

October 24, 2008

**Ben S. Bernanke, Chairman**

Federal Reserve Board  
20<sup>th</sup> Street and Constitution Avenue NW  
Washington, D.C. 20551

**Henry S. Paulson, Secretary**

Department of the Treasury  
1500 Pennsylvania Avenue, NW  
Washington, D.C. 20220

**Re: Investing in Infrastructure Projects as Conduits for Economic Stimulus**

***Summary:** You have a legitimate concern about the potential lag time between investment in infrastructure and the resulting effects on job creation and economic activity. But unlike during the Great Depression, there are already many permitted, approved infrastructure projects across our nation that could be funded to immediately jumpstart the economy. To demonstrate this point, we polled DOTs in eight states. Attached to this letter is an illustrative list of more than 90 transportation projects worth \$4.0 billion that are now ready to go. Extrapolating these findings across all 50 states, we project that there are \$15-20 billion worth of transportation projects that could be put out to bid in the next 30 days, leading to contractors on site in the next 60-90 days—and generating a considerable flow of money back into the economy. This amount could be increased dramatically by adding ports, airports, hospitals, roads, rails, sewers, and water systems. Let's get back to building a "real" economy!*

**Dear Mr. Bernanke and Mr. Paulson,**

We are writing as a network of dedicated professors from public and private universities across the United States to endorse the idea of a "New, New Deal" to channel investment in infrastructure projects through state and local governments as a fiscal stimulus package for the American economy.

**Benefits of Infrastructure as Fiscal Stimulus**

Carefully selected infrastructure investments would:

- **Create Immediate Employment.** Infrastructure projects have repeatedly shown that they boost employment by creating highly dispersed construction, manufacturing, and small business activity.
- **Put Capital to Work in America.** Infrastructure investments would stimulate flows of money through multiple domestic sectors of the economy—as opposed to a general tax rebate that induces consumer spending on imported goods, which leads to money flowing out of the country.

- **Generate a High Multiplier Effect.** Infrastructure projects would lead to enormous secondary and tertiary expenditures within multiple sectors of the U.S. economy.
- **Remove Impediments to Growth.** By alleviating bottlenecks in the economy—such as port congestion, long lines at highways and border crossings, and electricity shortages that hamper growth—investments in infrastructure can achieve higher growth rates than other forms of public capital formation, especially given the decades-long neglect of infrastructure in many parts of America.
- **Put Young People to Work in the “Real” Economy.** Over the past decade, many young college graduates have preferred to work in high-paying financial services and related industries. A renewed emphasis on the real economy will bring young people back into value-added industries.
- **Ensure Long-Term Productivity Gains.** By creating enduring public assets, the long-term productivity of U.S. business would be enhanced and America’s position of global leadership in the world economy would be fortified.

### Challenges of Infrastructure as Fiscal Stimulus

As with any investment program, infrastructure investment poses challenges:

- **Lead Time.** As Chairman Bernanke noted in his testimony to the Budget Committee on Monday, new infrastructure projects typically require lead time to plan, permit, and approve—and this process can be long and unpredictable. But recent experiences, such as the contract award process for reconstructing the I35 Minneapolis bridge, show that certain project delivery systems can accelerate bidding and award procedures.<sup>1</sup>
- **Winter Months.** Even for projects that are already permitted and approved, it typically takes 30 days to bid out to a contractor and another 30 days for the contractor to set up sub-contracts and get crews on site. That would put us into the holiday season, freezing conditions, and heavy snowfall in Northern and Midwestern states, which would eliminate the possibility of some earthwork. Still, the construction industry is equipped to work in winter weather and in other regions—such as the Southwest—projects could proceed on a fast-track basis.
- **Industry Capacity Constraints.** If too much money is awarded to infrastructure too quickly, it could overwhelm the capacity of industry and create spot shortages of some construction materials, based on the types of contracts awarded and the timing of delivery. Moreover, there is a shortage of craft labor in some areas—though new projects would encourage on-the-job, community college, and technical training programs to ramp up quickly to help meet labor needs and ease unemployment.

