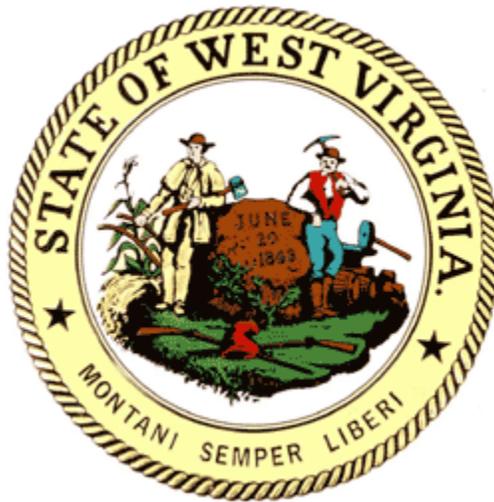




CCRC
Actuaries, LLC

STATE OF WEST VIRGINIA



HEALTH INSURANCE MARKETPLACE Actuarial and Economic Modeling Report

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Section I - Executive Summary

CCRC Actuaries, LLC (“CCRC Actuaries”) was engaged by The West Virginia Offices of the Insurance Commissioner (“WVOIC”) to perform various actuarial and economic analyses with regard to the West Virginia Health Insurance Marketplace (the “Marketplace”) and the broader reforms associated with the Affordable Care Act (“ACA”). The project team included CCRC Actuaries, Dr. Jonathan Gruber of Massachusetts Institute of Technology (“MIT”) who performed the economic analysis, and Mike Madalena who assisted in data management, manipulation and analysis. The analysis in this report was performed to assist the WVOIC in evaluating the various issues presented in developing a health care exchange in the State of West Virginia under the ACA. These issues included analysis and projection of each material component of the ACA including a projection of the number of insureds and anticipated premium levels in the Marketplace

The United States Supreme Court upheld most elements of the ACA in the summer of 2012. As a result, it is important that states such as West Virginia understand the implications of the possible alternative policies they might pursue in this arena.

The basis of our analysis is the Gruber Microsimulation Model (“GMSIM model”) combined with actuarial models to capture the implications of each of these options for West Virginia. These models project Marketplace participation by health care status, economic, and demographic characteristics. The models project participation and cost for the Individual and Small Group Marketplace. The models allow us to project the impact on West Virginia uninsured rates through the analysis of the Marketplace and the Medicaid Expansion previously elected by West Virginia:

Key results of our analysis include:

- The number of uninsured in 2016 is projected to decrease 170,000 after the implementation of the ACA (**Page 14**)
 - Projected uninsured in 2016 without the ACA is 246,000 while the number of uninsured residents is projected to drop to 76,000 after implementation of the ACA.
- Based upon 2016 projections, there will be a small decrease in employer coverage of 0.3% as a result of the ACA (**Page 14**)
 - Total group insurance for employees and dependents will decrease from a projected 910,000 without ACA implementation to 907,000 with ACA implementation in 2016
- There are projected to be 17,000 individuals transition from employer sponsored insurance to Medicaid or CHIP with the implementation of the ACA (**Page 16**)
- Absent the ACA, the number of underinsured would grow from its current level of 103,000 to a higher level of 110,000 by 2014 without the ACA. (**Page 19**)
- After implementation of the ACA, the number of underinsured falls to 93,000 by 2014, 86,000 in 2015, and 79,000 in 2016. (**Page 19**)
 - That is, by 2016, the share of the population that is underinsured falls by almost 40%. This decline is driven almost exclusively by declines in out-of-pocket costs.

- Gross Premiums in the small group market for employers sized 1-50 are projected to increase 7.3% **(Page 21)**
 - 2016 monthly premiums for employees and employers combined are projected to increase from \$960 to \$1,030
- Gross Premiums in the small group market for employers sized 51-100 are projected to decrease 4.7% **(Page 21)**
 - 2016 monthly premiums for employees and employers combined are projected to decrease from \$1,480 to \$1,410
- Expanding the definition of small group market from firms with 1-50 employees to firms with 1-100 employees adds a projected 30,000 employees to the small group market in 2016 **(Page 21)**
- Gross Premiums in the individual market will increase 35.3% after the implementation of the ACA **(Page 25)**
 - 2016 annual premiums are projected to increase from \$4,953 to \$6,702
- Net Premiums, subtracting expected tax credits, in the individual market will decrease 42.1% after the implementation of the ACA **(Page 25)**
 - 2016 net annual premiums after tax credits are projected to be \$2,870
- There are projected to be 183,000 individuals eligible to join the reformed non-group individual market, with 107,000 individuals purchasing insurance. **(Page 29)**
- Of the 76,000 individuals who remain uninsured, 42,000 are eligible for public insurance, 15,000 are eligible for Employer Sponsored Insurance, and 13,000 are eligible for subsidized non-group insurance. The rest, about 6,000, are eligible for non-subsidized non-group insurance. **(Page 16)**
- There are projected to be 99,000 individuals eligible to receive advance premium tax credits, with 86,000 of these individuals purchasing insurance and receiving tax credits. **(Page 29)**
- There are projected to be 6,300 firms with 35,000 employees eligible for the Small Business Tax Credit. Of this total, 8,000 employees are projected to enroll in SHOP and allow their employers to take advantage of the tax credit. **(Page 30)**

The models presented in the report assume that the individual mandate will create a sufficient incentive for uninsured persons to purchase health insurance. In the event that the actual take up rate does not approach those assumed in the development of the premium stabilization mechanisms of the ACA, it is conceivable that the systems will not function as designed. Issues, such as revenue shortfalls, would be exacerbated if the take up rate is significantly lower than expected in the young and healthier population or higher than assumed in the less healthy population. In essence, premium stabilization is focused at those segments and distortions in those populations could ripple through the system.

There are numerous factors that will affect the health insurance landscape going forward. These unknowns will affect both the number of insureds and the average premiums that are paid for health insurance policies. Some of the key factors that will affect projected versus actual enrollment and premiums charged in the marketplace are:

- Will the individual mandate and premium credits attract enough healthy uninsured residents to offset the anticipated number of residents with high health care utilization that will now be able to buy a health insurance plan due to the new guaranteed issue rules?
- The success of the ACA's individual mandate and premium subsidies at reducing the number of uninsured and attracting enrollees who have low health care utilization.
- Lower out of pocket costs due to actuarial value requirements will lead to higher premiums paid by members.
- Minimum Loss Ratio requirements are intended to limit the amount that insurance companies can charge for premiums. Should these requirements not be met, members will pay higher than needed premiums and receive a refund the following year.
- The decision of individual employers to offer coverage will affect the risk pool of both the individual and small group marketplaces.
- Will young, healthy populations obtain coverage or pay mandate penalties?
- Will outreach and education efforts be sufficient enough to motivate healthy populations into the marketplace?

Premium taxes associated with the ACA will add approximately 4.95% to the premiums for 2016 in the individual market.

- The *Patient-Centered Outcomes Research Institute (PCORI Fee)* is set at \$2/year/enrollee in 2014 and indexed thereafter.
- The *Transitional Reinsurance Fee* will be discontinued after 2016. It is assumed to cost \$24/enrollee for 2016.
- The *Exchange User Fee* is designed to fund the exchange in each state. The fee is 3.5% of premium charged against total premium of every insurer who offers a plan on the state exchange.
- The *Health Insurance Industry Fee* funds the cost of implementing provisions of the ACA. Insurers will be allocated their share of the national fee based on their total fully insured premiums. The collected fee nationally will be \$8 Billion in 2014 rising to 14.3 Billion in 2018.

There are projected to be 183,000 individuals eligible to join the reformed non-group individual market, with 107,000 individuals purchasing insurance. Average gross premiums in the non-group market are expected to increase 35.3% with the implementation of the ACA. Offsetting this increase, 99,000 of these individuals are eligible to receive advance premium tax credits, with 86,000 of these individuals purchasing insurance and receiving tax credits. Factoring in the tax credits, the average premium paid by individuals is 42.1% less than premiums would have been had the ACA not been implemented. Premium taxes associated with the ACA will add approximately 4.95% to the premiums in the individual market.

Table 1
2016 Non-group Market

	<u>No Reform</u>	<u>With ACA Pre-Credit</u>	<u>With ACA Post-Credit</u>
Premium Value	\$4,953	\$6,702	\$2,870
AV Value	71%	71%	71%
% Rise in Premium		35.3%	-42.1%
% Change in AV		0.2%	0.2%

The 35.3% gross premium increase was developed by analyzing the various changes made to the insurance marketplace by the ACA. The actuarial value in the current market is represented by the first column at 71%. The change in actuarial value of plans contributes only 0.2% to the expected premium increase. The primary drivers of this increase are outlined in Table 2 below:

Table 2

<u>Driver</u>	<u>Percent Increase</u>
Benefit Plan Changes	8.30%
Change in Actuarial Value	0.20%
Limiting of Rating Factors	1.00%
End of Underwriting	17.60%
ACA Taxes	4.95%

Various cohorts of individuals will see different changes in their premiums. This is due to the age rating compression, unisex rates, and the inability for insurers to charge by health status and other underwriting criteria.

Individuals whose family income is below 400% of the FPL are eligible for tax credits if their health care premium exceeds a percentage of their income. For individuals below 250% FPL, modified Silver plans will be offered with higher actuarial values and lower cost sharing requirements in addition to the premium tax subsidies.

The table below summarizes the required premium contribution and the actuarial value based on income level:

(1) Summary of Required Premium Contribution and Cost Share Modifications

<u>Income Level</u>	<u>Required Premium Contribution Percentage of Income</u>	<u>Actuarial Value of Coverage</u>
100 - 133%	2%	94%
133 - 150%	3-4%	94%
150 - 200%	4-6.3%	87%
200 - 250%	6.3-8.1%	73%
250 - 300%	8.1-9.5%	70%
300 - 350%	9.5%	70%
350 - 400%	9.5%	70%

Actual premiums will be determined by each insurance company, and have not been established yet. Appendix B shows the projected gross premium for non-group insurance for various age and family size cohorts for three different levels of income based on the Federal Poverty Level.

On the next page Table 3 shows the projected gross premium for three sample ages with varying family size cohorts for three different levels of income based on the Federal Poverty Level. Families above 400% of the FPL will have to pay the full amount of the Gross Premium shown in the third column. The displayed tax credits available to an individual are at the midpoint of the range of FPL, but not the additional savings associated with the reduced cost share.

The chart shows the gross premium increase of the impact of the ACA, as well as the net premium increase after premium assistance. Premium assistance subsidies will be available to offset the total amount an individual or family needs to pay for health insurance coverage through a tax credit. The tax credit is available for the Silver plan, and is provided on a sliding scale, based on income as shown in the chart above.

If the premium is below the limit in the chart above, no premium assistance will be offered. This is the case for single 20-year olds in the highest FPL category.

The FPL is assumed to be \$12,555 in 2016. For an individual with 350% FPL, this would equate to \$43,944 in income. This same individual's premium is capped at 9.5% of income, or \$4,175. For a 60-year old individual, the net premium after tax credit will be \$4,175 instead of the gross premium of \$10,360.

Table 3
Non-Group Insurance Premiums - 2016

<u>Age</u>	<u>Pre-ACA</u>	<u>Post-ACA</u>	2016 Gross Percent Increase	Net Percent Increase After Subsidy Based on Income(percent of FPL)		
				<u>138% - 200%</u>	<u>201% - 300%</u>	<u>301% - 400%</u>
Male						
20	1,988	3,817	92.0%	-46.3%	27.1%	92.0%
40	3,512	4,878	38.9%	-69.6%	-28.1%	18.9%
60	7,681	10,360	34.9%	-86.1%	-67.1%	-45.6%
Female						
20	2,648	3,817	44.1%	-59.7%	-4.6%	44.1%
40	4,616	4,878	5.7%	-76.9%	-45.3%	-9.6%
60	7,320	10,360	41.5%	-85.4%	-65.5%	-43.0%
Family - Two Adults						
20	4,636	7,635	64.7%	-68.9%	-26.4%	21.5%
40	8,129	10,908	34.2%	-82.3%	-58.0%	-30.7%
60	15,001	20,171	34.5%	-90.4%	-77.3%	-62.4%
Family - Two Adults, Two Children						
20	8,283	13,254	60.0%	-73.6%	-37.5%	3.3%
40	11,775	16,528	40.4%	-81.4%	-56.0%	-27.3%
60	18,647	25,791	38.3%	-88.3%	-72.2%	-54.1%

Section II – ACA Background

A critical component of the Patient Protection and Affordable Care Act (“ACA”) is the establishment of health benefit exchanges. These new marketplaces may serve individuals and small businesses purchasing health insurance. The exchange will be incorporated into a broader ACA framework.

States may establish a “state exchange” or have a “federally-facilitated exchange” established by the Secretary of Health and Human Services (“HHS”). A federally-facilitated exchange may be operated by the federal government, or by the federal government in conjunction with the state, as a “partnership” exchange. West Virginia has chosen to operate as a partnership exchange with the federal government titled the Marketplace. The same functions are required of all exchanges and they must adhere to many of the same standards.

Health plans within exchanges will be segregated based on their actuarial value. Actuarial value is the percentage of the total charges that the health plan covers compared to the enrollee’s financial responsibility. Inside the exchange, health plans will be offered within four metal tiers:

- Bronze (58-62 percent actuarial value)
- Silver (68-72 percent actuarial value)
- Gold (78-82 percent actuarial value)
- Platinum (88-92 percent actuarial value)

In addition to the four tiered plans, an insurance plan may offer a Catastrophic Health Plan for those under the age of 30, or for individuals who are exempt from the individual mandate.

Premium Stabilization

To help protect insurers against risk selection and market uncertainty, the ACA establishes three programs which are scheduled to be effective in 2014: temporary reinsurance and risk corridor programs to give insurers payment stability as insurance market reforms begin, and an ongoing risk adjustment program that will make payments to health insurance issuers that cover higher-risk populations (e.g., those with chronic conditions) to more evenly spread the financial risk borne by issuers. These programs intend to ensure that health plans and issuers compete for coverage on the basis of price, quality and service.

Risk Adjustment

Risk adjustment is an actuarial tool used to adjust payments to health plans based on the relative health of the covered populations. Health risk adjustment is the process of adjusting payments to health insurance plans based on differences in the risk characteristics of people enrolled in each plan. Risk adjustment relies on risk assessment to determine the relative risks among individuals and groups. When premiums for individuals at risk for high health care spending don’t fully reflect those higher costs, health plans could develop strategies for avoiding high-risk individuals. This is particularly true in an environment where policies are guaranteed issue. Risk adjustment can be used to reallocate premiums among plans to take into account the health status of plan participants. Risk adjustment helps to make payments to competing plans more equitable, thereby protecting plan solvency and reducing the incentives for competing plans to avoid high-risk individuals with higher-than-average costs.

