April 2013
Infrastructure Investments Necessary for Economic Success
Facing Our Future

New Jersey Association of Counties
Annual Conference Seminar
May 10, 2013
Agenda

- Introductions
- *Facing Our Future*: The Initiative
- Infrastructure and Economic Success
- Electric Power
- Transportation
- Water Systems Infrastructure
- Conclusion
  - What Can County Government Do?
  - Q&A and Contacts
Facing Our Future: The Initiative

- What is *Facing Our Future*?
  - Organized, independent and nonpartisan/bipartisan effort
  - Offers insight and analysis from volunteer Leadership Group of nearly 20 former gov’t cabinet officers, senior gov’t executives and public servants
  - Builds understanding about New Jersey's systemic fiscal problems
  - Fosters environment of informed public discussion – and future of NJ
  - Conducted without bias, hidden agenda, partisanship or political motivation

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**Facing Our Future Leadership Group Members**

- Nancy Becker
- William H. Byrnes
- Raphael “Ray” Caprio
- Michael Catania
- Sam Crane
- Kathy Crotty
- Christopher J. Daggett
- Robert Del Tufo
- John Farmer
- Gwendolyn Harris
- Michael M. Horn
- Feather O’Connor Houstoun
- Robert Hughey
- Jack Lettiere
- Marc Pfeiffer
- Deborah T. Poritz
- Ingrid Reed
- Robert L. Smartt
- Charles Venti
Infrastructure and Economic Success: The Problem

- Absence of integrated approach
- Inability to maintain current infrastructure
- Failure to fund adequate investment to spur economic growth
- Deterioration of primary drivers re: economic competitiveness – power, transportation and water
- Projection of growing, systemic fiscal gaps at all levels of NJ gov’t
Infrastructure and Economic Success: NJ’s Complex Puzzle

- Provide and deliver government services
- Identify types and levels of necessary change to meet priorities
- Consider other ways to deliver services
- Identify services that can be eliminated
- Develop process to obtain consensus

Establish Priorities

Identify needed public investments (i.e., transportation, education, water, sewer and storm water, technology)
- Determine funding
- Identify requirements to promote private sector economic activity
- Ensure New Jersey’s competitiveness
- Address fairness of tax structure (e.g., individuals, businesses, homeowners)
- Create/confirm tax incentives for investment and growth
- Confirm sufficient funding for 21st century government

Consider Possibilities for Change

- Revisit constitutional, statutory or societal requirements/expectations for 21st century
- Learn from other states, regional jurisdictions, municipalities and school districts
- Expand and inform public discussion (commission, forums, convention)

Increase Government Effectiveness and Efficiency

- Determine affordability of government we have
- Rethink current government organization and functions for excellence, efficiency and affordability
- Determine benefits of government restructuring to address new or emerging priorities
- Explore opportunities for change to create increased effectiveness and efficiency for service delivery
Infrastructure and Economic Success: Impact of Inattention

- NJ’s situation:
  - Complicated by history of underinvestment
    - Avoidance of routine maintenance and deferral of preventative maintenance
  - Widespread and cumulative impact
  - Inability of infrastructure to support economic growth
  - Results of deferred investment often unconnected to super-size or extraordinary weather events
Infrastructure and Economic Success: Two Views of NJ’s Needs

**Report of the American Society of Civil Engineers – NJ Section**

<table>
<thead>
<tr>
<th></th>
<th>Grade</th>
<th>Risk</th>
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<tbody>
<tr>
<td>Wastewater</td>
<td>D</td>
<td></td>
</tr>
<tr>
<td>Drinking Water</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>Dams</td>
<td>C-</td>
<td></td>
</tr>
<tr>
<td>Energy</td>
<td>C+</td>
<td></td>
</tr>
<tr>
<td>Roads</td>
<td>D</td>
<td></td>
</tr>
<tr>
<td>Bridges</td>
<td>D</td>
<td></td>
</tr>
<tr>
<td><strong>Overall</strong></td>
<td>C-</td>
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**ASCE 2009 Report:**
- **Overall National Grade:** D
- **NJ Grade:** C-

Facing Our Future:
- Significant investment needed over 5, 10, 20 years or more

**Transportation** investment needs – estimate of $21.3 billion over the period 2014-2018 just to cover short-term state critical needs...presumes level of federal and state funding that is unlikely and unpredictable...an additional $514 million per year needed to meet county and municipal transportation needs.