### Recommendations

Should you decide to pursue a policy of infrastructure as fiscal stimulus, we suggest the following approaches for administering the program:

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<sup>1</sup> *See:* Five Engineering Lessons From the New, Reopened Minnesota Bridge, *Popular Mechanics Magazine*, September 30, 2008, <http://www.popularmechanics.com/technology/transportation/4285220.html>

- **Phased Program.** We believe that a fiscal stimulus package for infrastructure should have three components:
  - a. *Phase I.* First, an immediate capital injection of \$20-50 billion in the next 30 days for projects sitting in need of funds, to create a base level of new building activity that would sustain the economy through the winter months. A consulting organization could be retained and given two weeks to identify a list of candidate water, port, airport, road, rail, and electricity projects across all 50 states ready for immediate execution.
  - b. *Phase II.* Second, an immediate program to fund an objective, third-party, bipartisan panel of engineering and planning consultants to triage the entire nation—state by state, and sector by sector—to identify projects that could potentially add value to the American economy in the long run, in preparation for a larger injection of capital in spring 2009. We believe that a bipartisan panel of consultants could: (a) develop a master list of potential projects for funding, (b) establish a way to determine the relative value added of these projects to the American economy, and (c) prioritize the projects that provide the highest return on federal dollars. The approval process for such a list of projects could be modeled on the military's Base Realignment and Closure process (BRAC). Once the panel compiles the list, it should be voted on and approved up or down, without the option of adding or deleting individual projects to the list.
  - c. *Phase III.* Third, a major capital injection of \$100-500 billion in the spring and summer of 2009 for the projects identified during the nationwide triage.
- **Selection of Projects for Phase I.** Projects would be selected for immediate funding in fall 2008 if they meet three criteria:
  - a. They could be financed and put out to bid in the next 30 days, so that they would have an immediate impact.
  - b. They would add real value to our economy—say, by solving a serious congestion bottleneck or by creating immediate construction jobs and secondary and tertiary spending.
  - c. They would not be adversely affected by winter construction conditions, such as some road construction projects in the Northern and Midwestern states.
- **Availability of Projects for Phase I.** To determine whether a significant number of projects meet these three criteria, our Working Group polled the heads of various state DOTs, port authorities, and water authorities. We asked them to compile a list of permitted, approved infrastructure projects that were ready for immediate execution and that simply needed funding to go ahead, and that could serve as conduits of economic stimulus. The general consensus was that many projects have been put on hold over the past 18 months due to a 50% rise in construction costs and general funding shortfalls. Appendix 1 presents the conclusions and raw data from our polling exercise, and shows that across eight states more than 90 transportation

projects could immediately absorb more than \$4.0 billion in fiscal stimulus dollars. These eight states are home to 24.5% of the U.S. population. A crude extrapolation based on the total U.S. population indicates that \$16.1 billion is the approximate volume of fiscal stimulus that could be put to work in transportation projects. This number is probably a lower bound, since projects in cities, counties, MPOs, and special districts are not necessarily tracked by each state DOT. However, it is also true that harsh winter weather conditions would reduce short-run project feasibility in some U.S. states, which would suggest a downwards revision. As a final illustration, Appendix 2 identifies port projects for the Long Beach, CA region totaling nearly \$150 million and water reservoir projects in Georgia totaling over \$400 million. Additional investigations and similar calculations would need to be prepared to determine the total availability of projects in the water, power, airport, port, healthcare, and other sectors at local, city, county, state, and national levels.

We stand ready to serve to advance the ideas proposed.

Yours Truly,

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**Cc:** *Richard Cheney*, Vice President

*Steny Hoyer*, Congressman

*Edward Lazear*, Chairman of the Council of Economic Advisers

*James Oberstar*, Congressman

*Dave Obey*, Congressman

Nancy Pelosi, Congresswoman

*Members*, Transportation and Infrastructure Committee

**APPENDIX 1**  
**Illustrative List of Highway Projects Available for Immediate Phase I Stimulus Funding**

*Over the past three days we polled DOTs in eight U.S. states to assess how many infrastructure projects could become immediate recipients of fiscal stimulus dollars. We spoke with Directors, Deputy Directors, and Chief Engineers within each DOT and requested that they send us lists of projects permitted, approved, and ready for financing and bidding within 30 days. Table 1 below provides a summary of the data that was provided. Further down is the underlying data – i.e. specific lists of projects ready in each state. Due to obvious time constraints, we did not have time to vet the detailed project lists, but we trust that the representative at each DOT took our instructions seriously and only submitted those projects that could create immediate jobs and spending in the very short-run.*