The ACA risk adjustment program will become permanent in each state beginning in 2014. The purpose of the risk adjustment program is to make payments to health insurers who take on higher risk members and receive payments from insurers that have healthier members. The insurers with high cost members will need these additional payments, as all health insurance policies will be guaranteed issue and health insurers are not allowed to rate individuals based on health status and other health factors. The risk adjustment program is set up to be a zero sum program within each state. That is, all payments from health insurers will be equal to all payments to insurers each year. Risk adjustments will apply to non-grandfathered individual and small group health insurance plans inside and outside of the health insurance exchange starting in 2014.

Reinsurance

The temporary reinsurance program included in the ACA is scheduled to be in place from 2014 through 2016. As the provisions of the ACA begin to come into effect, health insurers are faced with many unknowns. Of those unknowns is what the health care utilization of the newly insured will be in the first few years of coverage. Because of this, the ACA provides a measure of protection by offering a federal reinsurance plan to non-grandfathered individual market insurance plans inside and outside of the exchange. The program is intended to help stabilize health insurance premiums in the individual market during the transition from the pre-ACA market to the guaranteed issue, modified community rating environment starting in 2014. The federal parameters state that insurers will receive payments for each individual covered that are equal to 80% of incurred claims above \$60,000, subject to a \$250,000 reinsurance cap. States may also establish a supplemental reinsurance program that provides reinsurance benefits that are more generous than those provided under the national program. This option may be attractive to states expecting a large influx of high-cost individuals into the individual health insurance market in 2014 due to a large uninsured population with higher than average morbidity and/or a relatively large high risk pool.

Risk Corridors

The temporary risk corridor program is also scheduled to run from 2014 through 2016 and is another tool that is intended to protect insurers from the new guaranteed issue healthcare market. However, this program also mandates insurers to share better than expected experience. The risk corridor mechanism compares the total allowable medical costs for each Qualified Health Plan (QHP) (excluding non-medical or administrative costs) to those projected or targeted by the QHP. The following chart illustrates HHS payments to and from insurers based on the projected versus actual outcomes:

Table 4

<u>Allowable Target</u>	<u>Action</u>	<u>Amount Paid</u>
Greater than 108%	HHS pays QHP	2.5% of Target + 80% of amount in excess of 108%
103%-108%	HHS pays QHP	50% of amount in excess of 103%
97%-103%	No Action	No payment transfer
92%-97%	QHP pays HHS	50% of difference between 97% of target and allowable cost
Less than 92%	QHP pays HHS	2.5% of Target + 80% of difference between 92% of target and allowable cost

The risk corridor will apply to all individual and small group plans inside the state health insurance exchange, and QHPs sold outside the exchange that are substantially the same as those sold inside the exchange.

Risk Corridor Calculation Example¹:

(2) Summary of HHS Example of Calculation of Risk Corridor Payment

Assumptions

1. Premiums earned	\$200
2. Allowable costs (defined in prior rule, including claims and allowed expenses for quality, information technology, and other applicable adjustments, and net of reinsurance and risk adjustment payments, and net of any cost-sharing reduction payment received by the issuer)	\$140
3. Non-claims costs, total	\$50
a. Taxes	\$15
b. Other than taxes	\$35

Calculations

4. After tax premiums earned: premiums earned minus taxes: ($\$200 - \15)	\$185
5. Profits: greater of 3% of after tax premiums earned ($3\% * \$185 = \5.55) or premiums earned minus allowable and administrative costs ($\$200 - (\$140 + \$50) = \10)	\$10
6. Allowable administrative costs: sum of administrative costs other than taxes plus profits ($\$35 + \$10 = \$45$), limited to 20% of after tax premiums earned (20% of $\$185 = \37), plus taxes ($\$15$) = $\$37 + \$15 = \$52$	\$52
7. Target amount: premiums earned minus allowable administrative costs: ($\$200 - \$52 = \$148$)	\$148
8. Risk corridor ratio: ratio of allowable costs to the target amount ($\$140 / \$148 = 94.6\%$).	

Based on risk corridor table above, issuer would be required to remit to HHS 50% of difference between 97% and 94.6% (50% of 2.4% = 1.2%) times the target amount of \$148 (1.2% * \$148 = \$1.78)

¹ <http://www.chausa.org/docs/default-source/advocacy/e6c3d6d3eb0a438088a0b4db08fe7ec61-pdf.pdf?sfvrsn=2>

Section III – State of West Virginia Health Care and Financing Today

In evaluating the future enrollment of the Marketplace, the project team analyzed historical data from January 1, 2008 through June 30, 2012 for Medicaid, PEIA, large group commercial insurance, small group commercial insurance, and individual commercial insurance. Some providers provided data for a shorter period of time. This data was combined with census data from the Current Population Survey (“CPS”) to develop an understanding on the health care characteristics of residents of West Virginia.

In this section, the project team presents family income in the analysis. The Census ACS 1-year survey shows both household income and family income. For 2011, the household income is \$38,482 for WV and \$50,502 for the US. The family income is \$49,693 for WV and \$61,455 for the US. We believe the family income is the more appropriate to report on. The definitions from the Census Bureau are below.

Family: "A family is a group of two people or more (one of whom is the householder) related by birth, marriage, or adoption and residing together; all such people (including related subfamily members) are considered as members of one family. Beginning with the 1980 Current Population Survey, unrelated subfamilies (referred to in the past as secondary families) are no longer included in the count of families, nor are the members of unrelated subfamilies included in the count of family members. The number of families is equal to the number of family households, however, the count of family members differs from the count of family household members because family household members include any non-relatives living in the household."

Household: "A household consists of all the people who occupy a housing unit. A house, an apartment or other group of rooms, or a single room, is regarded as a housing unit when it is occupied or intended for occupancy as separate living quarters; that is, when the occupants do not live with any other persons in the structure and there is direct access from the outside or through a common hall.

A household includes the related family members and all the unrelated people, if any, such as lodgers, foster children, wards, or employees who share the housing unit. A person living alone in a housing unit, or a group of unrelated people sharing a housing unit such as partners or roomers, is also counted as a household. The count of households excludes group quarters. There are two major categories of households, "family" and "nonfamily". (See definitions of Family household and Nonfamily household)."

The data below summarizes our analysis of these subsets:

Uninsured: In 2011, West Virginia had a total of 251,000 uninsured, which represents 19.2% of the total 1,308,000 aged 18-64 non-disabled population in West Virginia. Some of their characteristics of importance are:

- a.) Their median family income is \$20,240 compared to \$49,693 for the entire state
- b.) The average number of people in the household is 2.0
- c.) Their average age is 36.6
- d.) 49.8% of those uninsured are female
- e.) Of the total, 60.6% (totaling 152,000) are employed, and 10.0% (totaling 25,000) are offered insurance through their employer
- f.) Of the total, 4.8% (totaling 12,000) are eligible for public insurance
- g.) Of the total, 38.6% (totaling 97,000) are married

Underinsured: Assessing underinsurance is a more challenging undertaking because there is no clear definition of “underinsured”. For this section we define someone as “underinsured” if they have private insurance, but they have to pay more than 15% of their income for health insurance premiums and out of pocket expenses. This 15% cutoff corresponds to the lower bound for the share of resources that is not devoted to necessities in the study of Gruber and Perry²; that is, for all groups in that study the median household could afford to spend 15% of their budget on goods other than food, shelter and transportation. In 2011, we have a total of 103,000 underinsured, which represents 7.9% of the total 1,308,000 aged 18-64 non-disabled population in West Virginia. The underinsured are a subset of the insured population described below.

- a.) Their median family income is \$23,240 compared to \$49,693 for the entire state
- b.) The average number of people in the household is 2.3
- c.) Their average age is 37.0
- d.) 52.4% of those underinsured are female.
- e.) Of the total, 57.3% (totaling 59,000) are employees covered under Employer Sponsored Insurance. After including the dependents of these employees, 82.5% (totaling 85,000) are offered insurance through their employer or a primary’s employer.
- f.) Of the total, 15.5% (totaling 16,000) are eligible for public insurance.
- g.) Of the total, 40.8% (totaling 42,000) are married.

² *Will The Affordable Care Act Make Health Insurance Affordable?*; Jonathan Gruber and Ian Perry; Commonwealth Fund, April 27, 2011

Insured: We can also consider a comparable set of facts for the 1,057,000 insured, which represents 80.8% of the total 1,308,000 aged 18-64 non-disabled population in West Virginia.

- a.) Their median family income is \$61,673 compared to \$49,693 for the entire state
- b.) The average number of people in the household is 2.9
- c.) Their average age is 31.6
- d.) 49.6% of those insured are female.
- e.) Of the total, 55.6% (totaling 587,000) are employed, and 73.0% (totaling 770,000) are offered insurance through their employer or a primary's employer
- f.) Of the total, 23.3% (totaling 246,000) are eligible for public insurance. Of these 246,000 that are eligible for public insurance, 74.4% (totaling 183,000) are on public insurance.
- g.) Of the total, 44.8% (totaling 473,000) are married.

In evaluating the regional health care delivery system for West Virginia, it is clear that in general the health care markets of Maryland, Virginia and Pennsylvania are very different from West Virginia due to differences in metropolitan population. On the other hand, similarities can be found in western Maryland, southeastern Ohio, Kentucky and Tennessee.

In the 2010 census, West Virginia, with a median age of 41.3, has the distinction of being recognized as one of the states with the highest median age in the United States compared to 37.2 nationally. This has increased from 38.9 ten years ago. This has impacted the nature of insurance for the State of West Virginia, as the state has experienced a growing number of retirees and fewer employed individuals as a percentage of the overall population.

According to the Centers for Disease Control ("CDC"), the percent of West Virginia residents with a body mass index ("BMI") greater than 30 was less than 15% in 1990. This has increased to over 30% by 2009. Consequently, obesity has contributed to West Virginia having a lower life expectancy for a newborn of 75.2 YOA, compared to 78.6 YOA nationally. West Virginia's child overweight and obesity rate stands at 35.5%, about 4% higher than the national average.

In combination with its rural character, these observations define the challenges of financing health care in West Virginia. Whereas other areas and other states have been able to negotiate with providers to change practice protocols and receive substantial unit discounts, West Virginia's rural makeup has hampered the development of these basic managed care precepts.

West Virginia public and private insurers have experienced a high rate of increase in benefit cost for 2010 through 2012 resulting in premium increases. In particular, West Virginia Public Employees Insurance Agency ("WVPEIA") has been understandably concerned about the recent high medical trends in providing health care coverage of active employees and retirees, while the State Medicaid program has experienced an average 9.8% annual growth from Federal Fiscal Year 1990 to Federal Fiscal Year 2009 according to State Health Facts³. In the period of 2007 to 2009, the State Medicaid program experienced lowers trends; however, due to the passage of Patient Protection and Affordable Care Act ("ACA"), medical and drug trends have started to accelerate, and are expected to continue to rise due to the expansion of eligibility, restriction of coverage limits, and elimination of pre-existing condition clauses.

³ <http://kff.org/medicaid/state-indicator/growth-in-medicaid-spending-fy90-fy10/>

According to the United Health Foundation⁴, current West Virginia health statistics in 2011 were:

- Pre-term birth rate - 12.1% 30th nationally
- Low birth weight babies index - 9.2% 45th nationally
- Infant mortality rate - 7.7% 43rd nationally
- Smokers among adults - 28.6% 49th nationally
- Obesity rate - 32% 48th nationally
- Cancer deaths per 100,000 population - 214.4 49th nationally
- Cardiac heart disease - 6.7% 50th nationally
- High blood pressure - 37% 45th nationally
- High Cholesterol - 40.5% 40th nationally
- Cardiovascular deaths per 100,000 population - 320.1 47th nationally
- Diabetes rate - 12% 48th nationally
- Immunization rate - 85.5% 48th nationally

Additionally, according to the *County Health Rankings & Roadmaps* program published by the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute⁵, West Virginia's statistics include:

Table 5

	Smoking	Inactivity	Diabetes	Obesity	Teen Birth Rate
National Median	19%	24%	9%	28%	38
National (90th percentile)	16%	19%	7%	24%	24
West Virginia	26%	33%	13%	33%	45
West Virginia Ranking	49	49	49	48	36
					Rate per 1,000 females

⁴ <http://www.americashealthrankings.org/WV/2011>

⁵ <http://www.countyhealthrankings.org/app/west-virginia/2013/measure/factors/9/map>

Section IV - Results

To evaluate the Marketplace, the project team evaluated the current pool of insureds in the state of West Virginia. The data collected to complete the study was from Medicaid, PEIA, and commercial insurers which spanned a two year period from July 2010 through June 2012. Data included membership enrollment numbers, medical claim expenditures, drug claim expenditures, and risk scores of members. Additionally, the project team analyzed all rate filings from insurers during this same time period and analyzed the actuarial value of each plan. From this data, the project team projected what 2016 would look like absent the ACA and 2016 including the impact of the ACA. For the Tables below, the following column headings are used:

2011 The current state of insurance in 2011
Pre-ACA The projected state of insurance in 2016 assuming the ACA had not been implemented
Post-ACA The projected state of insurance in 2016 assuming the ACA is implemented

Table 6 shows the overall impact of the various insured groups in West Virginia.

	2011	Pre-ACA	Post-ACA
Employees in ESI	<u>841,000</u>	<u>910,000</u>	<u>907,000</u>
Small Group ESI (<50)	119,000	131,000	113,000
Medium Group ESI (>=50 & <100)	38,000	41,000	30,000
Large Group ESI (>=100)	684,000	738,000	764,000
Unreformed Individual Market	24,000	28,000	0
Reformed Individual Market	0	0	107,000
Uninsured	251,000	246,000	76,000
Public (Excluding Disabled)			
Medicaid and CHIP	192,000	183,000	277,000

The ESI enrollment is projected to increase from 2011 through 2016 due to the projected national economic recovery. Variations in the West Virginia business cycle will result in variations in the projected ESI enrollment.

The following two pie charts show the projected insurance status for all West Virginia residents as of 2016. The uninsured, as a percentage of population, has decreased from 13.5% to 4.2%.

