ANALYSIS OF WINDSTORM COVERAGE FUND

by

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EXECUTIVE SUMMARY

We have reviewed the FAIA proposal for a Windstorm Coverage Fund. This fund would cover hurricane losses not covered by the Florida Hurricane Catastrophe Fund.

The first part of the review determined savings if the Citizens High Risk Account is converted to a WCF concept. We determined savings as follows:

ANNUAL SAVINGS FROM CONVERTING HRA TO WCF

- $79 million per year - unallocated loss adjustment and general expense
- $29 million per year - other acquisition expense
- $108 million per year - total savings

This compares to the HRA premium of $792 million for 2005.

The WCF proposal makes the process "transparent" to the policyholder improving policyholder satisfaction and the level of service. We did not calculate a cost savings associated with this, but it would avoid duplication of people that are dedicated to policyholder service.

We estimated the cost to depopulate the HRA using the current "takeout bonus" program versus the WCF.

SAVINGS TO DEPOPULATE THE CITIZENS HRA

- $71 million - one time cost to depopulate with the current takeout bonus program
- $0 - cost with the WCF concept.
- $71 million one time savings

Citizens and its predecessors have spent $206 million on various past takeout bonus programs. The WCF concept would save future potential cost of the takeout programs.

The use of the "windfall sales tax" could be used as a funding source for the WCF. This is an efficient funding mechanism since it only funds the hurricane loss when it occurs out of money received as a result of the occurrence. The FAIA report *"The Winds of Change"* states the 2004 windfall sales tax amount was $725 million.

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By including Citizens policyholders in the assessments for the 2004 hurricanes the assessment would have been reduced by:

REDUCED ASSESSMENTS BY INCLUDING CITIZENS IN ASSESSMENT

- $75 million to non-Citizens policy holders for 2004 assessments
- $13 million for Citizens policyholders for 2004 assessments
- $88 million total savings for 2004 assessments

If the WCF concept had been applied to all policies, income of $24.62 billion would have been generated for the period 1990-2005 and the WCF losses would have been $23.15 billion, at 100% retention by the WCF.

CONCLUSION - The WCF is a promising concept for building voluntary capacity and reducing reluctance by insurers to write property insurance in Florida. While not specifically quantifiable, over time the WCF should reduce underlying costs and create a significant favorable impact on policyholder premiums.

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BACKGROUND

We were requested by the Florida Association of Insurance Agents to review a proposal to create a Windstorm Coverage Fund (hereafter WCF) that would cover hurricane losses not covered by the Florida Hurricane Catastrophe Fund. We intend to show the possible savings to Florida policyholders and impact on insurer operations.

THE PROPOSAL

The proposal for the WCF is outlined in a statement by the FAIA on the Windstorm Coverage Fund and a report *"The Winds of Change"* commissioned by the FAIA. The points below are paraphrased from the FAIA statement and apply to the concept of moving the Citizens Property Insurance Company High Risk Account (referred to as the HRA) to the WCF concept. We also reviewed a broader concept of applying the WCF concept to hurricane losses for all policies in Florida.

1. Restructure Citizens High Risk Account (old FWUA) into an entity that only performs rate analysis and funding functions and eliminate all its other expenses by requiring private carriers to perform functions, such as administration, agent appointment and training, underwriting, policy processing and claims adjustment--just like companies do today in the rest of the state. Call this new entity the Windstorm Coverage Fund

2. Companies keep a portion of the wind premium as a fee for services and are responsible for paying their agents. Also, companies can retain as much of the "Wind" exposure (and related premium) as they want and, along with it, the responsibility to pay claims from those retained funds. A minimum retention for the companies could be required (i.e. 1% or 2%) so that every company has some "skin" in the game for the wind peril thus insuring that claims are handled fairly and responsibly. The company forwards to the WCF any premium for the amount of wind that it does not retain; then, after a storm it accesses the WCF for reimbursement of losses that exceeded its retention.

