

February 2010

THE LUCAS GROUP

South Carolina Unemployment Insurance Benefits: Financing the System

Prepared by:

THE LUCAS GROUP

116 Huntington Avenue, Suite 504

Boston, MA 02116-5749

Main: (617) 224-1212

Fax: (617) 224-1211

www.lucasgroupinc.com

February 2010

Report

About The Lucas Group

Government Solutions Team

During times when public policymakers are forced to choose between slashing budgets and raising taxes, governments are constantly challenged by an environment that demands exceptional accuracy as well as high quality, exemplary customer service. Our Team has built a reputation that we can be relied upon as experts that will help optimize government programs with cost-effective results.

We leverage our vast program experience and deliver solutions that help governments reach their objectives, despite the ongoing economic crisis. Our Government Solutions Team has a proven track record of delivering results for states, counties and municipalities across the country. We have experts who have played critical roles in and out of government, and who have helped shape government services. We find new efficiencies and identify savings opportunities without impacting critical services, and we help establish innovative public/private partnerships that meet the unique needs of beneficiaries. In the past, we have led a number of assignments in such areas as restructuring an entire department of health and human services, reforming employment programs, including welfare-to-work, modernizing eligibility systems, and developing other strategies for policy reform. Our Government Solutions Team remains committed to achieving positive results for all of our government clients.

Jay Lucas, Managing Partner

John Stephen, Partner

Table of Contents

About The Lucas Group 2

 Government Solutions Team..... 2

Table of Contents 3

Executive Summary 6

Methodology 10

Comparison to Other States 13

 Key Highlights 13

Borrowing Under the Federal Unemployment Tax Act (FUTA)..... 15

 Interest Payments 15

 FUTA Tax Credit Reductions 15

Impact of the Unemployment Insurance System..... 18

 Moral Hazard of Unemployment Insurance 19

 Effect of Payroll Taxes 20

 Experience Ratings 21

Recommendations for South Carolina 22

 Recommendation 1: 22

 The governor and state legislature should immediately pursue extending the waiver of interest that accrues on UI Trust Fund debt. 22

 Recommendation 2: 23

 Take active steps to avoid scheduled increases in FUTA taxes. 23

 Recommendation 3: 24

Allow flexibility in setting of UI tax rates to enable the implementation of timely performance feedback and prevent buildup of excessive reserves or depletion of UI Trust Fund..... 24

Recommendation 4: 25

 Develop experience ratings based on 5-year reserve ratios, rather than lifetime reserve ratios..... 25

Recommendation 5: 27

 Implement an efficient UI tax schedule designed to effectively mitigate negative implications of the current UI system. 27

Tax Option 1: 30

 1. Calculate revenues required to meet estimated annual benefits, loan repayment, interest payments, and Trust Fund solvency requirements. 30

 2. Set fixed rate classes according to reserve ratios. 31

 3. Provide a flexible method of adjusting rates as the UI Trust Fund is rebuilt over time. 33

 Summary..... 37

Tax Option 2: 38

 1. Calculate revenues required to meet estimated annual benefits, loan repayment, interest payments, and Trust Fund solvency requirements. 39

 2. Array employers into ordered classes according to reserve ratios..... 40

 3. Assign tax rates by class. 41

 Summary..... 44

Recommendation 6: 45

 Maintain competitive average new employer rate and develop industry-based rates for new employers. 45

Other UI Tax System Alternatives..... 47

 Individual Accounts 47

Theoretical Models of UISA.....	48
Real World Evidence from Chile.....	48
Administration of a Program in South Carolina	49
Transition Period	51
Alternative Systems of Insurance.....	51
Reemployment Bonuses.....	51
Appendix.....	53
Statement of the Unemployment Insurance Actuary, State of Alaska	53
Team Background.....	55
Endnotes.....	58

Executive Summary

South Carolina faces two fundamental problems with its Unemployment Insurance (UI) Trust Fund. First, the system is paying out significantly more than it is receiving, resulting in an underlying structural imbalance in the integrity of the Trust Fund and financing structure. Second, as a result of this imbalance, the Fund has become insolvent, which has required the state to borrow \$773.8 million from the federal government to continue paying benefits. Moreover, this debt is growing by roughly \$16.5 million each week.

An earlier report, *“South Carolina Unemployment Insurance Benefits: Report Evaluating the Administration of Non-Monetary Benefits”*, The Lucas Group outlined a number of areas where the state can improve the efficiency of the UI system that would help to alleviate the structural imbalance. However, this still leaves a massive debt to the federal government that must be repaid. Left unchecked, the federal mandated reimbursement of these borrowed funds would involve substantial across-the-board UI tax increases.

To ensure that South Carolina policymakers maintain control of the state’s UI tax structure instead of the federal government, the legislature must move quickly to develop a plan to repay these borrowed federal funds in a manner that best meets the goals of equity and future growth. Effective decisions on financing, coupled with the action items included in the programmatic review of the UI system, can move South Carolina to the forefront of states nationally in terms of providing a framework that will allow and encourage economic development while maintaining the integrity of the UI system.

To achieve these goals, we recommend:

- **South Carolina should work with the federal government to mitigate the impact of interest on the UI Trust Fund debt and seek an extension of the waiver of interest on the UI Trust Fund debt.** Without an extension and changes to the existing tax structure, South Carolina will be required to raise UI taxes or seek bonds to pay \$70.7 million in interest payments starting in January 2011. Moreover, interest payments will rise to \$90.9 million in 2012, \$105.3 million in 2013, with further increases thereafter.¹ State officials should work with the state’s Congressional delegation and federal officials to identify ways to reduce this impact.
- **Take steps to avoid the mandated across-the-board increase in federal UI taxes for outstanding loans.** This includes paying approximately \$35.6 million to the federal government, taking steps to ensure that there are sufficient UI tax revenues to pay all

benefits from November 1, 2010 to December 31, 2010, and increasing the net solvency of the UI Trust Fund by at least \$35.6 million.

- **Provide a more flexible and responsive UI financing system that will maintain adequate Trust Fund levels** by: 1) setting UI tax rates based on estimated costs utilizing a framework that includes taxation limitations, yet is responsive to transitory as well as enduring changes in the economy; and 2) requiring ESC to establish a team of UI tax experts who continually monitor and forecast the activity of the UI Trust Fund and report on its status.
- **Use 5-year experience rating measures instead of lifetime rating measures.** A 5-year review of an employer's UI history better reflects recent employment experience and the assigned UI tax rate will more accurately reflect employers' utilization of the UI system. A 5-year experience rating measure better aligns incentives to retain workers.
- **Implement changes to South Carolina's UI financing system in an integrated way that recognizes how the inter-related components work together.** Modifications to just one component should not be considered separately, as each component impacts employers differently. For example, simply increasing the taxable wage base to restore solvency will raise taxes on all employers, including those who have not laid-off any employees.
- **Select from several policy options a strategy that best fits the needs for job growth and stability of the UI system.** The report lays out several policy options that include:

Tax Option 1

- Adjusting the fixed UI tax rate schedule to improve UI experience-rating by expanding the number of reserve ratio classes and applying the appropriate tax rates to generate contributions comparable to long run average benefit costs and
- Providing flexibility to the system by setting forth solvency taxes/credits, based on the state's average high cost multiple (AHCM) up to 1.0/-1.0 percentage points in order to maintain optimal Trust Fund solvency, repay federal loans, and make necessary interest payments
- These changes, in the long run, will lead to a reduction in the UI tax rates for 53.7 percent of covered employers; keep the tax rates the same for 4.6 percent of covered employers, and increase tax rates on the 41.7 percent of employers that layoff most of the workers.

- This tax option results in a reduction in costs from \$9.80 to \$58.80 per worker for the “best” 53.7 percent of employers and increases in costs from \$88.20 to \$644.70 per worker for the 41.7 percent of the “worst” employers. The “worst” 40.0 percent of employers have tax increases greater than \$100 per worker.

Tax Option 2

- Utilizing an array method to assign employer tax rates to more predictably forecast UI tax revenues and bring contributions in line with projected benefit outlays;
- Implementing a temporary experienced-rated surtax to ensure employers with the largest benefit charges per taxable wages bear the greatest burden for enabling the state to pay accrued interest on its Trust Fund loans and to keep the FUTA tax rate from increasing on employers who have not laid-off workers; and
- Continuing to impose experience-rated solvency taxes/credits on employers to rebuild/draw down the Trust Fund to the level recommended by the Unemployment Insurance Advisory Committee.
- These changes, in the long run, will lead to a reduction in the UI tax rates for 50.0 percent of covered employers; keep the tax rates virtually the same for 10.0 percent of covered employers, and increase tax rates on the 40.0 percent of employers that tend to layoff the most workers.
 - This tax option results in a reduction in costs from \$0.96 to \$53.54 per worker for the “best” 50.0 percent of employers and increases in cost from \$6.93 to \$379.63 per worker for the 40.0 percent of the “worst” employers. Only the 5 percent of firms with the worst reserve ratios will see an increase in their taxes of more than \$90 per worker under this system.

Ultimately, state policymakers and the business community should work through these options to select the best solution that allows the state to repay the UI Trust Fund debt, ensure solvency of the UI system over the long haul and optimize growth in a way that rewards and incentivizes employers that retain employees.

- **Maintain competitive initial tax rates for new employers, and implement industry-based new employer tax rates for specific industries.** South Carolina has a relatively high initial UI tax rating for new employers, significantly higher than our regional neighbors, although this is partially offset by South Carolina’s lower than average taxable wage base. South Carolina

should reexamine the initial UI tax rate on new employers after changes to the experience-rated employers are made to ensure that South Carolina remains competitive in the region.

- **Additionally, South Carolina should consider a future overhaul of its UI system to bring transformational change to how beneficiaries receive services.** One example of this would be to shift from an employer-based structure to one in which individuals would have private accounts into which employers would pay while the employee is working. In the event of a layoff, workers could then draw from these accounts to pay expenses. At retirement, any funds left in these accounts would belong to the worker. Such a model would encourage employees to seek rapid employment, would remove the experience rating system from employers and would dramatically reduce state and federal involvement in the layoff and job search process. An example of this system is currently in place in Chile.

While our first report defines a number of options for reducing costs of the current system, those projected savings are not included in this analysis. If they are enacted, further reduction in short-term and long-term costs to employers will be realized.

Ultimately, South Carolina faces a steep climb out of the hole created not only by the current recession, but also the ineffective UI system that is currently in place. Finding a solution that will eliminate the debt that the state has incurred will not be an easy process, and as with all insurance systems, costs will rise in the short-term for many employers as the state's economy moves to recovery and the UI Trust Fund returns to solvency.

However, the current crisis represents an opportunity to leave the state primed to become more competitive over the long run with strong policy choices now. There are no short cuts and no easy answers that can avoid the impact of higher taxes over the near term. The right answer will involve solutions that put the long-term interests of South Carolina first.

The best answer to having a vibrant UI system is low unemployment. This results from low taxation of businesses, low utilization of benefits and employees who can readily find new jobs. We urge all policymakers to focus on solutions that will make South Carolina the most competitive place possible to facilitate job creation.

Methodology

The Lucas Group recommendations on reforming the financing of South Carolina’s UI system are based on aggregate data from the U.S. Department of Labor, including the distribution of employers by experience rate from 2000 to 2009, as well as unidentifiable firm level data from the South Carolina Employment Security Commission (ESC) for 2007 to 2009. The projections of UI tax revenues, benefit payments, Trust Fund balances, and accrued interest on Trust Fund loans were developed using the U.S. Department of Labor Benefit Financing Model for South Carolina. The employer, employee, and industry estimates were developed using the detailed ESC data.

The Benefit Financing Model was developed in 1977, and has since been modified and expanded by the Division of Actuarial and Fiscal Services in the Office of Workforce Security of the U.S. Department of Labor. The model was developed as a tool to project the condition of state UI Trust Funds several years into the future and to quickly assess the financial impact of various economic scenarios and possible law changes. The model was constructed to be extremely comprehensive yet flexible enough to adapt to individual states.

The “baseline” projection for 2010 to 2018 assumes no change to current law or benefit administration. The economic assumptions for projections are based on the latest forecasts from the Congressional Budget Office and the Office of Management and Budget. Specifically, the economic assumptions are:

Table 1: Economic Assumptions Utilized in Baseline Projections

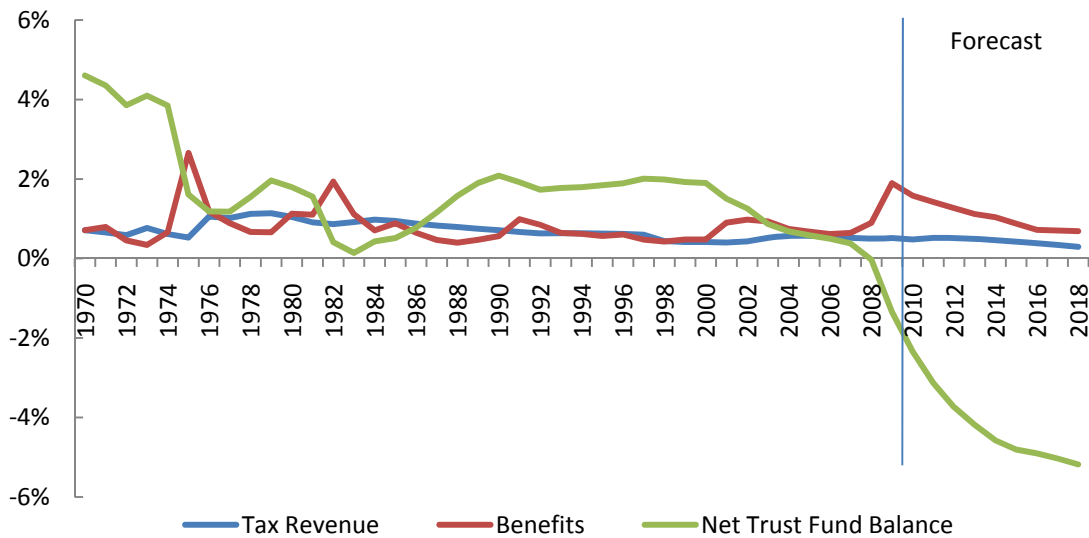
Year	Insured Unemployment Rate	Wage Growth	Labor Force Growth	Taxable Wage Base	Maximum Weekly Benefits
2010	5.40%	1.80%	2.00%	\$7,000	\$326
2011	5.00%	2.20%	2.00%	\$7,000	\$326
2012	4.60%	2.35%	2.00%	\$7,000	\$326
2013	4.20%	2.50%	2.00%	\$7,000	\$326
2014	4.00%	2.50%	2.00%	\$7,000	\$326
2015	3.50%	2.50%	2.00%	\$7,000	\$326
2016	3.00%	2.50%	2.00%	\$7,000	\$326
2017	3.00%	3.00%	2.00%	\$7,000	\$326
2018	3.00%	3.00%	2.00%	\$7,000	\$326

Source: Applied Economic Strategies, LLC, using U.S. Department of Labor data and Benefit Financing Model for South Carolina.

The Lucas Group recommendations on reforming the financing of South Carolina’s UI system also rely on a wide variety of data and information on other state UI systems and economic research that are identified in the endnotes.

South Carolina’s unemployment tax is the primary South Carolina UI History source of revenue for the state’s Unemployment Insurance (UI) Trust Fund and benefits. From 1970 to 2000, UI taxes sufficiently funded the state’s UI Trust Fund and benefits despite three recessions, including the severe recession of 1982 (Figure 1). Since 1998, South Carolina workers have received more in UI benefits than employers have paid in UI taxes (Figure 2), resulting in a significant decline in South Carolina’s UI Trust Fund balance. As of February 18, 2010, South Carolina has borrowed \$773.8 million from the federal government in order to continue paying UI benefits.² The state is currently borrowing approximately \$16.5 million per week.³

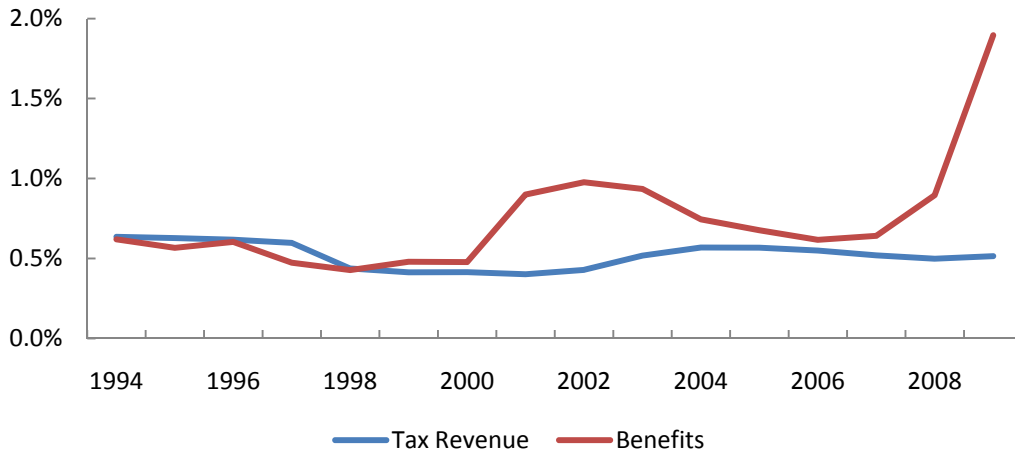
Figure 1: South Carolina UI Tax Revenues, Benefits Paid, and Net Trust Fund Balance*



Source: Applied Economic Strategies, LLC, using U.S. Department of Labor data and Benefit Financing Model for South Carolina. Forecast period assumes no change to current law or benefit administration. See methodology for forecast assumptions.
*Percent of Total Covered Wages less Reimbursable Wages.