Chart 1

Insured Status Assuming No ACA Implementation

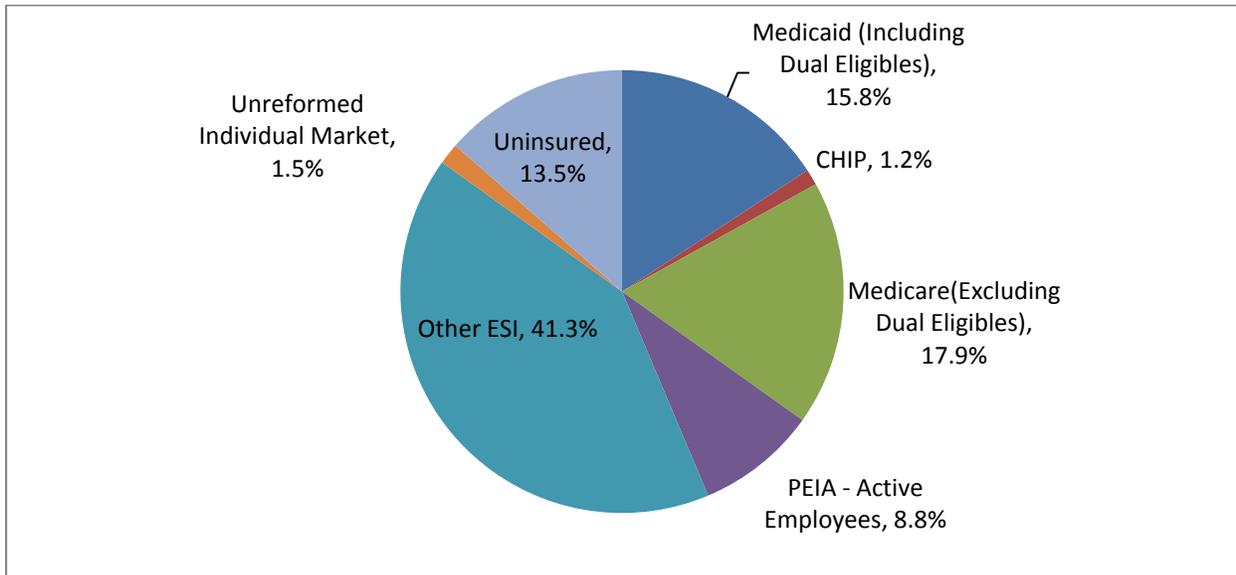
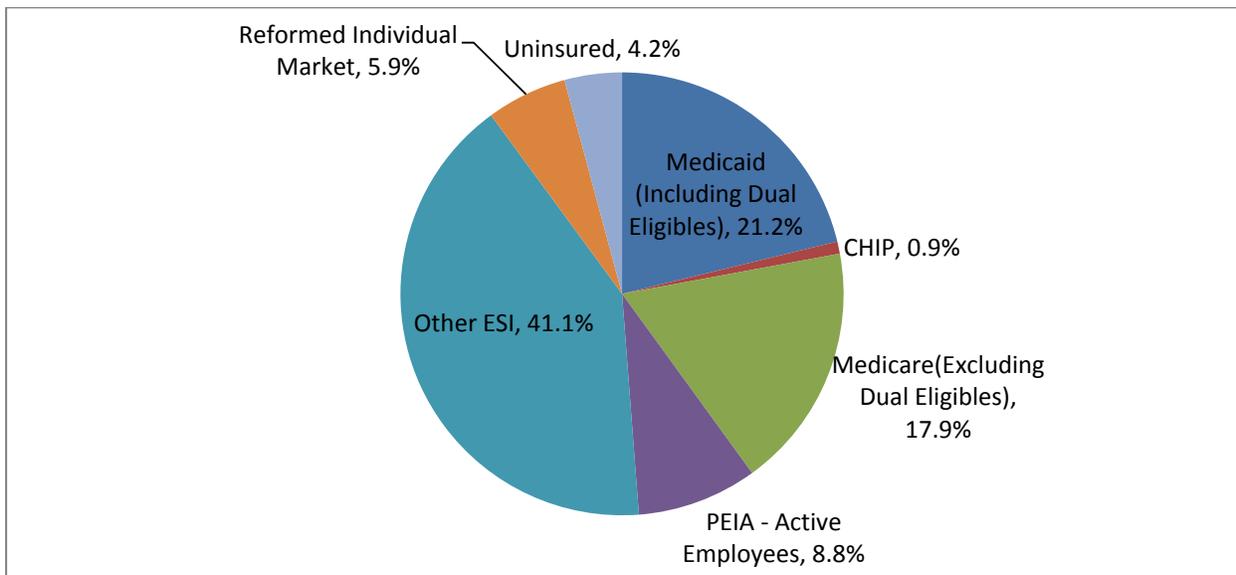


Chart 2

Insurance Status Assuming ACA Implementation



Documentation of the movements across different insurance types due to the ACA are found in Table 7. The rows show the population divided by their insurance status in 2016 in the absence of the ACA, while the columns show the population divided by their insurance status with the ACA. This table shows the case where there is a Medicaid expansion.

For example, in the top panel the “Total” column shows that absent the ACA there would be 910,000 individuals in employer sponsored insurance, and that there would be 246,000 uninsured. Likewise, the “Total” row shows that after the ACA (with expansion) there will be 910,000 individuals in employer sponsored insurance, and 77,000 uninsured.

**Table 7
Population Movement for 2016**

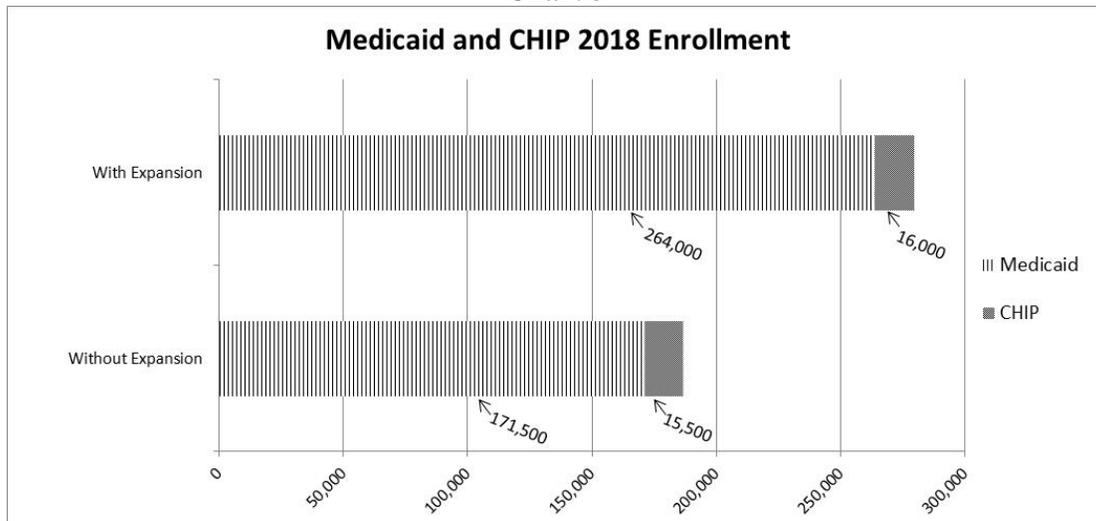
Before ACA Insurance Status	After ACA Implementation Insurance Status				Total
	<u>ESI</u>	<u>Non-group</u>	<u>Public</u>	<u>Uninsured</u>	
Employer Sponsored Insurance	871,000	18,000	17,000	4,000	910,000
Non-group	1,000	26,000	-	1,000	28,000
Public	1,000	-	182,000	-	183,000
Uninsured	34,000	63,000	78,000	71,000	246,000
Total	907,000	107,000	277,000	76,000	1,367,000

The individual cells show movements across particular insurance categories. So for example, 871,000 individuals start in ESI and remain in ESI. At the same time, 18,000 move to non-group insurance, 17,000 move to Medicaid, and 4,000 become uninsured (through firm dropping). Likewise, of the 246,000 individuals who start out as uninsured, 34,000 move to employer-sponsored insurance, 63,000 move to non-group insurance, and 78,000 move to public insurance, while 71,000 remain uninsured. The erosion of employer insurance is happening primarily in the smallest firms.

For the 76,000 individuals who remain uninsured, 42,000 are eligible for public insurance, 15,000 are eligible for Employer Sponsored Insurance, and 13,000 are eligible for subsidized non-group insurance. The rest, about 6,000, are eligible for non-subsidized non-group insurance.

Chart 3 below shows the change in enrollment in Medicaid and CHIP in the year 2018. The analysis can be viewed in further detail in the *Health Insurance Marketplace – Medicaid Expansion Report* dated April 16, 2013.

Chart 3



Uninsured

Various estimates of the number of uninsured in West Virginia have ranged from 230,000 to 300,000. The Henry J. Kaiser Family Foundation's State Health Facts⁶ has estimated the number as approximately 230,000 in 2011 while the West Virginia Hospital Association⁷ has estimated the uninsured population at 300,000 in 2011. The number of uninsured account for 16-17% of the total population of West Virginia. Between 2007 and 2010, West Virginia Hospitals have provided \$400 million to \$580 million of uncompensated charity care.

In 2016, without passage of the ACA, the uninsured in West Virginia are projected to be 246,000. Passage of the ACA has reduced this projection to 76,000. It is assumed that ultimately, 87% of individuals eligible to receive advance premium tax credits will choose to enter the exchange by 2016. Additionally, 25% of individuals not eligible to receive advance premium tax credits will purchase individual insurance either in or out of the exchange.

The two charts in Table 8 shows the previously uninsured who wind up with insurance, the type of insurance they obtain and their FPL income level.

Table 8

Insurance Source of Newly Insured		Level Number in 2016
ESI		34,000
Reformed Individual Market (Receiving Subsidies)		55,000
Reformed Individual Market (Not Receiving Subsidies)		8,000
Public		<u>78,000</u>
		175,000

Newly Insured	By Income: 2016	Post-ACA Level in 2016
<133	44.6%	78,000
133-200	25.7%	45,000
201-400	21.7%	38,000
401-500	1.7%	3,000
500+	6.3%	<u>11,000</u>
		175,000

Of the remaining 76,000 uninsured after implementation of the ACA, 50,000 individuals are not subject to the insurance mandate, including:

- Native Americans
- Prisoners
- Undocumented immigrants

⁶ <http://kff.org/other/state-indicator/adults-19-64/>

⁷ <http://www.wvha.org/WVHA/media/WVHAMedia/Media/Articles/Cost-of-the-Uninsured.pdf?ext=.pdf>

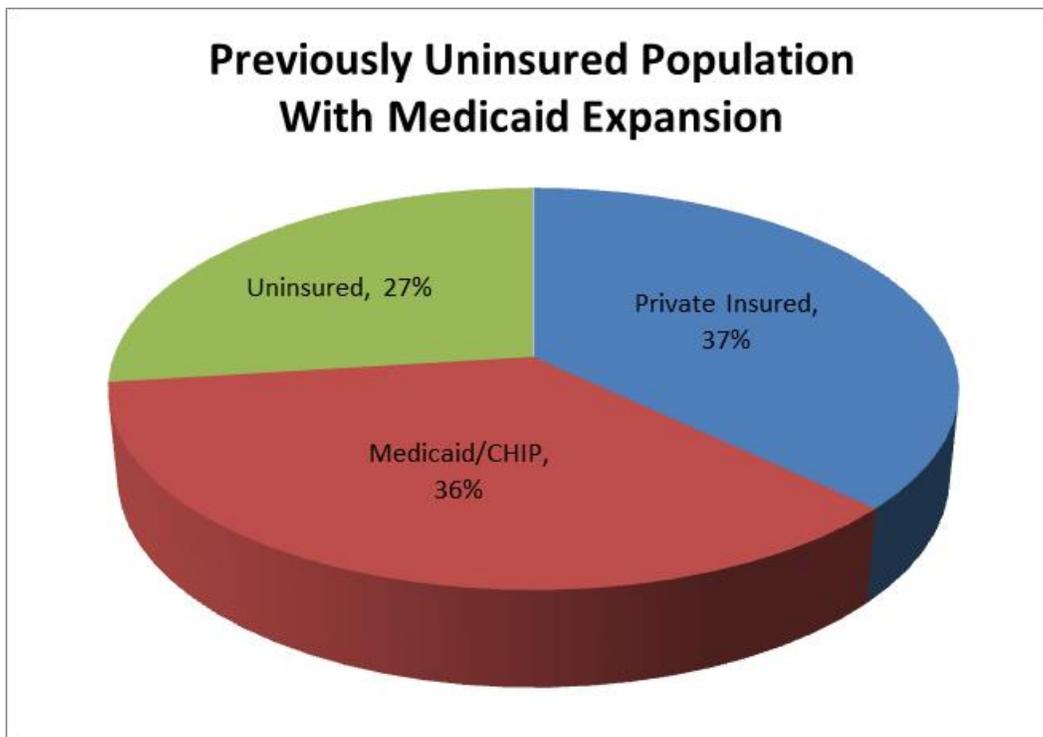
- Some religious groups. Those that have historically been exempt from the Social Security system, such as the Old Order Amish, are one example. Religious groups whose members pay for one another's health care instead of buying insurance are also exempt.
- Those whose family income is so low they don't have to file a tax return. Those numbers vary depending on several factors, including how old you are, whether you're married and whether you're the head of your household.
- Those who earn so little that health insurance premiums, after federal subsidies and employer contributions, would total more than 8 percent of their income.

Table 9

	Remaining Uninsured: 2016	Post-ACA Level in 2016
Exempt from Mandate	65.8%	50,000
Subject to Mandate, Choose not to Insure	<u>34.2%</u>	<u>26,000</u>
Total	100.0%	76,000

The pie chart below, titled Chart 4, summarizes where the uninsured population migrates to through implementation of the ACA.

Chart 4



Underinsured

The manner in which the underinsured is defined is inherently subjective and varies from source to source. It is an imprecise subject that can be considered a matter of value judgments. Various definitions of underinsurance include:

- 1) Researchers at the CDC have defined underinsurance as being insured but failing to see a doctor because of costs.
- 2) The Article “Underinsured Americans: A Review” Annual Review of Public Health, 1994) defines the underinsured as those uninsured or with inadequate coverage
- 3) Gruber and Perry⁸ define underinsured as those persons that have private insurance, but they have to pay more than 15% of their income for health insurance premiums and out of pocket expenses. This 15% cutoff corresponds to the lower bound for the share of resources that is not devoted to necessities.
- 4) The HealthWell Foundation⁹ has defined someone as underinsured if they spend more than 10 percent of their income on out-of-pocket medical expenses (5 percent if they are low income) or more than 5 percent on deductibles.

In order to most accurately quantify the current number and projection of the underinsured, CCRC Actuaries will rely on the definition in terms of exposure to out-of-pocket medical and drug expenses. Because of this, CCRC Actuaries has set the bench mark of someone who is underinsured as having a health insurance plan with an actuarial value of less than 60%.

In order to understand the whole marketplace, CCRC Actuaries collected benefit, claim, and premium information from major group and individual carriers in order to analyze their benefits. Using this information, CCRC Actuaries calculated the actuarial value of the major carriers. The “underinsured” were defined as anyone holding a plan with an actuarial value of less than 60%.

We estimate that absent the ACA, the number of underinsured would grow from its current level of 103,000 to a higher level of 110,000 by 2014 without the ACA. But, we estimate that with the ACA in place, the number of underinsured falls to 93,000 by 2014, 86,000 in 2015, and 79,000 in 2016. That is, by 2016, the share of the population that is underinsured falls by almost 40%. This decline is driven almost exclusively by declines in out-of-pocket costs.

