Recognizing that sound infrastructure is essential to the economic and public health and vitality of a community, it is imperative that strategies be developed and implemented that ensure the stability and integrity of all aspects of this critical element of our county. The Infrastructure Vision Team crafted the following recommendations to ensure that the highest standards are attained and maintained for our transportation system involving Roads, Bridges and Rail, Site Development and Water, Sewer, Locks and Dams including public drinking systems and adequate waste water management:

- **Recognize Criticality and Maximize Efficiency of Roads, Bridges and Rail**
  
  - Promote intergovernmental cooperation which will result in efficiencies through enhanced and expanded shared snow removal agreements and the exploration of Ownership Transfers between the county and the state involving the exchange of responsibilities high-functional classified/high-volume roadways and bridges from the county to Penn DOT, while transferring some appropriate lower functional classified /lower volume roadways and bridges to the county.
  
  - Increase predictability and certainty by improvements in the delivery process by expanding the role of the county’s two design managers to advance projects without securing Penn DOT approval, or by greater coordination and synthesis between the county and Penn DOT.
  
  - Coordinate with the State to allow for Right-of Way Acquisition for road and bridge projects and approval for the county to develop the equivalent of ECMS to expedite project letting and record keeping.
  
  - Evaluate the development of an electronic permitting system to expedite permit approval.
  
  - Eliminate duplicative inspection/monitoring projects by designating one agency for these functions and sharing evaluations with other entities.
  
  - Encourage the Commonwealth to revisit the allocation formula for liquid fuel tax revenue to the counties. A system based upon miles of roadway, lane miles of roadway, bridge deck area and/or Average Daily Traffic would provide a more equitable allocation system.
  
  - Optimize the county’s position on securing available funds by identifying an individual or retain outside support to monitor state and federal programs for funding transportation improvements.
  
  - Raise the alcoholic beverage tax from 7 percent to 10 percent. Dedicate the additional funds towards sustainable transit funding.
  
  - Consider a portion of the gaming revenue dedicated to infrastructure improvements.
  
  - Consider leasing large tract of land owned by the county (i.e. Airport, Parks) for Marcellus Shale exploration and a portion of the revenue dedicated to infrastructure improvement. Advocate for the enabling legislation that would allow local government to pass funding initiatives for local transportation needs, in accordance with the Governor’s Transportation Funding Advisory Commission’s (TFAC) recommendations.
o Exercise options in Public-Private Partnership (P3) Legislation for infrastructure improvements and/or asset management; utilize a broad-based committee (technical, financial, legal) to evaluate P3 proposals.

o Advocate for passage of the Governor’s Transportation Funding Advisory Commission (TFAC) recommendation, including legislation to allow local governments to initiate a funding initiatives to fund regional transportation improvements.

o Prepare a transportation improvement program so that impact fees can then be imposed for transportation capital improvements; base fees on (1) the total costs of the road improvements; (2) included in the capital improvement plan; and (3) be located within a given transportation service area affected by new development.

o Consider using the concept of Value Capture or Tax Increment Financing to finance public infrastructure projects.

o Investigate Community Facility Districts and municipal authorities further for possible use as funding mechanisms for regional infrastructure maintenance.

- Strategically Plan and Implement Protocols to Enhance the Marketability and Preserve High Quality Site Development
  
o Invest in a Site Development fund with regional matches, develop and market sites cooperatively and leverage regional expertise to address site development challenges. Use of this fund (patterned after the Strategic Investment Fund and Pennsylvania’s Business in Our Sites program) will have long-term amortization.

o Invest in sites that have demonstrated marketability, offer attractive interest rates, leverage private investment and help developers/land owners carry projects until absorption begins.

o Advocate for re-capitalizing of Business In Our Sites and RACP funding from the state for site development. The County should assist private developers in securing these grants and loans.

o Dedicate some portion of the revenues generated by natural gas drilling on Allegheny County Airport Authority land be used to help capitalize the site development fund.

o Re-institute a planning function to plan for future development and for preserving a sustainable, high-quality environment.

o Coordinate permitting procedures related to site development by a single office; coordinate with the Allegheny County Economic Development and its counterpart at the City of Pittsburgh is maintained and expedited.

o To increase pad-ready site development, focus on Brownfield’s and Greyfields and locations that can be developed as mixed-use communities.
Further Strengthen and Enhance the Management of Water, Sewer, Locks and Dams

- Guide and coordinate the multiple parties involved with the ALCOSAN and Municipal Wet Weather Planning Process to provide the focus and vision needed to assure a cost effective and sustainable wet weather plan.

- Create a water advocacy coordinator in the County Executive’s office to develop and coordinate an integrated watershed management plan for Allegheny County watersheds.

- Initiate an implementation team of stakeholders with the charge to carry out the leading regionalization recommendation(s) of the study including legislative (state and local) solutions to incentivize system consolidation and sustainability.

- When using County funding programs such as CDBG or CITF, require demonstration that the community sewer rates are adequate to provide the real cost of service including comprehensive operation and maintenance (O&M) programs or at least at an affordability level of 2 percent of Median Household Income (MHI) before providing grant funding. Funding decisions should leverage management changes to assure continued sustainability of the system or promote regionalization.

- Revise the Allegheny County Health Department Regulation, Article XIV, and Sewage Disposal, to require full funding of approved wet weather plans and adequate operation and maintenance programs and to require communities that cannot meet these requirements to look for consolidation opportunities.

- Review and encourage the use of innovative billing rate structures for customer communities to be implemented by ALCOSAN and other centralized wastewater treatment systems.

- Consider revising the rate structure to pro-rate sewer billings based upon the amount of flow being delivered for treatment in separate sewer areas.

- Provide the County Health Department with the staffing and resources needed to continue to implement the Safe Drinking Water Program and take full responsibility for the implementation of the Safe Drinking Water Act.

- Charge the Allegheny County Health Department with evaluating the capabilities of each of the public drinking water treatment and conveyance systems to provide safe and reliable water supply for the next 25 years.

- Provide Regional leadership to encourage and incentivize local water distribution systems to proactively perform periodic maintenance (such as pipe lining) and replace service lines that are beyond their useful life before they fail.

- Encourage municipal water systems to adopt an asset-management approach to prolong the system life and aid in rehabilitation, repair and replacement decisions through efficient and focused operations and maintenance.
Charge the County Economic Development and Health Departments with developing countywide codes and regulations to assure appropriate and consistent requirements. Indicate that county funding such as CDBG and AIM should be contingent on municipalities' adoption and enforcement of these ordinances.

Consider Storm water fee programs as an option to provide additional capital as they can provide equity in the distribution of wet weather compliance costs to the largest contributors of wet weather flows based on impermeable surfaces.

