0	77.5	62.0	370.6
Orleans Parish School Board	104.7	33.1	0	76.2	59.5	273.5
Regional Transit Authority	0	75.5	0	35.9	47.2	158.6
Law Enforcement District	41.5	0	1.4	17.3	18.0	78.2
Audubon Commission	31.8	3.0	0	16.8	0	51.6
Orleans Levee District	3.7	0	0	26.1	9.6	39.4
Total	**$755.6**	**$471.0**	**$76.8**	**$329.7**	**$436.3**	**$2,069.4**

Note: The numbers are as of June 1, 2010. The chart includes the debt of public entities that receive taxes levied on a citywide basis. It does not include the debt of entities whose debt is not supported directly or indirectly by citywide taxes (e.g., the New Orleans Aviation Board, the French Market Corporation and the Downtown Development District).

Source: BGR calculations based on data provided by local bond counsel, Foley & Judell, LLP.

The City and the Law Enforcement District have voter approval to issue an additional $145 million and $28.2 million of general obligation bonds, respectively. The issue of these bonds would increase debt payable from dedicated ad valorem property taxes to $929 million. Total debt would rise to $2.24 billion.

Prior to Hurricane Katrina, Tax Recipient Bodies had outstanding $1.81 billion of debt.[19] Since then, total debt has risen by 14.3%. The increase is due to $436 million in borrowings from the federal Community Disaster Loan program to meet operating expenses post-Katrina, $115 million in bonds issued by the City, and $35 million issued by the Law Enforcement District. Local government entities are hopeful that they will qualify for forgiveness of most of the federal Community Disaster Loans under regulations issued earlier this year.

The debt of the various government entities is payable over several decades. Table 2 shows the debt service payable on outstanding general obligation, limited tax and revenue bonds, certificates of indebtedness, and disaster relief loans from the state. It does not include debt service for borrowings under the federal government's Community Disaster Loan program, for which Tax Recipient Bodies are seeking forgiveness.

Debt service requirements will ease somewhat beginning in 2015, when the School Board's total debt service drops by roughly 40%. Debt service requirements will not decline significantly until 2022, when the City of New Orleans' total debt service drops from $91 million to about $51 million.

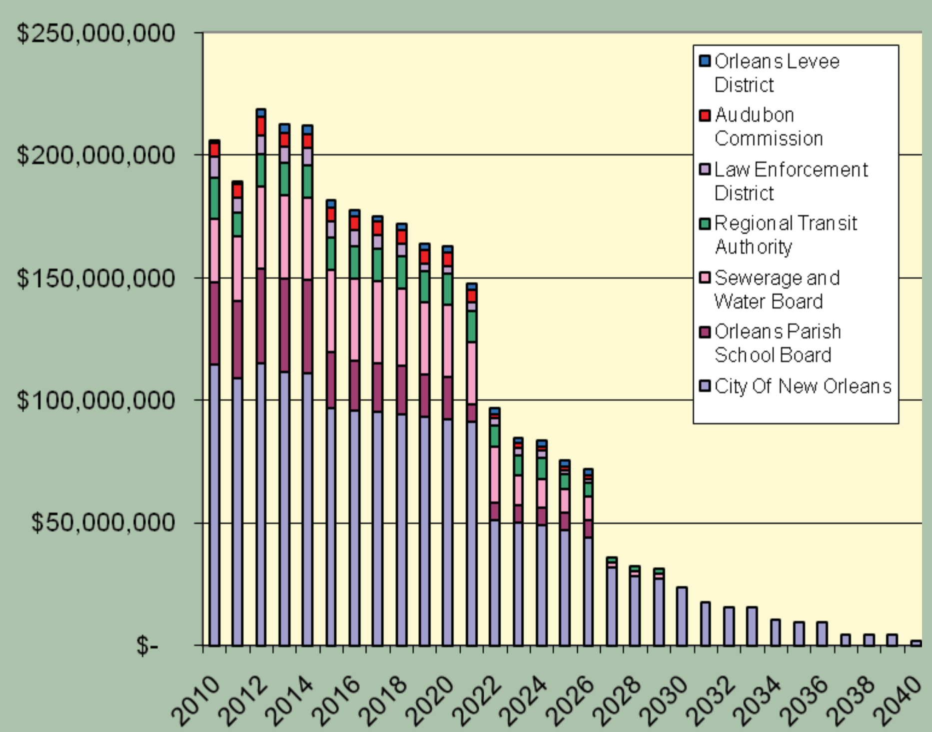
Restructuring the debt could free up some additional capacity before then by reducing the debt service payments in the near term. However, unless the restructuring involves a substantial reduction in interest rates, it would merely pass the cost of past improvements further into the future, consuming the tax capacity that future generations will need to deal with their infrastructure issues.