3. Finally, restructure the deficit funding mechanism so that an assessment is less likely and more equitable. Do this by first earmarking portions of hurricane sales tax windfalls to rapidly grow the surplus of the WCF. Then, if necessary, fund any deficit with monies from the sales tax windfall created by the event(s) that gave rise to the deficit, should there be one. Finally, lower any assessment by spreading the base beyond just property policyholders who are not insured by Citizens and by including more lines like the Cat Fund does.

CURRENT HURRICANE CATASTROPHE MECHANISM

Currently the hurricane catastrophe exposure in Florida is handled by the Florida Hurricane Catastrophe Fund (hereafter the FHCF) and the insurance industry. A

simplified explanation of the structure is the insurance industry retains the first $4.5 billion of each hurricane loss for the first two each year and the FHCF takes 90% of the remainder. The FHCF currently has a $15 billion limit on its coverage. Previous to FHCF changes made in 2005 the industry retained $4.5 billion of each hurricane loss. The FHCF was started after Hurricane Andrew in 1992 to provide a reliable source of reinsurance for hurricane exposure. *"The Winds of Change"* report provides extensive details and discussion of the current hurricane catastrophe mechanism that we will not repeat here.

In the absence of hurricane losses the system seemed to be working fairly well. The residual market was of manageable size and coverage was available at premiums that, while considerably higher than pre-Andrew, were relatively reasonable. The residual market was converted to the Citizens Property Insurance Company (hereafter Citizens) concept in 2002, and has in recent years shown considerable growth, causing concern about current and especially potential assessments for Citizens deficits. The four hurricanes experienced by Florida in 2004 have caused turbulence in the insurance market with some large insurers reducing their exposure in Florida due to the potential hurricane catastrophe exposure.

The FHCF performed as designed in 2004, but the actual payment by the FHCF was relatively modest given the size of the total hurricane loss. This was due to the $4.5 billion threshold before recovery for each hurricane. *"The Winds of Change"* report again gives more detail on the FHCF performance.

THE INSURANCE ECONOMICS OF CATASTROPHES

The 2004 season demonstrated to the insurance industry the potential for hurricane losses that were not forecast by catastrophe models and were not built into the premiums being charged. As a result insurers are currently going through a cycle of increasing premiums to recognize the higher risk.

This raises the question, if insurers can charge adequate premiums to pay hurricane losses and make a profit, why are they reluctant to write business in Florida. The answer lies in the insurance economics of catastrophes.

The economics of insurance are the same for catastrophes, be they earthquakes, floods, hurricanes, terrorism, nuclear explosion or some other catastrophe as for any other peril. The insurance company collects the premium from the policyholder, retains any amount not needed for company expenses, collecting investment income on the funds until needed to pay losses. When losses occur they are paid and any remainder is company profit. The profit can be added to surplus or paid to shareholders as dividends. The key difference between catastrophe perils and other perils is when the company needs to pay the loss. The loss for non catastrophic perils is usually known within at most a year or two

of when the premium is collected and is paid shortly thereafter. A catastrophe peril may not have any loss for decades, and then there will be a loss far in excess of the premium collected for any one year. Even though the amount paid as losses compared to the amount of premium collected is the same for the two types of perils, the risk associated with writing the two types of perils is not the same.

There are a number of mathematical equations that try to quantify risk, but most boil down to variation in the amount of loss. As an illustration we constructed Table 1 below to show two types of insurance, one written for a non catastrophic peril and the other written for a catastrophe peril.