Identify or create an appropriate institution(s)/entity(ies) capable of addressing storm water management on a comprehensive, equitable, hydrology (watershed) basis, which would also consider regulatory compliance, costs and incentives to promote effective and efficient storm water management best practices.

Implement institutional changes at the Allegheny County Conservation District so that they will take a more active role in sustainable storm water management and education.

Develop a county-wide model storm water ordinance that integrates the use of green infrastructure to the maximum extent practical (a requirement of the storm water Management Act 167).

Commit to use or require low impact development practices and green infrastructure in all county-funded projects.

Continue to provide for the development and management of Act 167 Storm water Management Plans for all watersheds in county.

Advocate for federal appropriations to maintain and recapitalize these assets in order to protect pool levels for commerce as well as for drinking water.

Initiate contingency planning to understand the impacts of pool loss on drinking water and other critical environmental, commercial and recreational assets.

Provide technical assistance to companies interested in siting and permitting for new natural gas related facilities along the river.

Work with the Port of Pittsburgh Commission and Carnegie Mellon University to develop applications utilizing the new broadband wireless network including the monitoring of bridges, dams, air and water quality, and sewage outflows.

Initiate a working committee of the engaged organizations to develop the implementation plan for the recommendations of the ALCOSAN Regionalization Committee.
The Infrastructure Vision Team was charged with looking at how the county addresses infrastructure needs, sets priorities and funds these needs including roads, bridges, dams, water, wastewater and sewer and infrastructure preparation of sites for future business investment. The team also considered whether countywide funding sources dedicated to those needs could be proposed or developed. The full committee met on March 30, 2012 to discuss the charge and establish subcommittees, and held a final meeting on Friday, Aug. 17.
Scope of Work

The subcommittees were:

- Roads, Bridges and Rail
- Site Development
- Water, Sewer, Locks and Dams

Summary of Methodology

The Roads, Bridges and Rail Subcommittee drew on information provided by several Allegheny County departments and the combined professional expertise of the subcommittee members.

The Site Development Subcommittee studied information provided by the Pittsburgh Regional Alliance, an affiliate of the Allegheny Conference on Community Development which markets sites and other regional amenities to businesses looking to relocate or expand in the 10-county Pittsburgh region. Additionally, it drew upon the expertise of the subcommittee members.

The Water, Sewer, Locks and Dams Subcommittee compiled an inventory of sewage and drinking water infrastructure from the Allegheny County Health Department, ALCOSAN and other public sources, and drew on the combined professional expertise of the subcommittee members.
Subcommittee on Roads, Bridges and Rail

Our transportation system impacts every resident, business and visitor to the county. However, it is becoming increasingly difficult for Allegheny County Department of Public Works (DPW) to maintain, improve and provide the infrastructure and services to meet the county’s mobility needs.

The benefits of highway and bridge investments to private sector productivity and economic activity are well-documented in the economic literature. Numerous studies have found positive correlation between transportation infrastructure investment and economic development. Although exact impact of the investment varies, the fact there is a positive relationship is widely accepted. In addition to the direct employment supported by highway construction activities, there are also direct user benefits such as improved quality of life in time saved and safety, as well as gains in business productivity.

The importance of our road and bridge network is even more apparent after access and mobility are compromised by natural disaster, system failures or other disruptions (i.e. Hurricanes Ivan, Andrew). It is difficult to measure the long-term economic impact of infrastructure disruption because of some redundancy in the system. Consumers and businesses will find alternative transportation routes and travel in response to a disruption; however often in the short term there are significant economic consequences following an unexpected shut down of a bridge or roadway.

ROAD AND BRIDGE NEEDS

According to the Federal Highway Administration, Allegheny County has 5,801 miles of paved roads owned and maintained by various entities including the Federal, State, County, and Municipal governments, etc. Of 1,595 miles of roadway rated for quality purposes, 8 percent are deemed “not acceptable” and need major repairs or placement. With respect to the County-owned roads, the Department of Public Works annually compiles a prioritized list after input from the five (5) divisions within the Department, the Parks Departments and municipalities.

Within Allegheny County, there are a total 2,232 bridges and 1,197 bridges are 20 feet or more in length. Of the bridges greater than 20 feet in length, PennDOT owns 804, the county owns 174, local municipalities and the City of Pittsburgh own 186. Other entities, such as the Port Authority of Allegheny County own and/or maintain 70 Transit bridges and 11 highway bridges.

Allegheny County also owns and maintains another 346 bridges less than 20 feet in length, for a total responsibility of 520 bridges throughout the county. The FHWA reports 33 percent of all bridges in Allegheny County are either “structurally deficient” (356 bridges) or functionally obsolete (376 bridges). It will cost an estimated $936.9 million to make all necessary bridge repairs in the county. Allegheny County has 75 structurally deficient bridge and 67 functionally obsolete bridges. That totals more than 1.3 million square feet of deck area that is either structurally deficient or functionally obsolete. The Pennsylvania Department of Transportation (PennDOT) estimates the average square-foot bridge replacement cost is $500 per square foot, for a total cost of $6.5 billion.
The following major river bridges are maintained by Allegheny County:

- Mansfield Bridge
- Homestead Grays Bridge - Rehabilitation Completed in 2007 – $38 million
- Rankin Bridge – Rehabilitation Completed in 2011- $48.4 million
- Glenwood Bridge
- Rachel Carson Bridge (Ninth Street) - Under Design
- Andy Warhol Bridge (Seventh Street) - Under Design
- Roberto Clemente Bridge (Sixth Street) - Under Design
- Sixteenth Street Bridge – Rehabilitation Completed 2003
- South Tenth Street Bridge - Under Design

The Glenwood Bridge is primarily owned by Allegheny County; however, PennDOT owns the pavement and the City of Pittsburgh owns the sidewalks. The bridge is jointly maintained by all. It is typical for Pennsylvania counties to own bridges. It is atypical for the counties to own major bridges.

In numerous locations throughout the county-owned system ownership is discontinuous. This discontinuity can result in inefficiencies in snow removal and general maintenance. An example is Imperial and Burgettstown Road at Robinson Road near Imperial. This 1.6-mile road segment is owned and maintained by the county; however, there are no other county-owned and maintained roadways within several miles of this area.

There are many areas where the county maintains a number of roadways in a continuous pattern. The most obvious is the county park roadway system. It is typical for Pennsylvania counties to own the roads in their county parks. It is atypical for them to own any other roads.