Last year, taxpayers paid 45.6 mills, or nearly one-third of their property taxes, to support general obligation and limited tax bonds. Service charges and other general fund revenue covered debt service for the revenue bonds and certificates of indebtedness. No payment was made on state or federal recovery loans, since none was due.

Evaluating the Local Debt Burden

Various metrics can help assess a community's debt capacity. These metrics include debt per capita, debt as a percentage of taxable property value, and debt service as a percentage of total general fund and debt service fund spending.[20] Debt per capita is easy to compute, but it does not account for a jurisdiction's wealth, tax base, revenue and other financial factors. The other metrics better assess a community's debt burden and capacity, because they consider the

Table 2: Consolidated Debt Service Schedule



Sources: BGR chart based on information from Foley & Judell, LLP, and Orleans Levee District.

strength of the local tax base and local government spending levels.

In December 2009, rating agency Fitch Ratings provided information on debt per capita and debt as a percentage of taxable property value.[21] The calculations do not include debt paid from non-tax sources, such as service charges for sewer and water.

Overall debt per capita, which includes debt of the City and other local government entities in Orleans Parish, was $4,876. Fitch considers overall debt per capita of less than $2,000 to be low, and debt per capita over $4,000 to be above average.[22]

Overall debt as a percentage of taxable property values in New Orleans equaled 7.2%. Fitch considers 2% to be low, and 5% to be above average.[23]

Debt as a percentage of general fund and debt service spending for City government is 22%.[24] Ratings agencies consider percentages between 15% and 20% to be high, and above 20% to be excessive.[25]

All three of these metrics indicate that the debt burden in Orleans Parish is well above average.

Bond Ratings

The borrowing capacity of a public entity depends in part on its bond ratings. The ratings, which are prepared by one or more rating agencies, provide an assessment of an issuer's ability to meet its future debt obligations. Strong bond ratings attract low interest rates, decreasing the overall cost of borrowing – and the cost to citizens. Low ratings have the opposite effect.

Rating agencies provide ratings both for specific bond issues and for entities as a whole. The latter are known as "underlying ratings" or "issuer ratings."

Most government entities in Orleans Parish currently have investment grade ratings. The School Board has the strongest rating of the group,[26] followed by the Law Enforcement District[27] and the Regional Transit Authority.[28] The City's rating is lower, but still well within investment grade.[29]

The S&WB has the lowest bond ratings. The bonds of the sewerage[30] and drainage[31] departments of the S&WB are barely investment grade. The debt of the S&WB's water department is non-investment grade, marking it as a risky investment.

The S&WB's low ratings are primarily the product of the devastating impact Katrina had on its finances. Prior to the storm, the bonds of the S&WB's sewerage, water and drainage departments all carried significantly higher underlying ratings.[32]

The S&WB sewerage and water departments are each required to maintain a debt service coverage ratio of at least 130% during the life of their revenue bonds.[33] This means that a department's net revenue must be at least 1.3 times the total annual debt service for its bonds.

The water department has been falling far short of the 130% requirement. The department operated at a deficit from 2005 through 2008.[34] In 2007, its coverage ratio dipped as low as negative 600%.[35] In 2009, FEMA reimbursements helped to lift the water department's coverage ratio above 130%, but the S&WB expects the department to fall out of compliance again this year.[36] The sewerage department is also struggling to satisfy the coverage ratio requirement. In 2009, its coverage ratio dipped below the required level, to 97%.[37] Needless to say, the sewerage and water departments must increase revenue or reduce debt service before they can issue new debt.

The S&WB has hired a consulting firm to create a financial plan and examine rates. The study is under way, and the S&WB expects it to be complete by the end of the year.

The low underlying bond ratings of the S&WB's various departments are problematic for several reasons. First, they make it expensive to sell bonds. Second, the ratings reflect fundamental weaknesses that would hamper the entity's ability to fund its infrastructure even in a world without ratings. These include the S&WB's debt burden, its poor financial health and the fragility of the local economy.