The current economic recession has put additional stress on the state’s UI system. Although the insured unemployment rate (IUR) is expected to slowly decline in 2010 and subsequent years, it will remain well above its long-run average for the near future.⁴ Furthermore, unemployment benefits have increased in recent years as the average duration of unemployment has increased between 1.1 and 1.4 weeks from 1992 to 2006; and the number of people exhausting their unemployment benefits has also increased suggesting that more people are remaining on UI for longer periods of time.⁵ Moreover, the fixed taxable wage base (TWB), which has not been increased since 1983, has created a structural imbalance in the UI system as average weekly wages and weekly benefit amounts have grown.

Figure 2: Since 1998, Total Benefits Paid Have Significantly Exceeded UI Tax Revenue



Source: Applied Economic Strategies, LLC, using U.S. Department of Labor data and Benefit Financing Model for South Carolina. Forecast period assumes no change to current law or benefit administration. See methodology for forecast assumptions. *Percent of Total Covered Wages less Reimbursable Wages.

As South Carolina and the nation emerge from this economic recession, employment growth and, thus, UI tax revenue growth is expected to be slower than it has been in the past. Over the next nine years (2010 to 2018), UI tax revenue is projected to average \$290.1 million per year compared to \$687.5 million in benefit payments, an average difference of \$396.8 million per year.⁶ In order to continue paying UI benefits, the state is projected to borrow more than \$2.7 billion by the end of 2018 without any changes to state law.⁷

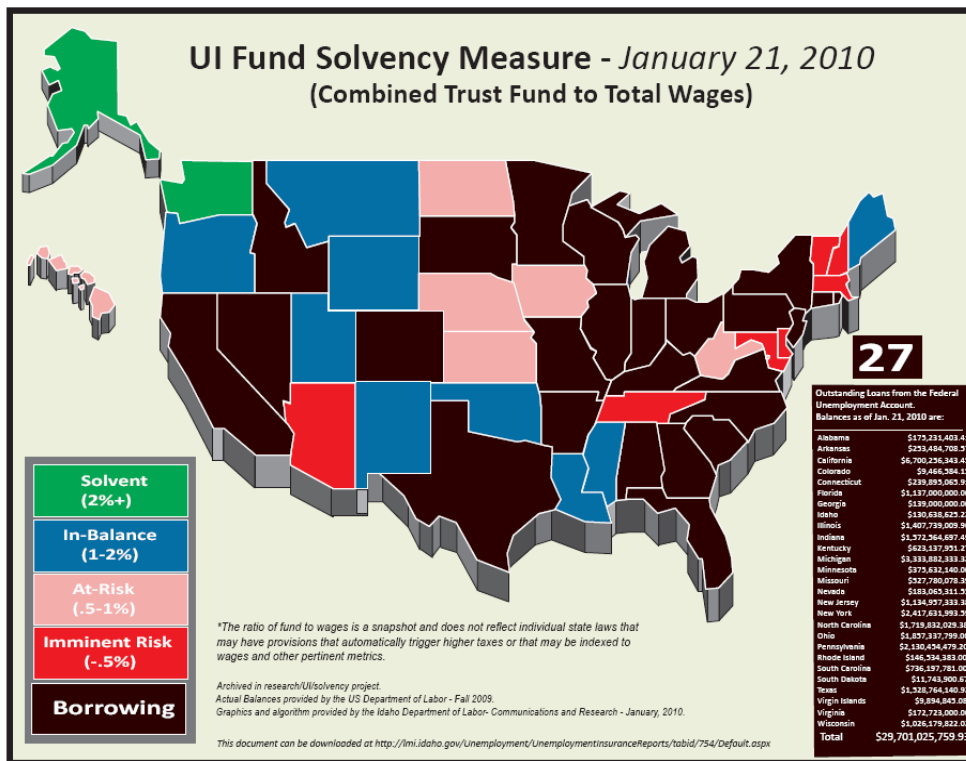
This report outlines the financing issues surrounding South Carolina’s UI system and provides recommendations for reform. These recommendations will not only address South Carolina’s immediate issues regarding repayment of borrowed federal funds, but they will also address the long term efficiency and adequacy of the system as a whole. Although the topic of monitoring and controlling benefit costs is important to the long term health of the overall system, that subject is covered in “South Carolina Unemployment Insurance Benefits: Report Evaluating the Administration of Non-Monetary Benefits”. This portion of the report specifically deals with the mechanisms of UI financing.

Comparison to Other States

Key Highlights

- Only three other states still have a taxable wage base of \$7,000. All eight states that enacted solvency legislation raised their taxable wage bases (AK, CA, FL, IN, NH, TN, VT and WV).
- Several states used triggers to allow automatic adjustments to their financing structure.
- South Carolina has the fifth highest amount of federal borrowing on a per worker basis.
- Interest due on loans from the federal Trust Fund will begin in 2011 without a waiver from the federal government.
- Almost every state will be borrowing from the federal government to fulfill Trust Fund obligations by 2012.

Figure 3: UI Fund Solvency Measure



Source: State of Idaho Unemployment Insurance Division

The issue of UI Trust Fund solvency is not unique to South Carolina. As of February 18, 2010, 27 states had exhausted their UI Trust Funds and borrowed \$32.3 billion from the federal government.⁸ On a per-worker basis, South Carolina ranks 5th among borrowing states (Table 1). By 2011, according to U.S. Department of Labor estimates, 40 state Trust Funds will have borrowed \$90 billion from the federal government in order to maintain benefit payments, a decrease of \$125 billion from the \$35 billion surplus balance the states enjoyed four years ago.⁹ Moreover, with weak employment growth and relatively high insured unemployment rate forecast for the next few years, many state Trust Fund balances are not projected to become positive again until well beyond FY 2014. Although states that have borrowed from the federal government have interest-free loans available to them until the end of 2010, interest will begin accruing in 2011.¹⁰

Table 2: Federal UI Loans Per Worker and State Rank

State	Federal Loan per Worker	National Ranking on Loan Per Worker
Alabama	\$107	23
Arkansas	\$240	15
Florida	\$167	20
Georgia	\$20	25
Kentucky	\$387	9
North Carolina	\$477	4
South Carolina	\$438	5

Source: Applied Economic Strategies, LLC, U.S. Department of Labor data.

A 2009 UI Trust Fund Solvency Survey by the National Association of State Workforce Agencies found that eight states have either introduced or enacted legislation regarding UI Trust Fund solvency during their 2009 legislative session¹¹. Specifically:

In all eight states (AK, CA, FL, IN, NH, TN, VT and WV) the legislation increases the state TWB. New Hampshire chose to increase its TWB in phases over the course of several years; from \$8,000 in 2008 to \$10,000 in 2010, \$12,000 in 2011 and \$14,000 in 2012. West Virginia, on the other hand, temporarily increased its TWB from \$8,000 to \$12,000 until Trust Fund levels reach a specified amount at which point the TWB will decline to \$9,000 and thereafter be indexed annually to annual wages.

Four states (AR, CA, IN and NH) reported the solvency legislation increases the effective tax rates on employers: Florida, New Hampshire, and Tennessee revised the state tax schedule trigger; Indiana and New Hampshire increased taxes on employers with poor UI claims experience.

Three states (IN, NH and WV) indicated their solvency legislation restricts benefits in some way. For example, Arkansas restricted eligibility for certain claimants discharged for misconduct, and West Virginia restricted benefit eligibility in minor instances of quits due to medical issues or work stoppages.

Four states (ID, KY, OK and WV) froze or indexed benefit increases in response to a general increase to UI tax rates or a low level of reserves in their UI Trust Funds. For example, legislation in Kentucky freezes the weekly benefit amount if the level of reserves in the State Trust Fund falls below a specified level. West Virginia requires their benefit freeze to remain in effect until the level of Trust Fund reserves increases to a specified level.

Borrowing Under the Federal Unemployment Tax Act (FUTA)

States may take cash advances, or loans, from the federal government when state Trust Funds are depleted.

Interest Payments

Normally, interest accrues on September 30th for any loans that are outstanding during the year. The current (fourth quarter 2009) interest rate is 4.4 percent. However, interest on loans has been waived under the American Recovery and Reinvestment Act from February 17, 2009 through December 31, 2010. If nothing is done South Carolina employers will be required to pay \$1.8 billion in interest payments on federal loans from 2011 to 2029.¹²

Under federal law, the payment of interest accrued on loans cannot be diverted from a state's normal UI tax revenue. Thus, other sources of revenue for interest payments, such as an additional solvency surtax on employers or the issuance of private-sector bonds, will be required to make interest payments commencing September 30, 2011 (Table 3). Failure to pay interest will result in complete removal of the 5.4 percent FUTA offset credit and loss of all grants for administration costs.

FUTA Tax Credit Reductions

The current net FUTA tax rate, after application of the 5.4 percentage point credit employers receive for timely payment of state unemployment insurance taxes, is 0.8 percent on the first \$7,000 in wages (\$56 per employee). However, if a state has outstanding loans for two consecutive years (January 2009 and January 2010 in the case of South Carolina) and they have not repaid the loans by November 9th in the second year (2010 for South Carolina), employers will lose 0.3 percentage points of the 5.4 percent FUTA tax credit, raising the net FUTA tax on employers to 1.1 percent (\$77 per employee, or an increase of \$21 per covered worker) in that year (2010 for South Carolina).

For every year thereafter that state loans are outstanding, employers lose an additional 0.3 percentage points of their FUTA tax credit and the net FUTA tax progressively increases to 1.4 percent in 2011, to 1.7 percent in 2012, to 2.0 percent in 2013, and so on until all outstanding loans are paid (Table 3).

The effect of these increases relative to the current tax schedule in place in South Carolina is shown in Figure 4.

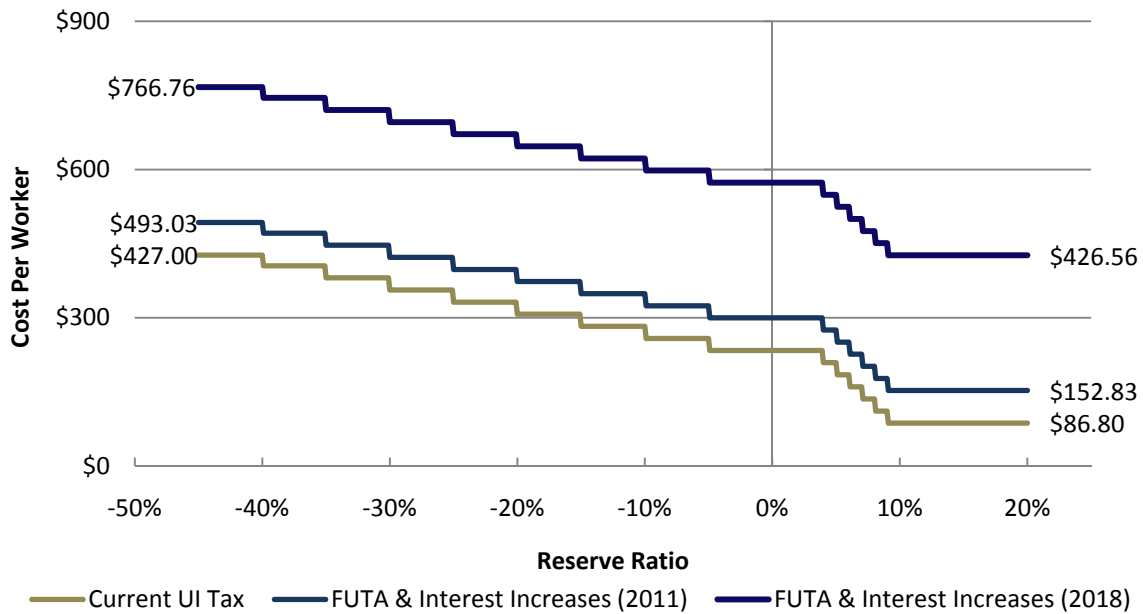
Because there is no experience rating aspect to the FUTA tax, the loss of FUTA tax credits effectively shifts costs from negative experience-rated employers whose employees frequently receive benefits, to positive experience-rated employers who do not use the unemployment insurance system as often.

Table 3: Additional FUTA Taxes and Interest Cost Per Worker from Outstanding Federal UI Loans

Year	Additional FUTA Taxes (millions)	Additional FUTA Taxes Per Worker	Interest Payable on Trust Fund Debt (millions)	Interest Cost Per Worker	Total Additional Cost Per Worker
2009	\$0.0	\$0	\$0.0	\$0	\$0
2010	\$0.0	\$0	\$0.0	\$0	\$0
2011	\$35.6	\$21	\$70.7	\$45	\$66
2012	\$73.8	\$42	\$90.9	\$57	\$99
2013	\$114.8	\$63	\$105.3	\$64	\$127
2014	\$158.8	\$84	\$119.5	\$71	\$155
2015	\$204.2	\$105	\$132.7	\$74	\$179
2016	\$255.5	\$126	\$137.6	\$75	\$201
2017	\$310.7	\$147	\$137.2	\$74	\$221
2018	\$362.1	\$268	\$136.2	\$72	\$340

Source: Applied Economic Strategies, LLC, using U.S. Department of Labor Benefit Financing Model for South Carolina. Forecast period assumes no change to current law or benefit administration. See methodology for forecast assumptions.

Figure 4: Additional FUTA Taxes and Interest Cost Per Worker Versus Current UI Cost Per Worker



Source: Applied Economic Strategies, LLC, using U.S. Department of Labor Benefit Financing Model for South Carolina. Forecast period assumes no change to current law or benefit administration. See methodology for forecast assumptions.

To avoid the FUTA tax rate increase, South Carolina would have to either:

1. Repay all loans (approximately \$1.1 billion) by November 9, 2010; or
2. Pay an amount equal to the credit reduction (0.3%) times total taxable wages at the federal TWB of \$7,000 (approximately \$35.6 million); and

Have the U.S. Department of Labor determine that state UI taxes between November 1, 2010 and December 31, 2010 are sufficient to pay all benefits during that period (approximately \$132.1 million); and

Have a net increase in the solvency of the state UI Trust Fund that exceeds the credit reduction (0.3%) times total taxable wages at the federal TWB of \$7,000 (approximately \$35.6 million).¹³

Given current South Carolina law, the likelihood that unemployment benefit payments will exceed tax revenue for the foreseeable future will greatly limit the system's ability to maintain a broadly shared forward funded UI program. Without reform, South Carolina will face years of

borrowing from the federal government or the private sector (Table 3). By 2014, if no changes are made to the UI tax system and/or benefit payments:

- Total UI benefits will exceed state tax revenue by \$392 million;
- Federal Unemployment Tax Act (FUTA) taxes will increase by \$158.8 million;
- Outstanding federal loans will be \$2.7 billion; and
- The state will owe \$119.5 million in interest on its federal loans.¹⁴

Table 4: Trust Fund Balance, FUTA Taxes, and Interest Payments Without Reform (millions)

Year	State Tax Revenue	Additional FUTA Taxes	Total UI Taxes	Benefit Payments	Interest Payable on Trust Fund Debt	Taxes + Interest	Trust Fund Balance
2009	\$264.0	\$0.0	\$264.0	\$973.5	\$0.0	\$264.0	-\$691.8
2010	\$267.4	\$0.0	\$267.4	\$883.7	\$0.0	\$267.4	-\$1,308.1
2011	\$304.2	\$35.6	\$339.8	\$831.0	\$70.7	\$410.5	-\$1,799.3
2012	\$317.5	\$73.8	\$391.3	\$777.4	\$90.9	\$482.2	-\$2,185.4
2013	\$319.6	\$114.8	\$434.4	\$721.1	\$105.3	\$539.7	-\$2,472.1
2014	\$309.3	\$158.8	\$468.1	\$701.3	\$119.5	\$587.6	-\$2,705.3
2015	\$300.3	\$204.2	\$504.5	\$621.6	\$132.7	\$637.2	-\$2,822.4
2016	\$290.8	\$255.5	\$546.3	\$536.9	\$137.6	\$683.9	-\$2,813.0
2017	\$266.6	\$310.7	\$577.3	\$550.1	\$137.2	\$714.5	-\$2,785.8
2018	\$240.6	\$362.1	\$602.7	\$564.9	\$136.2	\$738.9	-\$2,748.0

Source: Applied Economic Strategies, LLC, using U.S. Department of Labor Benefit Financing Model for South Carolina. Forecast period assumes no change to current law or benefit administration. See methodology for forecast assumptions.

