

**NATIONAL FLOOD INSURANCE PROGRAM  
ANALYSIS FOR NATIONAL ASSOCIATION OF  
REALTORS®**



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# **NATIONAL FLOOD INSURANCE PROGRAM**

## **ANALYSIS FOR NATIONAL ASSOCIATION OF REALTORS®**

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## EXECUTIVE SUMMARY

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### Purpose of Report

The National Association of REALTORS® (NAR) is a trade association representing REALTORS® in the United States. It is the country's largest trade association and one of its largest lobbying groups. Milliman, Inc. (Milliman) is among the world's largest independent actuarial and consulting firms. NAR engaged Milliman to show how increased differentiation of rating zones would affect and potentially improve National Flood Insurance Program (NFIP) rating.

This section of the report contains a high-level summary of our project scope and findings. The remainder of this report provides a more in-depth description of the data, methods and assumptions underlying these results, extended comments on our findings, and exhibits that document the analysis.

### Scope of Analysis

The scope of this analysis is to show how expected losses and relative adequacy of NFIP premiums depend on factors that influence flood risk, such as the following:

- Is the house in a location that is higher or lower than the surrounding area (is it on a hill or in a depression)?
- How near is it to the coast?
- How near is it to a river or stream?
- What effect do the building characteristics have for the examples chosen?

We also compare NFIP expenses to those of a private insurer.

Although the risks in this analysis are realistic, they are limited examples selected from a range of many risk types and geographies. The NFIP's rate adequacy depends on the entire portfolio of risks it writes.

### Highlights

Highlights of the findings addressed in this paper are as follows:

- The current NFIP rates are not aligned well with risk.
- Some risks are undercharged and others are over-charged.
- In this paper we suggest ways the NFIP rates could be improved.
- Improvements would likely result in more homeowners purchasing flood insurance and could lead to improved solvency of the NFIP.

## Key Findings

The current NFIP rating plan has limited geographic granularity. NFIP premiums are based primarily on three flood zones (X, AE, and VE) as well as elevation relative to Base Flood Elevation (BFE) in the AE and VE zones.<sup>1</sup> This limited granularity results in cross-subsidization between policies.

A private flood insurance program would likely have much more granularity and reduced cross-subsidization. It would likely have higher rates for policies that have inadequate NFIP premiums and lower rates for those that have excessive NFIP premiums. If the NFIP introduced additional rating factors, or refined its existing flood zones, it could reduce the level of cross-subsidization within the program.

The NFIP's actual experience is strongly influenced by which people choose to buy flood insurance. People in less risky areas, where NFIP rates tend to be higher than the target premiums, are less likely to buy flood insurance. Currently, houses in the X zone are not required to purchase flood insurance. The take-up rates (percentage of people who purchase flood insurance) in the X zone are very low, which may be in part because they are often subsidizing higher-risk locations. Since homeowners are usually aware of their flood risk, they may not choose to purchase flood insurance because they believe their risk is low relative to the premium charged.

The current cross-subsidization within the NFIP is complex and results from the mismatch between expected flood losses and the NFIP rates. This means that it is not possible to determine the direction of the subsidy by considering either the expected losses or the NFIP rates by themselves. The amount of subsidy often varies with geographic features that are related to loss. This is because the expected loss varies with these features, but the NFIP premium does not sufficiently reflect this variation.

We found that, all else being equal, expected loss usually:

- Decreases at higher elevations relative to surrounding areas.
- Decreases as you go away from the coast.
- Decreases as you go farther from rivers.

We discuss in more detail some of the ways that a mismatch between the NFIP premium and the underlying flood risk results in cross-subsidization in the “Detailed Discussion” section of this report.