Tax Rates and Service Charges

In addition to the state-imposed debt limits, the local debt burden and bond ratings, there is another factor, of a more political stripe, that plays into New Orleans' ability to borrow money for infrastructure: citizens' willingness to pay higher taxes and higher service charges.

Property Tax Rates. In 2010, New Orleans' property owners paid 139.84 mills of citywide taxes.[38] Of that, approximately 45.6 mills were levied to service general obligation and limited tax bonds issued by various local government entities for capital projects.[39] Table 3 breaks down the current debt service millage rates by entity.

In absolute terms, the current rate of 139.84 mills is significantly lower than the 171.29 mills in effect pre-Katrina. The decrease is attributable largely to a 38% increase in assessed values, which resulted in a roll back of the tax rate.[40]

The ability of government entities to levy additional mills is based on a number of factors, including the willingness of city residents to approve them. The tax rates of surrounding areas are influential as well. As Table 4 illustrates, the property tax rate in Orleans Parish is below that of the City of Mandeville in St. Tammany Parish, but far higher than the rates in St. Bernard, Jefferson and Plaquemines parishes.

Table 3: 2010 Millage Rates for Bonded Indebtedness

City of New Orleans	27.32
Orleans Parish School Board*	5.67
Levee Districts**	5.46
Audubon Commission	3.31
Law Enforcement District	2.90
S&WB Drainage***	0.90

* The millage covers debt service of approximately $14 million per year. According to the School Board, it pays another $19 million of debt service from its general fund.

** East Bank property owners paid 5.46 mills for levee improvements in 2010, while West Bank property owners paid 6.55 mills.

*** BGR calculation, based on 2010 debt service and the projected value of a mill.

Sources: Louisiana Tax Commission, 2009 Annual Report; Orleans Parish School Board; Orleans Levee District.

Table 4: 2009-10 Millage Rates in Neighboring Parishes

St. Tammany Parish (City of Mandeville)	159.16
Orleans Parish (East Bank)	139.84
St. Bernard Parish (Upper)*	103.64
Jefferson Parish (Metairie)	102.70
Plaquemines Parish	61.03

* Upper St. Bernard refers to Wards 1 through 5A, which stretch from Arabi through Chalmette, Meraux and portions of Violet.

Sources: Louisiana Tax Commission, 2009 Annual Report, and Jefferson, Plaquemines, St. Bernard and St. Tammany Assessor's Offices.

Given the property tax rates of neighboring parishes, increasing taxes to finance infrastructure could face significant roadblocks.

Sales Tax Rates. The sales tax rate in Orleans Parish is currently 9%. The State collects 4%, the City government 2.5%, the School Board 1.5% and the Regional Transit Authority 1%.

As Table 5 illustrates, the rate is lower than that of the City of Mandeville, but higher than that of Jefferson Parish, Orleans' immediate neighbor and the region's retail hub. This is a factor policymakers must keep in mind when assessing the local capacity to raise sales taxes.

According to recent budget projections by the City, a ¼-cent sales tax increase would have generated $14.7 million this year.[41] This is the equivalent of the revenue generated by 6 mills of property tax in that same period.[42] The levy of additional local sales taxes would require authorization from the State Legislature,[43] as well as approval from voters.[44]

Sewer and Water Rates. Residents of Orleans Parish pay substantially higher sewer and water rates than residents of neighboring parishes. A residential user consuming 6,000 gallons of water a month pays more than double what a comparable consumer would pay for sewer and water in any neighboring parish. A commercial user in Orleans consuming 50,000 gallons per

Table 5: Area Sales Tax Rates

St. Tammany Parish (City of Mandeville)	9.25%
Orleans Parish	9
St. Bernard Parish	9
Jefferson Parish	8.75
Plaquemines Parish	8

Source: Louisiana Association of Tax Administrators.

month pays twice as much as a comparable consumer in the City of Mandeville and 135% more than a comparable user in Jefferson. Large disparities also exist for businesses with more intensive water use. (See Table 6.)

The difference in rates is due in part to differences in the funding structures for the utilities. The S&WB's sewerage and water departments are financed almost exclusively by user fees. These fees made up 99% and 96% of the sewerage and water department's revenues, respectively, in 2009.[45] Neighboring parishes and cities rely more heavily on other sources of revenue, such as sales and property taxes, to fund their sewer and water operations.[46] This helps to lower their rates. Interestingly, however, taxes in most of these parishes are also lower than in New Orleans.