Trust Fund borrowing will lead to both the payment of interest and progressively higher FUTA taxes and loan interest repayment charges on the state's businesses. The choice facing South Carolina is not whether to raise UI taxes; taxes will rise over time because outstanding state loans will result in progressively higher FUTA taxes to repay balances. The choice to be made regards the optimal manner to address the state's UI issues while minimizing the impact on job growth and unemployed workers.

Impact of the Unemployment Insurance System

The Unemployment Insurance (UI) system in the United States was created, at the national level, in 1935 to safeguard individuals, "against distress for a short period of time after they

become unemployed. It is designed to compensate only employable persons who are able and willing to work and who are unemployed through no fault of their own.”¹⁵

There are two main goals of the unemployment insurance system. At the individual level, the goal is to temporarily replace income of unemployed workers. At the national level the goal is to provide an automatic counter-cyclical force when the business cycle turns down. The current unemployment system is intended to provide only moderate benefits for a limited period of time.¹⁶

Replacing the income of unemployed workers is an effort to keep consumer spending steady during an economic downturn and provide a social safety net. Consumer spending is a key component of the macro-economy, and unemployment benefits can help workers maintain their consumption and make an economic downturn less severe.

The success of unemployment insurance replacing wages is often based on the comparison of consumption with benefits. Several economic studies have found that overall unemployment insurance prevents a strong decline in consumption due to job loss.¹⁷

Unemployment insurance is also viewed as a mechanism to help workers find jobs suitable to their skills. In theory, by receiving UI benefits workers can look for a job that better matches their skill set and previous compensation level instead of having to immediately take a lower skilled and lower paying job in order to pay their bills. However, the evidence linking unemployment benefits to better job skill match outcomes is mixed.¹⁸

Unemployment insurance is considered an automatic stabilizer, because insurance payouts begin without any government action. The legislative process can be too slow at the onset of a business cycle downturn and automatic stabilizers are seen as a way to lessen the severity of a downturn.

Unemployment insurance is also an entitlement that is guaranteed by the federal government. If a state’s unemployment Trust Fund is exhausted, then the federal government will loan the state money to meet its financial obligation. States are required to repay the federal government with interest if the loan is not repaid by November 9, 2010.

Moral Hazard of Unemployment Insurance

Unemployment insurance also has some negative consequences that are related to the concept of moral hazard. The more generous and lengthy unemployment benefits are, the longer an individual is likely to remain unemployed, because unemployment benefits subsidize leisure and reduce to the value of work.

Empirical research has found that extending unemployment benefits by a week will increase the duration of unemployment by .1 to .4 weeks.¹⁹ Increasing unemployment benefits by one-fifth, extends the period of unemployment by three to six percent.²⁰ Unemployed workers are also most likely to find jobs after their unemployment benefits expire. Workers typically spend 20 minutes searching for jobs in the fifteenth week of unemployment. However, in the days before benefit exhaustion this number jumps to 76 minutes for job searches.²¹

Unemployment benefits are also financed through taxation that businesses are statutorily required to pay. More generous benefits require heavier taxation, which reduces overall employment. A study by the OECD summarizes the downside of unemployment compensation. "A consistent finding is that generous unemployment benefits, high tax wedges and stringent anti-competitive product market regulation increase aggregate unemployment."²²

The United States unemployment system attempts to minimize the adverse consequences of unemployment insurance by making it contingent on an individual actively searching for a new job. Benefits are relatively low by European standards in an effort to minimize the distortion to incentives to find new work. Moreover, policy analysts continue to explore options for improving the U.S. system including alternative approaches such as the Chilean unemployment insurance system that relies on unemployment savings accounts.

Effect of Payroll Taxes

Although unemployment taxes are statutorily paid by the employer, the tax is ultimately born by the employees in the long term because the employers' share of wage taxes is part of the overall cost of employing an individual worker. Employers are indifferent to how compensation is distributed between taxes, wages, or benefits. Thus if the share of taxes that employers must pay rises, employers will reduce expenses in other areas such as benefits, wages, or hours of work²³.

However, in the short term businesses bear more of the costs of tax increases. It takes a number of years before the burdens of new taxes are shifted to workers and customers, and evidence suggests that businesses will bear more than half of the burden of new taxes for the next several years.²⁴

Historically, economists have believed that workers will not leave the labor force due to increased costs. Male workers have traditionally stayed in the labor force despite higher taxes, but more recent research reveals that male workers are sensitive to price changes in labor. Female employees are even more sensitive to price changes and are more likely to move in and out of the labor force depending on their compensation. Teenagers and young adults are the most likely to be affected by any tax increases.²⁵

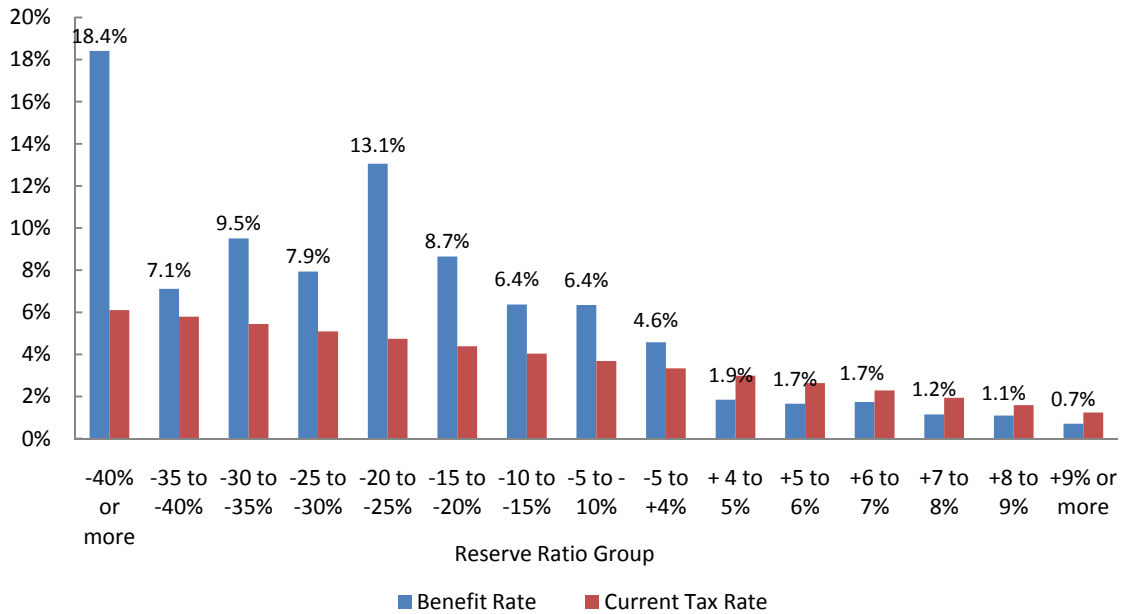
South Carolina's relatively low taxable wage base disproportionately affects low-skill workers. Since every employee at the same firm pays the same tax once they earn \$7,000 or more, then lower wage workers pay a higher share of their tax as a percent of their income. An increase in the taxable wage base would help low-skill workers. Higher-skill workers could be held harmless if there was a decline in the overall tax rate or a better experienced rating structure to offset the taxable wage base increase.²⁶

Experience Ratings

All states have pooled unemployment funds that have certain shared or "socialized" costs built into their UI systems. These pooled costs typically cause a state's experience rating measure and/or tax schedule to be inefficient to varying degrees. "Ineffective charges", a type of pooled cost, results from an employer that does not generate enough revenue to pay for UI benefits even though it is at the maximum UI rate. In 2008, South Carolina's ineffective charge rate of 23 percent of total benefits was 53 percent higher than the U.S. average of 15 percent, 77 percent higher than Georgia, and almost double the rate in Tennessee.²⁷

Figure 5 shows the extent of pool costs and ineffective charges in South Carolina's UI system based the total amount of taxable wages for each reserve ratio group. When the benefit rate (dark blue bars) is higher than the current tax rate (light blue bars), employers in that particular group are being subsidized by employers where the reverse is true. Figure 6 shows that on average employers with tax rates of 3.34 percent or more are being subsidized by employers with higher reserve ratios; in some cases significantly subsidized. This suggests that the current tax rates are too punitive on employers who rarely or never layoff employees and are not sufficiently experience-rated for employers who use the system extensively. The implication of such a UI tax system is that it distorts the economic decisions of firms. To the extent that incomplete experience ratings subsidize one industry over another, the relative size of these industries are shaped throughout the state.²⁸

Figure 5: South Carolina’s UI Tax Rates Are Not Sufficiently Experience-Rated To Pay For Benefits



Source: Applied Economic Strategies, LLC, using 2009 U.S. Department of Labor data for South Carolina.

Recommendations for South Carolina

Recommendation 1:

The governor and state legislature should immediately pursue extending the waiver of interest that accrues on UI Trust Fund debt.

The American Recovery and Reinvestment Act (ARRA) waived the accrual of interest on UI Trust Fund debt through December 31, 2010. If Congress were to extend the waiver through 2012, it would save South Carolina \$161.6 million in interest charges.²⁹ Extending the waiver through 2014 would save \$386.4 million. Without an extension of the a waiver, South Carolina will be required to implement a temporary surtax on employers or issue private-sector bonds to make the interest payment in 2011 and beyond. Failure to pay interest will result in complete removal of the 5.4 percent FUTA offset credit and loss of all grants for administration costs.

Like standard UI taxes, temporary surcharges to make required interest payments can be experienced-rated based on the ratio of employer reserves (UI tax contributions less benefits charged) to taxable payroll. This method will ensure that those employers with the largest

benefit charges bear a greater burden for the interest that accrues and those employers who have not laid-off any workers bear a lower burden of the surtax, or none at all. The surtax would have to raise \$70.7 million in revenue in 2011 (Table 5).³⁰

The implementation of this recommendation is detailed in Recommendation 5. Once the Trust Fund loans are repaid and interest is no longer accruing the temporary surtax should expire.

Table 5: Interest Costs Per Worker from Outstanding Federal UI Loans (Under Current SC Tax Schedule)

Year	Interest Payable on Trust Fund Debt (millions)	Average Interest Cost Per Worker
2009	\$0.0	\$0
2010	\$0.0	\$0
2011	\$70.7	\$45
2012	\$90.9	\$57
2013	\$105.3	\$64
2014	\$119.5	\$71
2015	\$132.7	\$74
2016	\$137.6	\$75
2017	\$137.2	\$74

Source: Applied Economic Strategies, LLC, using U.S. Department of Labor Benefit Financing Model for South Carolina. Forecast period assumes no change to current law or benefit administration. See methodology for forecast assumptions.

Recommendation 2:

Take active steps to avoid scheduled increases in FUTA taxes.

To avoid an increase in the FUTA tax rate, South Carolina will have to either:

1. Repay all loans (approximately \$1.1 billion) by November 9, 2010; or
2. Pay an amount equal to the credit reduction (0.3%) times total taxable wages at the federal TWB of \$7,000 (approximately \$35.6 million); and

Have the U.S. Department of Labor determine that state UI taxes between November 1, 2010 and December 31, 2010 are sufficient to pay all benefits during that period (approximately \$132.1 million); and

Have a net increase in the solvency of the state UI Trust Fund that exceeds \$35.6 million.³¹

Otherwise, Congress would have to pass legislation that suspends the FUTA tax increase as they have waived interest accrual under the ARRA. Without a suspension (which is highly unlikely),

the least costly way for South Carolina to avoid the increase in FUTA tax rates will require a temporary surtax on employers or the issuance of private-sector bonds to make the required annual federal payments (Table 5), *and* a significant increase in UI taxes to ensure that revenues are sufficient to pay all benefits from November 1, 2010 to December 31, 2010 (see Recommendation 4 below).

Again, an experienced-rated surtax based on employer reserve ratios can be implemented to ensure that those employers with the largest benefit charges per taxable wages bear the greatest burden for keeping the FUTA tax rate from increasing on employers who have not laid-off workers over the past three years. At a minimum, the surtax would have to raise an average of \$37.6 million in revenue from 2010 to 2013 (Table 6) to prevent FUTA tax increases on all employers. The implementation of this provision is detailed in Recommendation 5.

Table 6: Minimum Required Payment on Outstanding Federal UI Loans to Prevent FUTA Tax Increases

Year	Additional FUTA Payment (millions)	Average Additional FUTA Payment Per Worker
2009	\$0.0	\$0
2010	\$35.6	\$23
2011	\$36.9	\$24
2012	\$38.3	\$24
2013	\$39.7	\$24
2014	\$40.8	\$24
2015	\$42.6	\$24
2016	\$44.4	\$24
2017	\$45.3	\$24

Source: Applied Economic Strategies, LLC, using U.S. Department of Labor Benefit Financing Model for South Carolina. Forecast period assumes no change to current law or benefit administration. See methodology for forecast assumptions.

Recommendation 3:

Allow flexibility in setting of UI tax rates to enable the implementation of timely performance feedback and prevent buildup of excessive reserves or depletion of UI Trust Fund.

South Carolina has a relatively rigid UI financing system. This inflexibility has denied South Carolina the ability to adjust its TWB and UI tax rates to account for changes in economic conditions—both small ones that occur year-to-year as well as large ones that are brought on by economy-wide expansions and recessions. Although the statewide solvency “factor” provides some flexibility for South Carolina to adjust the state’s UI tax schedule without having to

continually change the law, it is far too limited (Table 7). For example, since 2004 the state has been at the highest tax rate schedule as the statewide reserve ratio fell from 1.4 percent to 0 percent.

A more flexible and responsive UI financing system will provide more stability to UI tax revenues and maintain adequate levels of Trust Fund balance. Furthermore, it will allow more timely adjustment to increase or decrease revenues in response to economic situations. This flexibility is particularly important given that UI tax rates will have to be increased above their optimal long-term levels in order to pay off the federal loans that have accumulated and to return the Trust Fund to a solvency level. A responsive system should be designed to *reduce* future tax revenues once the optimal level of solvency is reached so as not to unnecessarily burden employers and limit future job growth. To address this issue the following are recommended:

Set Rates Based on Estimated Costs: Any responsive, well-designed system should begin with the basic premise that tax rates should be based on the revenues needed to cover well-managed costs that are kept as low as possible.³² This principle will prevent the situation of raising too much revenue or too little. Moreover, the needs of the system can vary over time, as economic conditions change or as individuals and firms respond to incentives implicit in the system. A comprehensive, legislatively designed framework that sets taxation limitations while allowing responsiveness to transitory as well as enduring trend changes will guarantee UI system stability while ensuring the system does not impede statewide employment growth. Elements of this component are shown in Recommendation 5.

Charge Experts to Oversee the Health of the UI Trust Fund: The agency administering the Unemployment Insurance system should maintain a team of UI tax experts who continually monitor and forecast the activity of the UI Trust Fund, reporting its status to the state legislature annually at a minimum. Beyond this routine reporting, however, the committee should be charged month-to-month with identifying shifts in performance that would necessitate legislative action and immediately and proactively recommending necessary legislative changes—temporary or long term—in advance of ensuing negative consequences.

Recommendation 4:

Develop experience ratings based on 5-year reserve ratios, rather than lifetime reserve ratios. South Carolina currently utilizes an employer's entire history of UI tax contributions and benefit charges in conjunction with the most recent year of taxable payroll to calculate reserve ratios (UI tax contributions less benefits charged all divided by the most recent year of taxable payroll) for the purpose of assigning experience-rated tax rates to employers. The implications of continuing to use such a long history of benefits and contributions include:

- Use of such a long history slows and, in some cases, prevents changes in UI tax rates that more appropriately reflect recent UI experience.
- Firms with large negative reserve ratios from long past will find it difficult to change tax rate categories by improving current behavior, removing incentive to do so.
- Firms with large positive reserve ratios from long past may not change tax rate categories even if they layoff a large number of workers for one or two years, removing the incentive to minimize layoffs and reducing the efficiency of the state's experience rating system. Based on data from the U.S. Department of Labor ETA 204 reports, South Carolina firms with a lifetime reserve ratio of over 45 had an average 5-year reserve ratio of -1.7.³³
- The resulting mismatch between an employer's lifetime experience-rating and tax rate and their current UI benefit experience creates a mismatch between UI tax revenues and benefits that can have a negative impact on Trust Fund balances, especially in severe recessions that may occur only once every 20 years.