**Table 1 - OVERALL SUMMARY**

	Project Value, for Stimulus (\$M)	Population (M)	Project Value, Per Capita (\$)
Alabama	\$ 877	4.6	\$ 190.65
Arizona	\$ 775	6.3	\$ 123.02
California	\$ 1,239	36	\$ 34.42
Georgia	\$ 300	9.5	\$ 31.58
Idaho	\$ 209	1.5	\$ 139.33
Louisiana	\$ 335	4.3	\$ 77.91
Maine	\$ 126	1.3	\$ 96.92
Wisconsin	\$ 100	5.5	\$ 18.18
	\$ 3,961	69	\$ 89.00

**ALABAMA DOT - \$877M**

There are \$877 million in construction projects that we could let to contract within the next few months. As we discussed, please include in your report the benefits of letting the projects to contract over a longer time period (up to 12 months) rather than a shorter time period (within 3 months).

Another recommendation is for the projects to be funded with 100% federal funds, not requiring a state match. Many states have cash flow problems due to decreased gas tax revenues, cost overruns on projects primarily due to the tremendous increase in the price of oil and the price of construction materials, and covering the cost of projects that were advance constructed until federal funds are available for project conversion.

<u>COUNTY</u>	<u>DESCRIPTION</u>	<u>COST</u>
Marengo	US-43, Linden Bypass and SR-69 Extension	\$38 Million

Talladega	SR-21 Additional Lanes from Kelly Creek to Munford	\$18 Million
Talladega	SR-21 Additional Lanes from Sylacauga to CR-213	\$74 Million
Talladega	SR-21 Additional Lanes in Munford	\$24 Million
Talladega	SR-275 from SR-77 to SR-21	\$31 Million
Talladega	Anniston East Bypass from Lake Yahou to US-431	\$36 Million
Lauderdale	US-43 from Killen to SR-64	\$19 million
Madison	SR-255 from Dan Tibbs Road to 1 mile north of SR-53	\$36 Million
Etowah	US-411 from Turkeytown to CR-20	\$38 Million
Jefferson	I-65/Corridor X Interchange	\$300 Million
Etowah	I-59 Concrete Pavement Rehab	\$87 Million
Madison	Memorial Parkway from Oakwood Avenue to Sparkman Drive	\$41 Million
Baldwin	SR-181 from CR-64 to US-90	\$22 Million
Houston	SR-52 from Taylor to Malvern	\$19 Million
Coffee	US-84 from New Brockton to Enterprise	\$16 Million
St. Clair	I-20 Additional lanes from MP 147.9 to MP 155.77	\$78 Million

### **ARIZONA, MARICOPA ASSOC. OF GOVERNMENTS - \$775 M**

Here are our [permitted and approved] 2009 projects that are ready to go:

Corridor Type	Begin	End	Cost Est. (M)	
I-10 West	GPL	Verado	Sarival	31.1
I-10 West	GPL/HOV	Sarival	Dysart	60.6
I-17	GPL	Carefree	Anthem	21.3

L303	New	Happy Valley	Lake Pleasant	230.9
L303	New	Lake Pleasant	I-17	179.4
RM	GPL	L101	SR51	179.1
RM	HOV	L101	Gilbert	35.9
SR85	GPL	Southern	I-10	36.9

GPL: General Purpose Lane

HOV: High Occupancy Vehicle Lane

New: Construction in new corridor

### CALIFORNIA DOT - \$1239 M

We have several projects that have been approved but may not proceed on schedule because of funding shortfalls. It appears that we could commit about \$620 million of "economic stimulus" funds to projects that will be delivered by April 1. These projects would not be funded this year in the absence of stimulus funds. In addition, "yet to be resourced" pavement preservation projects up to around \$100 million or so could be accelerated for delivery this year.