Enhanced granularity in NFIP flood rates through the adoption of a multivariate rating structure similar to that described in Exhibit FL-I would likely align the premiums more closely with flood

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<sup>1</sup> There are other flood zones, but these are the most important ones and the ones we reviewed in this study. The X zone consists of those locations with less than a 1% annual chance of flooding. The AE zone consists of those locations with at least a 1% annual chance of flooding in areas where BFEs have been determined but there is no velocity hazard. The VE zone is similar to the AE zone, but with the velocity hazard. Velocity hazard means there is increased risk arising from the velocity of waves during a flood, such as can occur during storm surge.

risk. This would mean increasing the number of flood zones and/or adding additional rating variables, such as:

- Distance to the coast
- Distance to river/stream
- Relative elevation

In the X zone the NFIP premium does not currently depend on elevation. Adopting the use of relative elevation would help address this limitation. Although the premium in the AE and VE zones does depend on elevation relative to BFE, adding relative elevation would improve rating accuracy.

Another method of improving NFIP rating would be the adoption of more continuous rating variables. The current rating plan can result in abrupt changes in rates from one rating bin to an adjacent rating bin, such as a location at BFE and a location one foot below BFE. Increasing the number of rating bins or using continuous rating variables would reduce these discontinuous premium changes, resulting in more accurate rates and possibly reducing large premium changes as flood maps are revised.

These improvements would likely result in more homeowners purchasing flood insurance, because many homeowners would likely receive lower premiums after this change. However, some homeowners who currently have their premiums subsidized by those at lower risk would likely face large premium increases.

## DESCRIPTION OF ANALYSIS

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Many NFIP policies are in states at high risk of flooding. This study includes counties in five states, selected to include areas at high risk of flooding, but also to be geographically diverse.

TABLE 1: NFIP POLICIES BY STATE		
State	NFIP Policies in Force (2/28/15)	Percentage of NFIP Policies
Florida	1,929,393	37%
Texas	598,837	11%
New Jersey	236,241	5%
California	233,522	4%
Ohio	39,809	1%
Other States	2,204,483	42%
<b>TOTAL</b>	<b>5,242,285</b>	<b>100%</b>

For each county we determined a set of notional locations based on the centroid of each residential parcel, as derived from county data. Each base risk had fixed property characteristics, so that the only difference between notional risks was location. In this way we can isolate the impact of geography. Two base risks with different characteristics were selected for each county, which enabled us to look at how these characteristics impact expected loss and profitability.

The characteristics of each base risk are described below:

- Pinellas County, Florida
  - Locations analyzed are 243,607 points in Pinellas County, FL.
  - Base Risk 1 is 1970 year built, prior to the introduction of the Flood Rate Insurance Maps (FIRMs), so NFIP premiums are subsidized.
  - Base Risk 2 is 1995 year built, after the introduction of FIRMs, so NFIP premiums are unsubsidized.
  - Both modeled risks are 1-story; Masonry construction; Coverage A \$175,000; Coverage C 50% of Coverage A;<sup>2</sup> Deductible \$2,000.
- Harris County, Texas
  - Locations analyzed are 951,240 points in Harris County, TX.
  - Base Risk 1 is 1 story, \$125,000 Coverage A.
  - Base Risk 2 is 2 story, \$250,000 Coverage A.
  - Both modeled risks are 1995 Frame construction; Coverage C 50% of Coverage A; Deductible \$2,000.

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<sup>2</sup> Coverage A is the dwelling limit and is based on dwelling replacement cost. It does not include land, is not based on market value, and may differ significantly from market value. Coverage C is the contents limit.

- Ocean County, New Jersey
  - Locations analyzed are 292,211 points in Ocean County, NJ.
  - Base Risk 1 is at grade (not elevated).
  - Base Risk 2 is elevated 10 feet above grade.
  - Both modeled risks are 1-story; 1995 Frame construction; Coverage A \$175,000; Coverage C 50% of Coverage A; Deductible \$2,000.
- Merced County, California
  - Locations analyzed are 41,920 points in Merced County, CA.
  - Base Risk 1 is 1 story, \$150,000 Coverage A.
  - Base Risk 2 is 2 story, \$250,000 Coverage A.
  - Both Modeled risks are 1995 Frame; Coverage C 50% of Coverage A; Deductible \$2,000.
- Hancock County, Ohio
  - Locations analyzed are 23,523 points in Hancock County, OH.
  - Base Risk 1 has a basement.
  - Base Risk 2 does not have a basement.
  - Both modeled risks are 1-story; 1995 Frame construction; Coverage A \$100,000; Coverage C 50% of Coverage A; Deductible \$2,000.