⁸ *Will The Affordable Care Act Make Health Insurance Affordable?*; Jonathan Gruber and Ian Perry; Commonwealth Fund, April 27, 2011

⁹ http://www.healthwellfoundation.org/sites/default/files/About.the_.Underinsured.Final_.0.pdf

Small Group Insurance

Of particular importance is the change in employer sponsored insurance over time. Table 10 shows the characteristics of those with employer-sponsored insurance, by firm size. The first column shows the characteristics in 2011. Projections for 2016 were obtained from the Gruber Microsimulation Model explained in Appendix A. The second shows our projection of characteristics in 2016 if the ACA were not implemented. The final column shows the characteristics in 2016 with the ACA. The impact of the ACA is therefore shown by comparing the third column to the second.

Table 10

Employees in Firms with 25 or Fewer Employees

<u>Firms 1-25 People</u>	<u>2011</u>	<u>2016 Pre-ACA</u>	<u>2016 Post-ACA</u>
Total Number of People	98,000	110,000	98,000
Median Income	\$52,300	\$64,000	\$66,600
Average Family Size	2.3	2.2	2.3
Average Age	40.7	41.7	40.8
% Female	50.6%	50.8%	49.9%
% Eligible for			
Small Business Tax Credit			8.5%
Average per Month			
Small Business Tax Credit			\$130
% Eligible For Public			
(Medicaid and CHIP)	4.4%	4.2%	30.8%
Employee Takeup of Insurance			
(Employee Enrollment / Eligibility)	77.1%	79.1%	70.5%
Actuarial Value	73%	73%	73%
Average per Month Employee Cost	\$190	\$250	\$250
Average per Month Employer Cost	\$510	\$680	\$780

The % *Eligible for Public* includes the percent of enrollees who choose employer insurance despite being eligible for Medicaid or CHIP.

Note that the median income in Table 10 increased from \$64,000 in the 2016 Pre-ACA to \$66,600 in the 2016 Post-ACA. Firms whose average median income is lower are more likely to drop their employer sponsored insurance under the ACA implementation.

Table 11

Small Group Market Premium Transition (<100)

	<u>No Reform</u>	<u>Post-ACA Pre-Credit</u>	<u>Post-ACA Post-Credit</u>
Premium Value	\$12,655	\$13,749	\$13,666
AV Value	76%	76%	76%
% Rise in Premium		8.6%	8.0%
% Change in AV		0.0%	0.0%

Table 12**Current Small Group Market**

<u>Firms 1-50 People</u>	<u>2011</u>	<u>2016 Pre-ACA</u>	<u>2016 Post-ACA</u>
Total Number of People	119,000	131,000	113,000
Median Income	\$53,200	\$64,500	\$65,800
Average Family Size	2.4	2.3	2.3
Average Age	39.5	40.4	40.0
% Female	51.0%	51.1%	50.5%
% Eligible For Public (Medicaid and CHIP)	5.3%	5.1%	28.2%
Employee Takeup of Insurance	68.5%	70.1%	60.5%
Actuarial Value	73%	73%	73%
Average per Month Employee Cost	\$210	\$270	\$270
Average per Month Employer Cost	\$530	\$690	\$760

Currently, the small group market is defined as firms with 50 or fewer employees. This definition will be expanded to firms with 100 or fewer employees as of January 1, 2016. The difference between the first two columns in Table 12 shows the effects of health care inflation from 2011 through 2016. The difference between the last two columns shows the effects of implementation of the ACA. The premiums for the firms over 26 are expected to decrease slightly due to the healthier individuals joining the insured pool as a result of the health care mandate.

Table 13**Expanded Small Group Market**

<u>Firms 51-100 People</u>	<u>2011</u>	<u>2016 Pre-ACA</u>	<u>2016 Post-ACA</u>
Total Number of People	38,000	41,000	30,000
Median Income	\$62,700	\$77,200	\$76,600
Average Family Size	2.8	2.8	2.8
Average Age	31.6	31.7	31.2
% Female	48.9%	48.6%	45.9%
% Eligible For Public (Medicaid and CHIP)	3.7%	3.8%	9.7%
Employee Takeup of Insurance	77.9%	79.1%	70.3%
Actuarial Value	86%	86%	86%
Average per Month Employee Cost	\$380	\$490	\$460
Average per Month Employer Cost	\$760	\$990	\$950

We find that there are reductions in the number of persons with employer sponsored insurance in smaller firms, which are offset to some extent by increases in larger firms. This is because the larger firms do not drop insurance and there is an increase in enrollment due to the mandate. Most striking is the rise in the share of employees eligible for public insurance in the smallest firms, which is due to the expansion of Medicaid. Premiums rise in the smallest firms but fall for other firm sizes. The

drop in enrollment for firms with 51-100 employees in Table 13 is primarily by individuals who are less healthy than those that remain insured through ESI. This is the principal cause of the drop in premiums for this group.

Overall, premiums in the expanded small group market are higher than the original small group market. This is caused by the higher average actuarial value of these plans, which increases both the percentage of claims that the insurer pays as well as the utilization of services. See Appendix B for a discussion of actuarial value. Overall, expanding the definition of small group from 50 employees to 100 employees does not impact the risk pool in a significant way as to alter premiums.

Table 14
Changes in ESI Enrollment by Source by Employee Count

Small Group Employer Size	Employees Whose Firm Dropped Their Coverage	Employees Voluntarily Leaving ESI	Employees Joining ESI	Net Change in ESI Enrollment
ESI (Firms 1-50)	18,000	10,000	10,000	-18,000
ESI (Firms >50)	8,000	3,000	26,000	15,000
Total Small Group ESI	26,000	13,000	36,000	-3,000

Small Business Tax Credit

Of particular interest is the use of the small employer tax credit made available by the ACA. We estimate that in 2016 6,300 employers could benefit from taking advantage of the small employer tax credit, which could potentially impact 35,000 employees. Of that number of employers eligible, 2,100 employers with 8,000 employees utilize the credit. Small firms are estimated to receive \$12.8 million in credits, or \$1,535 per recipient.

To be eligible for the tax credit, employers must have fewer than 25 employees with average wages below \$50,000. The employer must also contribute at least 50% of total employee premiums. In total, premiums are expected to increase 8.6% in the small group market before tax credits, and 8.0% after tax credits. The actuarial value of plans post reform is expected to remain the same on average as it was pre reform. Therefore, selection, mandated benefits, and fees and taxes associated with the ACA are the primary causes of the increase in premiums for small groups. Beginning in 2014 this tax credit is increased from 35% to 50%. Firms may access the enhanced tax credit for any two consecutive taxable years beginning in 2014 through SHOP, limiting the potential impact of the tax credit.

Large Group Insurance

The projection shows a small change in large group insurance for employers with over 100 employees. Projections for 2016 were obtained from the Gruber Microsimulation Model explained in Appendix A. Total enrollment increases from 738,000 to 764,000, for a net increase of 26,000.

Table 15

<u>Firms 101+ People</u>	<u>2011</u>	<u>2016 Pre-ACA</u>	<u>2016 Post-ACA</u>
Total Number of People	684,000	738,000	764,000
Median Income	76,100	94,000	94,200
Average Family Size	2.9	2.9	2.9
Average Age	34.0	34.3	34.2
% Female	48.6%	48.4%	48.4%
% Eligible For Public (Medicaid and CHIP)	6.6%	6.6%	10.3%
Employee Takeup of Insurance	84.2%	90.8%	90.8%
Actuarial Value	89%	89%	89%
Average per Month Employee Cost	230	300	290
Average per Month Employer Cost	830	1,070	1,060

The difference between the first two columns in Table 15 shows the effects of health care inflation from 2011 through 2016. The difference between the last two columns shows the effects of implementation of the ACA. The premiums for the firms over 100 are expected to decrease slightly due to the healthier individuals joining the insured pool as a result of the health care mandate.

Overall, premiums in the large group market are higher than the small group market. This is caused by the higher average actuarial value of these plans, which increases both the percentage of claims that the insurer pays as well as the utilization of services. See Appendix B for a discussion of actuarial value.

Table 16

Large Group Market Premium Transition (101+)

	<u>2011</u>	<u>2016 Pre-ACA</u>	<u>2016 Post-ACA</u>
Premium Value	\$12,720	\$16,440	\$16,200
AV Value	89%	89%	89%
% Rise in Premium			-1.5%
% Change in AV			0.0%

Individual Insurance

With the implementation of the ACA, there will be a reformed individual market outside the Marketplace as well as an individual market inside the Marketplace. Additionally, grandfathered plans are exempt from some of the ACA requirements. The grandfathered plans will decrease significantly by 2016.

Projections for 2016 were obtained from the Gruber Microsimulation Model explained in Appendix A. There are projected to be 107,000 individuals in the reformed non-group individual market. Average premiums in the non-group market are expected to increase 35.3% with the implementation of the ACA. Offsetting this increase, 86,000 of these individuals will be receiving tax credits. Factoring in the tax credits, the average premium paid by individuals is 42.1% less than premiums would have been had the ACA not been implemented, as illustrated in Table 17.

Table 17

Non-group Market Premium Transition

	<u>No Reform</u>	<u>Post-ACA Pre-Credit</u>	<u>Post-ACA Post-Credit</u>
Premium Value	\$4,953	\$6,702	\$2,870
AV Value	71%	71%	71%
% Rise in Premium		35.3%	-42.1%
% Change in AV		0.2%	0.2%

The 35.3% gross premium increase was developed by analyzing the various changes made to the insurance marketplace by the ACA. The primary drivers of this increase are outlined in Table 18:

Table 18

Driver	Percent Increase
Benefit Plan Changes	8.30%
Change in Actuarial Value	0.20%
Limiting of Rating Factors	1.00%
End of Underwriting	17.60%
ACA Taxes	4.95%

Various cohorts of individuals will see different changes in their premiums. This is due to the age rating compression, unisex rates, and the inability for insurers to charge by health status and other underwriting criteria.

ACA Fees and Taxes

Increased fees to health insurance issuers will apply to fund portions of the ACA. These fees include:

The *Patient-Centered Outcomes Research Institute (PCORI Fee)* funds research to provide information about the best available evidence to help patients and their health care providers make more informed decisions. This fee is set at \$2/year/enrollee in 2014 and indexed thereafter.

The *Transitional Reinsurance Fee* is the premium associated with the transitional reinsurance program. This program will be discontinued after 2016. It is assumed to cost \$24/enrollee for 2016.

The *Exchange User Fee* is designed to fund the exchange in each state. The fee is 3.5% of premium charged against total premium of every insurer who offers a plan on the state exchange.

The *Health Insurance Industry Fee* funds the cost of implementing provisions of the ACA. Insurers will be allocated their share of the national fee based on their total fully insured premiums. The collected fee nationally will be \$8 Billion in 2014 rising to 14.3 Billion in 2018.

We have estimated these fees will add approximately 4.95% to the premiums in the individual market for 2016.

Advance Premium Tax Credit

Individuals whose family income is below 400% of the FPL are eligible for tax credits if their health care premium exceeds a percentage of their income. For individuals below 250% FPL, modified Silver plans will be offered with higher actuarial values and lower cost sharing requirements in addition to the premium tax subsidies. The table below summarizes the required premium contribution and the actuarial value based on income level:

Table 19

Summary of Required Premium Contribution and Cost Share Modifications

<u>Income Level</u>	<u>Required Premium Contribution Percentage of Income</u>	<u>Actuarial Value of Coverage</u>
100 - 133%	2%	94%
133 - 150%	3-4%	94%
150 - 200%	4-6.3%	87%
200 - 250%	6.3-8.1%	73%
250 - 300%	8.1-9.5%	70%
300 - 350%	9.5%	70%
350 - 400%	9.5%	70%

Actual premiums will be determined by each insurance company, and have not been established yet. Appendix C shows the projected gross premium for non-group insurance for various age and family size cohorts for three different levels of income based on the Federal Poverty Level.

Table 20 shows the projected gross premium for three sample ages with varying family size cohorts for three different levels of income based on the Federal Poverty Level. Families above 400% of the FPL will have to pay the full amount of the Gross Premium shown in the third column. The displayed tax credits available to an individual are at the midpoint of the range of FPL, but not the additional savings associated with the reduced cost share.

The chart shows the gross premium increase of the impact of the ACA, as well as the net premium increase after premium assistance. Premium assistance subsidies will be available to offset the total amount an individual or family needs to pay for health insurance coverage through a tax credit. The tax credit is available for the Silver plan, and is provided on a sliding scale, based on income as shown in the chart above.

If the premium is below the limit in Table 19, no premium assistance will be offered. This is the case for single 20-year olds in the highest FPL category.

Table 20

Non-Group Insurance Premiums - 2016

<u>Age</u>	<u>Pre-ACA</u>	<u>Post-ACA</u>	<u>2016 Gross Percent Increase</u>	<u>Net Percent Increase After Subsidy Based on Income(percent of FPL)</u>		
				<u>138% - 200%</u>	<u>201% - 300%</u>	<u>301% - 400%</u>
Male						
20	1,988	3,817	92.0%	-46.3%	27.1%	92.0%
40	3,512	4,878	38.9%	-69.6%	-28.1%	18.9%
60	7,681	10,360	34.9%	-86.1%	-67.1%	-45.6%
Female						
20	2,648	3,817	44.1%	-59.7%	-4.6%	44.1%
40	4,616	4,878	5.7%	-76.9%	-45.3%	-9.6%
60	7,320	10,360	41.5%	-85.4%	-65.5%	-43.0%
Family - Two Adults						
20	4,636	7,635	64.7%	-68.9%	-26.4%	21.5%
40	8,129	10,908	34.2%	-82.3%	-58.0%	-30.7%
60	15,001	20,171	34.5%	-90.4%	-77.3%	-62.4%
Family - Two Adults, Two Children						
20	8,283	13,254	60.0%	-73.6%	-37.5%	3.3%
40	11,775	16,528	40.4%	-81.4%	-56.0%	-27.3%
60	18,647	25,791	38.3%	-88.3%	-72.2%	-54.1%

The Marketplace

The Exchange will have enrollment from the individual market as well as the small group market. Table 21 summarizes projected enrollment from the individual market in 2016.

Table 21

Individual Marketplace – 2016		
Tax Credit Eligible Population		
Total Number of Individuals Eligible to Receive Tax Credit	Projected Number of Individuals Accepting Tax Credit in the Marketplace	Percentage of Individuals Taking Up Coverage in Marketplace
99,000	86,000	87%
Non-Tax Credit Eligible Population		
Total Number of Individuals Ineligible to Receive Tax Credit	Projected Number of Individuals Purchasing Coverage in the Marketplace	Percentage of Non-Eligible Tax Credit Recipients Purchasing Coverage in the Marketplace
84,000	21,000	25%
Total Individual Marketplace Participation		
Minimum Individual Marketplace Participation		86,000
Projected Individual Marketplace Participation		107,000
Projected Reformed Individual Market and Uninsured		183,000

The SHOP Exchange

SHOP Exchange coverage is available to the small group market for firms employing up to 100 individuals. Employees of SHOP participating employers generally do not qualify for premium tax credits through the Marketplace, except where their share of the SHOP coverage premium would exceed 9.5% of their income.