Systemic Limitations on Tax Capacity

The community's ability to generate revenue to address infrastructure suffers from two systemic problems. One is chronic underassessment of taxable property. Despite a jump in the city's total assessed value for 2008, analy-

Table 6: Water and Sewer Bill Comparison

Total	Residential - 6,000 gallons/month	Commercial - 50,000 gallons/month	Commercial - 200,000 gallons/month
Orleans	$57.13	$465.76	$1,697.31
St. Tammany (City of Mandeville)	24.20	234.26	1,023.50
Jefferson	22.34	197.83	762.66
St. Bernard	20.86	184.00	736.00
Plaquemines	10.20	202.50	877.50
Water Only			
Orleans	$24.93	$200.51	$739.31
St. Tammany (City of Mandeville)	12.20	75.60	270.60
Jefferson	14.53	82.75	307.94
St. Bernard	9.90	82.50	330.00
Plaquemines	6.80	135.00	585.00
Sewer Only			
Orleans	$32.20	$265.25	$958.00
St. Tammany (City of Mandeville)	12.00	158.66	752.90
Jefferson	7.81	115.08	454.72
St. Bernard	10.96	101.50	406.00
Plaquemines	3.40	67.50	292.50

Note: Calculations are based on a standard 5/8-inch meter for residential, a 2-inch meter for commercial at 50,000 gallons per month, and a 3-inch meter for commercial at 200,000 gallons per month.

Source: BGR calculation based on rate schedules provided at: City Council of New Orleans, Ordinance Mayor Council Series No. 22,823; Jefferson Parish Utility Rates, www.jeffparish.net; Mandeville Code of Ordinances, Section 17-14 and 17-15; Plaquemines Parish Code of Ordinances, Section 22-8; St. Bernard Parish Code of Ordinances, Appendix D.

ses by *The Times-Picayune* indicate that some property remains considerably under-assessed.[47]

The second problem is excessive property tax exemptions. New Orleans is the only municipality in the state that is constitutionally prohibited from taxing the full value of a homestead.[48] In 2009, the homestead exemption trimmed $362.7 million, or 12%, from Orleans Parish's taxable assessed value.[49] Other exemptions shield virtually all property owned by nonprofit organizations,[50] all publicly-owned property,[51] some new manufacturing property and equipment,[52] and some renovations of property in historic, downtown and economic development districts.[53]

Together, underassessment and excessive property tax exemptions limit the community's revenue-raising capacity. They reduce tax collections and drive up tax rates for non-exempt property owners.[54]

The Bottom Line on Debt and Tax Capacity

Collectively, public entities in Orleans Parish have approximately $2 billion in outstanding debt, more than one-third of which is payable from dedicated property taxes. The parish's overall debt burden is projected to ease somewhat in 2015. But, absent a debt restructuring, significant capacity does not free up until 2022. Any serious local effort to address infrastructure needs prior to that date is likely to require tax or rate increases.

The increases could be quite substantial. As noted previously, the known funding shortfalls for infrastructure are in the billions – and the number is likely to grow as more information becomes available.

BGR made rough calculations to get a sense of what it might cost to fund $1 billion of infrastructure repairs. By way of example, a $1 billion bond issue payable in equal semi-annual installments over 30 years at a rate of 5.25% would entail annual debt service payments of approximately $67 million. Funding that debt service through property taxes would require 27.3 mills a year, an increase of nearly 20% over the current citywide millage rate.[55] Funding it through sales taxes would require an additional 1.14% sales tax. (Due to the complexity of the issue, BGR is unable to compute the sewer and water rate increases necessary to generate an additional $67 million per year.)

The above example oversimplifies a complex question, but gives a real sense of the enormous cost of addressing deteriorated infrastructure. It is not meant to imply that the government entities in New Orleans could in the near future execute a financing of that magnitude.

Indeed, there are multiple factors that would impede such an undertaking. These include the political will to raise property taxes in a city where residents pay higher taxes than in most neighboring parishes. In addition, in the case of the City government and S&WB, mediocre and poor bond ratings, respectively, increase the cost of debt.

Other potential sources of revenue are difficult to increase as well. Sales tax rates are in the high range among neighboring parishes and provide a less reliable revenue source for financing. Sewer and water service charges are already extraordinarily high relative to rates in neighboring jurisdictions. Raising them further would add to that disparity.