The counties and base risks in this study were selected in consultation with volunteer members of the NAR Insurance Committee. We selected counties with relatively high flood risk from different regions of the country, and varied building features in each location. We selected base risks that are relatively typical for each area based on a review of local market data obtained from NAR.

For catastrophic flood exposure, historical experience may not be sufficient to measure future risk. In many areas, flood events are infrequent. Since housing costs and geographical concentrations change over time, historical experience may not be predictive of future loss. Therefore, to estimate losses from catastrophic exposures, insurers often use catastrophe models, which are based on hazard, engineering, and financial models calibrated to reproduce historical events on average.

We utilized catastrophe model output obtained from the RMS hurricane model, v13.0, with the long-term frequency setting, with demand surge. We calculated Average Annual Losses (AALs) with and without Storm Surge and calculated the Storm Surge AAL as the difference. Non-Storm Surge Flood expected loss is determined from the KatRisk flood model. We calculated total expected loss by adding Storm Surge expected loss and Non-Storm Surge expected loss.<sup>3</sup>

Our target premiums are based on the total expected loss, adjusted to include provisions for expense and contingencies as shown in the Expense Exhibits, Page 3.

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<sup>3</sup> The same event can cause flooding from both Storm Surge and non-Storm Surge, so adding these AALs will overestimate the expected loss in some cases. For purposes of this analysis, we believe the potential overstatement would not be material and would not impact our overall conclusions.

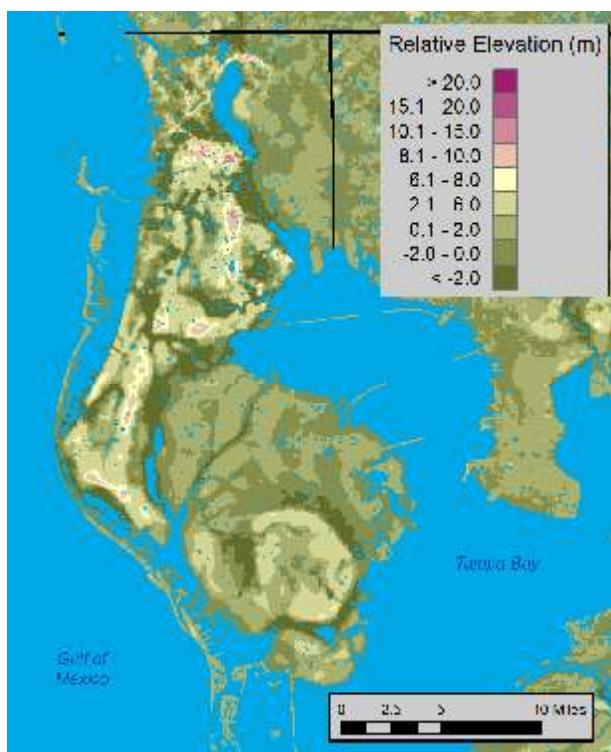
NFIP Premiums for each risk at each location were calculated from NFIP rate manuals effective October 2014. We used standard rates and, where appropriate, submit-to-rate rates. We excluded locations that were in neither the standard manual nor the submit-to-rate manual. There were very few of these locations and they had very low elevations relative to BFE. This study did not consider the Preferred Risk Program, which provides substantially reduced rates for certain risks in the X zone that have had a favorable loss history.

The premiums above/below target were calculated as the NFIP premiums minus the target premiums.