Of states with reserve ratio systems like South Carolina, 1 state (ND) uses 6 years worth of benefits in calculating reserve ratios.³⁴ Of states which use benefit ratio systems, all 17 states (AL, CN, FL, IA, IL, MD, MI, MN, MS, OR, PA, TX, UT, VT, VA, WA, and WY) use 3, 4 or 5 years worth of benefits in calculating benefit ratios. Moving to a current system of calculating reserve ratios rewards firms for their recent UI experience and maintains incentives for the appropriate use of the UI system.

Recommendation 5:

Implement an efficient UI tax schedule designed to effectively mitigate negative implications of the current UI system.

South Carolina's UI financing system is an integrated structure consisting of a taxable wage base (TWB), experience-rated tax rate schedules, statewide solvency triggers, and an administrative surcharge. These inter-related components work together to generate the state's UI tax revenue. Thus modifications to them should not be considered separately, as each component impacts employers differently. For example, simply increasing the TWB to restore solvency will raise taxes on all employers, including those who have not laid-off any employees. On the other hand, just increasing the tax rates on employers with negative reserve ratios and significant benefit charges would significantly increase labor costs on a number of businesses that are struggling through this recession and diminish the shared risk principal of the UI system. Any solution to South Carolina's UI financing issues must consider the issues underlying each of the components *together*.

South Carolina currently uses a reserve ratio formula to estimate an experience-rating measure for each covered employer that is then used to assign a UI tax rate using a fixed interval tax schedule. The tax schedule is a matrix of the 15 employer reserve ratio groups, a base tax rate schedule, and 7 state solvency tax rate schedules depending on the annual statewide reserve ratio computation (Table 7). Currently, all new employers in South Carolina begin with a 3.4 percent tax rate for one year. After that the each employer is eligible for an "experience rate."

South Carolina also has a 0.06 percent administrative contingency tax that is added to every covered employer who has a tax rate that is less than the highest rate on the schedule. In 2008, this administrative tax generated \$7.4 million in revenue to supplement the \$47.8 million the state received in FUTA revenue for its administrative grant.³⁵

Table 7 Current South Carolina UI Tax Rate Schedules

Employer's Reserve Ratio	Base Rate Schedule	Statewide Solvency Schedules						
		< 2.00%	< 1.90%	< 1.80%	< 1.70%	< 1.60%	< 1.50%	< 1.40%
+ 9% or More	0.54%	0.64%	0.74%	0.84%	9.40%	1.04%	1.14%	1.24%
+ 8.0 to 8.99%	0.89%	0.99%	1.09%	1.19%	1.29%	1.39%	1.19%	1.59%
+ 7.0 to 7.99%	1.24%	1.34%	1.44%	1.54%	1.64%	1.74%	1.84%	1.94%
+ 6.0 to 6.99%	1.59%	1.69%	1.79%	1.89%	1.99%	2.09%	2.19%	2.29%
+ 5.0 to 5.99%	1.94%	2.04%	2.14%	2.24%	2.34%	2.44%	2.54%	2.64%
+ 4.0 to 4.99%	2.29%	2.39%	2.49%	2.59%	2.69%	2.79%	2.89%	2.99%
+ 3.99 to - 4.99%	2.64%	2.74%	2.84%	2.94%	3.04%	3.14%	3.24%	3.34%
- 5.0 to - 9.99%	2.99%	3.09%	3.19%	3.29%	3.39%	3.49%	3.59%	3.69%
- 10.0 to - 14.99%	3.34%	3.44%	3.54%	3.64%	3.74%	3.84%	3.94%	4.04%
-15.0 to - 19.99%	3.69%	3.79%	3.89%	3.99%	4.09%	4.19%	4.29%	4.39%
-20.0 to - 24.99%	4.04%	4.14%	4.24%	4.34%	4.44%	4.54%	4.64%	4.74%
-25.0 to - 29.99%	4.39%	4.49%	4.59%	4.69%	4.79%	4.89%	4.99%	5.09%
-30.0 to - 34.99%	4.74%	4.84%	4.94%	5.04%	5.14%	5.24%	5.34%	5.44%
-35.0 to - 39.99%	4.09%	5.19%	5.29%	5.39%	5.49%	5.59%	5.69%	5.79%
- 40.0 or More	5.40%	5.50%	5.60%	5.70%	5.80%	5.90%	6.00%	6.10%
Avg. Tax Rate on Total Wages		0.36%	0.38%	0.41%	0.43%	0.46%	0.50%	0.51%

Source: South Carolina Employment Security Commission

The issues underlying South Carolina’s UI financing system go beyond the simple solution of just raising the TWB to increase tax revenues. The tax rate schedule is poorly experience-rated and results in significantly higher ineffective charges being paid for by employers that do not lay-off workers. Moreover, the statewide solvency triggers are far too limited and ineffective to stabilize the state’s UI Trust Fund when economic conditions quickly change. The fixed schedule of tax rates set a decade ago has not provided the ability to completely respond to changing economic conditions and Trust Fund solvency issues. The most optimal way to address South Carolina’s UI solvency issues is to consider the issues underlying each of the components *together*.

The elements and assumptions utilized in the development of both tax reform options include:

Recommended Trust Fund Balance: The Advisory Council on Unemployment recommends state UI Trust Funds be maintained at a level equal to an Average High Cost Multiple (AHCM) of 1.0, or approximate 12 months worth UI benefits at the state’s historical high rate.³⁶ The AHCM is based on the average of the most recent 3 years of the highest benefit rates out of the past 20 years. By the end of 2010, the Trust Fund balance needed to reach an AHCM of 1.0 will be \$894.7 million or a statewide reserve ratio of approximately 1.5 percent of total covered wages.³⁷

Indexed Taxable Wage Base: The U.S. Department of Labor recommends indexing taxable wages to the state's average weekly wage and adjusted it annually. South Carolina's Maximum Weekly Benefit (MWB) amount of \$326 is likewise indexed and currently set at 50 percent of the state's average weekly wage. The last time South Carolina raised its TWB was 1983 when the federal government raised the required wage base for all states. Since 1983, taxable wages have decreased from 47.8 percent of average weekly wages to 19.5 percent. The falling average has contributed to the solvency problems facing South Carolina since it has not allowed tax receipts to keep pace with the future growth in benefits due to higher wages.

Currently, 16 states (AK, HI, ID, IA, MN, MT, NV, NJ, NM, NC, ND, OK, OR, UT, WA, WY) have indexed their taxable wage bases, and West Virginia will move to indexation when their Trust Fund becomes solvent. Indexation has allowed these states to maintain a more solvent Trust Fund for a longer period of time.³⁸ In the current recession, only 5 states with indexation (ID, MN, NJ, NC, and NV) are currently borrowing from the federal government to pay unemployment benefits.

FUTA Requirements: While allowing states the flexibility to design their own UI systems, the U.S. Department of Labor has a rigid set of guidelines state systems must meet in order for employers to qualify for credits toward their FUTA taxes. One such requirement is that the top tax rate be at least 5.4 percent (regardless of the TWB, state economic conditions, or UI Trust Fund needs). As a result, each option has been designed to incorporate this element so as to satisfy these rules.

Freezing Benefit Amounts: In order to calculate estimates, it is assumed that weekly benefit amounts are frozen at current 2010 levels in which the MWB amount is equal to \$326. In light of the recommendation that the TWB be indexed to move—in tandem with the MWB—with average state wages, the TWB will not vary through the analysis either.

Paying Off All Federal UI Trust Fund Loans By 2018: Paying off the Trust Fund loans sooner than 2018 will require substantially larger increase in the TWB and/or tax rates, while delaying the payoff rate past 2018 will result in higher interest payments on the Trust Fund debt.

Due to difficulties obtaining and analyzing data from the South Carolina Employment Security Commission outlined in our prior report, options for UI tax finance reform presented in this section are based, primarily, on aggregate data obtained from USDOL. For this reason, estimates generated from analysis are just that—estimates. Prior to actual implementation of any of these options, the agency administering the state's Unemployment Insurance program

should pursue a thorough calculation of benefit, revenue, and fund estimates using detailed firm-level data to estimate the tax rates.

Furthermore, projections of national and statewide economic conditions are notable for requiring continual updates and revisions, particularly when forecast over a long period such as a decade. Therefore, projections to 2020 and beyond must be interpreted with this caveat in mind, and any solution implemented will require revision on a regular basis.

Finally, savings from options to control costs as presented in our first report, “*South Carolina Unemployment Insurance Benefits: Report Evaluating the Administration of Non-Monetary Benefits*” are not included in estimations developed for this study. It can be anticipated, that once implemented, these cost control methods will further reduce the tax burden facing employers throughout the state.

Tax Option 1:

An optimized system of reserve-ratio-based experience-rated tax rates combined with an increased and indexed Taxable Wage Base and triggered solvency tax schedules.

In reserve-ratio UI tax systems,³⁹ rates are set according to a range of reserve ratios, in which employers with lower reserve ratios (and, thus, greater layoffs) pay higher UI taxes than employers with higher reserve ratios (and fewer layoffs). In this fixed schedule of predetermined rankings, employer’s tax rates can change as their experience with the system changes over time. In most reserve ratio systems, the use of employer’s lifetime contributions and benefits are used to calculate reserve ratios creates little movement across tax rates on an annual basis. The fixed rate schedule can also prohibit timely response to changing economic and employment conditions throughout the state. Currently, 24 states utilize a fixed-rate reserve ratio UI tax system.⁴⁰ Of these states, 16 of them (AR, CA, CO, GA, IN, KY, MA, MO, NJ, NY, NC, OH, RI, SC, SD, and WI) have an insolvent Trust Fund.

1. Calculate revenues required to meet estimated annual benefits, loan repayment, interest payments, and Trust Fund solvency requirements.

Prior to setting a schedule of fixed tax rates, estimates must be developed of required annual benefit amounts, as well as loan repayment, and interest payment amounts over the near future. These estimates are shown through 2021 in Table 8. Calculations of each are made as follows:

- Benefit requirements are estimated based on the resulting coefficients of the regression of total annual benefits on the Insured Unemployment Rate (IUR).⁴¹

- Loan repayment amounts are based on repayment of the current outstanding loan of \$773,800,015.00 over the course of 7 years.
- Interest payment amounts are based on the existing USDOL defined interest rate of 4.3646 percent and are applied to the existing loan balance.
- Payments to restore Trust Fund solvency are estimated based on moving the Trust Fund balance towards an average high cost multiple of 1.0 within 5 years.

Table 8 Estimated Required Benefits and Loan, Interest, and Trust Fund Payments

Year	Benefit Requirements	Contributions			Total Contributions	Trust Fund Balance
		Loan Repayment & Trust Fund Restoration	Interest Payment	Benefits Paid		
2010	\$611,903,160	\$52,298,732	\$0	\$598,346,251	\$650,644,983	-\$723,811,057
2011	\$511,064,604	\$61,960,194	\$31,591,457	\$511,064,604	\$604,616,256	-\$723,947,595
2012	\$482,253,588	\$90,771,210	\$31,597,417	\$482,253,588	\$604,622,215	-\$661,987,401
2013	\$453,442,572	\$119,582,226	\$28,893,102	\$453,442,572	\$601,917,900	-\$571,216,191
2014	\$424,631,556	\$148,393,242	\$24,931,302	\$424,631,556	\$597,956,100	-\$451,633,964
2015	\$395,820,540	\$177,204,258	\$19,712,016	\$395,820,540	\$592,736,814	-\$303,240,722
2016	\$395,820,540	\$177,204,258	\$13,235,245	\$395,820,540	\$586,260,043	-\$126,036,464
2017	\$367,009,524	\$206,015,274	\$5,500,987	\$367,009,524	\$573,024,798	\$51,167,795
2018	\$367,009,524	\$180,693,821	(\$2,233,270)	\$367,009,524	\$547,703,345	\$257,183,069
2019	\$338,198,508	\$134,229,201	(\$11,225,012)	\$338,198,508	\$472,427,709	\$437,876,890
2020	\$338,198,508	\$84,442,295	(\$19,111,575)	\$338,198,508	\$422,640,803	\$572,106,091
2021	\$309,387,492	\$39,757,311	(\$24,970,142)	\$309,387,492	\$349,144,803	\$656,548,386
Average	\$416,228,343					

Note: Total contributions include interest payment (for years in which interest is owed), payments to cover benefit requirements, plus repayment of federal loans.

2. Set fixed rate classes according to reserve ratios.

Rate classes are defined in order to achieve the following:

1. Raise enough revenue to cover the average projected annual costs through the completion of obtaining solvency.
2. Improve the UI experience-rating and reduce the amount of ineffective charges being paid by employers that do not lay-off workers.
3. Implement an experienced-rated surtax to pay accrued interest on Trust Fund loans, to repay loan balances, and to rebuild the state UI Trust Fund.

To obtain contributions sufficient to cover an estimated level of benefits at a long run level, the base rate schedule shown in Table 9 is recommended. These recommended changes in the tax rates will improve experience-rating, reduce ineffective charges, and more fairly distribute the burden of achieving and maintaining Trust Fund solvency in the long run. Tax rates for each rate class are determined according to the benefit requirements as well as the taxable wage base. The minimum rate is set at 0.2% of the taxable wage base. This example is based upon a taxable wage base of \$14,000. In 2010, the average TWB for all states nation-wide is \$15,404.⁴² The highest wage base is \$38,800 in Hawaii.⁴³ Although alternative TWBs can be utilized, they will result in higher tax rates in order to raise required revenue.

Table 9: Recommended Fixed Reserve-Ratio UI Tax Rates (Base Schedule)

Reserve Ratio	Number of Firms	Estimated Taxable Wages	Percent Taxable Wages	Tax Rate	Tax Per Worker	Estimated Contributions
Less than -18%	4,706	1,272,593	5.03%	6.70	\$938.00	\$85,264
-18% to -16%	273	119,044	0.47%	6.20	\$868.00	\$7,381
-16% to -14%	321	97,871	0.39%	5.70	\$798.00	\$5,579
-14% to -12%	357	160,390	0.63%	5.20	\$728.00	\$8,340
-12% to -10%	447	258,840	1.02%	4.70	\$658.00	\$12,165
-10% to -8%	512	250,544	0.99%	4.20	\$588.00	\$10,523
-8% to -6%	579	179,925	0.71%	3.70	\$518.00	\$6,657
-6% to -4%	711	294,604	1.16%	3.20	\$448.00	\$9,427
-4% to -2%	847	336,264	1.33%	2.70	\$378.00	\$9,079
-2% to -0%	1,002	505,700	2.00%	2.20	\$308.00	\$11,125
0% to 2%	5,085	693,515	2.74%	1.50	\$210.00	\$10,403
2% to 4%	2,756	1,080,886	4.27%	1.35	\$189.00	\$14,592
4% to 6%	5,590	1,811,415	7.15%	1.20	\$168.00	\$21,737
6% to 8%	7,477	2,720,851	10.75%	1.05	\$147.00	\$28,569
8% to 10%	7,998	3,068,746	12.12%	0.90	\$126.00	\$27,619
10% to 12%	8,326	3,521,252	13.91%	0.75	\$105.00	\$26,409
12% to 14%	6,817	1,908,851	7.54%	0.60	\$84.00	\$11,453
14% to 16%	5,429	1,635,303	6.46%	0.45	\$63.00	\$7,359
16% to 20%	7,648	1,725,400	6.81%	0.30	\$42.00	\$5,176
20% to 30%	9,601	2,572,497	10.16%	0.20	\$28.00	\$5,145
30% to 35%	2,563	369,910	1.46%	0.20	\$28.00	\$740
35% to 40%	1,765	225,413	0.89%	0.20	\$28.00	\$451
40% to 45%	1,174	167,278	0.66%	0.20	\$28.00	\$335
Greater than 45%	5,256	344,361	1.36%	0.20	\$28.00	\$689
Total/Average	87,240	\$25,321,453	100%	1.29	\$180.36	\$326,217

Source: The Lucas Group

Note: Estimated 2010 taxable wages are based on USDOL reported 2008 taxable wages with assumed two percent growth.

This schedule represents base rates that will raise sufficient funds to cover benefit payments. They will *not* by themselves result in Trust Fund solvency. In order to repay loans and interest, additional surcharges are required, which are segregated into two components. First, to obtain funds sufficient to cover the additional interest payments an average surcharge of 0.16% (\$22.13 per worker) is needed across all employers for 2010. (estimated interest repayment divided by taxable wages). The estimated interest surcharges for each year are shown in Table 10. The first year of surcharges also includes the minimum requirement for loan repayment to avoid FUTA tax increases, after which, contributions raised under the solvency schedule shown in Table 12 will cover loan repayments.