Finally, New Orleans' ability to generate revenue is hampered by two systemic problems: underassessment and excessive property tax exemptions. These problems have limited property tax collections and driven up tax rates.

HOW THE CITY IS SPENDING FLEXIBLE FUNDS

Following Katrina, Congress appropriated $13.41 billion in disaster CDBG funds to Louisiana. The state designated a total of $6.15 billion for various purposes in New Orleans: $5.20 billion for housing programs, $121.3 million for economic development programs and business assistance, and $833.1 million for infrastructure.

Table 7 shows, in broad strokes, how the state allocated the infrastructure funds in New Orleans.

The $410.7 million allocated by the State to the City

Table 7: Disaster CDBG Allocations for Infrastructure in New Orleans (in millions)

City government allocation	$410.7
Entergy New Orleans	200.0
School facilities	132.7
Other projects, various entities*	88.3
Fisheries	1.4
Total	**$833.1**

*The individual allocations are determined by the State and include funding for an array of local projects, such as: $40 million for the Superdome, $15 million for S&WB work related to the Submerged Roads Program, and $4.5 million for Woldenberg Park.

Source: Office of Community Development, State of Louisiana, Parish Level Katrina/Rita Recovery CDBG Program Financial Data, as of June 1, 2010.

government for local projects is one of the most flexible funding sources available to New Orleans. The Nagin administration committed the majority of those funds, limiting the current administration's flexibility to set priorities for their use.

As of July 16, 2010, the City had contractually committed $290.5 million of those funds.

To better understand what types of projects are being funded with the contractually committed disaster CDBG funds, BGR divided the projects into seven categories. The categories are as follows:

- *Economic Development Projects:* Includes land acquisition, relocation costs, and sewer and water upgrades related to the VA Medical Center; also includes investments in the Saenger Theatre.
- *Public Amenity Development and Improvements:* Includes investments in streetscape improvements, libraries, playgrounds and parks.
- *Blight Reduction and Redevelopment:* Includes site acquisition, incentive programs, commercial redevelopment and a soft second mortgage program.
- *Administrative:* Includes staffing and program management and monitoring.
- *Local Hospitals & Community Health Centers:* Includes Methodist Hospital property acquisition[56] and construction costs for two community health centers.
- *General Street Improvements:* Includes improvements to roadways and one intersection.
- *Plans and Studies:* Includes plans such as the city's master plan, a plan for Methodist Hospital and a drainage plan.

The largest commitments thus far are for projects to promote economic development and to develop and improve public amenities. The category with the next largest commitment encompasses blight remediation and redevelopment projects; these projects are mainly under the control of the New Orleans Redevelopment Authority. The Administrative category consumes the next largest amount, mainly for program management, monitoring and administration. The two smallest commitments are for General Street Improvements and Plans and Studies. (See Table 8.)

The largest commitments for individual projects are $75 million for the new Veterans Administration hospital; $30 million for the Reinventing the Crescent riverfront park; $16.3 million to acquire Methodist Hospital;

Table 8: Amount Contractually Committed, by Category, as of July 2010

	Amount Committed	% of Total Committed
Economic Development Projects	$90,000,000	31.0
Public Amenity Development & Improvements	88,081,240	30.3
Blight Reduction & Redevelopment	58,925,000	20.3
Administrative	21,688,220	7.5
Local Hospitals & Community Health Centers	19,203,400	6.6
General Street Improvements	6,783,420	2.3
Plans & Studies	5,858,800	2.0
Total	**$290,540,080**	**100.0**

Source: BGR categorization of information provided by Project Delivery Unit, City of New Orleans.

Table 9: Top 10 Funding Commitments for Individual Projects, July 2010

	Amount Committed	Category
VA Medical Center Site Preparation	$75,000,000	Economic Development Projects
Reinventing the Crescent: Downriver Park	30,000,000	Public Amenity Development & Improvements
Methodist Hospital Acquisition	16,250,000	Local Hospitals & Community Health Centers
Saenger Theatre	15,000,000	Economic Development Projects
Lake Forest Plaza Redevelopment	8,875,000	Blight Reduction & Redevelopment
Gentilly Woods Shopping Center	6,300,000	Blight Reduction & Redevelopment
Algiers Regional Library	4,200,000	Public Amenity Development & Improvements
Lafitte Greenway Land Acquisition	4,000,000	Public Amenity Development & Improvements
Joe Brown Park Improvements	4,000,000	Public Amenity Development & Improvements
City Park Festival & Recreation Complex	4,000,000	Public Amenity Development & Improvements
Total	**$167,625,000**	

Source: BGR categorization of information provided by Project Delivery Unit, City of New Orleans.

and $15 million for the Saenger Theatre redevelopment. (See Table 9.)