We utilized the following Geographic Information Systems (GIS) layers:

- Distance-to-Coast, which was calculated based on the coastline from the National Hydrology dataset.
- Distance-to-River, which is the distance to the nearest river or stream in the National Hydrology Dataset.
- Relative Elevation, which is defined as the elevation within 100 meters of the location minus the average elevation within 2.5 kilometers of the location. We used elevation data from the National Elevation Dataset.

**Figure 1**



- FEMA Flood Zone. We utilized FEMA flood zones because they are the basis of the NFIP pricing. We determined FEMA flood zones based on the National Flood Hazard Layer.

## **DETAILED DISCUSSION**

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### **Take-Up Rates**

The flood take-up rate is the percentage of people who buy flood insurance. It tends to be higher in riskier areas. We have assumed 100% take-up rates in order to show premiums for all locations in each of the counties analyzed. In reality, people in riskier areas, where NFIP rates tend to be lower than the target premiums, are more likely to buy flood insurance. A comparison using actual NFIP take-up rates would show much more significant rate inadequacies on average than a comparison assuming 100% take-up rates.

Table 2 shows estimated NFIP take-up rates by county based on policies in force as reported by the NFIP, and number of single family homes as estimated by the United States Census.

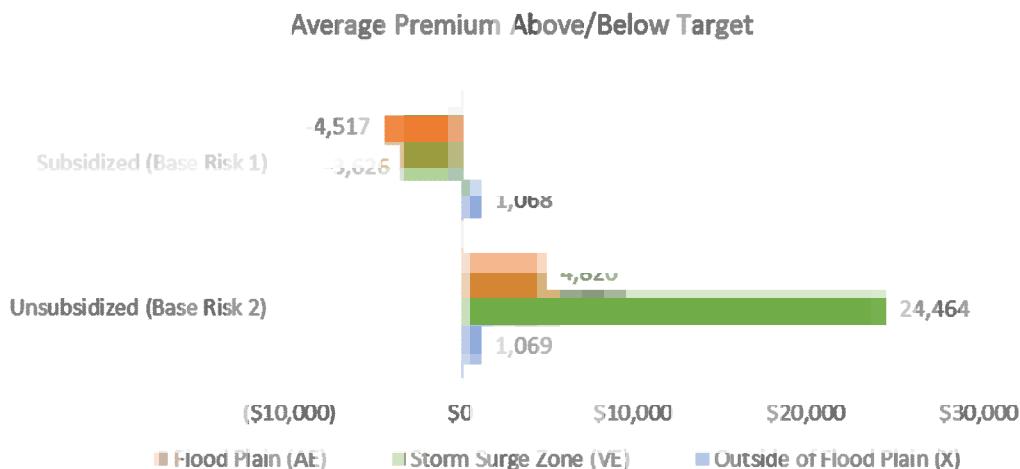
<b>TABLE 2: ESTIMATED TAKE-UP RATES</b>	
<b>County</b>	<b>County Take-up Rate</b>
Pinellas County, FL	47%
Harris County, TX	23%
Ocean County, NJ	21%
Merced County, CA	11%
Hancock County, OH	4%

### **Discussion of Exhibits**

#### *Pinellas County, Florida (Exhibits FL-A to FL-H):*

The dominant mechanism of flooding in Pinellas County, Florida is Storm Surge, though locations with exposure to Storm Surge risk are not necessarily in a VE zone. Exhibit FL-H shows that there is a very strong relationship between expected loss and distance to the coast in Pinellas County. This relationship is even stronger outside of the VE zone than in it. For example, in the AE zone for the unsubsidized (post-FIRM) risk the expected loss is \$5,168 within 0.025 miles of the coast and drops to \$408 more than five miles from the coast. For the X zone, the average expected loss is \$4,216 within 0.025 miles of the coast and only \$76 more than five miles from the coast. Distance from the coast is at least as important as flood zone in determining expected loss in Pinellas County.