**Electric Power** investment needs – estimate of $8.9 billion...what utilities have invested/are planning to invest over the next 15 months to up to 10 years...estimates are based upon needs of the distribution system and improvements resulting in increased system reliability.

**Water Systems Infrastructure** (including wastewater and storm water) – estimate of $40.7 billion...includes drinking water infrastructure, wastewater and open space preservation over next 5-20 years.
Electric Power

Electric Power Infrastructure Investment Considerations

- Energy resources can change globally
- Unreliable power distribution hampers long-term economic prospects and development
- Infrastructure increasingly unable to withstand age and extreme weather
- Investments come principally from private sector; government influences/regulates only through state and federal laws
- Ratepayers bear the cost of investment, whether by rate increases or incentives promoted by state government (e.g., clean energy)
  - Balance how utilities can manage risk against what ratepayers are willing to pay to increase reliability
- Monitor ongoing investment and rate increases to ensure that both ratepayers, and not only shareholders, derive benefit
- Consider 21st century need for reliable power, digital economy requirements, growing losses from power failures, increased demand from residential customers (i.e., more home computing and communication devices, multiple digital televisions)
- Assume growing demand
  - From 1949 to 2011, primary energy consumption in the United States tripled. In all but 17 of those years, primary energy consumption increased over the previous year.

Key Points for NJ:

Investments come principally from private sector

Ratepayers bear cost of investment
Electric Power: NJ’s Considerations

- New Jersey’s retail electric rates – the costs charged to businesses – are among the most expensive in the nation.
- In order for New Jersey’s economy to grow, electric rates must be competitive with other rates within the region and preferably comparable to other places in the United States.
- Unreliable power distribution hampers long-term economic prospects and development.
  - Utilities need to manage risk while increasing reliability.
  - Reliability must be balanced against cost, and ratepayers need to determine whether they are willing to accept an increase in utility rates if that increase can be dedicated to improved reliability.

To put it simply: what is the balance between reliability and rates?
Electric Power: Recommendations

- **Redefine the mission of the BPU** to be proactive in long-term planning of the electric power system. The New Jersey Energy Master Plan can and should be a document that both guides private investment and allows the BPU to articulate what needs to be done to insure the reliability of utility service.

- **Acknowledge and address the need for long-term stability** among the executive leadership and the politically appointed membership of the BPU.

- Require that appointees to the BPU include individuals with relevant government, scientific, legal or academic experience.

- Restructure the compensation policy for professional BPU employees in order to attract and retain individuals with appropriate academic training and/or experience in public policy, economics, law and related scientific fields.

- **Adopt post-employment restrictions** to prevent a brain drain of BPU employees to the benefit of the state’s public utility companies or their legal advisors and consultants.

- Require the BPU to develop specific performance standards for the EDCs for each sector of the distribution system, including the protection of critical infrastructure, emergency preparedness and operations, facilities design and operations, communication coordination, personnel performance and training and system restoration.
Transportation

- Vision NJ’s transportation infrastructure
  - Attain condition of good repair for all components of NJ’s transportation system
  - Eliminate commuter and goods transport delays during peak travel periods
  - Zero-fatalities: a goal NJ can live with
  - Implement the most effective business model
    - Provide reliable transportation services at lowest possible costs for customers

- Understand transportation as a business
- Change the transportation business model
Transportation: The **Existing Infrastructure Investment Gap**

**Transportation Infrastructure Investment Gap**

State Long Range Transportation Plan (LRP) identifies a $21.3 billion or $4.26 billion need per year between 2014 through 2018.