The minimal amount of funding committed to core infrastructure – $6.8 million for General Street Improvements, or 2.3% of the total committed – is surprising.

Luckily, the City administration is in a position to reconsider the allocation of about $120.2 million of its $410.7 million to help meet core infrastructure needs. The new administration has already indicated it plans to reprogram some portion of these funds, with $65.4 million currently under review. While this money is not nearly enough to solve the city's infrastructure funding problems, it makes sense to reallocate some of these flexible and immediately available funds in a manner that takes into account infrastructure funding shortfalls.

CONCLUSION

New Orleans faces an enormous gap between its capital needs and the resources available to meet them. Some of the city's most fundamental infrastructure components – namely drainage, sewerage and water systems, and streets – face particularly steep funding shortfalls. To make matters worse, the City government and, to a greater extent, S&WB are profoundly limited in their capacity to raise funds to meet these needs.

The infrastructure funding gap underscores the importance of carefully marshaling and spending available resources. It is essential to strategically deploy limited available resources, such as the remaining disaster CDBG funds, and to develop a coherent, prioritized citywide plan for addressing unmet infrastructure needs.

Despite multiple recovery and master planning efforts, the previous City administration failed to pull together a community-wide picture of infrastructure needs. It did not even pull together a comprehensive assessment of the City government's own capital needs, beyond the fragmentary information contained in the Capital Improvement Plan. This made it impossible for the administration to provide leadership in the arena of infrastructure. And so the various entities charged with building and maintaining local infrastructure have been moving along on separate trajectories.

When each entity with responsibility for infrastructure pursues public funds heedless of competing needs, meeting the community's highest needs becomes impossible. Without prioritization and coordination, New Orleans risks making substantial investments in streets, only to have the work undone by leaking subsurface infrastructure. The city could end up with leafy neutral grounds flanked by neighborhoods that flood too easily.

RECOMMENDATIONS

While the new City administration has inherited dire needs, it also has the opportunity to improve the situation. Improvement begins with coordinated planning and execution of a strategy to meet New Orleans' infrastructure needs. To that end, BGR recommends the following:

- The administration, in conjunction with the City Planning Commission, should fully assess and prioritize the needs of the City government.

- The administration should then take the lead in conducting a cross-agency evaluation of needs that takes into account the requirements of the S&WB, the public school system and the justice system. Other local entities should cooperate fully, providing detailed information and a prioritized list of unfunded needs.

- Finally, all government entities should cooperate to produce a plan that reflects the most critical needs of the community and commit to implement it. The City administration should take a stand against funding initiatives that do not reflect the top priorities.

In addition, given the tightly constrained financial picture in New Orleans, BGR recommends that the City administration do the following to begin attacking the gap between the city's capital needs and its resources:

- Re-evaluate the planned expenditure of remaining disaster CDBG funds in light of the city's pressing infrastructure problems.

- Work with other local entities to pursue additional federal and state monies for unmet infrastructure needs.

- Pursue the policy changes needed to address fundamental problems that limit the city's tax base, such as the underassessment of properties and excessive property exemptions.

END NOTES

1 The S&WB entered into the consent decree with the U.S. Environmental Protection Agency, the U.S. Department of Justice and other parties in 1998 to settle litigation relating to the sewer system. The consent decree was modified in March 2010.

2 Number provided by the S&WB.

3 Pursuant to La. R.S. 33:4096 and 33:4121.

4 United States Geological Survey, *Estimated Use of Water in the United States in 1995*, p. 23.

5 For example, pump station hardening is under way using $202 million in federal funds.

6 Sewerage and Water Board of New Orleans, *Adopted 2010 Capital Budget and 2011-2014 Capital Program*, amended March 17, 2010. Sewerage projects total $427 million and water projects total $239 million.

7 Black and Veatch, *Report on Current and Future Capital Needs*, prepared for the Sewerage & Water Board of New Orleans, December 2006, Appendix A, p. 2.