Allegheny County owns and maintains a wide range of roadways without regard to functional classification and Average Daily Traffic (ADT). The functional classification of county-owned roadways includes other Principal Arterials, Minor Arterials, Collectors, Local Roads and Park Drives. The ADT ranges from a high of over 60,000 (the Rankin Bridge) to roadways carrying only few hundred vehicles per day. The average ADT is 8,500 vehicles per day and the median ADT for the county system is 6,900 vehicles per day. (Refer to the 2010 PennDOT Type 4 Traffic Volume Map for Allegheny County: ftp://ftp.dot.state.pa.us/public/pdf/BPR_pdf_files/MAPS/Traffic/Traffic_Volume/2010/Allegheny_2010_tv.PDF)

The county owns roads and bridges that would normally be owned by the state (and therefore would be shepherded through the road and bridge condition analysis and funding process by the state). This has ramifications related to TIP funds and state Bridge Bill funds. The state allocates state and federal funds for infrastructure to each region, based on TIP formulas. The formulas do not deliver funds to major roads and bridges owned by Allegheny County in the same manner as if they were owned by the state. The total funds come to Southwestern Pennsylvania Commission (SPC), with targeted amounts allotted to each of three PennDOT districts. However, no targeted amounts are permitted as set-asides for major county roads or bridges.

Therefore, county-owned roads that would normally be owned by the state effectively become “less equal” when funds are designated. It should be noted that facilities that should be state-owned were, in fact, state-owned, they would be prioritized within their proper class and category. Those projects would likely move more effectively through the maintenance/reconstruction process if they belonged to the most logical entity. In the current situation, all entities involved cooperate well -- within the parameters in which they must function. But when the larger agency lists priorities, and the smaller agency's projects get tacked on at the end -- even though they are of equal magnitude and importance –

County of Allegheny
dependence on the largesse of the larger agency to “do the right thing” replaces a logical system in which priorities are determined as a whole by the facility owner.

ASSET MANAGEMENT

Asset management is a structured framework which addresses the life-cycle investment in roads and bridges. The framework is intended to:

- Be holistic, applicable to existing facilities and those that may be developed in the future;
- Provide the basis for making decisions across asset classes in an integrated manner and from a system-wide perspective about operation and maintenance as well as new construction and reconstruction; and
- Be easy to implement, cost-effective, and sufficiently beneficial for DPW.

Assets need to be managed collectively by asset type, as well as by segment, by corridor, by community, and for the system in its entirety. Recognizing that the current system of analysis has been used for approximately thirty years, the challenges only will grow greater as the system ages and there are more increases in vehicles miles traveled.

Transportation asset management is a developing field that provides a set of tools and techniques for managing infrastructure assets. Asset management is, at its core, a set of guiding principles and best practice methods for making informed transportation resource allocation decisions, and for improving the accountability for these decisions. AASHTO defined asset management as follows:

Transportation Asset Management is a strategic and systematic process of operating, maintaining, upgrading and expanding physical assets effectively throughout their life cycle. It focuses on business and engineering practices for resource allocation and utilization, with the objective of better decision-making based upon quality information and well-defined objectives.

The county-owned bridges do receive the biannual NBIS inspection, which is coded into the PennDOT Bridge Management System. Improvements to bridges consider several factors that include bridge inspection rating, traffic volume, posting and available funding. Bridge are typically funded with federal Critical Bridge (FCB) funding whereby the county secures 80 percent federal, 15 percent state and only 5 percent county funds. This funding mechanism has stretched available county funds.

Roadway funding has been stagnant for several years with actual spending around $6.5 million per year. The prioritization of roadway project is established by staff at the county district level along with DPW technical staff. A pavement management system is not being used because previous attempt have resulted in unsustainably cost systems.
The county does have a GIS system which could be augmented to assist DPW in developing an asset management system for the roadway system.

**CHALLENGES AND RECOMMENDATIONS**

**PROCESS**

**Challenge: Intergovernmental cooperation**
Intergovernmental cooperation among state agencies, cities, counties, towns and villages often produces less expensive and more efficient local government services. Allegheny County has 130 municipal governments all working to deliver similar service to their citizens. Efficiency in delivery these services through a collaborative approach can be achieved and provide improve service delivery.

**Recommendations:**
- Efficiencies could be achieved through enhanced and expanded shared snow removal agreements, including reimbursement for services or the transfer of certain roadway snow removal responsibilities among the county, municipalities and PennDOT.
- Potential Ownership Transfers between the county and the state. Although a formal process does not exist for ownership transfers, the county could enter into discussions with the state on the transfer of high-functional classified/high-volume roadways and bridges from the county to PennDOT, while transferring some appropriate lower functional classified /lower volume roadways and bridges to the county.

**Challenge: Delivery Process Improvements**
One important factor in securing public confidence and support for infrastructure improvement is predictability. Greater certainty is needed in terms of when environmental clearance can be obtained, how long right-of-way acquisition will take, whether all the permits can be secured and whether construction funding will be available.

**Recommendation:**
Expand the role of the county’s two design mangers to advance projects without securing PennDOT approval, or by greater coordination and synthesis between the county and PennDOT.

**Challenge: Right-of Way Acquisition**
On many projects, right-of-way acquisition has become the critical path element in the preparation of a project for lettings. This has been even acknowledged by MAP-21 (new two-year transportation bill) which allows right-of-way acquisition in advance of environmental clearance. Furthermore, based on a recent event, Allegheny County is not able to secure right-of-way for projects that have state and federal funding.

**Recommendation:**
The county should approach PennDOT to secure approval to secure right-of-way for road and bridge projects. The process needs to start as early as possible to ensure the right of clearance is secured prior to advertisement of project.

**Challenge: Project letting and records**
As a project nears the end of the design phase, the county receives the final plans and draft specifications from either a consultant or an in-house design squad. The county prepares a Plans, Specifications and Estimate (PS&E) package, which is subsequently forwarded to PennDOT for approval prior to letting and use the PennDOT ECMS system.
Recommendation: Allow the county to develop the equivalent of ECMS to expedite project letting and record keeping.

Challenge: Permitting process
The county issues permits for highway occupancy permits and development and these permits must be issued in a reasonable timeframe for commence to proceed in a reasonable manner.

Recommendation: The county should evaluate the development of an electronic permitting system to expedite permit approval.

Challenge: Project inspection/monitoring: Projects are being monitored by DPW and in some instances the comptroller’s office. This leads to duplicative inspection/monitoring.

Recommendation: One county agency should conduct the inspection/monitoring and share information with other county agencies.

FUNDING

The Commonwealth of Pennsylvania provides funds to each county for the construction, maintenance and repair of county roads and bridges through the Liquid Fuels Tax Act of 1931. This act provides all counties with semi-annual allocations in June and December of each year. The act also allows the counties to allocate monies from this fund to their political sub-divisions for these same purposes. The county receives funding based on a formula established in the act.