Table 1

Policy	Non Catastrophe Peril		Catastrophe Peril	
Year	Premium	Loss	Premium	Loss
2005	$1,000,000	$800,000	$1,000,000	$0
2006	1,000,000	800,000	1,000,000	0
2007	1,000,000	800,000	1,000,000	0
2008	1,000,000	800,000	1,000,000	0
2009	1,000,000	800,000	1,000,000	0
2010	1,000,000	800,000	1,000,000	0
2011	1,000,000	800,000	1,000,000	0
2012	1,000,000	800,000	1,000,000	0
2013	1,000,000	800,000	1,000,000	0
2014	1,000,000	800,000	1,000,000	0
2015	1,000,000	800,000	1,000,000	0
2016	1,000,000	800,000	1,000,000	0
2017	1,000,000	800,000	1,000,000	0
2018	1,000,000	800,000	1,000,000	0
2019	1,000,000	800,000	1,000,000	0
2020	1,000,000	800,000	1,000,000	0
2021	1,000,000	800,000	1,000,000	0
2022	1,000,000	800,000	1,000,000	0
2023	1,000,000	800,000	1,000,000	0
2024	1,000,000	800,000	1,000,000	0
2025	1,000,000	800,000	1,000,000	0
2026	1,000,000	800,000	1,000,000	20,000,000
2027	1,000,000	800,000	1,000,000	0
2028	1,000,000	800,000	1,000,000	0
2029	1,000,000	800,000	1,000,000	0
Total	$25,000,000	$20,000,000	$25,000,000	$20,000,000

Even though the total amount of loss over the 25 year period is the same for the two perils, the variation in loss from year to year is much greater for the catastrophe peril. An insurance company would want a risk loading to write insurance for the catastrophe peril.

The reason the insurance company wants a risk loading is that all insurance companies operate with a limited amount of capital and surplus. Capital and surplus is usually in the range of 50% to 100% of the premium a company writes in one year. In our example above the company could have a surplus of $1 million. For the catastrophe peril the company should have been accumulating the difference between the actual loss paid and the expected loss, in our example $800,000 per year, in order to pay the catastrophe loss when it occurs. If it has not accumulated enough to pay the loss, it must take the money from surplus. Clearly $1 million in surplus is not enough to pay the catastrophe loss unless it occurs at the end of the 25 year period.

Companies overcome this problem by either using surplus from other states and lines of insurance or they buy reinsurance. Reinsurers however have the same economic incentives as the direct insurer. They will expect a risk loading which essentially compensates the reinsurer for use of its surplus. There is no magic cure for the hurricane problem in Florida. We can develop some mechanisms that make it more efficient to handle the hurricane exposure and make it more attractive for insurance companies to provide insurance including hurricane catastrophe insurance.

ACTUAL INSURANCE RESULTS IN FLORIDA

The above may look like an unrealistic example, however, we have insurance company data that shows there is tremendous variation in losses for lines subject to the hurricane catastrophe exposure.

Table 2 below shows the results for homeowners insurance in Florida on a direct calendar year basis as reported to the Office of Insurance Regulation. The large variation in profit is clear. This is entirely from Hurricane Andrew in 1992 and the four hurricanes in 2004. It is also clear that insurers started to charge much more for the hurricane exposure after Andrew. In the non hurricane years of 1994 through 2003 the profits are over 20%. This is not a true profit since it is either used to buy reinsurance or accumulated by the insurer for the years when a hurricane occurs.

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Table 2

HOMEOWNERS

CALENDAR YEAR	DIRECT PREMIUMS EARNED	UNDERWRITING GAIN OR LOSS	RATIO TO PREMIUMS EARNED
1987	643,139,780	62,260,771	9.7%
1988	719,938,223	24,374,953	3.4%
1989	770,233,979	29,066,752	3.8%
1990	833,549,457	1,594,867	0.2%
1991	872,924,713	(52,528,993)	(6.0%)
1992	953,927,851	(9,874,659,153)	(1035.2%)
1993	1,081,892,509	(360,519,053)	(33.3%)
1994	1,226,868,258	271,400,633	22.1%
1995	1,410,053,489	36,435,000	2.6%
1996	1,550,222,039	438,042,986	28.3%
1997	1,626,512,606	423,008,675	26.0%
1998	1,684,019,946	495,006,682	29.4%
1999	1,893,162,983	548,771,048	29.0%
2000	2,073,031,145	690,788,867	33.3%
2001	2,105,579,493	456,702,180	21.7%
2002	2,716,598,948	674,198,581	24.8%
2003	2,654,848,608	836,194,524	31.5%
2004	3,165,316,837	(8,260,381,443)	(261.0%)
TOTAL	27,981,820,864	(13,560,242,123)	(48.5%)