There are \$239.5 million (rounded) TCRP projects that are (according to the sponsoring agency) ready to go to construction this year. These projects include:

- Route 680, to add HOV lanes over the Sunol Grade. \$20 million.
- Route 405, add northbound HOB over Sepulveda Pass. \$48 million.
- Route 10, add HOV lanes over Kellogg Hill. \$62 million.
- Route 10, add HOV and auxiliary lanes from Waterford to Route 10. \$9.7 million.
- Route 198, construct expressway from Route 43 to Route 99 in Kings County. \$13.1 million.
- Route 46, construct segment 3 in Kern County. \$24.8 million.
- Route 580, add eastbound HV lane from Tassajara Rd. to Vasco Rd. \$18 million.
- Poplar, 25th and Linda Grande Separations in San Mateo County. \$11 million.
- Expand parking at Richmond BART station. \$2.8 million.
- Route 5, add HOV lanes from Route 170 to Route 118. \$6.1 million.
- Alameda Corridor East, Pico Rivera. \$3.5 million
- Alameda Corridor East, SANBAG. \$3.8 million.
- Operational improvements on streets near CSU, Fresno. \$398K.
- Route 101 access, Advanced Traffic Corridor System in San Benito County. \$922 K.
- Campus Parkway in Merced. \$5.5 million.
- Palm Avenue Interchange in Riverside County. \$10 million.

We would want to pursue State legislation that would deem the above TCRP commitments met, if stimulus funding became available for these purposes. This would free up future TCRF funding (when all remaining commitments have been paid in about ten years) for programming through the STIP.

We have about \$1.1 billion in unvoted SHOPP projects that will be delivered by April 1. Another \$166 million of projects are scheduled for delivery in the last quarter of this fiscal year. Remaining SHOPP funding capacity that could be applied against these projects is about \$886 million, leaving about \$380 million of delivered projects this year unfunded. We could cherry pick \$380 million worth of projects off the "unvoted" list. Big jobs on the list include:

Antlers Bridge Replacement, Shasta County. \$239 million.  
High Street Bridge Seismic Retrofit in Oakland. \$116.5 million.  
Route 99, in Merced County, replace bridges. \$44.3 million.  
Route 89 near Meyers, from Alpine County Line to Route 50, water quality improvements. \$25.8 million.  
Rest Areas at Shandon, Coalinga, Lakehead, Beckworth, Donner Summit, Hillsborough, Vallejo, Coso Junction, Crestview, El Centro; maintenance facilities at Nevada City, Livermore, Bishop, Boulevard, El Cajon. \$64.5 million.

**GEORGIA DOT - \$300M**

Proj Id	County	Ds	Prog Typ	Expanded Descr	Cong Dist Cd	Total
751310-	Fulton	ABERNATHY RD FM JOHNSON FERRY RD TO ROSWELL RD - GRTA	Reconstruction/ Rehabilitation	This project widens Abernathy Road from Johnson Ferry Road to Roswell Road from 2 lanes to 4 lanes, 4' bike lanes and 16' shoulders with 8' sidewalks divided by a 16' to 32' raised median.	6	\$12,108,960
0002228	Dooly	CR 104/PLEASANT VALLEY ROAD @ LITTLE PENNAHATCHEE CREEK	Replacement	The project is located on CR-104 in Dooly County at Little Pennahatchee Creek. The project is approximately 4 miles northwest of Vienna, GA and approximately 2.5 miles southeast of Lilly, GA. The project consists of the replacement of the existing bridg	2	\$1,633,837
M003308	Carroll	I-20 FROM SR 1/US 27 TO SR 61	Maintenance	This project proposes to replace the existing travel lanes on I-20/SR 402, which consist of concrete pavement, utilizing full depth Continuous Reinforced Concrete. The shoulders will be replaced with Hot Mix Asphalt. The project will also upgrade the gu	11	\$109,584,866
M003235	Dekalb	I-20 FROM SR 12/SR 124/TURNER HILL ROAD TO SR 20/SR 138	Maintenance	This project proposes deep milling and inlay, guardrail upgrades, and vegetation clearing of the I-20 corridor between SR12/Turner Hill Road to SR 20/SR138.	4	\$25,741,800
M003235	Rockdale	I-20 FROM SR 12/SR 124/TURNER HILL ROAD TO SR 20/SR 138	Maintenance	This project proposes deep milling and inlay, guardrail upgrades, and vegetation clearing of the I-20 corridor between SR12/Turner Hill Road to SR 20/SR138.	4	\$25,741,800
311910-	Bibb	I-75 @ CR 717/SARDIS CHURCH RD - NEW INTERCHANGE & WIDENING	New Construction	This project proposes to construct a partial cloverleaf AB interchange on I-75 at Sardis Church Road and to widen Sardis Church Road from just west of I-75 to Skipper Road. The typical section for Sardis Church Road will include four 12-foot travel lanes	8	\$34,973,640
M003340	Dooly, Houston	I-75 FROM CR 323/PINEHURST-HAWKINSVILLE ROAD TO SR 26	Maintenance		2,8	\$71,060,000
751300-	Cobb, Fulton	JOHNSON FERRY RD FM COLUMNS DR TO ABERNATHY & BRIDGE	Reconstruction/ Rehabilitation	This project will widen Johnson Ferry Road from Columns Drive to Abernathy Road. The project will provide 6 travel lanes from Columns Drive to Riverside Drive, 4 travel lanes from Riverside Drive to Abernathy Road, a 16' raised median, 4' bike lanes and	6	\$19,652,760