8 Ibid, Appendix A, p. 1.

9 Public Works estimates the cost of drainage infrastructure at 30% of the cost, or about $420 million. Public Works is currently preparing a drainage master plan to better assess the condition of its drainage infrastructure and to propose capital improvements.

10 For a full explanation of why this approach is more cost-effective, see the 2008 BGR report *Street Smarts: Maintaining and Managing New Orleans' Road Network*, available at www.bgr.org.

11 Currently, the City spends just $3 million to $4 million each year on maintenance and repair of city streets.

12 *A Blueprint: Building 21st Century Schools for New Orleans*, prepared for the State of Louisiana and the Orleans Parish School Board, August 2008, p. iv.

13 Ibid.

14 Federal Emergency Management Agency, *Justice Facilities Master Plan, New Orleans, Louisiana*, September 2007.

15 FEMA's Public Assistance Grant Program reimburses governments and some nonprofit organizations for agreed upon repairs and replacements of damaged assets in the wake of presidentially-declared disasters and emergencies.

16 The Coroner's Office told BGR that it plans to replace, rebuild and re-equip its facility at a cost of $8 million to $10 million. It has $7 million from bond proceeds and FEMA funds, leaving a gap of $1 million to $3 million. The Juvenile Court is planning to replace its storm damaged facilities with a multi-purpose complex. The Juvenile Court reported short- and long-term needs totaling $50 million. It expects to receive $25 million to $30 million from FEMA.

17 La. R.S. 39:562.

18 Local officials are hopeful that most of the $436 million in federal Community Disaster Loans will be forgiven. If all are, outstanding debt will decrease to $1.63 billion.

19 BGR calculation based on information in the comprehensive debt statement attached to the offering circular for the City of New Orleans' Series 2004B limited tax bonds. The debt statement listed debt outstanding as of December 2, 2004.

20 Vogt, A. John, *Capital Budgeting and Finance: A Guide for Local Governments* (Washington, DC: ICMA Press, 2004), p. 126; and Fitch Ratings, *U.S. Local Government Tax-Supported Rating Criteria*, December 21, 2005, p. 5.

21 Fitch Ratings, *Tax Supported New Issue: New Orleans, Louisiana*, December 15, 2009, p. 2. Standard & Poor's December 2009 rating of the City of New Orleans also included per capita and percentage of market value measures for the City's direct debt. The S&P ratios differed from Fitch's. BGR used Fitch's numbers because its estimate of market value was significantly closer to figures provided in the Louisiana Tax Commission's *2009 Annual Report*.

22 Fitch Ratings, *U.S. Local Government Tax-Supported Rating Criteria*, December 21, 2005, p. 6.

23 Ibid.

24 BGR calculation, based on the following 2010 figures for the City of New Orleans: $114 million in total debt service, a general fund budget of $454 million and an additional $64 million in property taxes for the Board of Liquidation.

25 Vogt, p. 129.

26 The School Board is rated A+ by S&P and Aa3 by Moody's. Standard & Poor's, *Public Finance: Orleans Parish Parishwide School District, Louisiana*, July 14, 2010; and Moody's Investors Service, *High Profile New Issue, Orleans Parish School Board*, July 9, 2010.

27 The Law Enforcement District has an A rating from S&P. Standard & Poor's, *Public Finance: Orleans Parish Law Enforcement District, Louisiana*, February 24, 2010.

28 In 2009, S&P rated the Regional Transit Authority as A-. Standard & Poor's, *Public Finance: New Orleans Regional Transit Authority, Louisiana; Sales Tax*, August 19, 2009.

29 The City carries ratings of BBB, A3 and A- ratings from S&P, Moody's and Fitch, respectively. Standard & Poor's, *Public Finance: City of New Orleans, Louisiana*, December 16, 2009; Moody's Investors Service, *High Profile New Issue, Orleans Parish School Board*, July 9, 2010, p. 3; and Fitch Ratings, *Recalibration of U.S. Public Finance Ratings*, March 25, 2010, retrieved from www.boardofliquidation.com/bond_ratings.html, July 23, 2010.