The NFIP rates include subsidization of properties built before the creation of flood maps. For example, the average premium for the subsidized (pre-FIRM) risk in the AE zone is on average \$4,517 below the target premium, while the post-FIRM risk in the AE zone is on average \$4,820 above the target premium, as shown in the following figure from Exhibit FL-E:



This is a subsidy from the newer risks to the older risks. A similar pattern exists for VE, but not for X because there are no separate rates for pre-FIRM and post-FIRM risks in the X zone.

The expected losses for a post-FIRM home are very similar to a pre-FIRM home, assuming that the elevation of the first floor is the same. If houses built after the introduction of FIRMs are built with their first floor higher above grade than older houses, they would have lower expected losses, all else being equal. For the post-FIRM home in the AE zone, the NFIP premiums are much higher near the coast, as shown in Exhibit FL-H Page 1. For pre-FIRM homes, although the expected losses depend strongly on distance to the coast, the average NFIP premium does not vary materially with the distance to the coast.

#### *Pinellas County, Florida (Exhibit FL-I)*

Multiple factors can affect loss, and sometimes these factors move in different directions. For example, areas far from rivers may have higher expected losses because they are also near the coast. Areas in the VE zone, where Storm Surge is the dominant flooding mechanism, may show little relationship between expected loss and distance-to-river, because riverine flooding is much less important than coastal flooding. For Pinellas County, Florida, we have included in Exhibit FL-I a multivariate analysis that accounts for the multiple factors that affect flood risk.

This exhibit shows a multivariate analysis using a Generalized Linear Model with a Tweedie distribution and a log link function. We constructed a Storm Surge and an inland flood model for the X zone and outside the X zone. The model output and tests of statistical significance are shown in Exhibit FL-I, Page 5.

The models predict expected loss using variables including distance-to-coast, distance-to-river, elevation, and relative elevation as predictors. These models show that these variables have a very strong relationship with expected loss, even after adjusting for the correlation among them. Pages 1b, 2b, 3b, and 4b contain graphs showing the relationship between risk and these factors. For example, this means that distance-to-coast is important even after accounting for the impact of elevation.

*Harris County, Texas (Exhibits TX-A to TX-H):*

The dominant form of flooding in Harris County, Texas is riverine. There is a very small portion of this county on the coast, but as shown in Exhibit TX-E, 91% of risks are outside the flood plain. Only 108 risks out of 951,430 are in the VE zone.

Exhibit TX-F shows that the expected loss varies strongly with distance-to-river. For a one story house in the AE zone, the expected loss decreases from \$920 next to a river to \$140 more than a mile from a river. For a one story house in the X zone, the expected loss decreases from \$279 next to a river to \$111 more than one mile from a river. Although the AE zone does have both higher NFIP premiums and expected losses than the X zone, the NFIP premiums do not sufficiently reflect the change in risk within the flood zone. In the AE zone, the risks far from a river have an 85% reduction in expected loss compared to those near a river, but only a 56% reduction in premium. In the X zone, risks far from a river have a 60% reduction in expected loss compared to those near a river, but the average premium is only 2% lower. In all of these cases we estimate the target premiums to be lower than the NFIP premiums.

We compared one story houses to two story houses. Two story houses generally have higher values but reduced vulnerability, because a flood of a given depth affects less of a two story house than of a one story house. The relative vulnerability is the average loss per thousand dollars of Coverage A for a two story house divided by the value for a one story house.

Tables 3 and 4 show the calculation of the relative vulnerability and relative premium rate based on information from Exhibit TX-E:

**TABLE 3: AVERAGE RELATIVE VULNERABILITY (HARRIS COUNTY)**

Flood Zone	AE	VE	X
One Story Average Loss	\$272	\$3,869	\$67
One Story Coverage A	\$125,000	\$125,000	\$125,000
One Story Average Loss per \$1000 Coverage A	\$2.18	\$30.95	\$0.54
Two Story Average Loss	\$353	\$5,147	\$87
Two Story Coverage A	\$250,000	\$250,000	\$250,000
Two Story Average Loss per \$1000 Coverage A	\$1.41	\$20.59	\$0.35
Relative Vulnerability	65%	67%	65%