**\$300,497,663**

**IDAHO DOT - \$209M**

Per your request; these are projects that the Idaho Transportation Department has ready and are not currently funded or delayed due to funding.

Idaho could put approximately \$209 million in projects on the street.

These projects have not been officially been prioritized or approved by our Board and do not necessarily reflect the opinion or final priorities of our Board or the Department should funding be made available.

These projects are currently in our approved STIP or have been in the STIP and have been delayed due to funding challenges and construction materials inflation.

CN Year = the federal fiscal year that construction is currently planned.

Near = Near Planning Horizon (1 to 5 years outside our current five year STIP)

MID = Mid Planning Horizon (6 to 10 years outside our current five year STIP)

<b>Route &amp; Location</b>	<b>Program</b>	<b>CN Year</b>	<b>Cost \$(000's)</b>
US-2 Dover Bridge	Restoration	NEAR	40,000
US-95 Sandpoint to Kootenai Cutoff	Expansion	NEAR	15,000
I-84 Sand Hollow Concrete Pavement Rehab	Preservation	MID	7,300
US-93 Twin Falls Alternate Rte, Stage 2	Expansion	NEAR	74,000
I-84 Junction I 84/US 93 IC, Stage 2	Expansion	NEAR	15,500
I-86 Chubbuck IC Bridge	Restoration	MID	10,080
I-86 & I-15 Chubbuck - Pocatello Creek	Expansion	NEAR	24,000
I-15 Devil Creek - Downey SB PH 1	Preservation	MID	9,600
US-30 Soda Springs - Wyoming State Line	Safety-Turn lanes	MID	1,629
US-30 McCammon to 12th Street	Expansion	2010	4,000
SH-48 Rigby HS to Yellowstone Hwy	Expansion	2010	5,000
I-15 Idaho Falls to Osgood, NBL	Preservation	2012	1,500
I-15 Idaho Falls to Osgood, SBL	Preservation	2012	1,500

<b>PROGRAM</b>	<b>TOTALS</b>
<b>Preservation</b>	19,900
<b>Restoration</b>	50,080
<b>Safety</b>	1,629
<b>Expansion</b>	137,500
<b>Grand Total</b>	<b>209,109</b>

**LOUISIANA DOT - \$277M**

Here is the extra work we can deliver quickly should an economic stimulus package be forthcoming:

- \$80 million - force accounts for road and street repair work
- \$20 million - Interstate pavement preservation/rehabilitation projects
- \$80 million - non-Interstate pavement preservation/rehabilitation projects
- \$10 million - guardrail repairs

- \$10 million - roadside improvements (erosion repairs, ditch cleaning, etc.)
- \$22 million - widen LA 28 (417-01-0016) in Vernon Parish to 4 lanes from its junction with LA 465 to the Rapides Parish Line
- \$28 million - replace Prospect Street Bridge, LA 3087 (065-91-0016) in Terrebonne Parish
- \$40 million - widen I-10 in Jefferson Parish to 8 lanes from Veterans Blvd. to Clearview Parkway
- \$45 million - second phase of reconstruction of I-10 at Causeway Blvd. interchange in Jefferson Parish

### **MAINE DOT – \$126M**

Here is a list of projects that we submitted to our Delegation that we could award in 30-90 days from enactment and have underway immediately thereafter. This list was originally developed in January of this year and I believe was updated in September. As was discussed often at AASHTO this weekend, consideration must be given, however, to the fact that many states including Maine are entering the winter months, which would impact our ability to have these projects begin in a very brief window.