Table 10: Recommended Fixed Rate Surcharges for Loan Repayment, Interest, and Trust Fund Restoration

Year	Interest Payment	Average Tax	Cost Per Worker
2010	\$52,298,732*	0.2065%	\$28.92
2011	\$31,591,457	0.1248%	\$17.47
2012	\$31,319,123	0.1237%	\$17.32
2013	\$28,336,515	0.1119%	\$15.67
2014	\$24,096,422	0.0952%	\$13.32
2015	\$18,598,842	0.0735%	\$10.28
2016	\$11,843,777	0.0468%	\$6.55
2017	\$3,831,227	0.0151%	\$2.12

Source: Applied Economic Strategies, LLC, using 2009 data from the USDOL. *2010 includes surcharge to avoid FUTA tax credit reductions.

3. Provide a flexible method of adjusting rates as the UI Trust Fund is rebuilt over time.

It is important to note that the recommended per employee costs in Tables 9 and 10 are necessarily above their optimal long-term levels in order to pay higher anticipated levels of benefits due to the recession, pay off federal loans that have accumulated, and return the Trust Fund to solvency. Once Trust Fund solvency is attained these costs will be significantly reduced as employers move to a lower tax rate schedule and the FUTA surtax and interest payment surtax expire.

South Carolina’s current UI tax schedule is a matrix of the 15 employer reserve ratio groups, a base tax rate schedule, and 7 state solvency tax rate schedules that are automatically triggered depending on the annual statewide reserve ratio computation (see Table 7 above). The current state reserve ratio is equal to the Trust Fund balance divided by total statewide covered wages. However, the current statewide solvency “triggers” are ineffective when the Trust Fund falls below 1.4 percent of total covered wages. For example, since 2004 the state has been at the highest tax schedule in the matrix as the statewide reserve ratio fell from 1.4 percent to 0 percent. Likewise, the current “triggers” are ineffective when the Trust Fund rises above 2.0

percent of covered wages. In this instance, it would fail to reduce tax rates to respond to the surplus of funds.

To address this issue, two provisions should be put in place.

1. Legislation specifying that for each 10% the AHCM⁴⁴ is above 1.0, the schedule of fixed tax rates will experience an across the board reduction of 0.1 points, as shown in Table 11. Conversely, for each 10% the AHCM is below 1.0, the schedule of fixed tax rates will experience an across the board increase of 0.1 points. Minimum rates will be capped at 0.2%. As the Trust Fund is currently experiencing an AHCM of less than 0, a 1.0 percentage point solvency modification would be made to each of the base rates in Table 9 resulting in the tax rates shown in Table 12.

Table 11: Recommended Fixed Rate Surcharges to the Base Schedule for Loan Repayment and Trust Fund Restoration

AHCM	Tax Rate Schedule Modification
1.5	-0.5
1.4	-0.4
1.3	-0.3
1.2	-0.2
1.1	-0.1
1.0	0.0
0.9	0.1
0.8	0.2
0.7	0.3
0.6	0.4
0.5	0.5
0.4	0.6
0.3	0.7
0.2	0.8
0.1	0.9
0	1.0

Source: The Lucas Group

Table 12: Recommended Tax Rates with Highest Solvency Schedule for 2010

Reserve Ratio	Number of Firms	Estimated Taxable Wages	Percent Taxable Wages	Tax Rate	Tax Per Worker	Estimated Contributions
Less than -18%	4,706	1,272,593	5.03%	7.80	\$1,092.00	\$99,262
-18% to -16%	273	119,044	0.47%	7.30	\$1,022.00	\$8,690
-16% to -14%	321	97,871	0.39%	6.80	\$952.00	\$6,655
-14% to -12%	357	160,390	0.63%	6.30	\$882.00	\$10,105
-12% to -10%	447	258,840	1.02%	5.80	\$812.00	\$15,013
-10% to -8%	512	250,544	0.99%	5.30	\$742.00	\$13,279
-8% to -6%	579	179,925	0.71%	4.80	\$672.00	\$8,636
-6% to -4%	711	294,604	1.16%	4.30	\$602.00	\$12,668
-4% to -2%	847	336,264	1.33%	3.80	\$532.00	\$12,778
-2% to -0%	1,002	505,700	2.00%	3.30	\$462.00	\$16,688
0% to 2%	5,085	693,515	2.74%	2.60	\$364.00	\$18,031
2% to 4%	2,756	1,080,886	4.27%	2.45	\$343.00	\$26,482
4% to 6%	5,590	1,811,415	7.15%	2.30	\$322.00	\$41,663
6% to 8%	7,477	2,720,851	10.75%	2.15	\$301.00	\$58,498
8% to 10%	7,998	3,068,746	12.12%	2.00	\$280.00	\$61,375
10% to 12%	8,326	3,521,252	13.91%	1.85	\$259.00	\$65,143
12% to 14%	6,817	1,908,851	7.54%	1.70	\$238.00	\$32,450
14% to 16%	5,429	1,635,303	6.46%	1.55	\$217.00	\$25,347
16% to 20%	7,648	1,725,400	6.81%	1.40	\$196.00	\$24,156
20% to 30%	9,601	2,572,497	10.16%	1.25	\$175.00	\$32,156
30% to 35%	2,563	369,910	1.46%	1.10	\$154.00	\$4,069
35% to 40%	1,765	225,413	0.89%	0.95	\$133.00	\$2,141
40% to 45%	1,174	167,278	0.66%	0.80	\$112.00	\$1,338
Greater than 45%	5,256	344,361	1.36%	0.50	\$70.00	\$1,722
Total/Average	87,240	\$25,321,453	100%	2.36	\$330.82	\$598,346

Source: The Lucas Group

Note: Estimated 2010 taxable wages are based on USDOL reported 2008 taxable wages with assumed two percent growth.

- As outlined in Recommendation 3, the agency administering the state's Unemployment Insurance program should maintain a team of tax experts charged with pursuing a continual and thorough estimation of the UI finance system. Should the ability of the system to respond to changing economic circumstances become compromised, the team of experts should immediately and proactively make clear recommendations to the legislature to modify the tax specifications appropriately.

Utilizing the schedule of rate triggers, the schedule of UI tax payments through 2021 is estimated in Table 13. These figures include benefit requirements, loan repayment, interest payments, and payments for restoration of the UI Trust Fund.

Table 13 Estimated Total Cost Per Worker, 2010 - 2020

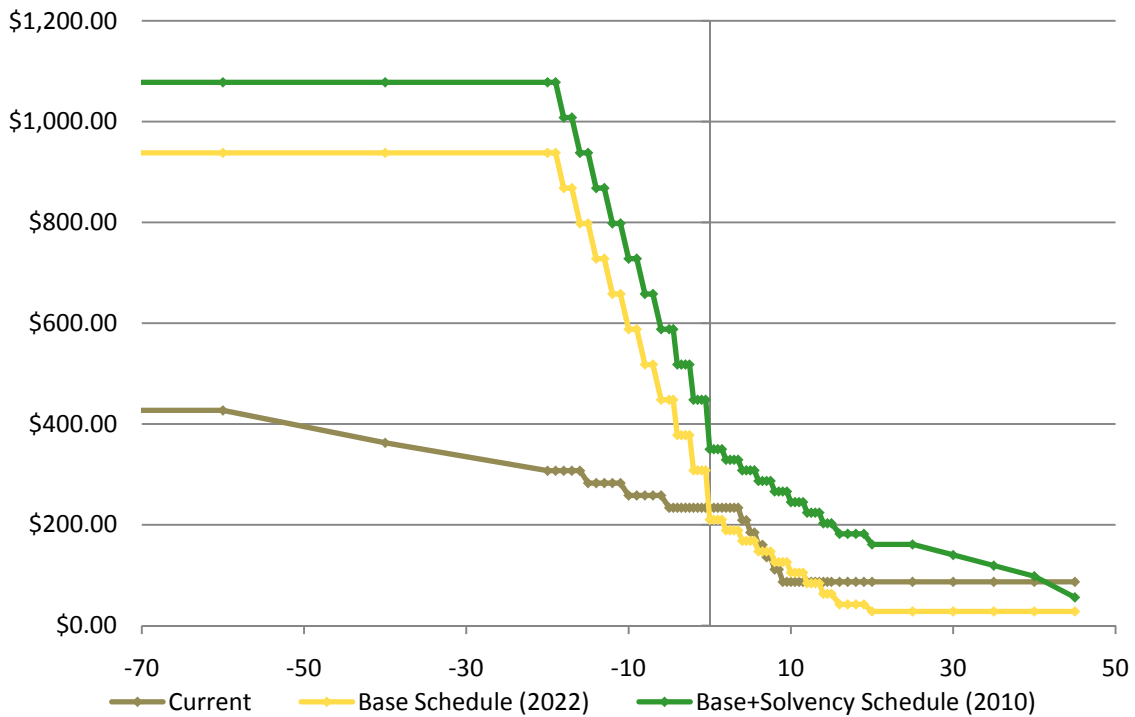
Reserve Ratio	Number of Firms	Current	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Base Rate
Less than -18%	4,706	\$399	\$1,121	\$1,109	\$1,109	\$1,108	\$1,105	\$1,102	\$1,099	\$1,094	\$1,078	\$1,050	\$1,008	\$966	\$952
-18% to -16%	273	\$307	\$1,051	\$1,039	\$1,039	\$1,038	\$1,035	\$1,032	\$1,029	\$1,024	\$1,008	\$980	\$938	\$896	\$882
-16% to -14%	321	\$295	\$981	\$969	\$969	\$968	\$965	\$962	\$959	\$954	\$938	\$910	\$868	\$826	\$812
-14% to -12%	357	\$283	\$911	\$899	\$899	\$898	\$895	\$892	\$889	\$884	\$868	\$840	\$798	\$756	\$742
-12% to -10%	447	\$283	\$841	\$829	\$829	\$828	\$825	\$822	\$819	\$814	\$798	\$770	\$728	\$686	\$672
-10% to -8%	512	\$258	\$771	\$759	\$759	\$758	\$755	\$752	\$749	\$744	\$728	\$700	\$658	\$616	\$602
-8% to -6%	579	\$258	\$701	\$689	\$689	\$688	\$685	\$682	\$679	\$674	\$658	\$630	\$588	\$546	\$532
-6% to -4%	711	\$245	\$631	\$619	\$619	\$618	\$615	\$612	\$609	\$604	\$588	\$560	\$518	\$476	\$462
-4% to -2%	847	\$234	\$561	\$549	\$549	\$548	\$545	\$542	\$539	\$534	\$518	\$490	\$448	\$406	\$392
-2% to -0%	1,002	\$234	\$491	\$479	\$479	\$478	\$475	\$472	\$469	\$464	\$448	\$420	\$378	\$336	\$322
0% to 2%	5,085	\$234	\$393	\$381	\$381	\$380	\$377	\$374	\$371	\$366	\$350	\$322	\$280	\$238	\$224
2% to 4%	2,756	\$234	\$372	\$360	\$360	\$359	\$356	\$353	\$350	\$345	\$329	\$301	\$259	\$217	\$203
4% to 6%	5,590	\$196	\$351	\$339	\$339	\$338	\$335	\$332	\$329	\$324	\$308	\$280	\$238	\$196	\$182
6% to 8%	7,477	\$149	\$330	\$318	\$318	\$317	\$314	\$311	\$308	\$303	\$287	\$259	\$217	\$175	\$161
8% to 10%	7,998	\$99	\$309	\$297	\$297	\$296	\$293	\$290	\$287	\$282	\$266	\$238	\$196	\$154	\$140
10% to 12%	8,326	\$87	\$288	\$276	\$276	\$275	\$272	\$269	\$266	\$261	\$245	\$217	\$175	\$133	\$119
12% to 14%	6,817	\$87	\$267	\$255	\$255	\$254	\$251	\$248	\$245	\$240	\$224	\$196	\$154	\$112	\$98
14% to 16%	5,429	\$87	\$246	\$234	\$234	\$233	\$230	\$227	\$224	\$219	\$203	\$175	\$133	\$91	\$77
16% to 20%	7,648	\$87	\$225	\$213	\$213	\$212	\$209	\$206	\$203	\$198	\$182	\$154	\$112	\$70	\$56
20% to 30%	9,601	\$87	\$204	\$192	\$192	\$191	\$188	\$185	\$182	\$177	\$161	\$133	\$91	\$49	\$28
30% to 35%	2,563	\$87	\$183	\$171	\$171	\$170	\$167	\$164	\$161	\$156	\$140	\$112	\$70	\$28	\$28
35% to 40%	1,765	\$87	\$162	\$150	\$150	\$149	\$146	\$143	\$140	\$135	\$119	\$91	\$49	\$28	\$28
40% to 45%	1,174	\$87	\$141	\$129	\$129	\$128	\$125	\$122	\$119	\$114	\$98	\$70	\$28	\$28	\$28
Greater than 45%	5,256	\$87	\$99	\$87	\$87	\$86	\$83	\$80	\$77	\$72	\$56	\$28	\$28	\$28	\$28
Total/Average	87,240														

Source: The Lucas Group

Note: Rate classes that will experience a decrease over current rates are highlighted in green. Cost per worker is based on a TWB of \$14,000. Estimated 2010 taxable wages are based on USDOL reported 2008 taxable wages with assumed two percent growth.

A comparison of estimated costs under the fixed rate option versus the current system in place in South Carolina is shown in Figure 6.

Figure 6 Estimated Cost Per Worker, 2010 & 2020 Versus Current UI System



Source: The Lucas Group

These changes, in the long run, will lead to a reduction in the UI tax rates for 53.7 percent of covered employers; keep the tax rates the same for 4.6 percent of covered employers, and increase tax rates on the 41.7 percent of employers that layoff most of the workers.

This tax option results in a reduction in costs from \$9.80 to \$58.80 per worker for the “best” 53.7 percent of employers and increases in costs from \$88.20 to \$644.70 per worker for the 41.7 percent of the “worst” employers. The “worst” 40.0 percent of employers have tax increases greater than \$100 per worker.

Summary

Tax Option 1—a fixed rate schedule based on employer reserve ratios—will achieve Trust Fund solvency in 2018. Pros and cons related to this option are outlined as follows.

Pros

- Significantly improves the experience-rating of the tax rates, reducing ineffective charges.

- This tax option results in a reduction in costs from \$9.80 to \$58.80 per worker for the “best” 53.7 percent of employers and increases in costs from \$88.20 to \$644.70 per worker for the 41.7 percent of the “worst” employers. The “worst” 40.0 percent of employers have tax increases greater than \$100 per worker.
- Indexation of TWB to state average weekly wage improves ability of revenues and benefit costs to change together, as both TWB and MWB move together.
- Provides some automatic stabilization through a fuller set of solvency “triggers” based on the state AHCM designed to increase or decrease rates on the experience-rated tax rate schedule to maintain optimal Trust Fund solvency.

Cons

- Problems inherent in fixed-interval tax rate schedules limit the ability to predictably match UI tax revenues with benefit costs over time and impede the accuracy of future estimates.
 - As employers change rate classes over the years, the number of firms by tax rate—and thus tax revenues—will change in a manner that cannot be estimated and will not be in concert with benefit changes.
 - Changes in benefit costs (either up or down) are not reflected in the schedule rapidly enough to match changes in the economy or in firm behavior. Movement to use of AHCM to trigger solvency schedules will improve the responsiveness but not resolve it. Severe or unanticipated changes in the economy could, again, render the schedule ineffective at matching tax revenues with anticipated benefit costs.
- Solvency schedules are not experience-rated, thereby charging all firms equally the additional costs during high tax periods.

Tax Option 2:

An array system of assigning UI tax rates combined with an increased and indexed TWB and triggered solvency charges.

In array systems, rates are determined by dividing employers into a fixed number of rate classes according to taxable wages and ranking those classes according to the employer’s reserve ratio. Rather than a fixed schedule of predetermined rates, the array method ranks employers both according to their own use of the UI system as well as relative to other employers. It will also allow defined, reliable adjustment of rates in a timely manner in response to changes in the economy and Trust Fund levels. Currently, 11 states assign UI tax rates using the array method

(AK, IA, ID, KS, ME, MT, ND, NE, NV, OR and VT).⁴⁵ Of these array states, only one of them (Idaho) has an insolvent Trust Fund.⁴⁶

1. Calculate revenues required to meet estimated annual benefits, loan repayment, interest payments, and Trust Fund solvency requirements.

Prior to setting annual tax rates, estimates must be developed of required annual benefit amounts, as well as loan repayment, and interest payment amounts. These estimates are shown through 2021 in Table 14. Calculations of each are made as follows:

- Benefit requirements are estimated based on the resulting coefficients of the regression of total annual benefits on the Insured Unemployment Rate (IUR).⁴⁷
- Loan repayment amounts are based on the annual payment of 14.29% of the current outstanding loan of \$773,800,015.00 over the course of 7 years.
- Interest payment amounts are based on the existing USDOL defined interest rate of 4.3646 and are applied to the existing loan balance.
- Payments to restore Trust Fund solvency are estimated based on moving the Trust Fund balance towards an average high cost multiple of 1.0 within 5 years.