<b>TABLE 4: AVERAGE RELATIVE NFIP PREMIUM (HARRIS COUNTY)</b>			
<b>Flood Zone</b>	<b>AE</b>	<b>VE</b>	<b>X</b>
One Story Average NFIP Premium	\$2,725	\$19,791	\$1,221
One Story Coverage A	\$125,000	\$125,000	\$125,000
One Story Average Premium per \$1000 Coverage A (Rate)	\$21.80	\$158.33	\$9.77
Two Story Average Premium	\$2,572	\$37,232	\$1,666
Two Story Coverage A	\$250,000	\$250,000	\$250,000
Two Story Average Premium per \$1000 Coverage A (Rate)	\$10.29	\$148.93	\$6.66
Relative Rate	47%	94%	68%

Two story houses have about a third less expected loss than one story houses, so we would expect a similar reduction in premium. However, the NFIP over-discounts two story houses in the AE zone and under-discounts in the VE zone

*Ocean County, New Jersey (Exhibits NJ-A to NJ-H):*

In Ocean County, New Jersey we considered the impact of elevating a house by 10 feet. In the AE zone, this reduced the expected losses by 98%, but reduced the NFIP premium by only 92%, as shown in Exhibit NJ-E. A risk in the AE zone that is not elevated has a premium that is \$4,460 above the target premium, whereas the elevated risk is only \$433 above the target premium. However, the not elevated risk has an expected loss of \$456, while the elevated risk has an expected loss of only \$7, as shown in the following table excerpted from Exhibit NJ-E:

<b>TABLE 5: ELEVATED (BASE RISK 2)</b>				
<b>Flood Zone</b>	<b>Average Loss</b>	<b>Average Premium</b>	<b>Target Premium</b>	<b>Premium Above/Below Target</b>
Flood Plain (AE)	\$7	\$445	\$13	\$433
Storm Surge Zone (VE)	\$4	\$3,419	\$7	\$3,412
Outside of Flood Plain (X)	\$2	\$1,570	\$3	\$1,566
TOTAL	\$3	\$1,332	\$5	\$1,326

*Merced County, California (Exhibits CA-A to CA-H):*

In Merced County, California, the expected losses for one story and two story houses are similar because the reduced vulnerability of two story houses offsets their higher value. The NFIP average premiums are higher for two story houses in the X zone, but lower in the AE zone.

Expected loss varies strongly with relative elevation. For example, as shown in Exhibit CA-G, in the X zone the expected loss for a one story risk at a relative elevation of less than -6 feet is \$433, while for a relative elevation of greater than 6 feet it is \$10. These risks currently receive the same premium, resulting in a premium adequacy that strongly depends on relative elevation. For the AE zone, the NFIP premium varies with elevation relative to BFE, so the average premium does

decrease at lower relative elevations. However, the NFIP premium does not change at the same rate as the expected loss, resulting in rate adequacy that depends on relative elevation.

*Hancock County, Ohio (Exhibits OH-A to OH-H):*

In Hancock County, Ohio, the dominant flooding mechanism is riverine, so distance-to-river is crucial, similar to what we saw for the Texas example. As shown in Exhibit OH-F, for a house without a basement in the X zone, the average expected loss within 0.025 miles (132 feet) of a river is \$157, while more than one mile from a river the expected loss is \$15. Despite having a 90% reduction in expected loss, these risks are charged the same NFIP premium.

In the AE zone, the average NFIP premium varies with distance-to-river because the Base Flood Elevation is correlated with distance-to-river. However, the reduction in premium does not reflect the reduction in risk. For the risk without a basement, the expected loss more than 0.25 miles from a river is 75% lower than within 0.025 miles of a river, but the NFIP premium decreases by only 51%.