It is interesting to compare homeowners with other lines of insurance. Table 3 shows this comparison. We can see that the results for lines not exposed to hurricane losses never show the extreme variation in results of the homeowners line. The commercial multiple peril line shows the same variation, although not as extreme, since property coverage is a smaller part of the commercial multiple peril premium. Note that the profits between lines cannot be compared without adding investment income. This is shown on the last line of the table.

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Table 3

CALENDAR YEAR	UNDERWRITING GAIN OR LOSS RATIO TO PREMIUMS EARNED Homeowners	Commercial Multiple Peril	Other Liability	Private Passenger Auto Liability	Private Passenger Auto Physical Damage	Workers' Compensation
1987	9.7%	19.7%	(27.9%)	(10.1%)	8.4%	(36.8%)
1988	3.4%	15.7%	3.1%	(4.7%)	5.0%	(50.9%)
1989	3.8%	12.4%	(20.0%)	(5.0%)	4.8%	(47.6%)
1990	0.2%	1.2%	(32.1%)	(4.7%)	7.1%	(27.4%)
1991	(6.0%)	(1.1%)	(12.9%)	(6.9%)	14.3%	(37.8%)
1992	(1035.2%)	(362.2%)	(12.2%)	(3.9%)	(28.3%)	(57.9%)
1993	(33.3%)	(14.1%)	(65.0%)	(7.5%)	(1.7%)	(49.6%)
1994	22.1%	5.1%	12.1%	(2.6%)	0.6%	(18.8%)
1995	2.6%	(11.1%)	1.1%	0.5%	(2.1%)	(24.5%)
1996	28.3%	8.6%	(44.1%)	6.4%	3.8%	(14.9%)
1997	26.0%	8.6%	(30.5%)	5.7%	2.8%	3.9%
1998	29.4%	12.8%	16.7%	4.9%	5.2%	(14.9%)
1999	29.0%	3.8%	(33.5%)	(7.8%)	(1.0%)	(10.9%)
2000	33.3%	17.5%	16.1%	(19.3%)	(1.9%)	(12.2%)
2001	21.7%	0.9%	(30.3%)	(22.0%)	4.7%	4.8%
2002	24.8%	14.0%	(10.1%)	(13.3%)	7.3%	(3.2%)
2003	31.5%	16.2%	(17.5%)	1.7%	11.2%	7.9%
2004	(261.0%)	(175.4%)	(36.9%)	2.8%	(1.5%)	10.8%
TOTAL	(48.5%)	(23.4%)	(18.0%)	(4.4%)	2.5%	(15.4%)
INVESTMENT GAIN	3.4%	22.8%	31.3%	4.9%	1.5%	17.1%

THE WCF PROPOSAL PRODUCES SAVINGS

The FAIA proposal for the WCF has elements that improve the insurance climate in Florida for exposure related to hurricane catastrophes. These should produce savings either immediately or over the longer term. In a statement by the FAIA on the Windstorm Coverage Fund a number of benefits of the WCF have been outlined. We have shown the benefits below and will examine these and determine the savings associated with them.

1. It will immediately and dramatically reduce costs associated with administering Citizens HRA by requiring companies who are already providing identical services in other parts of the state to perform all administrative and policy processing functions at less cost to the system. It will also lower loss adjustment expenses.

2. The WCF approach eliminates the need to deal with the state for coverage in high-risk areas. This means one agent, one policy, one check and one adjuster.

3. Because the state runs its own insurance company (Citizens) its rates must be non-competitive with the voluntary market (indexed higher than the voluntary writers). Without a state run insurer there is no competition with the voluntary market and thus no need for such a requirement.