The Commonwealth allocates one-half cent of the tax collected on each gallon of liquid fuels for distribution to the counties. The allocation formula is based on the ratio of a county’s average gas consumption in the years 1927, 1928 and 1929 to the total statewide consumption in those long-ago years. The allocations are calculated semi-annually based on actual revenues as certified by the Department of Revenue and distributed by the Bureau of Municipal Services to the counties in June and December. Allegheny County receives $4.5 million annually under the Liquid Fuels Tax Act.

The Commonwealth also allocates liquid fuel tax revenue for roadway construction, maintenance and repair to the municipalities under a different act and formula. These funds go to local municipalities, but do not flow to Allegheny County. This act (the Liquid Fuels Tax Act 655 dated 1955, and as amended) allocates funds to municipalities, and is based on the ratios of mileage and population of the municipality to the state totals. That is, 50 percent of the funds are distributed based on a municipality’s proportion of local road mileage to the total local road mileage in the state, and 50 percent on the proportion of a municipality’s population to the total population of the state.

Challenge: Equity Issues with the Allocation Formula County allocations are based on the ratio of average gas consumption in the years 1927, 1928 and 1929 to the total statewide consumption in those years. Because of demographic shifts, fuel usage and other factors, a current-day ratio is likely to be dramatically different.

The county allocation system does not consider the size of the roadway system that the counties are responsible for. This is contrary to the municipal fuel tax allocation system, which considers the mileage of local municipality maintained roadways.
The county allocation system also does not consider the magnitude of the roadway system. Allegheny County maintains nine major bridges and many high-volume roadways. This is not taken into consideration in the current allocation system.

**Recommendation:**

Based upon the information collected and analyzed above, along with discussions with Allegheny Public Works and Department of Economic Development staff, the county should encourage the Commonwealth to revisit the allocation formula for liquid fuel tax revenue to the counties. A system based upon miles of roadway, lane miles of roadway, bridge deck area and/or Average Daily Traffic would provide a more equitable allocation system.

**Challenge: Finding Other Sources of Revenue**

**Recommendations:**

- Funding Sources Identification. The state and local programs available for transportation funding need continuous monitoring to optimize the counties position on securing available funds. The new two-year federal transportation bill (Map 21) has various programs and grants. The county should identify an individual or retain outside support to monitor state and federal programs for funding transportation improvements.

- Raise alcoholic beverage tax from 7 percent to 10 percent. Dedicate the additional funds towards sustainable transit funding.

On Dec. 4, 2007, Allegheny County Council enacted an Alcoholic Beverage Tax for Allegheny County which was signed into law by the County Executive. On Dec. 2, 2008, Allegheny Council passed an amendment reducing the rate of the Alcoholic Beverage Tax from 10 percent to 7 percent effective Jan. 1, 2009, which was subsequently signed into law by the Chief Executive. Under state law, the county treasurer is the Tax Collector of all taxes levied in Allegheny County and thus responsible for the collection of this tax.

- **Gaming Revenue.** The County should consider a portion of the gaming revenue dedicated to infrastructure improvements.

Act 71 of 2004 was designed to produce tremendous benefits for its citizens through the introduction of the slots gaming industry to Pennsylvania and in 2010, table games. Legalized gaming in the Commonwealth is creating thousands of new living-wage jobs, generating revenues that will improve the quality of life in local communities, reinvigorating of Pennsylvania horse racing industry, and lowering the property tax of homeowners. For every dollar produced as revenue from slot machine play, 55¢ is returned to Pennsylvanians. Here is a breakdown of this taxation:
• **Marcellus Shale Revenue.** The county should consider leasing large tract of land owned by the county (i.e. Airport, Parks) for Marcellus Shale exploration and a portion of the revenue dedicated to infrastructure improvement. Advocate for the enabling legislation that would allow local government to pass funding initiatives for local transportation needs, in accordance with the Governor’s Transportation Funding Advisory Commission’s (TFAC) recommendations.

Pennsylvania Consolidated Statutes ([Act 13 of 2012](#)) was signed by Governor Corbett on Feb. 14, 2012 with some provisions going into effect upon signing and others will become effective on April 14, 2012. The law provides for the imposition of a gas well fee (also called a drilling impact fee), and the expenditure of the funds generated by that impact fee to local and state purposes specifically outlined in the law. The law also contains a mechanism as to how the fees shall be distributed. A significant portion of the fees generated will be used to cover the local impacts of drilling while several of state agencies will also receive funding for a variety of other purposes.

The law specifically provides for the imposition of an unconventional well fee by county (or alternatively municipalities compelling the imposition of an unconventional well fee). A county may impose the fee if unconventional gas wells are located within its borders and it passes an ordinance within 60 days of the effective date of the act. A county that does not pass an ordinance imposing a fee shall be prohibited from receiving funds. This prohibition shall remain in effect until a county passes an ordinance imposing a fee.

- **Public-Private Partnership (P3) Legislation.** The County should consider this delivery method for infrastructure improvements and/or asset management. A broad-based committee (technical, financial, legal) should be established to evaluate P3 proposals.

On July 5, 2012, by signature of Governor Tom Corbett, Pennsylvania joined 32 other states in the U.S. that authorize Public-Private Partnerships (also known as P3’s), an innovative transportation financing and project delivery mechanism that is endorsed by the U.S. Department of Transportation and the Governor’s Transportation Funding Advisory Commission (TFAC). The measure, [Act 88 of 2012](#), will allow private sector enterprises to propose new highway projects, and give state and local governments more flexibility to use firms to design, build, finance, and manage roadways.

- **Enabling Legislation for localities to impose tax.** Advocate for passage of the Governor’s Transportation Funding Advisory Commission (TFAC) recommendation, including legislation to allow local governments to initiate a funding initiatives to fund regional transportation improvements.

**Challenge: Impact Fees**

One-time impact fees from property developers to municipal, county or school district governments for off-site improvements necessitated by new development may be based upon square footage, number of bedrooms, number of bathrooms or other housing characteristics depending upon the use of the funds. These fees may be authorized by state-enabling statutes.

The Delaware Valley Regional Planning Commission (DVRPC) has promoted impact fees as one of its “Municipal Implementation Tools.” A guide published in 2004 describes the status of impact fees at that time: Act 47 and Act 209 of 1990, which amended Article V of the Municipalities Planning Code (MPC), provide for the use and management of impact fees for transportation capital improvements. Act 47 allows municipalities to delineate a Transportation
County of Allegheny

Development District (TDD), following the completion of a comprehensive transportation study that assesses the existing conditions of the district and identifies necessary improvements.

**Recommendation:**
A transportation improvement program must be prepared and impact fees can then be imposed for transportation capital improvements, but they must be based on (1) the total costs of the road improvements; (2) included in the capital improvement plan; and (3) be located within a given transportation service area affected by new development.