*Expense Exhibit*

The expense exhibit compares the NFIP expenses to State Farm, the largest insurance company in the United States. The NFIP does not purchase reinsurance and does not have a profit load, although it does have a contingency load. State Farm, like most private insurance companies, does purchase reinsurance and this expense is included in the exhibit. The reinsurance State Farm has purchased is likely based primarily on other perils such as wind risk, not flood risk, because Flood is not a covered peril in State Farm's Homeowners policies. Reinsurance cost depends on many things, including the perils covered, the attachment point and limits, the distribution of risks, and other terms and conditions of the contracts. For these reasons, the average expense shown should be taken merely as indicative as opposed to directly comparable. However, the State Farm five-state average of 43.4% is similar to the 42.0% NFIP expense ratio (for the non-Storm Surge Zone) and 46.6% NFIP expense ratio (for the Storm Surge Zone).

Page 2 of the exhibit shows our source for NFIP expenses. Page 3 shows our assumptions in calculating target premiums and an example of the calculation.

## LIMITATIONS AND QUALIFICATIONS

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### *Use of Report*

The data and exhibits in this report are provided to support the conclusions contained herein, limited to the scope of work specified by NAR, and may not be suitable for other purposes. Milliman is available to answer any questions regarding this report or any other aspect of our review.

### *Distribution*

This report was prepared solely for the use and benefit of NAR, and is only to be relied upon by NAR. Although we have agreed to allow distribution of this report to outside parties, Milliman does not intend to benefit any third party recipient of its work product. In the event this report is distributed to third parties, the report must be provided in its entirety. We recommend that any such party have its own actuary review this report to ensure that the party understands the assumptions and uncertainties inherent in our estimates. This report may not be filed with the SEC or other securities regulatory bodies.

### *Data Reliances*

In performing this analysis we relied upon information obtained from NAR, catastrophe model output obtained from RMS and KatRisk, NFIP reports, the United States Census, as well as GIS layers from multiple sources. We have not audited or verified this data and information. If the underlying data or information is inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete. In that event, the results of our analysis may not be suitable for the intended purpose.

### *Model Reliances*

Our analysis is based on two catastrophe models, one from KatRisk and one from RMS. We have reviewed the model output for reasonableness and consistency. However, no catastrophe model is entirely accurate. To the extent that one or both models are biased, our results will be biased.

### *Uncertainty*

We based our results on generally accepted actuarial procedures and our professional judgment. Due to the uncertainty associated with the estimation of future loss payments and the inherent limitations of the data, actual results will vary from our projections.

### *Use of Milliman's Name*

Any reader of this report agrees that they shall not use Milliman's name, trademarks or service marks, or refer to Milliman directly or indirectly in any third party communication without Milliman's prior written consent for each such use or release, which consent shall be given in Milliman's sole discretion.