Within the SHOP Exchange, firms employing 25 or fewer employees are eligible for a Small Business Tax Credit. To obtain the credit, a firm must have average salaries less than 50,000 and contribute at least 50% of the premium. Business may only access the tax credit twice after 2014.

Table 22 summarizes the anticipated enrollment in the SHOP Exchange, broken down by firms eligible for a Small Business Tax Credit, and firms that are not eligible for the tax credit.

Table 22

SHOP Marketplace – 2016		
Tax Credit Eligible Businesses (1-25 Employees)		
Total Number of Firms Eligible for Tax Credit	Total Number of Employees Eligible for Coverage In Firms	Number of Employees Purchasing Coverage in SHOP
6,300	35,000	8,000
Non-Tax Credit Eligible Businesses (1-100 Employees)*		
Total Number of Firms Ineligible to Receive Tax Credit	Total Number of Employees Eligible for Coverage In Firms	Number of Employees Purchasing Coverage in SHOP
17,600	159,000	37,000
Total Individual Marketplace Participation		
Minimum SHOP Marketplace Participation		8,000
Projected SHOP Marketplace Participation		45,000

* Non-Tax Credit Eligible Business include business with 26-100 employees as well as business with 1-25 employees who do not meet the eligibility requirements for the Small Business Tax Credit.

Section V - Impacts of Premium Stabilization

Background and Assumptions

As previously discussed on pages 5 and 6, the ACA implements three components to stabilize the experience of insurers offering qualified health plans through the exchange. The components are:

- Reinsurance – payments made to insurers for high cost enrollees (Section 1341 of the ACA). Under this feature, qualified health plans will be reimbursed for a proportion of claim cost for members who exceed a threshold (attachment point). There is a cap on claim expenses considered under this provision.
- Risk corridors – reallocation of revenue based on composite loss ratios (Section 1342 of the ACA). In this program, aggregate losses are compared to target losses and qualified health plans can both receive payments from (to the extent that loss ratios exceed targets) and make payments to (to the extent loss ratios are below targets) to HHS.
- Risk adjustment – reallocation of revenue based on relative risk of enrollees (Section 1343 of the ACA). The composite risk score of a qualified health plan will be used to adjust claim experience based upon the risk present in the qualified health plan. For plans with a composite risk score of 1.00, expected claim expenses will be adjusted downward while qualified health plans with an aggregate risk score greater than 1.00 will have expected claim expenses increased.

While reinsurance and risk corridors are temporary vehicles (2014 to 2016), these programs will have significant impact on the financial performance of group and non-group health plans inside and outside of the exchanges. To estimate the impact of these programs, a simulation model was implemented. The simulation model “repays” the claims for enrolled members and then quantifies the interactions between claim expense, risk present in a population, premium charged, actuarial value, and the premium stabilization features of the ACA. In the model, members are randomly assigned to carriers and plans depending upon the scenario that is being simulated. Five scenarios were modeled:

- Completely random assignment.
- Selection against higher actuarial value plans by higher risk members.’
- Selection against higher actuarial value plans by higher risk members and the dominant carrier.
- Selection against higher actuarial value plans by higher risk members and one of the less dominate carriers.
- Selection against higher actuarial value plans by higher risk members and more favorable than expected claim experience across the market.

Key attributes of the simulation model database:

- Based on privately insured members in the State of West Virginia. The simulation database contains member exposure of 153,692 years with unadjusted total allowed charges of \$626,906,091.
- Dates of service from July 1, 2011 to June 30, 2012.
- Includes prescription drugs and medical. Allowed charges are those recognized by private insurers in West Virginia and are therefore assumed as representative of the market.

- Claims are trended to the midpoint of 2014 at an assumed rate of 5.4% annually. 5.4% is the underlying trend assumption applied in the economic projection model.
- Claims are loaded for selection, health status, and benefit changes by 35%. This assumption is based on data gathered from national insurers, trade association analysis (Society of Actuaries), and independent analysis and correlates with the GMSIM. The adjustment is appropriate given that the simulation database is constructed based on members who currently have insurance and we are modeling a market where many of the members will be newly insured.

The risk adjustment model (CDPS) was applied as a concurrent model and was based only on medical data. This approach mirrors the methodology that will be applied in the HHS risk adjustment model. Membership was placed into four equal (in terms of exposure) risk strata for selection distribution analysis purposes. The following table summarizes the risk stratification:

Table 23

<u>Risk Strata</u>	<u>Lower Bound</u>	<u>Higher Bound</u>	<u>Exposure</u>	<u>Percent of Expenditure</u>
Very Low Risk	0.1259	0.1607	25%	3.6%
Low Risk	0.1608	0.3975	25%	4.4%
Moderate Risk	0.3976	0.8707	25%	15.1%
High Risk	0.8708	95.061*	25%	76.9%

* It is interesting to note that while the High Risk strata contains 25% of exposure, it accounts for 76.9% of expenditures. This is a typical distribution in the health insurance market, thus validating the probability distribution of claim expenses at a member level.

A synthetic market of three insurers was constructed for the simulation. In the market, there is one dominant carrier (70% of the penetration) and two smaller carriers splitting evenly the remaining membership. It is assumed that, at least initially, the market in West Virginia will be segmented in a similar fashion.

For individuals below 250% FPL, modified Silver plans will be offered with higher actuarial values and lower cost sharing requirements in addition to the premium tax subsidies. Table 24 summarizes the required premium contribution and the actuarial value based on income level:

Table 24

<u>Income Level</u>	<u>Required Premium Contribution Percentage of Income</u>	<u>Actuarial Value of Coverage</u>
100 - 133%	2%	94%
133 - 150%	3-4%	94%
150 - 200%	4-6.3%	87%
200 - 250%	6.3-8.1%	73%
250 - 300%	8.1-9.5%	70%
300 - 350%	9.5%	70%
350 - 400%	9.5%	70%

The following table lists the assumed actuarial value of each plan and the percentage of the population in the plan:

Table 25

<u>PLAN</u>	<u>AV</u>	<u>POPULATION PERCENTAGE</u>
94% Silver AV	94%	9%
87% Silver AV	87%	26%
74% Silver AV	73%	7%
Gold	80%	16%
Silver	70%	16%
Bronze	60%	17%
Catastrophic	55%	8%

The following assumptions were made with respect to premium stabilization parameters:

- For reinsurance, an attachment point of \$60,000 was assumed. Claims in excess of the attachment point were reimbursed to the plan at an 80% rate. Reinsurance payments were subject to the reinsurance cap of \$250,000 per member.
- For risk corridors, thresholds were established at:
 - From 103% to 108% of projected total allowable medical costs: 50% recovery rate.
 - Greater than or equal to 108% of projected total allowable medical costs: 80% recovery rate.
 - From 93% to 97% of projected total allowable medical costs: 50% reimbursement rate.
 - Less than or equal to 93% of projected total allowable medical costs: 80% reimbursement rate.

Scenario 1 – Random Distribution of Membership

For this scenario, members were allocated to each plan based on the market penetration assumptions described earlier in this document randomly. Table 26 summarizes the results:

Table 26

Carrier	Risk Adjusted Premium	Claims	Reinsurance	Net Claims	Premium Stabilization Collected	Premium Stabilization Paid	Loss Ratio
1	\$579,226,295	\$558,579,336	\$43,959,719	\$514,619,618	\$25,331,532	\$0	85%
2	124,201,030	114,677,146	7,764,228	106,912,918	2,370,343	0	84%
3	124,920,307	115,413,670	8,342,530	107,071,141	2,375,204	0	84%
Total	\$828,347,632	\$788,670,152	\$60,066,477	\$728,603,677	\$30,077,079	\$0	85%

Scenario 2 –Selection Against Higher AV Plans

For this scenario, members were randomly allocated to each plan based on the penetration assumption, but membership with risk scores in the highest quartile disproportionately selected the higher AV plans. Table 27 summarizes the results:

Table 27

Carrier	Risk Adjusted Premium	Claims	Reinsurance	Net Claims	Premium Stabilization Collected	Premium Stabilization Paid	Loss Ratio
1	\$573,722,401	\$548,888,290	\$42,576,382	\$506,311,907	\$21,960,763	\$0	85%
2	128,369,846	116,744,451	8,564,447	108,180,004	1,339,888	0	83%
3	128,665,702	121,164,682	9,024,312	112,140,370	3,589,008	0	85%
Total	\$830,757,949	\$786,797,423	\$60,165,141	\$726,632,281	\$26,889,659	\$0	85%

Scenario 3 –Selection Against Higher AV Plans and Selection Against the Dominant Carrier

For this scenario, members were initially randomly allocated to each plan based on the penetration assumption, but membership with risk scores in the highest quartile disproportionately selected the higher AV plans. Ten percent of the highest risk quartile was also assigned to the dominant carrier. Table 28 summarizes the results:

Table 28

Carrier	Risk Adjusted Premium	Claims	Reinsurance	Net Claims	Premium Stabilization Collected	Premium Stabilization Paid	Loss Ratio
1	\$585,459,065	\$578,214,879	\$45,668,295	\$532,546,584	\$38,341,259	\$0	85%
2	123,187,011	108,155,196	8,524,354	99,630,842	0	0	81%
3	122,421,780	104,704,866	7,138,043	97,566,823	0	0	80%
Total	\$831,067,856	\$791,074,941	\$61,330,692	\$729,744,249	\$38,341,259	\$0	84%

Scenario 4 –Selection Against Higher AV Plans and Selection Against the One of the Less Dominant Carriers

For this scenario, members were initially randomly allocated to each plan based on the penetration assumption, but membership with risk scores in the highest quartile disproportionately selected the higher AV plans. Ten percent of the highest risk quartile was also assigned to one of the less dominant carriers. Table 29 summarizes the results:

Table 29

Carrier	Risk Adjusted Premium	Claims	Reinsurance	Net Claims	Premium Stabilization Collected	Premium Stabilization Paid	Loss Ratio
1	\$551,578,840	\$494,514,041	\$35,518,750	\$458,995,290	\$2,520,243	\$0	83%
2	123,423,424	104,261,979	6,493,145	97,768,835	0	0	79%
3	156,529,802	196,714,516	20,345,358	176,369,159	50,958,080	0	85%
Total	\$831,532,066	\$795,490,536	\$62,357,252	\$733,133,284	\$53,478,323	\$0	83%

Scenario 5 –Selection Against Higher AV Plans and With Positive Claims Experience (10%)

For this scenario, members were randomly allocated to each plan based on the penetration assumption, but membership with risk scores in the highest quartile disproportionately selected the higher AV plans. It was also assumed that claim experience will be 10% better than projected in scenario 1. Table 30 summarizes the results:

Table 30

Carrier	Risk Adjusted Premium	Claims	Reinsurance	Net Claims	Premium Stabilization Collected	Premium Stabilization Paid	Loss Ratio
1	\$575,402,451	\$497,044,569	\$35,788,946	\$461,255,622	\$0	\$0	80%
2	128,206,340	104,988,251	7,543,845	97,444,406	0	1,029,990	77%
3	127,614,633	105,212,858	6,761,665	98,451,193	0	421,913	77%
Total	\$831,223,424	\$707,245,678	\$50,094,456	\$657,151,221	\$0	\$1,451,903	79%

While it is clear that premium stabilization will indeed have the desired effect of “smoothing” loss ratios between carriers, and, will be a positive for both carriers and consumers in West Virginia, there are several potential issues:

- There is evidence nationally that providers (hospitals and physicians) are seeking higher reimbursement rates for exchange business compared to existing network products. There are a number of reasons cited, however one of the more common rationales offered is the protection offered to qualified health plans by the risk corridor program. In essence, it is being argued that this program can be used to offset the losses caused by higher reimbursement rates, effectively using the Federal program as source of subsidization. Given the temporary nature of the risk corridor program, premium pressure may develop in 2016 to offset the loss of the risk corridor revenues.
- The Federal risk adjustment model is based solely on current (concurrent) medical claims. As prescription drugs replace (as well as augment) medical and surgical therapies, risk scores may become understated. Essentially, HHS is assuming that medical claims will exist that support and document the conditions indicated in the pharmacy data. As payment system reform (i.e. capitation, case rates, etc.) occurs in the marketplace, this assumption may not be reasonable. In the end, risk adjustment accuracy is a function of the robustness of the administrative claims data and the calculated relationship between the markers developed from the claims data and risk. In addition to issues related to input data sources, prospective risk models are commercially available and may offer additional data points in evaluating and understanding the risk present in West Virginia.
- The models presented in the report assume that the individual mandate will create a sufficient incentive for uninsured persons to purchase health insurance. In the event that the actual take up rate does not approach those assumed in the development of the premium stabilization mechanisms of the ACA, it is conceivable that the systems will not function as designed. Issues, such as revenue shortfalls, would be exacerbated if the take up rate is significantly lower than expected in the young and healthier population or higher than assumed in the less healthy population. In essence, premium stabilization is focused at those segments and distortions in those populations could ripple through the system.

Section VI - Merged Market Analysis

A. Impact from Merging Individual and Small Group Markets

The ACA allows the State of West Virginia the option to combine the Individual and Small Group Insurance market risk pools. The question of whether to maintain separate exchanges can be viewed as both a design issue and an operational issue. It is clear that the organizational challenge is to develop an exchange or exchanges that serve customers of different needs. Examples of these differences include enrollment, billing and premium collection. Outreach efforts will be clearly different for the Individual and Small Group markets.

West Virginia currently rates the two markets separately and has the option to continue the current differential. One argument for the merger of the two pools is the relatively small size of the Individual market both before the ACA of approximately 28,000 and the projected size of the Individual market of 107,000 in 2016. The Small Group Market is projected to be approximately 113,000 in 2016 for groups under 50 and another 30,000 in 2016 for groups between 50 and 100. The impact on premiums of combining risk pools depends on the actual composition of the respective pools. Our analysis concluded that monthly premiums will average \$560 in the Individual Market before subsidy and the Small Group Market monthly premiums will average \$450. **Should West Virginia elect to merge these markets the average increase will be an additional 10.5% for Small Group Market insureds and a projected 11.2% savings for Individual Market insureds.** We note that our projection is similar to other studies in terms of impact on the Individual Market, one study predicted that the Massachusetts merger would reduce premiums for individuals by 15%¹⁰ and an analysis of New York State projected a reduction of individual premiums by 37%, though this analysis was under an assumption of a voluntary market participation model, with significant selection. These studies also projected lower impact for the Small Group in each state, with the key difference that these states have significantly higher small group participation than West Virginia. The State of Maryland is similar to West Virginia in that a single carrier, CareFirst, a division of Maryland Blue Cross has a 72 percent market share of the Individual market and a 70 percent market share of the Small Group market. It is interesting to note that in December 2011 Maryland elected to conduct two separate exchanges for Individual and Small Group.

Clearly, the Individual Market was not an effective provider of health insurance preceding the ACA, but with the expected growth of the Individual Market, largely due to premium subsidies, the Individual Market by itself is expected to be a significant provider of health care coverage in West Virginia.