**Challenge: Value Capture (Assessment Districts and Tax Increment Financing)**
Value capture attempts to capture some of the increase in value due to the improvements which benefit the properties impacted. Assessment districts are special property taxing districts where the cost of infrastructure is paid for by properties that are deemed to benefit from the infrastructure.

**Recommendation:**
These assessments can be applied to the full value of the subject property, or use a Tax Increment Financing (TIF) technique in which bonds are issued to finance public infrastructure improvements and repaid with dedicated revenues from the increment in property taxes as a result of such improvements.

**Challenge: Community Facilities Districts (CFD)**
CFDs are creative funding mechanisms for infrastructure projects where residential and commercial property owners are charged an annual fee for the benefit of specific infrastructure needs in their area. CFDs seem suited to regional projects and programs as they are not tied to a specific facility as is the case with most other beneficiary charges. They have been used in California and to a lesser extent in Arizona, Illinois, New Mexico, and Hawaii. Although they have seen limited use for transportation to date, there may be larger potential in the future. Pennsylvania’s equivalent to CFDs is the municipal authority. An authority can be organized by any governing entity, acting singly or jointly, within two general categories: operating and leaseback. An operating authority is totally on its own, selling bonds to finance its projects, operating the project and paying off its debt from project revenues. Municipal officials have no role in operating or paying for the project. Authority personnel operate the project and collect user charges directly.

A special type of business district authority is the Transportation Improvement Authority. Transportation improvement authorities operate under the provisions of the Transportation Partnership Act, 53 P.S. 1621, as well as the Municipality Authorities Act. Transportation improvement authorities build transportation improvements and fund them through property assessments, with the prior approval of the elected municipal officials. This allows creation of public-private sector partnerships to fund projects where benefits are restricted to a small area.

**Recommendation:**
The county should investigate CFDs and municipal authorities further for possible use as funding mechanisms for regional infrastructure maintenance.

**Subcommittee on Site Development**

Two key factors are impeding investment to attract and expand business in Allegheny County. Our topography provides unique challenges in developing real estate. Also, the public sector lacks the financial resources to make the improvements to infrastructure that are needed.
Excessive costs, uncertain timetables and the lack of public investment in infrastructure all stand in the way of attracting private investment in business sites. By pooling investment into a fund with regional matches, we could develop and market sites cooperatively and leverage regional expertise to address site development challenges. In addition, site developers have expressed frustration with multiple points of contact – at both the county and municipal levels – when it comes to permitting.

Streamlining this process could cut costs and investment delays, foster economic development in diverse communities and strengthen intergovernmental cooperation.

**CHALLENGES AND RECOMMENDATIONS**

**Challenge: Lack of Financial Resources**
The public sector lacks the financial resources to make the improvements to infrastructure (roads, water and sewer) that are needed.

**Recommendations:**

- By pooling investment into a fund with regional matches, we could develop and market sites cooperatively and leverage regional expertise to address site development challenges. We recommend that the Allegheny County Executive’s Office support a Site Development Fund, as envisioned by the Power of 32 initiative, to help prepare pad-ready sites for office and industrial development. Investors would have a position in a professionally managed, limited partnership fund. Due diligence teams would play key roles in ensuring money is disbursed fairly to sites with immediate market viability.

  Patterned after the Strategic Investment Fund and Pennsylvania’s Business In Our Sites program, such a fund would have long-term amortization, invest in sites that have demonstrated marketability, offer attractive interest rates, leverage private investment and help developers/land owners carry projects until absorption begins. Among good examples that should be prioritized are the Almono/Hazelwood site; the Buncher site in the Strip District; sites around the Pittsburgh International Airport; certain MonValley Brownfields; and the vacant 28 acres adjacent to the CONSOL Energy Center.

- The County Executive should advocate for re-capitalizing of Business In Our Sites and RACP funding from the state for site development. The County should assist private developers in securing these grants and loans.

- We recommend that some portion of the revenues generated by natural gas drilling on Allegheny County Airport Authority land be used to help capitalize the site development fund.

**Challenge: Multiple Points of Contact/Overlapping Jurisdictions**
Site developers have expressed frustration with multiple points of contact – at both the county and municipal levels – when it comes to permitting.

**Recommendations:**

- The county should re-institute a planning function to plan for future development and for preserving a sustainable, high-quality environment.
Permitting procedures related to site development should be coordinated by a single office. We recommend that efforts to coordinate with the Allegheny County Economic Development and its counterpart at the city of Pittsburgh be maintained and expedited.

We recommend that pad-ready site development be focused on Brownfields and Grayfields.

We recommend that pad-ready site development be focused on locations that can be developed as mixed-use communities in order to foster live-work-play nodes that minimize environmental and quality-of-life costs imposed by commuting.

Subcommittee on Water, Sewer, Locks and Dams

INVENTORY OF SEWAGE AND DRINKING WATER INFRASTRUCTURE

- Sewage Treatment Infrastructure (Source: Allegheny County Health Department)
  - 71 sewage treatment plants
  - 48 publicly owned treatment works
  - 23 private treatment facilities
  - 120+ municipal sewage collection system owners.

- Drinking Water Infrastructure (Source: Allegheny County Health Department)
  - 16 publicly owned water treatment plants
  - 1 investor-owned water treatment plant
  - 19 consecutive municipal water distribution systems
  - 6 commercial treatment facilities (bottled water and other)

- Municipal Stormwater Infrastructure
  - Stormwater system mapping and assessment is being developed under the municipal separate storm sewer system (MS4) state and federal permit requirements

- Locks and Dams
  - Seven lock systems are located in Allegheny County
    - Monongahela River
      - Lock and Dam #3, Elizabeth
      - Braddock Locks and Dams, Braddock
    - Allegheny River
      - Lock and Dam #4, Brackenridge
      - C.W. Bill Young Lock and Dam, Harmer
      - Lock and Dam #2, Highland Park
    - Ohio River
      - Emsworth Locks and Dam, Emsworth
      - Dashields Locks and Dams, Crescent Twp
CHALLENGES AND RECOMMENDATIONS

1. Sewage conveyance and treatment systems

1.1 Challenge: Wet Weather Plan Implementation

All 83 ALCOSAN service area communities and many of the remaining 47 municipalities and authorities are under some form of consent order and agreement or permit requirement with Allegheny County Health Department, the Pennsylvania Department of Environmental Protection (DEP) or the U.S. EPA to prepare wet weather plans to address sanitary and combined sewer overflows. Implementation of the Regional Long Term Wet Weather Control Plan will require extensive regional capital programs.