4. The FAIA proposal will help competition return. In coastal areas some companies are still willing to write "some" wind (just not the more catastrophic category 3, 4 or 5 solvency impairing hurricanes). But, they are prohibited from doing so. FAIA's proposal allows companies to profit from writing as much wind or as much of the non-wind coverage's as they wish; thus growing capacity.

5. It's possible to entirely eliminate the need for assessing any policyholders. If FAIA's proposal had been in "full" effect a number of years prior to the 2004 season, there would not have been a deficit in Citizens of $515 million. Even if FAIA's approach hadn't been implemented until immediately after the 2004 season, there would not have been an assessment of 6.8% to pay for the Citizens deficit.

6. There are tremendous administrative, legal and actuarial costs associated with paying bonuses to carriers to take policies out of Citizens. There's also the cost of the bonuses that, just since 2003, total over $80 million ($2.2 million in the HRA)--the FAIA approach creates100% depopulation upon implementation and eliminates all of the costs and hassles related thereto.

SAVINGS FROM CONVERTING HRA TO WCF

There are a number of savings from converting the Citizens HRA to the WCF concept. Below we estimate the amount of several of these savings.

- Savings from Unallocated Loss Adjustment Expense and General Expense

The expense of providing insurance can be substantial. We know from the homeowners experience reported to the Office of Insurance regulation the expenses associated with providing insurance. The attached Appendix 1 shows this experience. We have estimated savings for these expenses below assuming the HRA business was written in the WCF.

The unallocated loss adjustment expense is the cost of maintaining the people needed to pay claims. Citizens in the past contracted for this service but now has started to build an employed staff due to poor quality of service in the 2004 hurricanes. General expense is the cost of employees, office space and miscellaneous costs needed to run the insurance company. The Citizens HRA business represents almost a total duplication of these costs compared to the cost if written through the WCF. Table 4 below shows the distribution of business in the three Citizens accounts.

Table 4

Citizens Property Insurance Company

Exposure and Premium Summary
As of September 30, 2005

Account	Policies In Force	Premium	Exposure
High Risk	428,611	$792,276,403	$139,816,044,301
Personal-Residential	365,723	$444,828,569	$52,549,655,185
Commercial-Residential	3,318	$52,628,436	$11,577,617,085
Total	797,652	$1,289,733,408	$203,943,316,571

Roughly 10% of every premium dollar is used for either unallocated loss adjustment expense or general expense. By moving only the High Risk account to the WCF this expense is eliminated for a 10% savings which generates over $79 million of savings per year. In 2004 Citizens spent over $200 million for claims adjustment services, due primarily to the four hurricanes that year.

There would be little or no increase in general expense to the insurer who assumes the High Risk account business since there is no additional company expense when a peril is added to a policy. The claims staff needed for hurricane claims adjustment would be handled with little additional expense. Insurance companies do not maintain a claims staff only for hurricane claims. The large national companies assign claims staff from other states to catastrophe teams. This is a very small additional cost to the company, nowhere near the cost of maintaining a Citizens claim staff. Smaller companies hire outside claims adjusters as Citizens has done in the past. Expense for outside adjusters should be no more than with Citizens and since it occurs only when claims are incurred would be less than maintaining a permanent Citizens claims staff.

- Savings from Other Acquisition Expense

The cost of policy issuance is another cost savings addressed in the benefits above. This cost would usually be classified as “Other Acquisition Expense” in Appendix 1. This is around 7.4% of premium for the industry. There are expenses other than policy issuance included in other acquisition expense, such as advertising, that would not apply to Citizens. Purely on a judgment basis we assume half of industry other acquisition would apply to the Citizens High Rick Account business. This would be over $29 million of savings per year. There

would be little or no increase in other acquisition expense to the insurer who assumes the High Risk account business since there is no additional company expense when a peril is added to a policy.