An advantage of merging the Individual and Small Group Insurance market would be greater economies of scale in plan management and regulation. In addition a merged market could potentially result in more carriers entering the market, potentially resulting in more competition and potentially resulting in more choices for the consumer. On the other hand, if the Individual and Small Group Insurance Markets are merged, it will require that rating and offer rules be identical, which could potentially create additional winners and losers in terms of premiums going up and going down for others.

¹⁰ Massachusetts Merger Project. (2006, December 13). Impact of Merging the Massachusetts Non-Group and Small Group Insurance Markets. Retrieved February 20, 2007, from http://www.hcfama.org/_uploads/documents/live/MA%20Merger%20Project%20Final%20Report%2020061213.pdf

B. Expanding Small Markets

Currently, the small group market is defined as firms with 50 or fewer employees. This definition will be expanded to firms with 100 or fewer employees as of January 1, 2016.

Overall, premiums in the expanded small group market are higher than the original small group market. This is caused by the higher average actuarial value of these plans, which increases both the percentage of claims that the insurer pays as well as the utilization of services. See Appendix B for a discussion of actuarial value. Overall, expanding the definition of small group from 50 employees to 100 employees does not impact the risk pool in a significant way as to alter premiums.

C. Regional Exchanges

The ACA allows the State of West Virginia to work with other states to create a regional exchange, with the approval of the federal government. States, whether they are contiguous or not, may elect to form a regional exchange where various functions and risk management can be combined. This concept was developed specifically to appeal to states with smaller populations. A regional exchange could facilitate the development of risk pools that are actuarially stable. A combined exchange would provide some benefits to the state, including:

- Increased competition and consumer choice
- Administrative economies of scale
- Increased risk pool lowers variability of claim costs
- Makes sense in areas of the state where a significant portion of care is provided out of state.

The pooling of risk with surrounding states would most likely benefit West Virginia. The population in West Virginia is a relatively high health care utilizer compared to the average population nationally. The increased enrollment across multiple Exchanges would help to create beneficial economies of scale. Additionally, the pooling of risks helps to spread catastrophic claims over several years and several insurers.

There are risks and expenses to developing a multi-state exchange:

- Potential for adverse selection if single state plans offered alongside regional exchange plans
- Is the insurance industry prepared to administer a regional exchange plan, where mandated benefits and regulatory oversight will likely vary from state to state.
- Increased administrative oversight from each participating state in terms of implementing policy and system changes to the Health Exchange.

Section VII – Impact of Definition of Full-Time Employee

The Affordable Care Act requires large employers through the Employer Share Responsibility to offer minimum essential coverage to all employees working 30 hours a week or more or face a potential penalty. A penalty of \$3,000 per subsidized employee is triggered when full-time employees obtain subsidized coverage through the Marketplace, which could be because the available coverage does not provide at least 60% actuarial value, or because the coverage is not affordable (9.5% of salary). The penalty cannot exceed the penalty of not offering any coverage to substantially all full time employees.

To reduce or eliminate penalties, potential employer responses could include:

- Some employers cut back employee hours, resulting in workers earning less money. According to the Los Angeles Times, an estimated 2.3 million workers nationwide could see their hours reduced. Based on this estimate, West Virginia could see 10-15,000 full time employees hours reduced.
- Instead of extending health insurance to their employees, many employers are considering paying the federal penalty of \$2,000 per worker that is levied when a company does not offer insurance.

It is anticipated that the impact of employers cutting hours to maintain fewer than 50 employees will be minimal, as this will only impact a limited number of companies that are close to the limit. The greater concern is the impact of employers significantly larger than 50 employees actively working to limit potential penalties. Anecdotal examples of employer responses to potential penalties that have recently been reported include:

- The state of Virginia is cutting part-time employee hours instead of extending insurance coverage to its workers. Virginia employees have been advised to work 29 hours or less.
- The city of Long Beach in California is cutting full time employees to below 30 hours.
- Darden Restaurants, which owns the Olive Garden and Red Lobster chains, has opted to cut hours.
- The largest U.S. movie-theater chain cut the hours of many workers below 30 hours. In a memo to employees, the Regal Entertainment Group stated: “To comply with the Affordable Care Act, Regal had to increase our health care budget to cover those newly deemed eligible based on the law's definition of a full-time employee,” the company stated in a memo. “To manage this budget, all other employees will be scheduled in accord with business needs and in a manner that will not negatively impact our health care budget.”

While some employers have already stated their intent to cut worker hours, the overall impact will be muted by companies needs to expand and provide consistent customer service.

Appendix A - Overview of the Gruber Microsimulation Model (GMSIM)

The results presented in this report are based on modeling performed using the microsimulation model described in this section. There are two major components to the Gruber Microsimulation Model (“GMSIM”): the “premod” which is the baseline dataset, and the GMSIM model itself which produces the simulation results.

The data base for the GMSIM application to West Virginia is the Current Population Survey (“CPS”). This is the largest nationally representative survey with information on health insurance coverage, health, income, and other demographic information. The CPS is designed to be representative at the state level. We pool the latest three years of the CPS in order to have a sufficiently large sample size for our analysis of West Virginia.

To improve the accuracy of our pre-reform estimations of the non-group and small group markets in West Virginia, we used data provided by Madalena Consulting (“MC”). MC provided us with data on annual claims, plan premium and actuarial value that is based on data submitted by West Virginia insurers. We first use this data to adjust our estimated distribution of “true cost” or annual expected health spending to match the distribution of claims paid by West Virginia insurers. Next, we match the distribution of insurance products in these markets. We begin by grouping together plans with similar actuarial value, which we then refer to as a “product”. Then we group the enrollees into sub-population cells determined by the enrollee’s age, sex, and claims cost. We find the distribution of “product” market share and average premium and actuarial value for each “product” in each age, sex, and claims population group. We then assign individuals from the CPS to products, matching the distribution of enrollment and premium spending that we observe in the MC data. At the end of this process, our estimation of the West Virginia non-group and small group markets reflects the intricacies of the West Virginia marketplace as best that can be estimated using this methodology.

To model firm behavior, it is important to understand that firms make decisions based on the firm wide aggregate effects of a policy. To mimic this in GMSIM, we construct “synthetic firms” which are meant to reflect the demographics of actual firms. The core of this computation comes from the U.S. Bureau of Labor & Statistics (“BLS”) data providing the earnings distribution of co-workers for individuals of any given earnings level, for various firm sizes and regions of the country (that is, for a worker in a small firm in the western region who earns at a given level, we find the distribution of earnings of all their co-workers). We then divide our CPS data into the same firm size and region categories. For each CPS worker, we use statistical matching to find other CPS observations that mimic the earnings distribution that we see in the BLS data for a worker of that region, firm size, and earnings level. These other observations become the “synthetic co-workers” for that CPS observation.

To project our “premod” forward for future year analysis we use a variety of income and health cost inflation rates, as well as population projections from the Census Bureau, and insurance growth rates from the Congressional Budget Office (“CBO”). We use CBO’s projections for Gross Domestic Product (“GDP”) growth to inflate income measures. We use a flat 5.7% growth rate for commercial insurers to inflate health care costs following the CBO¹¹. For Medicaid claims, a 3% growth rate in health care costs was used after reviewing state experience. We grow the overall population based on Census Bureau projections of population growth by age and sex. We also adjust the relative size of insurance categories using growth rates supplied by CBO. The CBO report utilized was issued in March 2012 titled “Updated Estimates for the Insurance Coverage Provisions of the Affordable Care Act.”

¹¹ <http://www.cbo.gov/sites/default/files/cbofiles/attachments/03-13-Coverage%20Estimates.pdf>

To begin the policy simulation process, we first consider firm reactions to policy changes. We do this because 90% of private health insurance is provided by employers, giving them great influence in insurance markets. To model firm behavior, we assume that the firm's decision-making reflects the aggregation of worker characteristics and preferences. To model these preferences we compute "pseudo-takeups", which are the firm's prediction of worker reactions to policy changes. We then average these reactions across the firm. There are three ways that we allow firms to react to policy changes and their predictions of worker behavior: change in employer sponsored insurance ("ESI") offering, change in the premium contribution split, and change in the spending on the total ESI premium. We also consider the size of the firm, as small firm behavior is more sensitive to policy changes. We assume that total worker compensation remains constant, so firm increases in ESI spending are offset with wage reductions and decreases in spending are offset with increases in wages.

We model changes in ESI offering by considering the incentives to offer insurance provided by the policy. We consider each policy component separately and compute an "offer pressure" that reflects the influence of the policy component on the firm's decision to offer or not offer insurance. Therefore, policies that provide viable alternatives to ESI coverage reduce the likelihood that the firm offers ESI. For example, the introduction of individual exchanges or expansion of Medicaid would reduce the likelihood that a firm offers insurance. Additionally, policies that subsidize alternative sources of insurance reduce the likelihood that a firm will offer insurance. Subsidies or penalties for not offering insurance raise the probability of offering insurance. If there is a mandate policy, it will result in a positive offer pressure. Since individuals will be required to take up a form of insurance if they are uninsured and many will prefer ESI over other insurance types, this will reduce the likelihood that the firm drops coverage. The decision to offer insurance is the most direct method by which firms react to policy changes.

We utilize a similar framework to firm offering when considering contribution shift and spending decisions. In this process, we consider each policy component's impact of the contribution decision and spending decision, and then aggregate the individual components to get the final contribution and spending change. The contribution and spending decisions are more subtle methods for firms to influence worker behavior. Policies that provide or subsidize alternative forms of insurance will cause firms to reduce their contribution to the ESI premium and reduce spending on the premium. This works as an indirect influence on workers to move to these alternatives. Conversely, when ESI is subsidized or firms are penalized for not providing coverage, firms will increase their contribution or spend more on the policy. All of these reactions will increase with the size of the subsidy or penalty. When firms change the total spending on the ESI premium, half of the spending increase goes to purchasing a higher actuarial value ("AV") product, and half goes to buying unobservably better coverage (i.e. purchasing from a more reliable or higher reputation insurer).

After determining the firm response, we move on to estimate the reactions of individuals to the policy changes. When considering individual reactions, we use a hierarchy of insurance desirability. ESI is most desirable, followed by individual exchanges, then traditional non-group insurance, and last is public health insurance. To decide between the insurance options we use "takeup" equations to determine the probability that an individual will move to a certain insurance type. Generally speaking, these equations are of the form:

$$\text{Takeup} = (\text{Constant} + \text{Elasticity} \times \% \text{ Price Change} \times \text{Income Effect}) \times \text{Income Adjustment}$$

The constant is a term that reflects the individual's health and the desirability of the insurance option. The elasticity determines the responsiveness of individuals to price changes. These are determined,

to the greatest extent possible, by a survey of the health economics literature. The price change measures the change in price from the pre-reform state to the post-reform state, and is adjusted for changes in the actuarial value of the plan. The income effect measures the level of the price change relative to income. This is important because price changes have diminishing returns to movement. That is to say that as the price change becomes large in dollar terms its impact on movement gets progressively weaker. The income effect also picks up the assumption that price changes are less important as income rises. Finally, the income adjustment reflects the assumption that takeup of insurance will fall as the final cost of insurance rises relative to income. After we compute the takeup probabilities for all the possible insurance movements, we apply any regulatory apparatus. For example, individuals with an ESI offer may be barred from moving to the individual exchange. After making the regulatory changes, we adjust the probabilities for overlap such that the sum of the movement probabilities and the probability of remaining on the pre-reform insurance category equals 100%.

By this point we have predicted the probability of the individual making all possible insurance choices. We now relax the assumption that each individual observation can only be on one insurance type. We use the movement probabilities as the share of the individual's weight that is moved to the relevant insurance category. For example, an observation might have a total weight of 1,000 and in the pre-reform state is uninsured. Pre-reform, we say this observation represents 1,000 uninsured individuals. Now in the post-reform world, we have concluded there is a 50% probability that this observation will continue to be uninsured, and a 50% probability that this observation will be covered by public health insurance. We now say that this observation represents 500 uninsured individuals and 500 individuals covered by public health insurance.

At this point we have computed what we call the voluntary movement: the movement that occurs as a result of individual and firm decisions. The next step is to apply any additional regulatory apparatus that affects movement such as an individual responsibility requirement or an auto-enrollment process. To make these adjustments, we move a portion of the observation's post-reform uninsured weight to a pre-determined insurance destination. The insurance destination represents the most likely source of insurance coverage for the person. The portion of the post-reform uninsured weight that is shifted depends on the insurance destination, and is calibrated to produce results in line with CBO estimates. We also have the capability to restrict the movement of undocumented immigrants. Utilizing data provided by Dr. Jeffery Passel of the Pew Hispanic Center, we are able to identify likely undocumented immigrants in the data, and to adjust or restrict their movement.

After considering the regulatory apparatus, we have finished the movement section of the model. To conclude the modeling process we finalize cost changes for individuals, firms, and governments. The first step in this process is to reset premiums in any exchanges that have been created. Exchanges will charge premiums that reflect the underlying risk of the overall pool, instead of the individual as in traditional non-group markets. To model the premiums that will be charged in the new exchanges we collaborate with CCRC Actuaries to determine the effect of ACA regulations and exchange population characteristics on premiums. This is an iterative process where we complete a model run and then CCRC Actuaries provides premium effects, which we feed back into the model until the premiums and populations stabilize. For the initial run, we estimate exchange premiums by using the existing non-group and half of the existing uninsured population (selected randomly). In the subsequent iterations, we use data from CCRC Actuaries to predict an exchange premium that is either higher or lower than the pre-reform premium based on the regulatory impacts of the ACA and the underlying cost of the exchange population.

Appendix B – Actuarial Value

Actuarial Value is the percentage of expected Essential Health Benefit costs a health plan will cover for a standard population.

$$\text{Actuarial Value} = \frac{\text{Anticipated Plan-Paid Allowed Charges for EHB Coverage for Standard Population}}{\text{Anticipated Total Allowed Charges for EHB Coverage for Standard Population}}$$

Currently, the actuarial value calculator relies on continuance tables that were developed from a national database by Health Intelligence Company LLC. Imputed costs are developed from the continuance tables. There is an assumption that individuals who purchase a higher actuarial value plan will utilize more services. The table below shows the assumptions currently contained in the actuarial value calculator.

Table 31

PMPM Allowed Charges from Continuance Table

<u>Plan</u>	<u>Medical Only</u>	<u>Rx Only</u>	<u>Combined</u>
Platinum	\$381	\$103	\$484
Gold	\$359	\$92	\$450
Silver	\$338	\$91	\$429
Bronze	\$334	\$80	\$415

Table 32

Implied Induced Utilization, Relative to Bronze

<u>Plan</u>	<u>Medical Only</u>	<u>Rx Only</u>	<u>Combined</u>
Platinum	14%	29%	17%
Gold	7%	15%	9%
Silver	1%	14%	3%
Bronze	0%	0%	0%

Premiums will not be determined strictly from the actuarial value calculator. This tool calculates the level of cost sharing, but NOT the overall level of benefits. Some of the pricing considerations that are not included in the actuarial value calculator include:

- Pent-up demand
- Geographic region
- Age and Gender mix
- Provider discounts
- Differences in formulary
- Out-of-Network costs

- Differences in benefits for each Essential Health Benefit

Due to the above factors, pricing actuaries at the recent Society of Actuaries 2013 Health Meetings were reporting that some plans with identical actuarial values could have as much as a 10% differential in costs. This differential may make it difficult for consumers to compare plans, even while the insurers are complying with the law.