Table 14 Estimated Required Benefits and Loan, Interest, and Trust Fund Payments

Year	Benefit Requirements	Loan Repayment	Interest Payment	Trust Fund Solvency Payment	Trust Fund Balance
2010	\$611,903,160	\$38,741,823	\$0	\$0	-\$736,044,733
2011	\$511,064,604	\$110,555,857	\$33,777,247	\$0	-\$695,500,973
2012	\$482,253,588	\$110,555,857	\$32,086,321	\$0	-\$583,245,706
2013	\$453,442,572	\$110,555,857	\$27,261,000	\$0	-\$467,028,419
2014	\$424,631,556	\$110,555,857	\$22,435,679	\$0	-\$345,109,923
2015	\$395,820,540	\$110,555,857	\$18,707,263	\$0	-\$217,461,198
2016	\$395,820,540	\$110,555,857	\$13,581,385	\$0	-\$88,302,798
2017	\$367,009,524	\$110,555,857	\$8,455,507	\$0	\$42,791,563
2018	\$367,009,524	\$0	(\$10,090,852)	\$160,575,166	\$231,197,641
2019	\$338,198,508	\$0	(\$18,314,024)	\$126,144,438	\$419,603,720
2020	\$338,198,508	\$0	(\$25,648,767)	\$91,781,376	\$587,654,479
2021	\$309,387,492	\$0	(\$32,234,064)	\$61,572,742	\$738,534,210

Source: The Lucas Group

2. Array employers into ordered classes according to reserve ratios.

In an array method, South Carolina’s employers would be ranked from the highest to the lowest reserve ratios and then assigned to one of 20 ordered rate classes. The “best” employers—those with the highest reserve ratios—who comprise the 5 percent of taxable wages are assigned the lowest tax rate on the schedule. The next group of employers who comprise the next 5 percent of taxable wages would be assigned the second lowest rate on the tax schedule, and so on until the employers with the lowest reserve ratios who comprise 5 percent of taxable wages are assigned the highest tax rate. Based on data on current employers’ reserve ratios and taxable wages, the number of employers would be assigned to each rate class for 2010 is shown in Table 15.

Table 15 Estimated Employers and Taxable Wages per Array Rate Class, 2010

Rate Class	Estimated Taxable Wages	Percent of Taxable Wages	Number of Employers	Percent of Employers
1	\$1,266,072,650	5%	10,758	12.3%
2	\$1,266,072,650	5%	3,712	4.3%
3	\$1,266,072,650	5%	5,889	6.8%
4	\$1,266,072,650	5%	5,380	6.2%
5	\$1,266,072,650	5%	4,897	5.6%
6	\$1,266,072,650	5%	4,504	5.2%
7	\$1,266,072,650	5%	5,113	5.9%
8	\$1,266,072,650	5%	1,809	2.1%
9	\$1,266,072,650	5%	1,993	2.3%
10	\$1,266,072,650	5%	4,524	5.2%
11	\$1,266,072,650	5%	2,010	2.3%
12	\$1,266,072,650	5%	4,244	4.9%
13	\$1,266,072,650	5%	3,555	4.1%
14	\$1,266,072,650	5%	4,146	4.8%
15	\$1,266,072,650	5%	2,992	3.4%
16	\$1,266,072,650	5%	4,118	4.7%
17	\$1,266,072,650	5%	3,530	4.1%
18	\$1,266,072,650	5%	6,160	7.1%
19	\$1,266,072,650	5%	3,200	3.7%
20	\$1,266,072,650	5%	4,706	5.4%
Total	\$25,321,453,000	100%	87,240	100%

Source: The Lucas Group

Note: Estimated 2010 taxable wages are based on USDOL reported 2008 taxable wages with assumed two percent growth.

3. Assign tax rates by class.

Tax rates for each rate class are determined according to the benefit requirements as well as the taxable wage base. This example is based upon a taxable wage base of \$14,000. In 2010, the average TWB for all states nation-wide is \$15,404.⁴⁸ The highest wage base is \$36,800 in Washington.⁴⁹ Although alternative TWBs can be utilized, they will result in higher tax rates in order to raise required revenue.

To obtain contributions sufficient to cover the level of benefits estimated for 2010 (\$611,903,160), an average tax rate of 2.42% is required across all employers (estimated benefits divided by taxable wages). To obtain contributions sufficient to cover the additional loan repayment for 2010 (\$154,760,003), an average tax rate of 0.61% is needed across all employers (estimated loan repayment divided by taxable wages). The experience-rated array tax schedule is shown in Table 16.

Table 16 Estimated Tax Rates and Cost Per Worker, 2010

Rate Class	Benefit Requirements		Loan Repayment		Total Cost Per Worker
	Tax Rate	Cost Per Worker	Tax Rate	Cost Per Worker	
1	0.57%	\$80.18	0.14%	\$5.08	\$85.26
2	0.64%	\$89.09	0.16%	\$5.64	\$94.73
3	0.71%	\$98.99	0.18%	\$6.27	\$105.25
4	0.79%	\$109.98	0.20%	\$6.96	\$116.95
5	0.87%	\$122.20	0.22%	\$7.74	\$129.94
6	0.97%	\$135.78	0.25%	\$8.60	\$144.38
7	1.08%	\$150.87	0.27%	\$9.55	\$160.42
8	1.20%	\$167.63	0.30%	\$10.61	\$178.25
9	1.33%	\$186.26	0.34%	\$11.79	\$198.05
10	1.48%	\$206.96	0.37%	\$13.10	\$220.06
11	1.64%	\$229.95	0.42%	\$14.56	\$244.51
12	1.83%	\$255.50	0.46%	\$16.18	\$271.68
13	2.34%	\$327.63	0.59%	\$20.74	\$348.37
14	2.75%	\$385.45	0.70%	\$24.40	\$409.85
15	3.24%	\$453.47	0.82%	\$28.71	\$482.18
16	3.81%	\$533.49	0.96%	\$33.78	\$567.27
17	4.48%	\$627.64	1.13%	\$39.74	\$667.37
18	5.27%	\$738.40	1.33%	\$46.75	\$785.15
19	6.21%	\$868.70	1.57%	\$55.00	\$923.70
20	7.30%	\$1,022.00	1.85%	\$64.71	\$1,086.71
Average	2.42%	\$339	0.61%	\$22	\$361

Source: The Lucas Group

Note: Tax rates for each class step up in increments of 10% for the initial 12 classes, followed by increments of 15% for the remaining 8 classes. The 20th class is set at 5.4% according to USDOL requirements. Cost per worker is based on a TWB of \$14,000.

Over the next decade, the rate schedule, denoting the total UI tax cost per worker is shown in Table 17. These figures include benefit requirements, loan repayment, interest payments, and payments for restoration of the UI Trust Fund.

Table 17 Estimated Total Cost Per Worker, 2010 - 2020

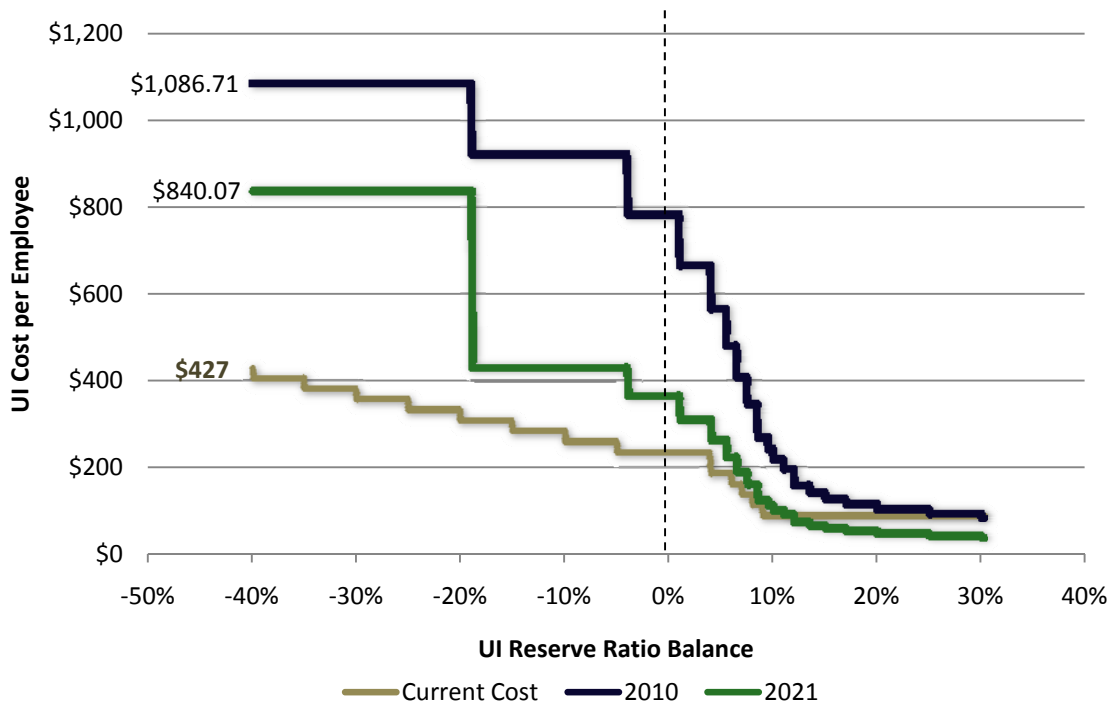
Rate Class	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Current
1	\$85.26	\$84.19	\$78.70	\$73.01	\$67.50	\$62.32	\$60.50	\$55.44	\$58.94	\$50.86	\$46.18	\$39.85	\$86.80
2	\$94.73	\$93.55	\$87.45	\$81.12	\$75.00	\$69.24	\$67.22	\$61.60	\$65.49	\$56.51	\$51.32	\$44.28	\$86.80
3	\$105.25	\$103.94	\$97.16	\$90.13	\$83.34	\$76.93	\$74.69	\$68.45	\$72.76	\$62.79	\$57.02	\$49.20	\$86.80
4	\$116.95	\$115.49	\$107.96	\$100.14	\$92.60	\$85.48	\$82.99	\$76.05	\$80.85	\$69.77	\$63.35	\$54.67	\$86.80
5	\$129.94	\$128.32	\$119.95	\$111.27	\$102.88	\$94.98	\$92.21	\$84.50	\$89.83	\$77.52	\$70.39	\$60.74	\$86.80
6	\$144.38	\$142.58	\$133.28	\$123.63	\$114.32	\$105.53	\$102.45	\$93.89	\$99.81	\$86.14	\$78.21	\$67.49	\$86.80
7	\$160.42	\$158.43	\$148.09	\$137.37	\$127.02	\$117.26	\$113.84	\$104.32	\$110.90	\$95.71	\$86.90	\$74.99	\$86.80
8	\$178.25	\$176.03	\$164.55	\$152.64	\$141.13	\$130.29	\$126.49	\$115.91	\$123.23	\$106.34	\$96.56	\$83.32	\$86.80
9	\$198.05	\$195.59	\$182.83	\$169.60	\$156.81	\$144.76	\$140.54	\$128.79	\$136.92	\$118.16	\$107.29	\$92.58	\$86.80
10	\$220.06	\$217.32	\$203.14	\$188.44	\$174.23	\$160.85	\$156.16	\$143.10	\$152.13	\$131.29	\$119.21	\$102.86	\$86.80
11	\$244.51	\$241.47	\$225.71	\$209.38	\$193.59	\$178.72	\$173.51	\$159.00	\$169.04	\$145.87	\$132.46	\$114.29	\$86.80
12	\$271.68	\$268.30	\$250.79	\$232.64	\$215.10	\$198.58	\$192.79	\$176.67	\$187.82	\$162.08	\$147.17	\$126.99	\$99.05
13	\$348.37	\$344.04	\$321.59	\$298.32	\$275.83	\$254.64	\$247.21	\$226.54	\$240.84	\$207.84	\$188.72	\$162.84	\$123.55
14	\$409.85	\$404.75	\$378.35	\$350.96	\$324.51	\$299.58	\$290.84	\$266.52	\$283.34	\$244.51	\$222.03	\$191.58	\$148.05
15	\$482.18	\$476.18	\$445.11	\$412.90	\$381.77	\$352.44	\$342.16	\$313.56	\$333.34	\$287.66	\$261.21	\$225.39	\$172.55
16	\$567.27	\$560.21	\$523.66	\$485.76	\$449.14	\$414.64	\$402.54	\$368.89	\$392.17	\$338.43	\$307.30	\$265.17	\$201.13
17	\$667.37	\$659.07	\$616.07	\$571.48	\$528.40	\$487.81	\$473.58	\$433.99	\$461.37	\$398.15	\$361.53	\$311.96	\$233.80
18	\$785.15	\$775.37	\$724.79	\$672.33	\$621.65	\$573.90	\$557.15	\$510.58	\$542.79	\$468.41	\$425.33	\$367.01	\$233.80
19	\$923.70	\$912.20	\$852.70	\$790.98	\$731.35	\$675.17	\$655.47	\$600.68	\$638.58	\$551.07	\$500.39	\$431.78	\$273.00
20	\$1,086.71	\$1,073.18	\$1,003.17	\$972.91	\$961.21	\$951.54	\$940.11	\$929.04	\$984.10	\$931.67	\$881.31	\$840.07	\$376.37

Source: The Lucas Group

Note: Tax rates for each class step up in increments of 10% for the initial 12 classes, followed by increments of 15% for the remaining 8 classes. The 20th class is set at 5.4% according to USDOL requirements. Cost per worker is based on a TWB of \$14,000. Note: Estimated 2010 taxable wages are based on USDOL reported 2008 taxable wages with assumed two percent growth.

A comparison of estimated costs under the array option versus the current system in place in South Carolina is shown in Figure 7.

Figure 7 Estimated Cost Per Worker, 2010 & 2021 Versus Current UI System



Source: The Lucas Group

Note: These are estimates of the costs over the next 11 years. The results assume that the UI Trust Fund loans are paid back over a period of 7 years and the Trust Fund is rebuilt to an AHCM of 1.0 over 5 years. Changes in the anticipated unemployment rate and the relationship between IUR and benefits paid will impact the actual cost per worker.

Once the Trust Fund reaches a balance that meets the solvency recommendations from the Unemployment Insurance Advisory Council (AHCM of 1.0), the long run tax rates needed to generate approximately \$310 million are shown in Table 18. Under these tax rates, up to 50% of employers will enjoy a decrease in the cost per worker compared to the tax rates they paid in 2009.

Table 18 Estimated Total Cost Per Worker, Long Run

Rate Class	Long Run Base Rates	Increase/Decrease over Current Costs
1	\$33.26	-\$53.54
2	\$36.95	-\$49.85
3	\$41.06	-\$45.74
4	\$45.62	-\$41.18
5	\$50.69	-\$36.11
6	\$56.32	-\$30.48
7	\$62.58	-\$24.22
8	\$69.53	-\$17.27
9	\$77.26	-\$9.54
10	\$85.84	-\$0.96
11	\$95.38	+\$8.58
12	\$105.98	+\$6.93
13	\$135.89	+\$12.34
14	\$159.88	+\$11.83
15	\$188.09	+\$15.54
16	\$221.28	+\$20.15
17	\$260.33	+\$26.53
18	\$306.27	+\$72.47
19	\$360.32	+\$87.32
20	\$756.00	+\$379.63

Source: The Lucas Group

Note: Assumes the Trust Fund has reached an AHCM of 1.0, the economy is experiencing an IUR of 2.4% and estimated benefits for the year are \$309 million on taxable wages of \$30.9 billion.

Summary

Tax Option 2—an arrayed schedule of rates, ordered by employer reserve ratios—will achieve Trust Fund solvency in 2018. Pros and cons related to this option are outlined as follows.

Pros

- Under the long run base schedule, 50% of employers pay reduced taxes compared to 2009 average tax rates. Another 45% of employers experience a minor increase in taxes ranging between \$8.58 per employee to \$87.32 per employee.
- Provides the ability to modify rates in a timely manner to coincide with the estimated level of benefits and repayments. Changes in benefit costs (either up or down) are reflected in the schedule rapidly to match changes in the economy or in firm behavior.
- Predictably estimates UI tax contributions annually to improve accuracy of current and future estimates, as well as to match contributions with anticipated benefit costs.

- Significantly improves the experience-rating of the tax rates, reducing ineffective charges.
- Allows experienced-rating of all solvency surcharges, near-term and long term, on payment of accrued interest, loan repayment, and Trust Fund restoration.
- Indexation of TWB to state average weekly wage improves ability of revenues and benefit costs to change together, as both TWB and MWB move together.

Cons

- Increases taxes on some positive rated employers who fall into rate classes 9 through 17.
- The employers in rate class 20 (i.e., those with the most experience with the unemployment insurance system) will experience tax increases ranging from \$379.63 per employee to \$710.34 per employee. However, these maximum costs are comparable to other, more solvent, states.
- Accurate forecasting of the contribution levels needed depends on the historical relationship between the IUR and benefits made remaining strong. It is recommended that the agency in charge of UI benefits update the formula with new data on an annual basis to ensure the correct amount of contributions to be collected is computed.