- Transparent Process To Policyholder

Another benefit of the WCF concept is that the entire process is transparent to the policyholder. Currently the HRA policyholder must deal with two insurers and thereby duplicates all the policyholder time and expense. The WCF makes the entire process look to the policyholder as if he is dealing with only one insurer, which is essentially true. There is no tangible cost benefit to the insurance system in this other than that already described above, but to the policyholder it is a friendlier process and could occasionally result in insurer savings since it is less likely that a policyholder will forget to write a check or incorrectly fill out an application if done only once instead of twice. There may be an indirect benefit to Citizens since they would never have to deal directly with the WCF policyholder. This may eliminate the need for some staff that currently deal primarily with policyholder problems.

- Savings from Takeout Bonus Program

Citizens has a continuing effort to depopulate the company. Their program is described in *"The Winds of Change"* report in considerable detail. Essentially the program consists of paying insurers money to assume business from Citizens, called a takeout bonus. This may not be a very efficient use of Citizens money since money that would be accumulated to pay for catastrophe losses is instead paid to insurers. The biggest down side of the depopulation is the business may eventually return to Citizens. We know of two companies formed specifically to take out business that have failed. Generally a company must retain the assumed business for three years to get the bonus. *"The Winds of Change"* report states that $206 million has been spent on the take out program to remove 1.4 million policies. It is not clear that the depopulation is very efficient since most of the policies are taken out of the Citizens personal residential account not the high risk account according to *"The Winds of Change"* report. The high risk account has most of the Citizens exposure to loss, see Table 4 above. Not paying a takeout bonus will be a definite savings since this money can be accumulated in Citizens to pay losses. The prior average takeout bonus has been $147 dollars per policy. The current average Citizens premium is $1,617. Thus the takeout bonus has been about 9% of premium. The takeout program has changed but it appears the takeout percentage is still around 9%. We have used this to calculate the savings if a takeout bonus is not paid. The dollar cost to totally depopulate the HRA would be one time cost of $71 million. If the WCF concept is used there should be no need for the takeout bonus.

- Windfall Sales Tax

One of the proposed WCF funding mechanisms is to use the "windfall sales tax" from rebuilding after a hurricane instead of assessing policyholders. This works quite well since the funding source is directly related to the event causing the assessment. The windfall sales tax would have eliminated the 2004 HRA deficit assessment. *"The Winds of Change"* report states the incremental sales tax revenue in 2004 is estimated at $752 million while the HRA deficit was $516 million. The difference is $236 million. The remaining positive amount would remain in the general revenue of Florida or it could be used to prefund the WCF.

- Savings in Assessments

Assessments resulting from Citizens deficits are not applied to Citizens policies under present procedures. This means that the assessments for non Citizens policyholders must be higher than if Citizens policyholders were assessed. Citizens policyholders are charged a Market Equalization Surcharge (hereafter MES) equal to the percentage assessment. This MES is not used to pay the deficit, since the deficit is entirely paid by assessments against non Citizens policyholders. The result is the total collected is more than the amount of the Citizens deficit. The FAIA proposes applying assessments to Citizens policies. This eliminates the need for the MES and reduces the total collected by $88 million. The non Citizens assessment is reduced $75 million and the Citizens is reduced $13 million.

THE BROADER WCF CONCEPT

The above savings all relate to transforming the Citizens HRA account to the WCF concept. A broader view of this can be taken in which all insurance policies; both in the residual market and the voluntary market are subject to the WCF concept. We have discussed this concept in Appendix 2 where we examine the feasibility of the broader concept.

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About the Author

Jerome F. Vogel has over 39 years of insurance experience as a property/casualty actuary. He is now a consulting actuary practicing in Tallahassee, Florida as president of his firm, Vogel Consulting, Inc. Mr. Vogel has been consulting for over 15 years with a number of clients. For 9 years prior to that Mr. Vogel served as an actuary with the Florida Department of Insurance responsible for a broad range of property and casualty lines. Prior to that Mr. Vogel was an actuary with State Farm serving in a number of capacities in the actuarial department. Mr. Vogel graduated with honors from St. Ambrose University with a Bachelors degree in Mathematics in 1966. He is a Member of the American Academy of Actuaries and an Associate of the Casualty Actuarial Society.