West Virginia will be allowed to use a state-specific dataset as the standard population beginning in 2015 if it meets certain requirements, such as being large enough to be statistically reliable and stable.

Appendix C – Projected Non-Group Silver Premiums

With the implementation of the ACA, there will be a reformed individual market outside the Marketplace as well as an individual market inside the Marketplace. Additionally, grandfathered plans are exempt from some of the ACA requirements. The number of grandfathered plans will decrease significantly by 2016.

There are projected to be 107,000 individuals in the reformed non-group individual market. Average gross premiums in the non-group market are expected to increase 35.3% with the implementation of the ACA. Offsetting this increase, 86,000 of these individuals will be eligible to receive tax credits. Factoring in the tax credits, the average premium paid by individuals is 42.1% less than premiums would have been had the ACA not been implemented. Premium taxes associated with the ACA will add approximately 4.95% to the premiums in the individual market.

Premium assistance subsidies will be available to offset the total amount an individual or family needs to pay for health insurance coverage. The tax credit is available based on the state's Silver benchmark plan, and is provided on a sliding scale, based on income as shown in the chart below.

Table 33

<u>Income</u>	<u>Premium Limit</u>
138 – 150% FPL	3.00 – 4.00% of income
150 – 200% FPL	4.00 – 6.30% of income
200 – 250% FPL	6.30 – 8.05% of income
250 – 300% FPL	8.05 – 9.50% of income
300 – 400% FPL	9.50% of income

In addition to the premium tax credit, individuals below 250% FPL are eligible for reduced cost share when utilizing services. While this does not lower the premiums owed for these individuals and families, it does lower overall health care expenditures.

Table 34

	Non-group Market		
	<u>No Reform</u>	<u>With ACA Pre-Credit</u>	<u>With ACA Post-Credit</u>
Premium Value	\$4,953	\$6,702	\$2,870
AV Value	71%	71%	71%
% Rise in Premium		35.3%	-42.1%
% Change in AV		0.2%	0.2%

The 35.3% gross premium increase was developed by analyzing the various changes made to the insurance marketplace by the ACA. The primary drivers of this increase are outlined below:

Table 35

<u>Driver</u>	<u>Percent Increase</u>
Benefit Plan Changes	8.30%
Change in Actuarial Value	0.20%
Limiting of Rating Factors	1.00%
End of Underwriting	17.60%
ACA Taxes	4.95%

Various cohorts of individuals will see different changes in their premiums. This is due to new rules restricting the age rating compression, unisex rates, and the ability of insurers to charge by health status and other underwriting criteria.

Actual premiums will be determined by each insurance company, and have not been established yet. Tables A.1 – A.6 shows the projected gross premium for non-group insurance for various age and family size cohorts for three different levels of income based on the Federal Poverty Level. Families above 400% of the FPL will have to pay the full amount of the Gross Premium shown in the last column. Tables A.1 – A.6 show the tax credits available to an individual at the midpoint of the range of FPL, but not the additional savings associated with the reduced cost share.

The premium projections do not calculate tobacco use and reflect a state aggregate for regional rating. Individual premiums will vary by insurance company, tobacco use and location of household.

Appendix C - Single Adults

Single Adults	138% - 200% FPL			201% - 300% FPL			301% - 400% FPL		
	Net Premium (\$)	Average Tax Credit (\$)	Gross Premium (\$)	Net Premium (\$)	Average Tax Credit (\$)	Gross Premium (\$)	Net Premium (\$)	Average Tax Credit (\$)	Gross Premium (\$)
Age									
22	1,068	2,749	3,817	2,527	1,290	3,817	3,817	-	3,817
23	1,068	2,749	3,817	2,527	1,290	3,817	3,817	-	3,817
24	1,068	2,749	3,817	2,527	1,290	3,817	3,817	-	3,817
25	1,068	2,764	3,832	2,527	1,306	3,832	3,832	-	3,832
26	1,068	2,841	3,909	2,527	1,382	3,909	3,909	-	3,909
27	1,068	2,932	4,000	2,527	1,474	4,000	4,000	-	4,000
28	1,068	3,081	4,149	2,527	1,622	4,149	4,149	-	4,149
29	1,068	3,203	4,271	2,527	1,745	4,271	4,175	97	4,271
30	1,068	3,264	4,332	2,527	1,806	4,332	4,175	158	4,332
31	1,068	3,356	4,424	2,527	1,897	4,424	4,175	249	4,424
32	1,068	3,447	4,516	2,527	1,989	4,516	4,175	341	4,516
33	1,068	3,505	4,573	2,527	2,046	4,573	4,175	398	4,573
34	1,068	3,566	4,634	2,527	2,107	4,634	4,175	459	4,634
35	1,068	3,596	4,665	2,527	2,138	4,665	4,175	490	4,665
36	1,068	3,627	4,695	2,527	2,168	4,695	4,175	520	4,695
37	1,068	3,657	4,726	2,527	2,199	4,726	4,175	551	4,726
38	1,068	3,688	4,756	2,527	2,229	4,756	4,175	581	4,756
39	1,068	3,749	4,817	2,527	2,290	4,817	4,175	643	4,817
40	1,068	3,810	4,878	2,527	2,352	4,878	4,175	704	4,878
41	1,068	3,902	4,970	2,527	2,443	4,970	4,175	795	4,970
42	1,068	3,990	5,058	2,527	2,531	5,058	4,175	883	5,058
43	1,068	4,112	5,180	2,527	2,653	5,180	4,175	1,005	5,180
44	1,068	4,264	5,333	2,527	2,806	5,333	4,175	1,158	5,333
45	1,068	4,444	5,512	2,527	2,985	5,512	4,175	1,337	5,512
46	1,068	4,658	5,726	2,527	3,199	5,726	4,175	1,551	5,726
47	1,068	4,898	5,966	2,527	3,439	5,966	4,175	1,792	5,966
48	1,068	5,173	6,241	2,527	3,714	6,241	4,175	2,066	6,241
49	1,068	5,444	6,512	2,527	3,985	6,512	4,175	2,337	6,512
50	1,068	5,749	6,817	2,527	4,291	6,817	4,175	2,643	6,817
51	1,068	6,051	7,119	2,527	4,592	7,119	4,175	2,944	7,119
52	1,068	6,383	7,451	2,527	4,924	7,451	4,175	3,276	7,451
53	1,068	6,719	7,787	2,527	5,260	7,787	4,175	3,612	7,787
54	1,068	7,081	8,150	2,527	5,623	8,150	4,175	3,975	8,150
55	1,068	7,444	8,512	2,527	5,985	8,512	4,175	4,338	8,512
56	1,068	7,837	8,905	2,527	6,379	8,905	4,175	4,731	8,905
57	1,068	8,234	9,302	2,527	6,776	9,302	4,175	5,128	9,302
58	1,068	8,658	9,726	2,527	7,199	9,726	4,175	5,551	9,726
59	1,068	8,868	9,936	2,527	7,409	9,936	4,175	5,761	9,936
60	1,068	9,292	10,360	2,527	7,833	10,360	4,175	6,185	10,360
61	1,068	9,658	10,726	2,527	8,199	10,726	4,175	6,551	10,726
62	1,068	9,898	10,967	2,527	8,440	10,967	4,175	6,792	10,967
63	1,068	10,200	11,268	2,527	8,741	11,268	4,175	7,094	11,268
64	1,068	10,383	11,451	2,527	8,925	11,451	4,175	7,277	11,451

Appendix C - Family: One Adult, One Child

Family - One Adult, One Child	138% - 200% FPL			201% - 300% FPL			301% - 400% FPL		
	Net Premium (\$)	Average Tax Credit (\$)	Gross Premium (\$)	Net Premium (\$)	Average Tax Credit (\$)	Gross Premium (\$)	Net Premium (\$)	Average Tax Credit (\$)	Gross Premium (\$)
	Age								
22	1,442	5,185	6,627	3,411	3,216	6,627	5,635	992	6,627
23	1,442	5,185	6,627	3,411	3,216	6,627	5,635	992	6,627
24	1,442	5,185	6,627	3,411	3,216	6,627	5,635	992	6,627
25	1,442	5,200	6,642	3,411	3,232	6,642	5,635	1,007	6,642
26	1,442	5,277	6,719	3,411	3,308	6,719	5,635	1,083	6,719
27	1,442	5,368	6,810	3,411	3,400	6,810	5,635	1,175	6,810
28	1,442	5,517	6,959	3,411	3,548	6,959	5,635	1,324	6,959
29	1,442	5,639	7,081	3,411	3,671	7,081	5,635	1,446	7,081
30	1,442	5,701	7,142	3,411	3,732	7,142	5,635	1,507	7,142
31	1,442	5,792	7,234	3,411	3,823	7,234	5,635	1,599	7,234
32	1,442	5,884	7,326	3,411	3,915	7,326	5,635	1,690	7,326
33	1,442	5,941	7,383	3,411	3,972	7,383	5,635	1,748	7,383
34	1,442	6,002	7,444	3,411	4,033	7,444	5,635	1,809	7,444
35	1,442	6,033	7,475	3,411	4,064	7,475	5,635	1,839	7,475
36	1,442	6,063	7,505	3,411	4,094	7,505	5,635	1,870	7,505
37	1,442	6,094	7,536	3,411	4,125	7,536	5,635	1,900	7,536
38	1,442	6,124	7,566	3,411	4,155	7,566	5,635	1,931	7,566
39	1,442	6,185	7,627	3,411	4,216	7,627	5,635	1,992	7,627
40	1,442	6,246	7,688	3,411	4,277	7,688	5,635	2,053	7,688
41	1,442	6,338	7,780	3,411	4,369	7,780	5,635	2,145	7,780
42	1,442	6,426	7,868	3,411	4,457	7,868	5,635	2,232	7,868
43	1,442	6,548	7,990	3,411	4,579	7,990	5,635	2,355	7,990
44	1,442	6,701	8,143	3,411	4,732	8,143	5,635	2,507	8,143
45	1,442	6,880	8,322	3,411	4,911	8,322	5,635	2,687	8,322
46	1,442	7,094	8,536	3,411	5,125	8,536	5,635	2,900	8,536
47	1,442	7,334	8,776	3,411	5,365	8,776	5,635	3,141	8,776
48	1,442	7,609	9,051	3,411	5,640	9,051	5,635	3,416	9,051
49	1,442	7,880	9,322	3,411	5,911	9,322	5,635	3,687	9,322
50	1,442	8,185	9,627	3,411	6,217	9,627	5,635	3,992	9,627
51	1,442	8,487	9,929	3,411	6,518	9,929	5,635	4,294	9,929
52	1,442	8,819	10,261	3,411	6,850	10,261	5,635	4,626	10,261
53	1,442	9,155	10,597	3,411	7,186	10,597	5,635	4,962	10,597
54	1,442	9,518	10,960	3,411	7,549	10,960	5,635	5,324	10,960
55	1,442	9,880	11,322	3,411	7,911	11,322	5,635	5,687	11,322
56	1,442	10,273	11,715	3,411	8,305	11,715	5,635	6,080	11,715
57	1,442	10,670	12,112	3,411	8,702	12,112	5,635	6,477	12,112
58	1,442	11,094	12,536	3,411	9,125	12,536	5,635	6,901	12,536
59	1,442	11,304	12,746	3,411	9,335	12,746	5,635	7,111	12,746
60	1,442	11,728	13,170	3,411	9,759	13,170	5,635	7,534	13,170
61	1,442	12,094	13,536	3,411	10,125	13,536	5,635	7,901	13,536
62	1,442	12,335	13,777	3,411	10,366	13,777	5,635	8,141	13,777
63	1,442	12,636	14,078	3,411	10,667	14,078	5,635	8,443	14,078
64	1,442	12,819	14,261	3,411	10,851	14,261	5,635	8,626	14,261

Appendix C - Family: Two Adults

Family - Two Adults	138% - 200% FPL			201% - 300% FPL			301% - 400% FPL		
	Net Premium (\$)	Average Tax Credit (\$)	Gross Premium (\$)	Net Premium (\$)	Average Tax Credit (\$)	Gross Premium (\$)	Net Premium (\$)	Average Tax Credit (\$)	Gross Premium (\$)
Age									
22	1,442	6,192	7,634	3,411	4,223	7,634	5,635	1,999	7,634
23	1,442	6,192	7,634	3,411	4,223	7,634	5,635	1,999	7,634
24	1,442	6,192	7,634	3,411	4,223	7,634	5,635	1,999	7,634
25	1,442	6,223	7,665	3,411	4,254	7,665	5,635	2,030	7,665
26	1,442	6,376	7,818	3,411	4,407	7,818	5,635	2,182	7,818
27	1,442	6,559	8,001	3,411	4,590	8,001	5,635	2,365	8,001
28	1,442	6,857	8,298	3,411	4,888	8,298	5,635	2,663	8,298
29	1,442	7,101	8,543	3,411	5,132	8,543	5,635	2,907	8,543
30	1,442	7,223	8,665	3,411	5,254	8,665	5,635	3,030	8,665
31	1,442	7,406	8,848	3,411	5,437	8,848	5,635	3,213	8,848
32	1,442	7,589	9,031	3,411	5,621	9,031	5,635	3,396	9,031
33	1,442	7,704	9,146	3,411	5,735	9,146	5,635	3,511	9,146
34	1,442	7,826	9,268	3,411	5,857	9,268	5,635	3,633	9,268
35	1,442	7,887	9,329	3,411	5,918	9,329	5,635	3,694	9,329
36	1,442	7,948	9,390	3,411	5,979	9,390	5,635	3,755	9,390
37	1,442	8,009	9,451	3,411	6,040	9,451	5,635	3,816	9,451
38	1,442	8,070	9,512	3,411	6,102	9,512	5,635	3,877	9,512
39	1,442	8,193	9,634	3,411	6,224	9,634	5,635	3,999	9,634
40	1,442	8,315	9,757	3,411	6,346	9,757	5,635	4,121	9,757
41	1,442	8,498	9,940	3,411	6,529	9,940	5,635	4,305	9,940
42	1,442	8,673	10,115	3,411	6,705	10,115	5,635	4,480	10,115
43	1,442	8,918	10,360	3,411	6,949	10,360	5,635	4,724	10,360
44	1,442	9,223	10,665	3,411	7,254	10,665	5,635	5,030	10,665
45	1,442	9,582	11,024	3,411	7,613	11,024	5,635	5,389	11,024
46	1,442	10,009	11,451	3,411	8,041	11,451	5,635	5,816	11,451
47	1,442	10,490	11,932	3,411	8,522	11,932	5,635	6,297	11,932
48	1,442	11,040	12,482	3,411	9,071	12,482	5,635	6,847	12,482
49	1,442	11,582	13,024	3,411	9,613	13,024	5,635	7,389	13,024
50	1,442	12,193	13,635	3,411	10,224	13,635	5,635	8,000	13,635
51	1,442	12,796	14,238	3,411	10,827	14,238	5,635	8,603	14,238
52	1,442	13,460	14,902	3,411	11,491	14,902	5,635	9,267	14,902
53	1,442	14,132	15,574	3,411	12,163	15,574	5,635	9,939	15,574
54	1,442	14,857	16,299	3,411	12,888	16,299	5,635	10,664	16,299
55	1,442	15,583	17,024	3,411	13,614	17,024	5,635	11,389	17,024
56	1,442	16,369	17,811	3,411	14,400	17,811	5,635	12,176	17,811
57	1,442	17,163	18,605	3,411	15,194	18,605	5,635	12,969	18,605
58	1,442	18,010	19,452	3,411	16,041	19,452	5,635	13,817	19,452
59	1,442	18,430	19,872	3,411	16,461	19,872	5,635	14,237	19,872
60	1,442	19,278	20,719	3,411	17,309	20,719	5,635	15,084	20,719
61	1,442	20,010	21,452	3,411	18,042	21,452	5,635	15,817	21,452
62	1,442	20,491	21,933	3,411	18,522	21,933	5,635	16,298	21,933
63	1,442	21,094	22,536	3,411	19,126	22,536	5,635	16,901	22,536
64	1,442	21,461	22,903	3,411	19,492	22,903	5,635	17,268	22,903