ALCOSAN’s Recommended 2026 Plan will result in approximately $1.5 billion in new capital expenditures for ALCOSAN and an additional $0.5 billion in expenditures for the municipalities in current dollars. Accounting for inflation, ALCOSAN and the municipalities will face capital expenditures of approximately $2.8 billion for the Recommended 2026 Plan. ALCOSAN’s Selected Plan will cost approximately $3.6 billion in current dollars and would meet established goals to not preclude the attainment of water quality standards and to eliminate SSOs (sanitary sewer overflows). However, implementing a $3.6 billion program through 2026 is unaffordable. As a result, ALCOSAN is proposing a phased course of wet weather controls. Preliminary analysis by ALCOSAN has indicated that annual ALCOSAN rate increases ranging from 10 percent to 12 percent through the implementation of the Recommended Plan may be necessary.

The draft ALCOSAN wet weather plan was made public at the end of July 2012 with an 80-day comment period that ends Oct. 19, 2012. The final ALCOSAN Wet Weather Plan is due in January 2013, while the municipal wet weather plans are due in July 2013. It is anticipated that the ALCOSAN and municipal wet weather planning will be integrated over the following year with subsequent approval of the regional wet weather plan in 2014. Under the ALCOSAN consent decree, the municipal obligations must be implemented through an enforceable order so new orders from the regulatory agencies are anticipated, but negotiation of 83 separate municipal orders with long-term compliance obligations is not practical, cost-effective or sustainable. Coordination is essential in order to achieve regional compliance by the 2026 deadline established by the ALCOSAN consent decree.

There are a series of challenges related to wet weather planning facing municipalities including increasing requirements to improve water quality, particularly wet weather impacts caused by sanitary and combined sewer overflows and stormwater. EPA has developed a new integrated watershed management strategy that will require holistic planning beyond municipal boundaries to allow flexibility in wet weather planning. Competing regulatory requirements such as the Municipal Separate Storm Sewer Systems (MS4) permits, total maximum daily load (TMDL) as well as combined sewer overflow/separate sewer overflow (CSO /SSO) compliance can all be considered when developing wet weather plan priorities under this new policy.

Wet weather planning and CSO/SSO compliance is not limited to the ALCOSAN communities. Most of the older towns along the rivers also have combined systems and are under either permit obligations or consent orders to develop wet weather plans as well. Although these costs are not yet defined, we estimate that there is several hundred million dollars in additional liability.
**Recommendation:**

The leadership of the County Executive Office should guide and coordinate the multiple parties involved with the ALCOSAN and Municipal Wet Weather Planning Process to provide the focus and vision needed to assure a cost effective and sustainable wet weather plan. Integrated water planning will help prioritize water quality improvements, including implementation of the regional wet weather plan.

This can be accomplished through the creation of a water advocacy coordinator in the County Executive’s office to develop and coordinate an integrated watershed management plan for Allegheny County watersheds. This strategy will set priorities for water management including regional wet weather planning, Act 167 Stormwater Planning (county level planning for the major watersheds), Act 537 Sewage Facilities planning (required municipal planning for sewer infrastructure), and water quality planning for waterways where TMDL has been established for “impaired” waterways. The cost for this coordination would be very small when compared to the potential costs to the ratepayers for failure to coordinate wet weather planning. As an example, a surcharge of $.01 per thousand gallons of water consumption across 500,000 households in Allegheny County will produce more than $300,000 in revenue annually. (Domestic consumption @ 60,000 gal/yr/household).

1.2 **Challenge: Wastewater System Management**

In Allegheny County, the ownership of most of the sewer infrastructure is distributed across more than 100 municipal councils and 34 municipal authorities. The prevalent governance model is similar to ALCOSAN’s with a centralized sewage treatment authority and collection system ownership by the customer municipalities. Historically, systems were underfunded to fully cover the level of operation, maintenance and capital improvements needed to maintain the systems. Although little has happened to change this model, through the municipal consent orders the ALCOSAN communities have significantly improved their knowledge of their system assets and liabilities which will help facilitate the discussion of future management options. It should be expected that after approval of the wet weather plan there will be new enforcement orders to the municipalities to implement the plan requirements. Continued ownership of the sewer infrastructure under this model is not cost effective or sustainable.

ALCOSAN has initiated a study of eight potential alternatives for regionalization of the ALCOSAN service area municipal systems and options that include the sewer systems outside of ALCOSAN and regional stormwater management within the county. The study is served by a steering committee of 36 stakeholders created by the Allegheny Conference for Community Development chaired by Carnegie Mellon University President Jared Cohen. The process is being facilitated with the consultants provided by ALCOSAN. A final report is scheduled for completion in December 2012.

Consolidation of municipal systems into regional authorities could provide for a more cost-effective and professional management approach. Regional authorities could also be involved in the management of storm sewer, stormwater management and flood reduction. Regional authorities provide many opportunities for more cost effective and professional system management.

**Recommendation:**

The County Executive’s office should initiate an implementation team of stakeholders with the charge to carry out the leading regionalization recommendation(s) of the study including legislative (state and local) solutions to incentivize system consolidation and sustainability.
1.3 **Challenge: Sustainable Funding**

Historically municipal wastewater rates have not reflected the real cost of providing service that has resulted in decades of deferred maintenance. The level of capital improvements and operation and maintenance through the distributed ownership of the wastewater infrastructure in more than 100 municipalities and authorities has triggered county, state and federal enforcement actions against the great majority of Allegheny County municipalities.

The ALCOSAN contracts with their original member municipalities were developed and executed in the 1950s and provide little incentive to control flow from these communities. The agreements do, however, hold the municipalities responsible for all delinquent sewer use accounts which assure ALCOSAN’s bond rating through guaranteed revenues.

**Recommendation:**

Allegheny County funding programs such as Community Development Block Grants (CDBG), Community Infrastructure & Tourism Fund (CITF) and others should require demonstration that the community sewer rates are adequate to provide the real cost of service including comprehensive operation and maintenance (O&M) programs or at least at an affordability level of 2 percent of Median Household Income (MHI) before providing grant funding. Funding decisions should leverage management changes to assure continued sustainability of the system or promote regionalization.

Allegheny County Health Department Regulation, Article XIV, Sewage Disposal, should be revised to require full funding of approved wet weather plans and adequate operation and maintenance programs and to require communities that cannot meet these requirements to look for consolidation opportunities.

1.4 **Challenge: Incentivizing Municipal Wet Weather Flow Reduction**

In ALCOSAN and all other Allegheny County sewer systems, the rate structure is based on consumer water usage. Therefore there is little incentive to customer municipalities to provide source reduction techniques to address inflow and infiltration or implement green infrastructure. There are several communities that joined the ALCOSAN system in the 1980’s and 90’s (Robinson Run communities, Collier and Penn Hills) that are charged a wet weather penalty for excessive flow. In these communities the surcharge is returned to them through an escrow account for the dedicated purpose of system improvements and rehabilitation for removal of excess flow.