#### **Interstate**

- \$45,000,000 Brunswick to West Gardiner, I-295 North Bound rehabilitation, approximately 22 miles
- \$ 3,000,000 Sidney to Augusta, I-295 South Bound Mill & Fill, 9 miles

#### **Bridge**

- \$21,000,000 (Maine share) Kittery Memorial Bridge rehabilitation between Maine and New Hampshire. New Hampshire's share is also \$21 Million.
- \$ 7,000,000 Waldo-Hancock Bridge demolition and removal

#### **Pavement Preservation**

- \$3,700,000 Eddington, Main Road, 12.05 miles
- \$3,564,000 Skowhegan, Route 201, 7.96 miles
- \$2,615,000 Presque Isle, Route 1, 5.67 miles
- \$2,250,000 Carmel, Route 2, 3.78 miles
- \$1,449,000 Bingham, Main Street, 4.82 miles
- \$1,200,000 Pittsfield, Route 2, 3.53 miles
- \$1,116,000 Boothbay Harbor, Route 27, 5.83 miles
- \$ 760,000 Chester, Lincoln Access Road, 2.54 miles
- \$ 673,000 Benton, Route 11, 1.75 miles
- \$ 525,000 Lincoln, River Road, 1.72 miles
- \$ 207,000 Waterville Pleasant Street, .67 miles

#### **Transit**

- \$13,000,000 Trenton Intermodal Facility Construction
- \$ 6,000,000 Statewide Bus Replacement

**Ferry**

- \$12,500,000 Governor Curtis Replacement

**WISCONSIN DOT - \$100M**

I am a colleague of John Nelson's, and I have contacted the Wisconsin Department of Transportation (WisDOT) and they have a number of projects that are ready or could be made ready for bidding in a fairly short period of time. These projects represent real needs as their current budgets are not keeping up with the demands that exist for both new and rehabilitation type projects. WisDOT, however, is reluctant to identify specific projects because of concerns over identifying priorities and wanting the most flexibility in bidding the projects. With the winter climate it may make more sense to bid one type of project versus another to maximize the work that could be started immediately for example. They have said that they have well over \$100M worth of construction in projects that have plans at a stage where they could be bid quickly. Some as soon as 30 days and others at say 60 and 90 days. I know this is not the format you had asked for, but it is about the most definitive WisDOT wants to be at this stage of the discussion.

**APPENDIX 2**  
**Illustrative List of Port & Water Projects Available for Immediate Phase I Stimulus Funding**

**PORT OF LONG BEACH, CAPITAL PROJECTS - \$62M**

**A. Ready for Construction: 30 to 60 days:**

1. Pier G Administration and Marine Operations Buildings project: Contractor contract: \$45,890,000,
2. Harbor Scenic Drive at Harbor Plaza Drive Intersection Improvements.
  - a. Estimated construction value: \$1.1M
  - b. Bid due date: December 2008
3. Pier D Building Demolition. Estimated Construction cost \$190,000
4. ATMIS-S2326A Cameras, poles and foundations construction cost \$470,000
5. Demolition of the Intake Structure in the Back Channel if we get permits. Preliminary construction estimate is \$300,000.

**B. Ready for Construction within 4 months:**

1. Advance Transportation Management Intelligence System (ATMIS): Cameras, poles, foundations, Changeable Message Signs and traffic detection devices. Engineer's estimate is \$2,446,800

**C. Ready for Construction within 6 months:**

1. Pier G Maintenance and Repair Complex Buildings project: Estimated construction contract cost: \$89,000,000
2. HD-S2300 Site Preparation & New Road Widening Project. Estimated construction value: \$3.6 M
3. Pier C Shore to Ship Power Estimate Construction. Estimated Construction Value \$10,000,000.