Appendix C - Family: Two Adults, One Child

Family - Two Adults, One Child	138% - 200% FPL			201% - 300% FPL			301% - 400% FPL		
	Net Premium (\$)	Average Tax Credit (\$)	Gross Premium (\$)	Net Premium (\$)	Average Tax Credit (\$)	Gross Premium (\$)	Net Premium (\$)	Average Tax Credit (\$)	Gross Premium (\$)
	Age								
22	1,816	8,629	10,444	4,295	6,149	10,444	7,096	3,348	10,444
23	1,816	8,629	10,444	4,295	6,149	10,444	7,096	3,348	10,444
24	1,816	8,629	10,444	4,295	6,149	10,444	7,096	3,348	10,444
25	1,816	8,659	10,475	4,295	6,180	10,475	7,096	3,379	10,475
26	1,816	8,812	10,628	4,295	6,333	10,628	7,096	3,532	10,628
27	1,816	8,995	10,811	4,295	6,516	10,811	7,096	3,715	10,811
28	1,816	9,293	11,108	4,295	6,814	11,108	7,096	4,013	11,108
29	1,816	9,537	11,353	4,295	7,058	11,353	7,096	4,257	11,353
30	1,816	9,659	11,475	4,295	7,180	11,475	7,096	4,379	11,475
31	1,816	9,842	11,658	4,295	7,363	11,658	7,096	4,562	11,658
32	1,816	10,026	11,841	4,295	7,546	11,841	7,096	4,745	11,841
33	1,816	10,140	11,956	4,295	7,661	11,956	7,096	4,860	11,956
34	1,816	10,262	12,078	4,295	7,783	12,078	7,096	4,982	12,078
35	1,816	10,323	12,139	4,295	7,844	12,139	7,096	5,043	12,139
36	1,816	10,384	12,200	4,295	7,905	12,200	7,096	5,104	12,200
37	1,816	10,446	12,261	4,295	7,966	12,261	7,096	5,165	12,261
38	1,816	10,507	12,322	4,295	8,027	12,322	7,096	5,226	12,322
39	1,816	10,629	12,444	4,295	8,150	12,444	7,096	5,349	12,444
40	1,816	10,751	12,567	4,295	8,272	12,567	7,096	5,471	12,567
41	1,816	10,934	12,750	4,295	8,455	12,750	7,096	5,654	12,750
42	1,816	11,110	12,925	4,295	8,631	12,925	7,096	5,830	12,925
43	1,816	11,354	13,170	4,295	8,875	13,170	7,096	6,074	13,170
44	1,816	11,659	13,475	4,295	9,180	13,475	7,096	6,379	13,475
45	1,816	12,018	13,834	4,295	9,539	13,834	7,096	6,738	13,834
46	1,816	12,446	14,261	4,295	9,967	14,261	7,096	7,166	14,261
47	1,816	12,927	14,742	4,295	10,448	14,742	7,096	7,647	14,742
48	1,816	13,476	15,292	4,295	10,997	15,292	7,096	8,196	15,292
49	1,816	14,018	15,834	4,295	11,539	15,834	7,096	8,738	15,834
50	1,816	14,629	16,445	4,295	12,150	16,445	7,096	9,349	16,445
51	1,816	15,232	17,048	4,295	12,753	17,048	7,096	9,952	17,048
52	1,816	15,896	17,712	4,295	13,417	17,712	7,096	10,616	17,712
53	1,816	16,568	18,384	4,295	14,089	18,384	7,096	11,288	18,384
54	1,816	17,294	19,109	4,295	14,814	19,109	7,096	12,013	19,109
55	1,816	18,019	19,834	4,295	15,540	19,834	7,096	12,739	19,834
56	1,816	18,805	20,621	4,295	16,326	20,621	7,096	13,525	20,621
57	1,816	19,599	21,415	4,295	17,120	21,415	7,096	14,319	21,415
58	1,816	20,446	22,262	4,295	17,967	22,262	7,096	15,166	22,262
59	1,816	20,866	22,682	4,295	18,387	22,682	7,096	15,586	22,682
60	1,816	21,714	23,529	4,295	19,235	23,529	7,096	16,434	23,529
61	1,816	22,447	24,262	4,295	19,967	24,262	7,096	17,166	24,262
62	1,816	22,928	24,743	4,295	20,448	24,743	7,096	17,647	24,743
63	1,816	23,531	25,346	4,295	21,052	25,346	7,096	18,251	25,346
64	1,816	23,897	25,713	4,295	21,418	25,713	7,096	18,617	25,713

Appendix C - Family: Two Adults, Two Children

Family - Two Adults, Two Children	138% - 200% FPL			201% - 300% FPL			301% - 400% FPL		
	Net Premium (\$)	Average Tax Credit (\$)	Gross Premium (\$)	Net Premium (\$)	Average Tax Credit (\$)	Gross Premium (\$)	Net Premium (\$)	Average Tax Credit (\$)	Gross Premium (\$)
	Age								
22	2,189	11,065	13,254	5,179	8,075	13,254	8,556	4,698	13,254
23	2,189	11,065	13,254	5,179	8,075	13,254	8,556	4,698	13,254
24	2,189	11,065	13,254	5,179	8,075	13,254	8,556	4,698	13,254
25	2,189	11,095	13,285	5,179	8,106	13,285	8,556	4,728	13,285
26	2,189	11,248	13,438	5,179	8,259	13,438	8,556	4,881	13,438
27	2,189	11,431	13,621	5,179	8,442	13,621	8,556	5,064	13,621
28	2,189	11,729	13,918	5,179	8,740	13,918	8,556	5,362	13,918
29	2,189	11,973	14,163	5,179	8,984	14,163	8,556	5,606	14,163
30	2,189	12,095	14,285	5,179	9,106	14,285	8,556	5,728	14,285
31	2,189	12,279	14,468	5,179	9,289	14,468	8,556	5,912	14,468
32	2,189	12,462	14,651	5,179	9,472	14,651	8,556	6,095	14,651
33	2,189	12,576	14,766	5,179	9,587	14,766	8,556	6,209	14,766
34	2,189	12,699	14,888	5,179	9,709	14,888	8,556	6,332	14,888
35	2,189	12,760	14,949	5,179	9,770	14,949	8,556	6,393	14,949
36	2,189	12,821	15,010	5,179	9,831	15,010	8,556	6,454	15,010
37	2,189	12,882	15,071	5,179	9,892	15,071	8,556	6,515	15,071
38	2,189	12,943	15,132	5,179	9,953	15,132	8,556	6,576	15,132
39	2,189	13,065	15,254	5,179	10,076	15,254	8,556	6,698	15,254
40	2,189	13,187	15,377	5,179	10,198	15,377	8,556	6,820	15,377
41	2,189	13,370	15,560	5,179	10,381	15,560	8,556	7,003	15,560
42	2,189	13,546	15,735	5,179	10,557	15,735	8,556	7,179	15,735
43	2,189	13,790	15,980	5,179	10,801	15,980	8,556	7,423	15,980
44	2,189	14,096	16,285	5,179	11,106	16,285	8,556	7,729	16,285
45	2,189	14,454	16,644	5,179	11,465	16,644	8,556	8,087	16,644
46	2,189	14,882	17,071	5,179	11,893	17,071	8,556	8,515	17,071
47	2,189	15,363	17,552	5,179	12,373	17,552	8,556	8,996	17,552
48	2,189	15,913	18,102	5,179	12,923	18,102	8,556	9,546	18,102
49	2,189	16,455	18,644	5,179	13,465	18,644	8,556	10,088	18,644
50	2,189	17,065	19,255	5,179	14,076	19,255	8,556	10,698	19,255
51	2,189	17,669	19,858	5,179	14,679	19,858	8,556	11,301	19,858
52	2,189	18,333	20,522	5,179	15,343	20,522	8,556	11,966	20,522
53	2,189	19,005	21,194	5,179	16,015	21,194	8,556	12,637	21,194
54	2,189	19,730	21,919	5,179	16,740	21,919	8,556	13,363	21,919
55	2,189	20,455	22,644	5,179	17,466	22,644	8,556	14,088	22,644
56	2,189	21,241	23,431	5,179	18,252	23,431	8,556	14,874	23,431
57	2,189	22,035	24,225	5,179	19,046	24,225	8,556	15,668	24,225
58	2,189	22,883	25,072	5,179	19,893	25,072	8,556	16,516	25,072
59	2,189	23,303	25,492	5,179	20,313	25,492	8,556	16,936	25,492
60	2,189	24,150	26,339	5,179	21,161	26,339	8,556	17,783	26,339
61	2,189	24,883	27,072	5,179	21,893	27,072	8,556	18,516	27,072
62	2,189	25,364	27,553	5,179	22,374	27,553	8,556	18,997	27,553
63	2,189	25,967	28,156	5,179	22,978	28,156	8,556	19,600	28,156
64	2,189	26,333	28,523	5,179	23,344	28,523	8,556	19,966	28,523

Appendix C - Family: Two Adults, Three Children

Family - Two Adults, Three Children	138% - 200% FPL			201% - 300% FPL			301% - 400% FPL		
	Net Premium (\$)	Average Tax Credit (\$)	Gross Premium (\$)	Net Premium (\$)	Average Tax Credit (\$)	Gross Premium (\$)	Net Premium (\$)	Average Tax Credit (\$)	Gross Premium (\$)
	Age								
22	2,563	13,501	16,064	6,063	10,001	16,064	10,017	6,047	16,064
23	2,563	13,501	16,064	6,063	10,001	16,064	10,017	6,047	16,064
24	2,563	13,501	16,064	6,063	10,001	16,064	10,017	6,047	16,064
25	2,563	13,532	16,095	6,063	10,032	16,095	10,017	6,078	16,095
26	2,563	13,684	16,248	6,063	10,185	16,248	10,017	6,230	16,248
27	2,563	13,868	16,431	6,063	10,368	16,431	10,017	6,414	16,431
28	2,563	14,165	16,728	6,063	10,666	16,728	10,017	6,711	16,728
29	2,563	14,410	16,973	6,063	10,910	16,973	10,017	6,956	16,973
30	2,563	14,532	17,095	6,063	11,032	17,095	10,017	7,078	17,095
31	2,563	14,715	17,278	6,063	11,215	17,278	10,017	7,261	17,278
32	2,563	14,898	17,461	6,063	11,398	17,461	10,017	7,444	17,461
33	2,563	15,013	17,576	6,063	11,513	17,576	10,017	7,559	17,576
34	2,563	15,135	17,698	6,063	11,635	17,698	10,017	7,681	17,698
35	2,563	15,196	17,759	6,063	11,696	17,759	10,017	7,742	17,759
36	2,563	15,257	17,820	6,063	11,757	17,820	10,017	7,803	17,820
37	2,563	15,318	17,881	6,063	11,818	17,881	10,017	7,864	17,881
38	2,563	15,379	17,942	6,063	11,879	17,942	10,017	7,925	17,942
39	2,563	15,501	18,064	6,063	12,002	18,064	10,017	8,047	18,064
40	2,563	15,623	18,187	6,063	12,124	18,187	10,017	8,170	18,187
41	2,563	15,807	18,370	6,063	12,307	18,370	10,017	8,353	18,370
42	2,563	15,982	18,545	6,063	12,482	18,545	10,017	8,528	18,545
43	2,563	16,227	18,790	6,063	12,727	18,790	10,017	8,773	18,790
44	2,563	16,532	19,095	6,063	13,032	19,095	10,017	9,078	19,095
45	2,563	16,891	19,454	6,063	13,391	19,454	10,017	9,437	19,454
46	2,563	17,318	19,881	6,063	13,818	19,881	10,017	9,864	19,881
47	2,563	17,799	20,362	6,063	14,299	20,362	10,017	10,345	20,362
48	2,563	18,349	20,912	6,063	14,849	20,912	10,017	10,895	20,912
49	2,563	18,891	21,454	6,063	15,391	21,454	10,017	11,437	21,454
50	2,563	19,502	22,065	6,063	16,002	22,065	10,017	12,048	22,065
51	2,563	20,105	22,668	6,063	16,605	22,668	10,017	12,651	22,668
52	2,563	20,769	23,332	6,063	17,269	23,332	10,017	13,315	23,332
53	2,563	21,441	24,004	6,063	17,941	24,004	10,017	13,987	24,004
54	2,563	22,166	24,729	6,063	18,666	24,729	10,017	14,712	24,729
55	2,563	22,891	25,454	6,063	19,392	25,454	10,017	15,437	25,454
56	2,563	23,678	26,241	6,063	20,178	26,241	10,017	16,224	26,241
57	2,563	24,472	27,035	6,063	20,972	27,035	10,017	17,018	27,035
58	2,563	25,319	27,882	6,063	21,819	27,882	10,017	17,865	27,882
59	2,563	25,739	28,302	6,063	22,239	28,302	10,017	18,285	28,302
60	2,563	26,586	29,149	6,063	23,087	29,149	10,017	19,132	29,149
61	2,563	27,319	29,882	6,063	23,819	29,882	10,017	19,865	29,882
62	2,563	27,800	30,363	6,063	24,300	30,363	10,017	20,346	30,363
63	2,563	28,403	30,966	6,063	24,903	30,966	10,017	20,949	30,966
64	2,563	28,770	31,333	6,063	25,270	31,333	10,017	21,316	31,333