**Annual Existing Recurring Revenue 2014 through 2018**
- Federal: $1.5 billion
- State: $1.247 billion
- **Total**: $2.747 billion

**Annual Projected Gap New Jersey’s Short Term Needs 2014 through 2018 per LRP**
- LRP: $4.26 billion
- Existing Revenue: $2.747 billion
- **Gap**: $1.513 billion

**Understanding the Transportation Infrastructure Investment Gap**

Note: The above information assumes that federal and state funding remains unchanged. The above does not include $363 million of current but non-recurring revenue, largely dedicated to the Pulaski Skyway, from the Port Authority of NY & NJ.

Using the above annual projected gap of $1.513 billion and adding the $514 million per year for county and municipal needs, the total transportation infrastructure investment gap is slightly more than $2 billion per year.

Note: The above gap does not include $514 million per year in county and municipal needs.
Key Points for NJ:

Rethink and change the transportation business model to support economic growth

Consider transportation as a public benefits corporation, regulated by an independent/appointed Board
Transportation: Recommendations….

- **Commit to a comprehensive and updated look at transportation needs.** Transportation investments should be determined not just through individual plans, but should reflect a coordinated state and local government approach along with long-term economic goals contained in an updated State Strategic Plan.

- **Identify ways in which transportation can better connect with customers.** It is time to look at transportation as a business, and determine how to provide services at the lowest cost.

- **Consider viewing transportation as a public utility or a public benefits corporation, treating transportation as a commodity or business service.** This new organizational approach can lead to cost effective planning and efficient provision of transportation services, and also to the funding necessary to maintain and expand transportation services.

- **Replenish funding** for New Jersey’s Transportation Trust Fund

- **Anticipate and adapt to funding changes.**
Transportation: Recommendations (cont’d)

- **Replenish funding** for New Jersey’s Transportation Trust Fund
  - Discontinue use of the Transportation Trust Fund to balance the State Budget
  - Renew the Transportation Trust Fund in FY 2017 for at least $8 billion over five years
  - Raise the motor fuels tax
  - Explore and adopt more elastic sources of revenue

- **Anticipate and adapt to funding changes. Why?**
  - All of the funding projections required for transportation infrastructure investment assume a level of both federal and state funding that is unlikely and unpredictable
  - Currently, New Jersey receives approximately $1.5 billion annually in transportation funding from the federal government
  - Reductions in traditional sources of funding further imperils the ability of transportation to support future economic competitiveness
Water Systems Infrastructure

- Visioning NJ’s water systems infrastructure
  - Ensure safe and adequate supply of public drinking water
  - Provide water supplies and wastewater treatment capacity to foster economic growth
  - Make the public and private investments today to avoid significantly higher costs tomorrow
Water Systems Infrastructure: NJ’s Needs....

By the numbers, New Jersey’s water and water-related infrastructure needs are ranked nationally as....

<table>
<thead>
<tr>
<th>Rank</th>
<th>Category</th>
<th>Need Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>by a wide margin in Storm Water Management needs</td>
<td>($15.6 billion)</td>
</tr>
<tr>
<td>2nd</td>
<td>in Combined Sewer Outflow Correction needs</td>
<td>($9.3 billion)</td>
</tr>
<tr>
<td>3rd</td>
<td>in Decentralized Wastewater Treatment needs</td>
<td>($2.2 billion)</td>
</tr>
<tr>
<td>4th</td>
<td>needs to repair and improve its Secondary Treatment and Advanced Treatment infrastructure needs</td>
<td>($6.3 billion)</td>
</tr>
<tr>
<td>4th</td>
<td>in Nonpoint Source Pollution Control needs</td>
<td>($1.8 billion)</td>
</tr>
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‘NJ aging infrastructure is an area for concern…….’