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APPENDIX 2

THE BROADER WCF CONCEPT

The need for payments to depopulate Citizens is a symptom of a poorly functioning hurricane catastrophe insurance system. The takeout bonus is providing the assuming insurer the risk loading we discussed under THE INSURANCE ECONOMICS OF CATASTROPHES above. The fact that the insurance system is not generating a sufficient risk load to keep policyholders out of Citizens is the major weakness in the hurricane catastrophe insurance system. It may not be possible to generate the risk loading needed using private insurers. Of the five catastrophes we mentioned earlier, earthquakes, floods, hurricanes, terrorism, nuclear explosion, the only two that do not use a federal program to cover the exposure are earthquakes and hurricanes. The earthquake exposure is confined almost entirely to California which has provided a state program to handle the exposure. Since the California economy is larger than many countries, this may be a feasible solution for California.

The hurricane exposure in Florida is partially covered by the FHCF, however, this does not provide the protection that insurers want as demonstrated by 2004 when the FHCF recovery was $1.5 billion even though the hurricane losses were estimated as over $22 billion in *"The Winds of Change"* report. Changes have been made to increase the recovery from the FHCF, however, the exposure insurers retain is still at least $4.5 billion for one hurricane and would have been $12 billion for 2004. Insurance industry attitude is typified by Allstate's recent action to non renew almost 100,000 personal lines policies and 16,000 commercial property policies, exiting that line entirely. Robert Hartwig, chief economist at the Insurance Information Institute is quoted as saying, "Unless there is some rationalization of the price of insurance relative to the risk assumed, there will be continued problems of availability."

Simply allowing insurers to charge as much as they want to cover the hurricane exposure might be one answer; however, it would be a very costly answer. Insurers cannot efficiently accumulate funds to pay catastrophe losses. The accumulated funds are taxed as profit if retained by the insurer. If used to buy reinsurance, the cost is much higher than the equivalent protection from a non-profit entity such as the FHCF. In addition, there is never any guarantee that funds accumulated by private insurers will eventually be used for the benefit of Florida policyholders. An insurance company can accumulate funds for 20 years, and then decide to stop doing business in Florida. If this happens, the money Florida policyholders have been paying for 20 years to fund the inevitable hurricane catastrophe would disappear. The company can also pay the higher profits to policyholders as dividends or even become insolvent for reasons not related to Florida exposure to Hurricanes. The most reasonable answer may be

to remove the hurricane catastrophe exposure from the private insurance area and make it 100% certain that money Florida policyholders pay to accumulate as hurricane catastrophe funds actually stay in Florida and are used for hurricanes. This is essentially what the WCF does if applied to all insurers and not just the Citizens HRA.

As a practical matter the money to pay hurricane losses is going to come from the people of Florida one way or another unless a national program is developed. The cost to Florida people of having private insurers assume the hurricane catastrophe risk is always going to be more expensive than using a concept such as the WCF. See our discussion under THE INSURANCE ECONOMICS OF CATASTROPHES above about risk loading. In the short term insurance companies may absorb large hurricane losses, but in the long term simple economics says they cannot do this unless people outside of Florida subsidize Florida property owners. Subsidies usually only work if they are imposed by government. There is no way Florida can impose a subsidy on the rest of the country.

If Florida is left to its own resources the goal should be to create a structure with the greatest efficiency, stability and equity we can. The FHCF has shown that it is possible to create such a structure for at least the excess layer of the hurricane exposure. The question is whether the structure will work for a primary layer. The FHCF gives some hope that this can be accomplished. The WCF proposal may well be the solution. Below we review some statistics on the FHCF.

1. The FHCF has an operating expense of 0.7% of income. This is efficient. If the same efficiency can be achieved for the WCF this would meet anyone's goal of efficiency.

2. The FHCF has been very stable. Insurer participation in the FHCF is mandatory. This has contributed greatly to the stable revenue, varying by only $100 million from 2000 through 2004, with 2004 revenue of $557 million.