**Recommendation:**

Review and encourage the use of innovative billing rate structures for customer communities to be implemented by ALCOSAN and other centralized wastewater treatment systems. For example, the city of Philadelphia has revised their billing structure for sanitary sewer treatment to reflect the amount of impervious area that customers have connected to the combined sewer system. The philosophy distributes the cost to the owners of large impermeable areas such as parking lots and other facilities that are contributing significant peak flows to the system resulting in wet weather overflows. The large cost of wet weather programs is in creating the capacity for these peak wet weather flows.
This type of rate structures provides an economic incentive to remove or reduce flows to the sewer system by rewarding those who remove storm water from the combined sewer system by reducing the impervious cover fee after corrective actions have been made.

In separately sewer areas, consideration should be given to revising the rate structure to pro-rate sewer billings based upon the amount of flow being delivered for treatment. This increase in billing due to wet weather infiltration and inflow would encourage investment in the system and result in reduced flow over time. This concept of source reduction may be more sustainable by directing some resources to address current systems problems, rather than investing the majority of the available funds to construct new facilities at the downstream end of the system. This emphasis of the sustainability of our current sanitary and combined sewer system will also help to address existing areas of basement flooding and future bacteria TMDL's that are due to overflows well above the points of connections with ALCOSAN.

2. Public Drinking Water Systems

2.1 Challenge: Changing Drinking Water Regulations

The Phase II regulatory treatment requirements under the Safe Drinking Water Act will require continual operator training, process modifications and capital improvements. Regulatory oversight includes “capability enhancement” studies by the DEP and an eight-step sanitary survey by the EPA. Allegheny County Health Department staff expertise may be lost through anticipated retirements and staff turnover in the next few years.

Recommendation:

The Allegheny County Health Department should be provided with the staffing and resources needed to continue to implement the Safe Drinking Water Program and take full responsibility for the implementation of the Safe Drinking Water Act.

2.2 Challenge: Source Water Quality

Source water quality continues to be a challenge to both surface and ground water treatment plants.

Recommendation:

The County Executive should charge the Allegheny County Health Department with evaluating the capabilities of each of the public drinking water treatment and conveyance systems to provide safe and reliable water supply for the next 25 years. All systems should be required to be able to provide a minimum of three days of continual safe supply through storage, system interconnects and/or alternate sources in case of source contamination or other system failures.

2.3 Challenge: Aging Water Distribution Infrastructure

Just as with the sewage conveyance systems, portions of the county’s water distribution infrastructure are approaching/exceed an age of 100 years. The same budgetary constraints have led to deferred maintenance and lack of proactive life cycle replacement resulting in aged and deteriorated pipelines that have failed and may at any time fail catastrophically. Failure of a major distribution line or river crossing could leave thousands if not tens of thousands of people without water for an extended period of time. As the system continues to age, failures will likely become more common and more significant.
**Recommendation:**
Regional leadership is needed to encourage and incentivize local water distribution systems to proactively perform periodic maintenance (such as pipe lining) and replace service lines that are beyond their useful life before they fail. Municipal water systems should be encouraged to adopt an asset-management approach to prolong the system life and aid in rehabilitation, repair and replacement decisions through efficient and focused operations and maintenance.

3. **Stormwater Management**

3.1 **Challenge: Local regulations**
There are numerous historic and conflicting land use and zoning regulations that need to be revised or repealed to allow the appropriate use of green infrastructure and encourage accepted stormwater best practices to promote sustainable low-impact development. 3 Rivers Wet Weather and the Environmental Law Clinic at the University of Pittsburgh are currently conducting an assessment of municipal codes and ordinances to identify the regulatory barriers to green infrastructure, low impact development standards and steep slope protection.

**Recommendation:**
Allegheny County Economic Development and Health Departments should be charged with developing countywide codes and regulations to assure appropriate and consistent requirements. Community Development Block Grants (CDBG), Authority for Improvement in Municipalities (AIM) and other county funding should be contingent on municipalities’ adoption and enforcement of these ordinances.

3.2 **Challenge: Increasing stormwater management requirements**
Municipalities with separate storm sewer systems (MS4) are required to renew their NPDES permits in 2012. These permits require the implementation of six minimum control measures (MCM) as described in the federal registry:

1. Public Education and Outreach,
2. Public Participation and Involvement,
3. Illicit Discharge Detection and Elimination,
4. Construction Site Runoff Control,
5. Post-Construction Stormwater Management in New Development and Redevelopment, and
6. Pollution Prevention and Good Housekeeping for Municipal Operations and Maintenance

Owners or operators of regulated small MS4s in Pennsylvania’s designated urbanized areas must implement a Stormwater Management Program that contains Best Management Practices (BMPs) to satisfy each one of these MCMs. In addition, for those small MS4s located in, or discharging to a waterbody for which a TMDL has been set, permittees must develop and implement control measures consistent with the wasteload allocation in the TMDL. These measures may include techniques such as reducing impervious areas, planting trees, constructing or upgrading recharge/infiltration facilities, retrofitting stormwater basins, restoring stream banks, establishing or re-establishing stream buffers and installing green infrastructure.
There are a number of streams in Allegheny County that have a TMDL currently or in development:

- Saw Mill Run
- Chartiers
- Pine Creek

**Recommendation:**
Municipal stormwater fee programs based on impermeable areas are beginning to be used in many cities to assist in reducing wet weather overflows in combined sewer systems and to address water quality and flooding impacts in separate storm sewer systems. Under the current economic programs, federal and state assistance to the county or municipalities cannot be anticipated for implementation of the regional wet weather plan as the costs will be borne by the ratepayers. Stormwater fee programs should be considered as an option to provide additional capital as they can provide equity in the distribution of wet weather compliance costs to the largest contributors of wet weather flows based on impermeable surfaces.

3.3 **Challenge: Implementation of Green Infrastructure**
Changes in policy, regulations and codes will help accelerate the implementation of green infrastructure (GI) in Allegheny County to reduce combined sewer overflows, improve water quality, and decrease the costs of controls needed for the wet weather plans being developed by ALCOSAN and local municipalities (when the use of GI is cost effective and appropriate). Implementation of green infrastructure and low impact development techniques require significant economic and regulatory incentives.