Recommendation 6:

Maintain competitive average new employer rate and consider developing industry-based rates for new employers.

Currently, all new employers in South Carolina begin with a 3.4 percent tax rate for one year, at a cost of approximately \$234 per worker. After that the each employer is eligible for an experience-rated tax rate. The base rate for new employers without the state solvency factor is 2.7 percent (\$189 per worker). Currently, Georgia, Alabama, Kentucky, Florida, and Mississippi have a new employer tax rate of 2.7 percent (or \$230 per worker in Georgia, \$216 in Alabama, \$216 in Kentucky, \$230 in Florida, and \$189 in Mississippi).⁵⁰ North Carolina's new employer rate is 1.2 percent (\$232 per worker), while Tennessee's rate is 2.7 percent (\$243 per worker) except when the statewide industry's reserve ratio is negative.⁵¹ South Carolina's average new employer rate should be competitively maintained.

Currently, 11 states (AK, CO, IL, KS, MO, MT, NE, OH, TN, UT, and WY) have industry-based rates for some or all new employers, due to the significant variation in benefits paid by industry.⁵² For example, new employers in the construction industry most often have an industry-based rate. In Ohio the rate for new employers in the construction industry is 5.4 percent, and in Colorado,

Nebraska, North Dakota, the rate for new employers in the construction industry is the average statewide experience rate for the construction industry.⁵³

An analysis of average tax rate by industry (Table 19) shows South Carolina also experiences significant variation in the rate of benefits paid by industry. As a result, South Carolina should consider graduated new employer rates by industry for the first year prior to experience rating, particularly for those industries with the largest variations from statewide average benefit rates.

Table 19 South Carolina Average Tax and Benefit Rates by Industry (2009)

Industry	Average Tax Rate *	Average Benefit Rate *
Manufacturing	2.88%	5.9%
Construction	2.81%	10.9%
Mining	2.80%	3.2%
Transportation & Warehousing	2.58%	4.3%
Management of Companies & Enterprises	2.54%	2.9%
Information	2.45%	7.7%
Wholesale Trade	2.38%	2.0%
Administrative Support & Waste Management & Remediation Services	2.38%	5.9%
Agriculture, Forestry, Fishing & Hunting	2.37%	1.5%
Professional, Scientific & Technical Services	2.26%	4.0%
Real Estate, Rental & Leasing	2.18%	9.4%
Finance & Insurance	2.16%	1.6%
Other Services	2.15%	2.1%
Arts, Entertainment & Recreation	2.11%	1.2%
Education Services	2.09%	2.5%
Accommodation & Food Services	2.07%	1.5%
Retail Trade	2.02%	2.7%
Health Care & Social Assistance	1.91%	0.7%
Public Administration	1.79%	0.7%
Utilities	1.74%	4.1%
South Carolina – State Average	2.31%	3.3%

Source: Applied Economic Strategies, LLC, using 2009 data from South Carolina Employment Security Commission.

* Tax rates and benefit rates are based on total taxable wages.

Other UI Tax System Alternatives

All state unemployment benefit systems must meet federal approval in order to receive a tax credit against the full FUTA tax. The federal government is unlikely to approve more radical changes to the fundamental unemployment insurance system. Any consideration of alternative system should be done in partnership with the federal Department of Labor to ensure approval.

Individual Accounts

Several alternatives to the existing unemployment insurance system have been proposed in an effort to counteract the disincentives of the current employment system. Policymakers are concerned that the existing system subsidizes unemployment and is too costly.

Individual unemployment savings accounts (UISA) are a way to offset the subsidy to leisure in unemployment benefits and the penalty to work that the current unemployment tax system provides.⁵⁴ Economists have developed several different ideas to create UISA in the United States. A long-term solution to solvency issues with the Unemployment Trust Fund could be a change to UISA in South Carolina, which draws upon both academic research and the real world experience of Chile as a model.

A system that relied exclusively on individual accounts would have a difficult time achieving federal approval and thus the tax credit. The federal government would be more likely to approve an individual account structure if the state had a guaranteed benefit underlying the accounts.

Achieving federal approval will require political will as well as policy innovation. The state experimentation with the administration of welfare in the 1980's and 1990's is a close example of how a state will need to work closely with the federal government to receive approval for the program.

If South Carolina is considering an alternative program like UISAs, they should begin consulting with the United States Department of Labor to determine what an adequate level of benefits is needed for an approved UISA program. The state cannot have its employers subject to the full FUTA tax if the Labor Department does not approve of the UISA program.

With an UISA, employees draw upon their own savings instead of government benefits. This makes unemployment more expensive to a worker and encourages them to find work more quickly than they the current unemployment system.

The basic structure of an UISA is that workers and/or employers contribute a certain amount of income into the account instead of paying the traditional tax. When a worker becomes unemployed, the worker can then utilize savings in the account as a form of unemployment

benefits. When a worker reaches retirement, the worker may then use any positive balance in the account to increase retirement savings.

If a worker exhausts the account when they are unemployed, there are three different options to ensure a worker can receive some benefits. First, the state can make up the difference through traditional unemployment outlays. Second, businesses make up the difference by paying a rate based on their experience rating. Finally, the state advances funds to the worker but establishes a lien on future earnings.

Theoretical Models of UISA

One of the seminal pieces of analysis on how workers would benefit from UISA was conducted by economists Martin Feldstein and Daniel Altman. The authors used a dataset that followed individual workers over a period of time to simulate how workers would be affected by UISAs.

The authors modeled four different plans from a required contribution of 4 percent of employees to a combination of required contributions from employees and employers. They found that most workers would be better off with a UISA and have money left in the account when a worker retired⁵⁵.

In this analysis, the government loans money to any worker who has insufficient balance to pay benefits. The government loan is repaid with interest when the worker finds a new job. If the account is negative when a worker reaches retirement age, the government loan to the account is forgiven. Even with these insolvent loans from the government, taxpayers would pay less under an UISA system than traditional unemployment.

The authors conclude that individuals in the top quintile of earnings would be substantially better off, workers in the bottom quintile of earnings would be worse off, and taxpayers would be better off due to a reduced total tax burden under a UISA system.

While South Carolina has fewer workers in the top national quintile than the average state, it has roughly the same number of workers in the bottom quintile as other states.⁵⁶ If South Carolina experiments the save unemployment rate as average, it would be slightly better off than other states under a UISA account. However, the state currently exceeds the national unemployment average which would cause individuals even in the second quintile to be adversely affected by UISAs.

Real World Evidence from Chile

In 2002, Chile began a national unemployment account program and a new national retirement system based on individual retirement savings accounts. This was a fundamental and comprehensive change in the social safety net. Chile now uses individual accounts garnering

returns based on market conditions. While other Latin American countries have some limited versions of individual employment accounts, Chile's is different because it is a much broader program, and the accounts are now the primary way to benefit unemployed workers.

The Chilean program is financed by a combination of the government, the employer and the employee. The government is going to maintain its existing expenditure on unemployment programs as the country moves from a more traditional benefit program to an individual account.⁵⁷ This Common Fund is still financed by taxes on the employer that is used as a safety net if an account is exhausted.

In typical cases, the employer in Chile pays most of the contribution to the account and the individual worker contributes the least. The annual contribution is slightly over one third of the monthly wage.⁵⁸ For example, if a worker earns \$100 a month, the monthly contribution would be \$3, and the annual contribution would be \$36. Workers are unable to access their account for the first month and must have worked over twelve months before being eligible.

New empirical research has found that UISA in Chile does reduce the moral hazard of unemployment benefits. The larger an account a worker has, the more quickly that worker finds a new job. Workers with a small balance or without any account at all find work much more slowly when compared to workers with UISAs.⁵⁹

This finding bolsters the theoretical modeling of UISAs. Individual accounts make unemployment more costly to workers, because workers are using their own savings as unemployment insurance instead of government benefits. Workers would like to return to work quickly so that their account balance does not shrink and will be large when the workers retire. The evidence from Chile shows that the moral hazard of unemployment benefits can be changed with a good individual account.

Administration of a Program in South Carolina

To create a UISA program, South Carolina should be prepared for a lengthy transition period. It takes several years for accounts to generate enough of a balance to be effective. Most UISA programs have a five year startup period that allows accounts to build a balance before they can be used during a period of joblessness.

South Carolina should contract with one or only a few investment firms. The number of firms involved with investing the funds should be kept small to allow economies of scale to keep administration costs low. If there are multiple firms administering many accounts, administrative fees will be higher which will reduce the value of the accounts. Investment firms should be made to bid for the right to administer the program. Chile offers an example by

auctioning the rights to administer the funds to the agency that offered the lowest administrative fees.⁶⁰

Investment opportunities should be conservative since access to the accounts is most likely to occur during an economic downturn. Too much investment in equities could lead to an account that loses much of its value when it is most needed. The Congressional Budget Office estimates that real investment in Treasuries will return 3.3 percent, corporate bonds 3.8 percent and equities, 6.8 percent.⁶¹ The majority of the accounts should be in Treasuries and corporate paper.

Workers should only be eligible to withdraw funds from the account if they have been employed for over twelve months. This will make sure that they have some money in the account before relying on government payments to cover any shortfall. Workers could also be denied access to benefits for a period of time ranging from one week to one month. This denial period encourages a quick return to work and functions much like a deductible in automobile or other property insurance.

Ideally, an individual account in the USA should be funded by contributions both by employers and employees. Employers should fund accounts and contribute to the general Trust Fund at a rate determined by their experience rating. Employees should be contributing at a percentage of their income up to the median income. While this contribution level exceeds the current wage base for unemployment benefits, workers in the second and third quintile of earnings are more likely to have a positive account balance at retirement and will not be made worse off.

Accounts for workers leaving the state would be held in absentia until the worker returns to South Carolina or reaches retirement age when the account will be transferred to the worker or to heirs. New workers entering into the state would be held to the five year waiting rule. This would create an incentive for workers to hire residents who already have an account.

If accounts turn negative, as many do during economic downtimes, the accounts receive advance funds from the state which are then repaid when a worker becomes re-employed. Any negative balances at retirement are waived. However, at a state level this presents some negative impacts as a worker with a negative account in South Carolina could be better off by moving to a neighboring state and not paying back the loan.

Individual data is needed to examine some of the individual account options for the state. Data following individuals over time was not available during the writing of this report. If the state is interested, the state should work to collect information at an individual level to see what level of contributions and benefits would be needed to make the account solvent.

Transition Period

The transition period to a UISA program will require some additional outlays from the state. The state will have to continue to pay off existing benefits while forgoing some unemployment taxes that will be used to finance the savings accounts. As a result, the state will experience a much larger shortfall with a UISA than under current law.

At the end of five years, the amount of the annual shortfall will begin to fall as some workers tap their UISA instead of relying on state benefits. The state and employers will be in a stronger fiscal situation the longer the program runs as investments returns grow over the years.

To ease the transition period, South Carolina can require employers to continue remitting the traditional unemployment taxes while requiring additional funds from employers and employees for the savings accounts. These types of add-on accounts will reduce employment opportunities and disposable income for some workers.

Transitioning to an unemployed saving account program should not take place until South Carolina has achieved stability with its current benefit Trust Fund. Otherwise, businesses and workers will pay more in taxes than they would under the current system.

Alternative Systems of Insurance

Alternatives to the traditional unemployment system, other than unemployment savings accounts, have been proposed. Some ideas involve treating unemployment more like traditional health or property insurance and have insurance provided by a private entity. Individuals would purchase insurance that would pay benefits during a period of unemployment, and premiums would be set according to the risk of unemployment.

A difficulty arises when trying to set premiums on the private market. Individuals have an advantage when purchasing insurance, because they have information that insurance companies do not have. Individuals have better knowledge on their likelihood to become unemployed than a private company, which makes it more difficult for a company to accurately set premiums.⁶² Insurance companies could offset this problem with interest rates on the premiums collected under a private system⁶³.

It is extremely unlikely that the federal government would give a waiver to a state that went to a privatized insurance program.

Reemployment Bonuses

Another alternative could be a combination of reemployment bonuses with strict oversight to ensure a claimant's eligibility for benefits. A reemployment bonus is given when a worker finds

a job before the benefits expire or another deadline expires. The goal is to reduce the adverse incentives to prolong unemployment while receiving unemployment insurance. There have been various pilot programs in several different states that used reemployment bonuses with mixed success.

Pilot programs found that more oversight in the job search requirement could result in savings to an unemployment program, through denial of benefits for failure to look for work as well as bonuses for faster employment. Combining both these ideas could result in ending unemployment spells at a savings to the state.

If the state is interested in additional alternative programs, it should consider launching a temporary, pilot program that uses a reemployment bonus to encourage a worker to leave unemployment more quickly. Evidence shows that temporary programs work best in utilizing the bonus because these programs can speed exit from unemployment but may not result in savings to the unemployment Trust Fund.⁶⁴ The reemployment bonus would be a lump sum that would decrease over time.

To be eligible for the reemployment bonus and regular unemployment benefits, the worker would be required to sign up for a more intense monitoring of efforts to obtain employment. This would require an effective South Carolina office to oversee the job search requirements. Increased oversight has resulted in reduced benefit outlays as workers who failed to search for jobs were disqualified, and it encouraged workers to find new employment before their benefits were exhausted.

Appendix

Statement of the Unemployment Insurance Actuary, State of Alaska

South Carolina Department of Commerce
1201 Main Street, Suite 1600
Columbia, SC 29201-3200

February 22, 2010

Re: Statement of the Unemployment Insurance Actuary, State of Alaska

To: South Carolina Department of Commerce

I am James Wilson, an Economist for the Alaska Department of Labor and Workforce Development. For nine years I've held the position of "Unemployment Insurance Actuary" with my work focused on the health of our State's Unemployment Insurance (UI) Trust Fund. Specifically, this includes analysis for our legislature for any financial impact of proposed changes to the benefit system. I am not a paid consultant or contractor. My participation with The Lucas Group is as a UI professional who is experienced in UI financing and genuinely interested in the solvency issues facing the UI system in South Carolina as well as many of the other states in our country.

When learning about the South Carolina system, I recognized some of our own history. The mid 1970's was a time of high benefit UI payments for Alaska. We had a fixed tax base, a series of 10 tax rate schedules for 10 tax classes with the effective schedule set by a solvency reserve ratio. The system rapidly shifted to the high end, settled on the second highest tax schedule, and the legislature was losing confidence in the Trust Fund. After a detailed study, a new system was envisioned and adopted in 1980. The system survived the severe recession we experienced years later in the mid-1980s, as well as the most current recession.

I reviewed the materials from The Lucas Group Report, including overviews, and the final draft report, as well as discussed the findings with the Lucas Group Team. The focus of my review has been primarily on the financing side of this work and I have not attempted to reproduce their modeling, or audit their figures. From my vantage point, the research they have done is well thought out, the approaches used appropriate, and the resulting options nicely presented.

Clearly, in this report, they have addressed major elements of the financing system that will need your attention. The various policy options they developed will provide you with tools to rework the UI system in South Carolina. You will want to review the detailed options presented in the report and decide on an optimal financing model that suits your state economy.

February 2010

My favorite word in the Lucas report is “flexibility” as in “Greater flexibility should be built into the system.” As a general principle this is a good thing – having a system that can adapt (but not abruptly) to changing conditions. Your existing system reached the edges of its legal limits some years ago, and the Trust Fund balance faded as costs outpaced revenue. Then the big recession hit – a UI system version of the perfect storm.

An indexed taxable wage base, discussed in the Report, is one financing feature that makes a system reactive to changing economic conditions. Indexing keeps the same portion of wages subject to taxation. This removes the need for periodic revisions of the tax base. My state of Alaska has used an indexed tax base since 1981 and it is a critical part of our current system design.

The suggested use of an array as part of your current experience rating methodology could be another way of keeping your system responsive to change. An array continually shows each employer in relation to all employers. The revision of using only 5 years of experience instead of a longer look-back period would allow employer ranking to be based on a set of more current data.

An array is used to assign a group of employers to tax classes based on defined share of wages. This technique can provide a level revenue dependability since tax classes should be symmetrically distributed above and below the average. An experience rating system provides the measure and a number used to list all employers from highest to lowest. The array applies the results, placing set groups from a list into a defined list of tax rate classes. An array would be a technical improvement in assigning tax classes. Alaska has been using an array as part of our experience rating system for several decades.

I am confident that you can turn the State’s current UI financial situation into an opportunity to develop a system that has long term viability. You have already taken an important step by enlisting the help of an independent professional advisor to assist you. My best wishes for your success. Your work may well become of great use to other states who are also dealing with overburdened UI Trust Funds.

Sincerely,

James Wilson
Unemployment Insurance Actuary
State of Alaska
(907) 465-4520
James.wilson@alaska.gov

Team Background

John Stephen is a Partner at Lucas Group Partners and works in the firm's Government practice. In addition to experience consulting with state agencies, John provides the benefit of heading a state agency through a period of major change.