## GEORGIA, WATER PROJECTS - \$400M

Project Type	Project	Jurisdiction	Grant Request	Project Total	Status	Readiness / K. Farrell's "category"	Water source
Reservoir	Bear Creek Reservoir	Newton County				Proposed Reservoir Projects That Have State Applications Submitted & In Various Stages Of Review	proposed pump storage from Alcovy R.
Reservoir	Bear Creek Reservoir	South Fulton				Proposed Reservoir Projects That Have State Applications Submitted & In Various Stages Of Review	proposed pump storage from Chattahoochee R.
Reservoir	Cedar Creek Reservoir	Gainesville / Hall County			Likely to develop a new associated water plant soon	"Recently" Finished Reservoirs Not Yet Used For Water Supply	Pump storage from North Oconee River
Reservoir	City of Braselton Reservoir	Braselton				Proposed Reservoir Projects That Have State Applications Submitted & In Various Stages Of Review	proposed pump storage from Mulberry River
Reservoir	Dog River Reservoir	Douglas County	3,250,000	13,000,000	State and Federal permits issued. Work is currently ongoing to raise the existing dam and increase yield.	Reservoirs Not Finished But In An Active Development Stage	
Reservoir	Future reservoir	Coweta County WSA	1,250,000	5,000,000			
Reservoir	Future reservoir	Heard County WA	2,000,000	8,000,000			
Reservoir	Glades Flat Creek Reservoir	Hall County				Proposed Reservoir Projects That Have State Applications Submitted & In Various Stages Of Review	
Reservoir	Hard Labor Creek Reservoir	Walton County	10,000,000	170,254,594	State & Federal permits issued. Dam design underway with dam construction possibly beginning late 2009 and lasting 2 years. Land purchases are ongoing.	Reservoirs Not Finished But In An Active Development Stage	Eventual pump storage from Apalachee River.
Reservoir	Hickory Log Creek Reservoir	Canton / Cobb County			State and Federal permits issued. Dam is built and reservoir is filling.	Reservoirs Not Finished But In An Active Development Stage	Eventual pump storage from Etowah River and flow augmentation to Etowah River.
Reservoir	Lake McIntosh Dam & Reservoir	Fayette County	4,899,975	23,295,572			
Reservoir	Line Creek Reservoir	Fayette County	5,000,000		State and Federal permits issued. Dam design submitted to State and under review. Site work underway. Projecting a built and useable reservoir by late 2011.	Reservoirs Not Finished But In An Active Development Stage	
Reservoir	Parks Creek Reservoir	Jefferson				Proposed Reservoir Projects That Have State Applications Submitted & In Various Stages Of Review	proposed pump storage from N. Oconee R.
Reservoir	Reservoir - land acquisition	Forsyth County	3,500,000				
Reservoir	Reservoir dredging	Winder	500,000	2,000,000			
Reservoir	Reservoir expansion	Newnan Utilities	2,500,000	10,000,000			
Reservoir	Richland Creek Reservoir	Paulding County				Proposed Reservoir Projects That Have State Applications Submitted & In Various Stages Of Review	proposed pump storage from Etowah R.
Reservoir	Russell Creek Reservoir	Dawson County	6,000,000	36,000,000		Proposed Reservoir Projects That Have State Applications Submitted & In Various Stages Of Review	proposed pump storage from Etowah R.
Reservoir	Thomaston Mills reservoir	Thomaston	1,637,500	6,550,000			
Reservoir	West Georgia Beech Creek	Haralson County	2,000,000	26,500,000			
Reservoir	West Georgia Beech Creek Reservoir					Other Proposed Reservoir Projects On The Radar Screen	
Reservoir	Yahoola Creek Reservoir	Dahlonega / Lumpkin County	5,366,739	21,466,958	Likely to develop a new associated water plant soon. Applied to GWSCGP for water treatment plant.	"Recently" Finished Reservoirs Not Yet Used For Water Supply	
Reservoir		Carroll County	8,000,000				
Water Treatment	Lower/move intake	Cumming	2,065,333	6,196,000			
Water Treatment	Mud Creek	Valdosta					
Water Treatment	Potable reuse project	Gwinnett County	1,000,000	72,265,000			
Waste Water Treatment	Varois sewer projects	Athens Clarke County		18,000,000	Part of a multi-phased sewer project where existing CWSRF funds have been committed		
Waste Water Treatment	Tunnel	Cobb County		35,000,000	Part of a multi-phased sewer project where existing CWSRF funds have been committed		
Waste Water Treatment	Tunnel	Gwinnett County		25,000,000	Part of a multi-phased sewer project where existing CWSRF funds have been committed		