**Recommendations:**
- Identification or creation of an appropriate institution(s)/entity(ies) capable of addressing stormwater management on a comprehensive, equitable, hydrology (watershed) basis, which would also consider regulatory compliance, costs and incentives to promote effective and efficient stormwater management best practices.
- Implementation of institutional changes at the Allegheny County Conservation District so that they will take a more active role in sustainable stormwater management and education (such as is being done in neighboring Westmoreland County).
- Development of a county-wide model stormwater ordinance that integrates the use of green infrastructure to the maximum extent practical (a requirement of the Stormwater Management Act 167).
- Commitment to use or require low impact development practices and green infrastructure in all county-funded projects.

3.4 **Challenge: Chronic Flooding**
Chronic stream flooding continues to impact a number of urban downstream communities including Etna, Millvale, Pitcairn, Carnegie and Washington Boulevard in the City of Pittsburgh.
Recommendation:
The Allegheny County Department of Economic Development should continue to provide for the development and management of Act 167 Stormwater Management Plans for all watersheds in county. This update should address both new and existing development. Stormwater fee programs based on impermeable area for both private and public properties should be considered at the county or local level to provide the capital resources needed to address the priority flood areas. The stormwater rates should be structured to provide incentive to property owners to reduce or control stormwater runoff from impermeable areas.

4. Locks and Dams

4.1 Challenge: Deteriorating Infrastructure

Stable pools of water, created by our locks and dams (L/Ds), provide for commercial navigation, recreation, drinking water, firefighting water and sewage dispersal. Their role can no longer be taken for granted. Conditions at the L/Ds have declined severely and maintenance continues to be cut.

There are 11 surface drinking water intakes located in these pools that serve 90 percent of the residents of Allegheny County. There are also numerous industrial intakes used for manufacturing processes and cooling. They depend upon these stable pool levels to withdraw the water based on the elevation of the intakes.

A danger exists due to the increasing deterioration of the locks and dams. The concern is not only for the dams in Allegheny County but the dams just outside the county as well. Of particular concern are the locks and dams at Emsworth, Dashields and Montgomery on the Ohio; Braddock, Elizabeth and Charleroi on the Monongahela; and Allegheny 2, C.W. Bill Young and 4 on the Allegheny. Of these, only the dams at Braddock and Emsworth are not major concerns for stability.

The consequences of a failure at any one of these dams could impact on the availability of drinking water for tens of thousands of residents. While the responsibility to maintain the locks and dams is a federal one, improvements of river banks, including terminals is a state and local responsibility.

Opportunities for the transport of water, sand and chemicals related to the Marcellus Shale and natural gas developments are only beginning to be felt. Expertise and technical assistance will be necessary to assist with site locations, facility and environmental development.

Moreover, the Port of Pittsburgh Commission and Carnegie Mellon University have initiated a program to bring broadband wireless network infrastructure to the waterways, beginning with an interoperable test bed in the Pittsburgh Pool in Allegheny County. The network is expected to be built out along the three rivers in all of Allegheny County by December 2012. The test bed promises to provide opportunities not only for navigation, but also public safety, security and environmental monitoring as well.

Recommendation:
The county should advocate for federal appropriations to maintain and recapitalize these assets in order to protect pool levels for commerce as well as for drinking water.
The county should initiate contingency planning to understand the impacts of pool loss on drinking water and other critical environmental, commercial and recreational assets.

County of Allegheny
The county should provide technical assistance to companies interested in siting and permitting for new natural gas related facilities along the river.

The county should work with the Port of Pittsburgh Commission and Carnegie Mellon University to develop applications utilizing the new broadband wireless network including the monitoring of bridges, dams, air and water quality, and sewage outflows.

5. Consolidation

5.1 Challenge: Water and Waste Water Consolidation

Over the past decade there have been a number of studies and reports evaluating the region’s water and waste water systems that have all concluded that there are too many providers of wastewater services, which has led to inefficient management and regulation of those services. This problem of “water governance” was most recently summarized in the University of Pittsburgh’s Institute of Politics report developed by the Regional Water Management Task Force, chaired by CMU president Jared Cohen. In Allegheny County, distributed ownership and management is primarily a problem of our wastewater systems as drinking water services are already provided and managed more regionally.

There have been a couple of recent initiatives to assess consolidation or regionalization of wastewater systems should be in consideration of the ALCOSAN wet weather plan and the municipal consent agreement required feasibility studies on their wastewater alternatives. 3 Rivers Wet Weather funded six sub-regional consolidation studies in 2011 and as discussed previously, the ALCOSAN regionalization study is ongoing with a report expected in December 2012. In addition, as the issues of stormwater and green infrastructure continue to evolve, regional leadership or coordination of those activities will also be critical. There are a number of organizations that are playing roles in either sorting through these associated issues or providing a broader (multi community) management of wastewater and/or stormwater services.

There are three major water-related activities that are facing the region now and in the future: wastewater collection and treatment, stormwater management (runoff, flooding, water quality) and green infrastructure/source reduction. All of these come together in the wet weather planning and implementation the region is mandated to move forward with by the EPA and DEP. Wastewater treatment, stormwater and green infrastructure/source reduction have typically been looked at as municipal responsibility. However, truly effective solutions require that these issues be evaluated from a multi community or regional view. A catalyst or facilitator will be needed to move the region forward into an era of professionally managed water resources. This role will also be crucial in anticipating future regulatory requirements and working with the affected stakeholders to make sure they respond appropriately. The county or its designated organization can work with the stakeholders to develop a more efficient system of managing the county’s water resources.

There are a number of groups that are providing regional leadership on these issues which form a foundation to build from for future sewer system consolidations. These include:

Potential Regional Consolidation Candidates

ALCOSAN
Pittsburgh Water and Sewer Authority
McCandless Township Sanitary Authority
Girtys Run Joint Sewer Authority
Wilkinsburg Penn Joint Water Authority
Monroeville Water Authority
South Fayette Municipal

**Consolidation Facilitators**
- 3 Rivers Wet Weather
- Allegheny Conference on Community Development
- Pa Environmental Council
- Council of Governments

**Stormwater/Green Facilitators**
- 3 Rivers Wet Weather
- ALCOSAN
- Clean Rivers Campaign
- GTECH
- Green Infrastructure Network
- PWSA
- PEC
- Allegheny County

In addition, ALCOSAN and 3RWW have been working with the municipalities on the development of their wet weather plans and have been facilitators of the discussion on the need for consolidation. Recently the Allegheny Conference has also been working with ALCOSAN’s Regionalization Committee chaired by CMU President Jared Cohen

**Recommendation:**
The County Executive should initiate a working committee of the engaged organizations to develop the implementation plan for the recommendations of the ALCOSAN Regionalization Committee.
Next Steps

The members of the Infrastructure Vision Team and its subcommittees appreciate the opportunity to engage with the Allegheny County Executive’s office in the important work of improving our region’s infrastructure, and stand ready to assist further in any way possible.
Members

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