Prior to joining the Lucas Group, John served from 2003 to 2007 as Commissioner of New Hampshire's largest Department, the Department of Health and Human Services, and was in charge of a \$1.8 billion dollar annual budget. During his tenure, John led the Department through a period of major innovation, including improving the Welfare program by engaging families on assistance in work activities. John led efforts to transform the Temporary Assistance to Needy Families (TANF) program to one that has received national recognition for a 72% improvement in engagement of TANF recipients in job participation and placement. John brought a number of efficiencies to the TANF program and re-engineered the Department's efforts at the district offices and one-stop work centers to successfully focus on helping individuals find sustainable employment. John also led efforts to change the culture of TANF to make participation in work program orientation a condition of eligibility, help individuals return to the workforce promptly, and establish innovative job training programs and other employer-based incentives so as to increase employment opportunities.

John also increased cooperation and collaboration between HHS and other state and federal agencies. Prior to heading the \$1.8 billion annual budget at HHS, John served as Assistant Commissioner of Safety, where he served as the state's first Homeland Security Coordinator. John organized New Hampshire to be the first in the US to conduct a statewide Avian Flu pandemic planning exercise, testing all aspects of its emergency management response.

John was a prosecutor for 10 years, taking him from the county level to an Assistant Attorney General. In the process, he prosecuted crimes from misdemeanors up through homicide cases. A respected author, he has written or co-authored eight books on various legal matters.

John holds a JD from the Detroit College of Law and Michigan State University (1987) and a B.S. in Administration from the Whittemore School of Business and Economics at the University of New Hampshire (1984).

Jay Lucas is the Chairman and Managing Partner of Lucas Group Partners, and over the past twenty-five years, has helped numerous government entities, executives, investors and management teams set their strategic direction, adopt innovative approaches and achieve significant efficiencies. Jay has developed deep expertise in the areas of strategy development, mergers and acquisitions, purchasing cost reduction, strategic sourcing, negotiation and operational improvement.

Jay is the Founder of the firm's Government Solutions practice and has led assignments in a number of states, counties and municipalities – including Indiana, Missouri, Pennsylvania, Rhode Island and New Hampshire – focusing on helping Governors, cabinet secretaries and other senior government executives set direction and achieve efficiencies. His work has included assignments in such areas as the modernization of the Medicaid Eligibility system for a Midwestern state, the strategic restructuring and merger of two hospital systems in a large Midwestern metro County-City, major restructuring of Health and Human Services departments in several states, including welfare-to-work and reforming employment programs and the development of strategies for policy reform. In most cases, this work has been subject to significant public scrutiny, and Jay has helped advise his clients on communications and messaging strategies.

Prior to founding Lucas Group Partners, Jay was a Partner at Bain & Company, a leading international management consulting firm. While at Bain & Company, he led assignments in the information services and consumer beverage sectors and was actively involved in the firm's work with leveraged buyout funds and their portfolio companies. In addition, earlier in his career, Mr. Lucas served in the public sector, including two terms in the New Hampshire House of Representatives, serving on both the Judiciary Committee and the Committee on Executive Departments and Administration.

Mr. Lucas is a graduate of Yale College. He earned his M.B.A. from the Harvard Business School and his J.D. from the Harvard Law School.

Mark Wilson is an economist and tax consultant for Lucas Group Partners. Mark also is the Principal at Applied Economic Strategies, LLC. He provides economic and public policy analyses, and strategic advisory services to business, government, and judicial decision-makers to enable them to clearly examine public policy choices and make fully informed decisions.

He has over 25 years of economic policy experience including serving seven years as Deputy Assistant Secretary for Employment Standards Administration at the U.S. Department of Labor for President Bush. Mark's responsibilities at the Department of Labor included regulatory and legislative policy development and implementation, developing economic analyses for

regulatory initiatives, and providing general economic analysis. His work included the first update to the overtime regulations in almost 50 years.

Prior to his work at the Department of Labor, Mark was a Research Fellow at The Heritage Foundation in Washington, D.C., where he specialized in workplace policy and tax issues. While at Heritage, Mark published over 50 research papers, including how to reform the federal/state unemployment insurance system. He has testified 12 times before Congress and frequently briefed members of Congress and the Administration. He also briefed state and local legislators on a variety of federal workplace programs and issues.

Prior to his employment at Heritage, Mark was a senior career economist in the Office of the Assistant Secretary for Policy at the U.S. Department of Labor where he provided analysis to the Assistant Secretary, the Secretary of Labor, and the White House on a variety of labor market issues.

Mark received a B.A. in economics from Kent State University in December 1979, and continued with Masters Degree studies in economics at George Washington University from 1983 to 1987.

He is a member of the American Economics Association, the National Association for Business Economics, and the National Economists Club.

Rea S. Hederman Jr. is a labor and tax consultant for Lucas Group Partners and the Assistant Director of The Heritage Foundation's Center for Data Analysis (CDA), where he is also Senior Policy Analyst.

Hederman's responsibilities include managing CDA's work on legislative analysis and Social Security. He also provides statistical analysis and econometric modeling for key Heritage policy initiatives, among them poverty, income inequality, labor policy, taxes and welfare.

Hederman's commentaries have appeared in The Washington Times, The Washington Post and FOXNews.com. He is quoted by major newspapers and wire services and appears regularly on such cable news outlets as CNN, FOX, CNBC and MSNBC.

Hederman, who joined Heritage in 1995, is a graduate of the University of Virginia with bachelor's degrees in history and foreign affairs. He has a master's in public policy from Georgetown Public Policy Institute.

Endnotes

¹ This assumes that South Carolina continues to borrow against the federal unemployment Trust Fund each year through 2018. Interest payments will be lower, if steps are taken to bring the Trust Fund back into balance and the amount of new loans is reduced or eliminated.

² U.S. Department of Labor (USDOL) data: <http://ows.doleta.gov/unemploy/budget.asp#tfloans>.

³ Ibid.

⁴ Ibid.

⁵ Walter Nicholson and Karen Needels, "Unemployment Insurance: Strengthening the Relationship between Theory and Policy," *The Journal of Economic Perspectives*, Vol 20, No. 3., Summer 2006. Data are national averages.

⁶ Applied Economic Strategies, LLC, using U.S. Department of Labor Benefit Financing Model for South Carolina. Forecast period (2010 to 2018) assumes no change to current law or benefit administration. See methodology for forecast assumptions.

⁷ Ibid.

⁸ U.S. Department of Labor (USDOL) data: <http://ows.doleta.gov/unemploy/budget.asp#tfloans>.

⁹ National Association of State Workforce Agencies, http://www.workforceatm.org/articles/template.cfm?results_art_filename=statesborrow.htm.

¹⁰ The American Recovery and Reinvestment Act of 2009 (ARRA) suspended interest payments of state loans until the end of 2011.

¹¹ National Association of State Workforce Agencies, "UI Trust Fund Solvency Survey", December 2009 at

¹² Applied Economic Strategies, LLC, using U.S. Department of Labor Benefit Financing Model for South Carolina. Forecast period assumes no change to current law or benefit administration. See methodology for forecast assumptions.

¹³ Applied Economic Strategies, LLC, using U.S. Department of Labor Benefit Financing Model for South Carolina. Forecast period (2010 to 2018) assumes no change to current law or benefit administration. See methodology for forecast assumptions.

¹⁴ Ibid.

¹⁵ "Unemployment Compensation: What and Why?" Social Security Board, Washington DC. Publication No. 14 www.larrydewitt.net/SSinGAPE/UI1937book2.htm

¹⁶ Katherine Baicker, Claudia Goldin, Laurence F. Katz, "A Distinctive System: Origins and Impact of U.S. Unemployment Compensation," *NBER Working paper 5889*, January, 1997.

¹⁷ Jonathan Gruber, "The Consumption Smoothing Benefits of Unemployment Insurance," *American Economic Review*, Vol. 97, 1987 and Daniel S. Hamermesh and Daniel T. Slesnick "Unemployment Insurance and Household Welfare: Microeconomic Evidence 1980-93," *NBER Working Paper #5315*, 1995.

¹⁸ J. B. Cullen and J. Gruber, "Spousal Labor Supply as Insurance: Does Unemployment Insurance Crowd Out the Added Worker Effect?" *Journal of Labor Economics*, Vol. 18 No.3, (2000), pp. 546-572 and

Daniel S. Hamermesh, "The Interaction Between Research and Policy: The Case of Unemployment Insurance", *The American Economic Review*, Vol. 72, No. 2, Papers and Proceedings of the Ninety- Fourth Annual Meeting of the American Economic Association, May, 1982

¹⁹ Lawrence F. Katz and Bruce Meyer "The Impact of the Potential Duration of Unemployment Benefits on the Duration of Unemployment, and Subsequent Wage Gain", *Journal of Public Economics*, 41:1, pp. 45-72.

²⁰ Daniel S. Hamermesh, "The Interaction Between Research and Policy: The Case of Unemployment Insurance", *The American Economic Review*, Vol. 72, No. 2, Papers and Proceedings of the Ninety- Fourth Annual Meeting of the American Economic Association, May, 1982.

²¹ Alan B. Krueger and Andreas Mueller, "Job Search and Unemployment Insurance: New Evidence from Time Use Data," *IZA Discussion Paper No. 3667*, August 2008, p. 11, at <http://ssrn.com/abstract=1261452> (November 13, 2008).

²² OECD Employment Outlook, *Boosting Jobs and Incomes*, OECD 2006.

- ²³ Jonathan Gruber and Alan Krueger "The Incidence of Mandated Employer-Provided Insurance: Lessons from Worker's Compensation Insurance," NBER Working Paper, 3557, December 1990.
- ²⁴ Daniel S. Hamermesh "Source Factor Market Dynamics and the Incidence of Taxes and Subsidies", The Quarterly Journal of Economics, Vol. 95, No. 4, Dec., 1980.
- ²⁵ Robert Kaestner "The Effect of Government-Mandated Benefits on Youth Employment, " Industrial and Labor Review", Vol. 50, 1, 1996.
- ²⁶ Randall Wright and Janine Loberg, "Unemployment Insurance, Taxes and Unemployment," , The Canadian Journal of Economics, Vol. 20, No. 1, Feb. 1987 .
- ²⁷ UWC, *Fiscal Data for State Unemployment Insurance Systems 1999 – 2008*, National Foundation for Unemployment Compensation & Workers' Compensation, Research Bulletin, October 2009. Data for North Carolina is not available.
- ²⁸ See Deere (Journal of Labor Economics 1991).
- ²⁹ Applied Economic Strategies, LLC, using U.S. Department of Labor Benefit Financing Model for South Carolina. Forecast period (2010 to 2018) assumes no change to current law or benefit administration. See methodology for forecast assumptions.
- ³⁰ If other financing and benefit recommendations are implemented, it is likely that the interest surtax may only have to raise at most \$57.1 million. Any additional revenue after all interest is paid should go toward paying off federal loans.
- ³¹ Ibid.
- ³² "South Carolina Unemployment Insurance Benefits: Report Evaluating the Administration of Non-Monetary Benefits", The Lucas Group, February 2010.
- ³³ Average 5-year reserve ratio calculated for accounts with lifetime reserve ratios greater than 45 from U.S. Department of Labor ETA 204 reports, 2004–2009.
- ³⁴ Currently, 33 states use reserve ratios to experience-rate UI tax rates. UWC, *Highlights of State Unemployment Compensation Laws*, National Foundation for Unemployment Compensation & Workers' Compensation, 2009.
- ³⁵ Applied Economic Strategies estimates using USDOL data: <http://ows.doleta.gov/unemploy/hb394.asp>; and http://ows.doleta.gov/unemploy/futa_receipts.asp.
- ³⁶ Advisory Council on Unemployment Compensation, A Report to the President and the Congress, "Report and Recommendations," February 1994: "Unemployment in the United States: Benefits, Financing, Coverage," February 1995; "Defining Federal and State Roles in Unemployment Insurance," January 1996; "Collected Findings and Recommendations: 1994-1996."
- ³⁷ Estimates for 2011, were calculated by Applied Economic Strategies, LLC , using UI benefit projections for 2009, 2010, and 2011, as well as the total covered wage projection for 2011, from the U.S. Department of Labor Benefit Financing Model for South Carolina. See methodology for forecast assumptions.
- ³⁸ Wayne Vroman "Unemployment Insurance: Current Situation and Potential Reforms", February 3, 2009
- ³⁹ Employer reserve ratio = (total UI tax contributions less total benefit charges) all divided by annual taxable payroll.
- ⁴⁰ The 24 states which used fixed-rate reserve-ratio based UI tax systems are: Arizona, Arkansas, California, Colorado, Georgia, Hawaii, Indiana, Kentucky, Louisiana, Massachusetts, Missouri, New Hampshire, New Jersey, New Mexico, New York, North Carolina, Ohio, Rhode Island, South Carolina, South Dakota, Tennessee, West Virginia, and Wisconsin.
- Alaska, Iowa, Idaho, Kansas, Maine, Montana, North Dakota, Nebraska, Nevada, Oregon, and Vermont.
- ⁴¹ Using the historical relationship between the amount of benefits paid in a given year and the estimated insured unemployment rate for the year, a formula was developed using ordinary least squares regression to forecast the level of benefits necessary given an estimate of the annual insured unemployment rate. The estimates were based on data from the Department of Labor from 1999-2008 ($Benefits_i = 36,344.7 + 14,405,508(IUR_i)$).
- ⁴² Ibid.

⁴³ Ibid.

⁴⁴ The Average High Cost Multiple (AHCM) is defined as the statewide reserve ratio (trust fund divided by total payroll) divided by the average benefit rate (benefits divided by total payroll) of the past 3 out of 20 highest benefit years.

⁴⁵ The 11 states are: Alaska, Iowa, Idaho, Kansas, Maine, Montana, North Dakota, Nebraska, Nevada, Oregon, and Vermont.

⁴⁶ Idaho became insolvent in June 2009, partly as a result of having their desired Trust Fund balance set too low for economic conditions accompanying the recession.

⁴⁷ Using the historical relationship between the amount of benefits paid in a given year and the estimated insured unemployment rate for the year, a formula was developed using ordinary least squares regression to forecast the level of benefits necessary given an estimate of the annual insured unemployment rate. The estimates were based on data from the Department of Labor from 1999-2008 ($Benefits_t = 36,344.7 + 14,405,508(IUR_t)$).

⁴⁸ Ibid.

⁴⁹ Ibid.

⁵⁰ UWC, *Highlights of State Unemployment Compensation Laws*, National Foundation for Unemployment Compensation & Workers' Compensation, 2009.

⁵¹ Ibid.

⁵² The 11 states are: Alaska, Colorado, Illinois, Kansas, Missouri, Montana, Nebraska, Ohio, Tennessee, Utah, and Wyoming.

⁵³ UWC, *Highlights of State Unemployment Compensation Laws*, National Foundation for Unemployment Compensation & Workers' Compensation, 2009.

⁵⁴ Michael Orszag and Dennis Snower, "From Unemployment Benefits to Unemployment Accounts," Institute for Study of Labor, DP. 532 July 2002,.

⁵⁵ Martin Feldstein and Daniel Altman "Unemployment Insurance Savings Accounts", NBER Working Paper 6860, December 1998.

⁵⁶ Tabulations from the 2009 March Current Population Survey, Bureau of the Census for Individuals in the Labor Force

⁵⁷ Kirsten Sehnbruch, "Privatized Unemployment Insurance: Can Chile's New Unemployment Insurance Scheme Serve as a Model for Other Developing Countries," Center for Latin American Study, University of California-Berkeley, Paper #12, December 2004.

⁵⁸ Ibid.

⁵⁹ Gonzalo Reyes Hartley, Jan C. van Ours and Milan Vodopivec "Incentive Effects of Unemployment Insurance Savings Accounts: Evidence from Chile", Tilburg University, Depart of Economics, CentER, Discussion Paper, #2010-04, January 2010.

⁶⁰ German Acevedo, Patricio Eskenazi, and Carmen Pages "Unemployment Insurance in Chile: A New Model of Income Support for Unemployed Workers," World Bank, Social Protection Paper #0612, October 2006.

⁶¹ Congressional Budget Office, Liberman, McCuinness Solvency Proposal, February 8, 2006.

⁶² W. Henry Chiu and Edi Karni "Endogenous Adverse Selection and Unemployment Insurance", The Journal of Political Economy, Vol. 106, No. 4, Aug. 1998.

⁶³ Stephen G. Bronars "Fair Pricing of Unemployment Insurance Premiums," The Journal of Business, Vol. 58, Jan. 1985.

⁶⁴ Bruce Meyer "Lessons from the U.S. Unemployment Experiments", Journal of Economic Literature, Vol. 33, No 1, 1995