American Water Works Association
American Society of Civil Engineers
US Environmental Protection Agency
numerous public advocacy watchdog groups
Water Systems Infrastructure: NJ’s Needs (cont’d)

<table>
<thead>
<tr>
<th>Category</th>
<th>Need $ (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wastewater treatment</td>
<td>$6,299</td>
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<tr>
<td>Pipe repair and new pipes</td>
<td>2,308</td>
</tr>
<tr>
<td>Recycled water distribution</td>
<td>99</td>
</tr>
<tr>
<td>Combined sewer overflow correction</td>
<td>8,176</td>
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<tr>
<td><strong>Subtotal Wastewater Treatment Needs</strong></td>
<td><strong>$16,882</strong></td>
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<tr>
<td>Conveyance infrastructure</td>
<td>$483</td>
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<tr>
<td>Treatment systems</td>
<td>$107</td>
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<tr>
<td>Green Infrastructure</td>
<td>$14,928</td>
</tr>
<tr>
<td>General Stormwater Management</td>
<td>$108</td>
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<tr>
<td><strong>Subtotal Stormwater Management Needs</strong></td>
<td><strong>$15,626</strong></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$32,508</strong></td>
</tr>
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Add a minimum of $250 million over the next five years for open space to arrive at the $40.7 billion needed to meet NJ’s water infrastructure needs over the next 5-20 years.
Water Systems Infrastructure: Recommendations

- Update the New Jersey Water Supply Master Plan
- Strengthen the water systems infrastructure capital planning process at the state, county and local levels of government
- Obtain and increase funding for open space preservation to protect and preserve watershed lands to assure water supply and quality
- Maintain and expand regulatory efforts to preserve and enhance water quality in order to avoid a future need for building expensive filtration and treatment systems
- Upgrade outmoded and inadequate water systems infrastructure through support for initiatives undertaken by private and public water companies through increased fees
- Consider joint land-use planning as a shared municipal service for post-Sandy redevelopment; use this opportunity to rethink what is needed and what can be supported by public funds available for rebuilding
- Expand buy-outs of flood-prone vulnerable properties to minimize future damages and create natural buffer areas to protect infrastructure and developed areas
- Encourage the broader use of “green infrastructure”, including rain gardens, green roofs, pervious pavement, as well as a variety of restoration projects, to help address both stormwater management and water quality issues
Conclusion: What Can County Government Do?

- **Support clear, targeted infrastructure investments** – and prioritize them according to updated, long-term plans
- Encourage coordination of plans across levels of government and public interests – **break down the siloed approach to investments**
- Recognize that **infrastructure must be funded** and that such funding will require new sources
- **Consider different ideas that are in place elsewhere** in New Jersey, or even at other levels of government or in other places
- Ask **how planning and implementation can be shared or coordinated across levels of government** or across different jurisdictions. Continue dialogue and discuss a sensible course of action to address our long-standing, historic and future storms
Conclusion: Q&A and Contacts....

- **Facing Our Future** report
  - Highlights NJ’s long failure to maintain and invest adequately
  - Identifies long-term infrastructure needs that drive economic competitiveness
  - Includes specific recommendations on funding needs and sources
  - Provides fact-based, no-blame opportunity to understand and explore relationship across areas of infrastructure investment and with economic success

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**Keys to Successful Infrastructure Investment**

- View comprehensively rather than as discrete, disconnected areas
- Support consistency – and prioritization – in conjunction with long-range economic plans

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**NJ’s infrastructure – a legacy from past generations – decays from delayed repairs and deferred maintenance. This was our perfect storm before Sandy – and it remains today as we recover and rebuild.**
Conclusion: Q&A and Contacts (cont’d)

- Sign up for the regular news brief “Options in Action”
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- Learn more about Facing Our Future at www.facingourfuture.org

Thank You

Read Facing Our Future’s 2013 Report: *Infrastructure Investments Necessary for Economic Success*

*available at www.facingourfuture.org*