3. The FHCF establishes rates using actuarial methodology that aims to produce adequate premiums. There are detailed rating classes to insure rates are equitable, meaning commensurate with the exposure.

The WCF would be funded mostly from premiums paid by policyholders. We have reviewed below the amount of money that might be available.

The homeowners data in Appendix 1 and similar data for commercial multiple peril shown in Appendix 3 give us an idea of the funds available. We have calculated the amount as about $1.54 billion dollars annually as shown in Appendix 4. This is an estimate of the amount that is included in the premium for hurricane catastrophe loss, including anticipated rate increases after 2004. The

available funds could be supplemented by the windfall sales tax. Investment income would also be received on invested funds, however, investment income should be considered as an offset to inflation rather than as a source of income. We need to subtract from this the amount needed to pay for the retained losses subject to FHCF recovery.

The other consideration is the loss that may be experienced by the WCF. This depends on two primary factors, the amount of hurricane losses and the retention by the WCF. We can assume that the FHCF will cover 90% of loss above a $4.5 billion retention since 99% of FHCF premium has this coverage. The FHCF only covers above $4.5 billion of loss for each of the first two hurricanes in a year and $1.5 billion for every other hurricane in a year. In Appendix 5 we have calculated the losses to the WCF for hurricanes since 1990, including an estimate for 2005, assuming present retentions had been in effect for the FHCF. The WCF income is $24.62 billion and the WCF losses are $23.15 billion, at 100% retention by the WCF.

The WCF would have been able to pay losses for the period 1990 through 2005 without an assessment if the sales tax windfall is included as a WCF revenue source, due primarily to the fact we started with 1990 which was two years prior to Hurricane Andrew. 1990-2005 includes two years of record hurricane losses in Florida and 2005 was a record year for hurricane frequency in the United States, so it is a good test of the WCF concept. A sound actuarial analysis of the concept would require use of hurricane modeling as is employed by the FHCF and most large insurance companies. The simple test above however, is very encouraging.

The losses do not reflect the effect of inflation since 1990, while the revenue does, therefore, the comparison is somewhat biased, however, since most of the losses are for 2004 and 2005 the bias can be ignored. We are not trying to determine actuarially sound rates in this analysis, simply see if the WCF concept is workable. Administrative expenses of the WCF are ignored since we assume they would be as low as for the FHCF. The agent's commission, taxes, underwriting expenses and loss adjustment expense are assumed to have been paid before the WCF receives it money. This means the premium the policyholder pays would be higher than the $1.54 billion a year we used above, but it would be no higher than the policyholder already pays the insurer. For this analysis we have already deducted all expenses other than losses paid to the policyholder.

The above test does not reflect any participation in the WCF losses by insurers. Participation by the insurers would not affect the outcome of the test. If the insurers retain 2% of the WCF losses they would presumably retain 2% of the premium, leaving the WCF with 98% of the income and losses noted above. It is feasible to have the insurer participate in losses to motivate them to provide good service and accurate claims adjusting.

ANALYSIS OF WINDSTORM COVERAGE FUND

The WCF concept does involve a major restructuring of the insurance market if applied to all insurers and not just the Citizens HRA business. The concept will work best if mandatory for all insurers with some small level of insurer retention of hurricane risk to insure good service to the public. If insurers are allowed to selectively participate, the WCF will be subject to adverse selection. This is one problem right now with the HRA business.

The removal of the hurricane risk should encourage insurers to compete to cover the remaining perils since these should be profitable. The price for this may well decrease from present levels since insurers will not have as much need for expensive reinsurance purchased in the private market. The business of Citizens should decrease significantly since the HRA business will all disappear. Whether the personal lines account is depopulated depends on why that business is in Citizens. *"The Winds of Change"* report mentions some problems with sinkhole losses in some parts of the state. Sinkhole losses are not a catastrophe problem, they are a coverage problem, similar to mold. More competition for business would eventually depopulate Citizens to a large extent, but not if there are loss problems other than hurricane losses.