30 Standard & Poor's, *Public Finance: City of New Orleans, Louisiana*, July 13, 2009; Moody's Investors Service, *Moody's As-*

signs Baa3 Rating and Stable Outlook to City of New Orleans' Sewerage and Water Board's $24.5 Million Sewerage Service Refunding Bonds, Series 2009, July 2, 2009; and Fitch Ratings, *Fitch Rates New Orleans Sewer and Water Board Refunding Bonds as 'BBB-,' Outlook Revised to Stable*, June 25, 2009.

31 Standard & Poor's, *Public Finance: New Orleans, Louisiana, General Obligation*, April 21, 2009; Moody's Investors Service, *Moody's Affirms Ratings on City of New Orleans Debt*, March 18, 2009; and Fitch Ratings, *Fitch Upgrades New Orleans S&WB Sewer and Drainage Bonds, Affirms Water Bonds*, February 13, 2009.

32 In early 2005, the S&WB's sewer, water and drainage bonds all carried Moody's ratings of A3, safely in the range of investment grade ratings. Today, the water department's bonds are no longer considered investment grade, with a Moody's rating of Ba2. The sewerage and drainage departments' bonds are rated Baa3, the lowest possible investment grade rating. For a description of Moody's rating system, see Moody's Investor Services, *Rating Symbols and Definitions*, May 2010. BGR acquired all S&WB rating information from the Board of Liquidation, City Debt.

33 La. R.S. 33:4096(C) and 33:4121(C) require the S&WB to include in its water and sewer bond resolutions covenants to fix and collect on rates sufficient to cover debt service. The S&WB's general sewer and water bond resolutions require a coverage ratio of 130% as long as bonds are outstanding.

34 Sewerage and Water Board of New Orleans, *Comprehensive Annual Financial Report for the Year Ended December 31, 2009*, p. III-11.

35 Ibid.

36 Board of Liquidation, City Debt, *Notice of Material Event Pursuant to Securities and Exchange Commission Rule 15C2-12(B)(5)(I)(C) AND (D)*.

37 Sewerage and Water Board of New Orleans, *Comprehensive Annual Financial Report for the Year Ended December 31, 2009*, p. III-12.

38 This figure applies to an East Bank property owner. It excludes business, neighborhood improvement and security district millages. The millages levied on East Bank and West Bank property owners differ slightly because of separate levee district millages.

39 West Bank property owners paid an additional 0.9 mills to the Algiers Levee District.

40 Article VII, Sec. 23 of the Louisiana Constitution requires local entities to adjust millage rates after a parishwide reassessment so that revenues remain neutral. Normally, this results in a roll back of millage rates. Rates may be increased, or "rolled forward," up to the prior year's maximum millage rate, but only with a two-thirds vote of the governing body of the taxing authority.

41 City of New Orleans, *2010 Adopted Operating Budget*, p. 91.

42 One mill generates $2.437 million dollars, assuming a 91% collection rate.

43 The Louisiana Legislature has set an aggregate local sales tax limit of 5%. La. R.S. 33:2721.6.

44 La. Const., Art. VI, Sec. 29(A).

45 Sewerage and Water Board of New Orleans, *Comprehensive Annual Financial Report for the Year Ended December 31, 2009*, p. II-57.

46 In the City of Mandeville, user fees cover 71% of sewer and water expenses; sales taxes and other funds cover the balance. In Jefferson, user charges make up 60% and 86% of sewer and water revenues, respectively. The remaining revenue comes from property taxes and the general fund. In Plaquemines, user fees make up just 38% of sewer and water revenue; the remainder comes from property taxes and the general fund. BGR calculations based on information in the 2010 operating budgets for City of Mandeville, Jefferson Parish and Plaquemines Parish.

47 Russell, Gordon, "Closer to Fair," *The Times-Picayune*, March 16, 2008; and Chang, Cindy, "N.O. property list prices, city values often far apart," *The Times-Picayune*, January 28, 2010.

48 La. Const., Art. VII, Sec. 20(A)(9).

49 Louisiana Tax Commission, *2009 Annual Report*, p. 42.

50 La. Const., Art. VII, Sec. 21(B).

51 La. Const., Art. VII, Sec. 21(A).

52 La. Const., Art. VII, Sec. 21(F).

53 La. Const., Art. VII, Sec. 21(H).

54 See BGR's report *Unfair Assessments, Excessive Exemptions*, May 2005 at www.bgr.org.

55 One mill generates $2.437 million dollars, assuming a 91% collection rate.

56 The City and the seller, Universal Health Services, have signed a letter of intent.

BGR
We report to you.

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