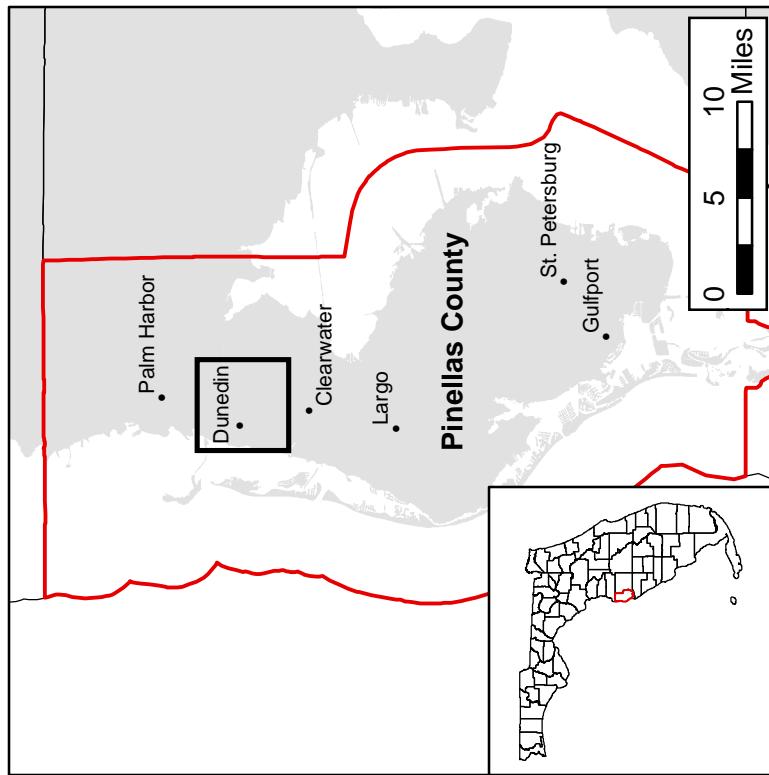
## **EXHIBITS**

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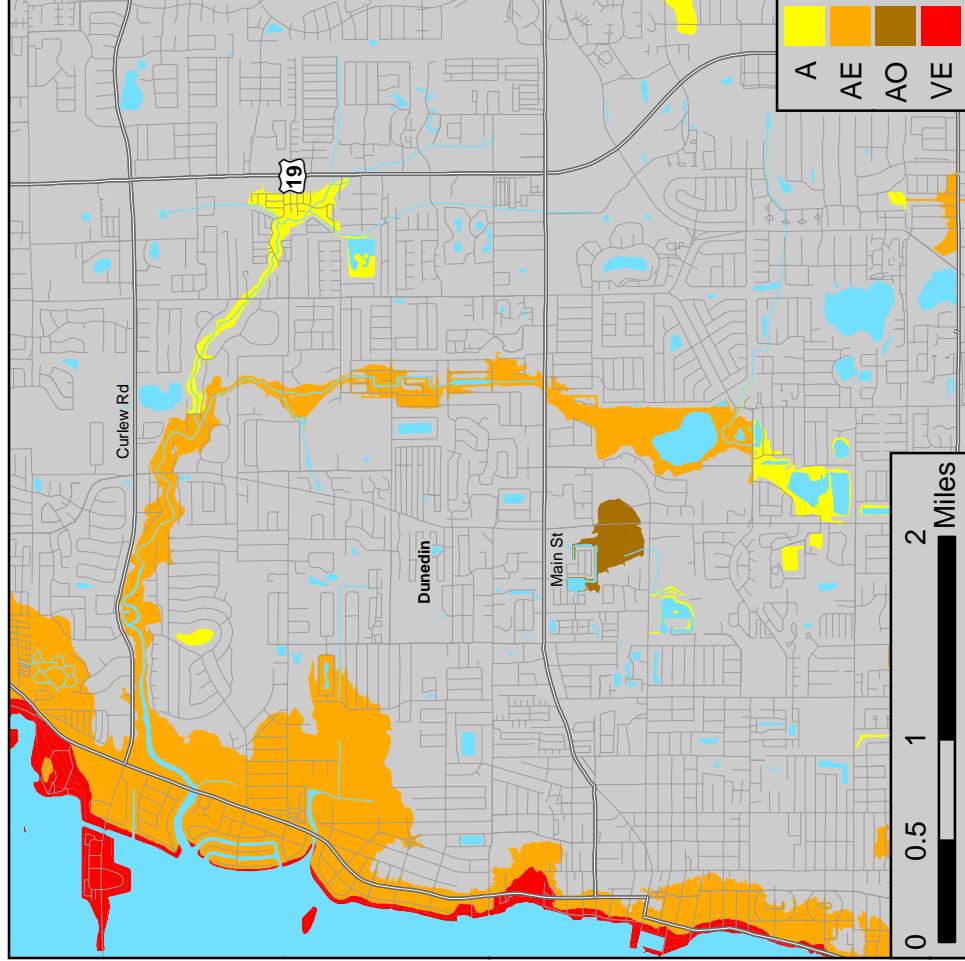
National Association of REALTORS®  
Pinellas County, Florida

Map FL-A

Extent of Mapped Area



FEMA Flood Zones



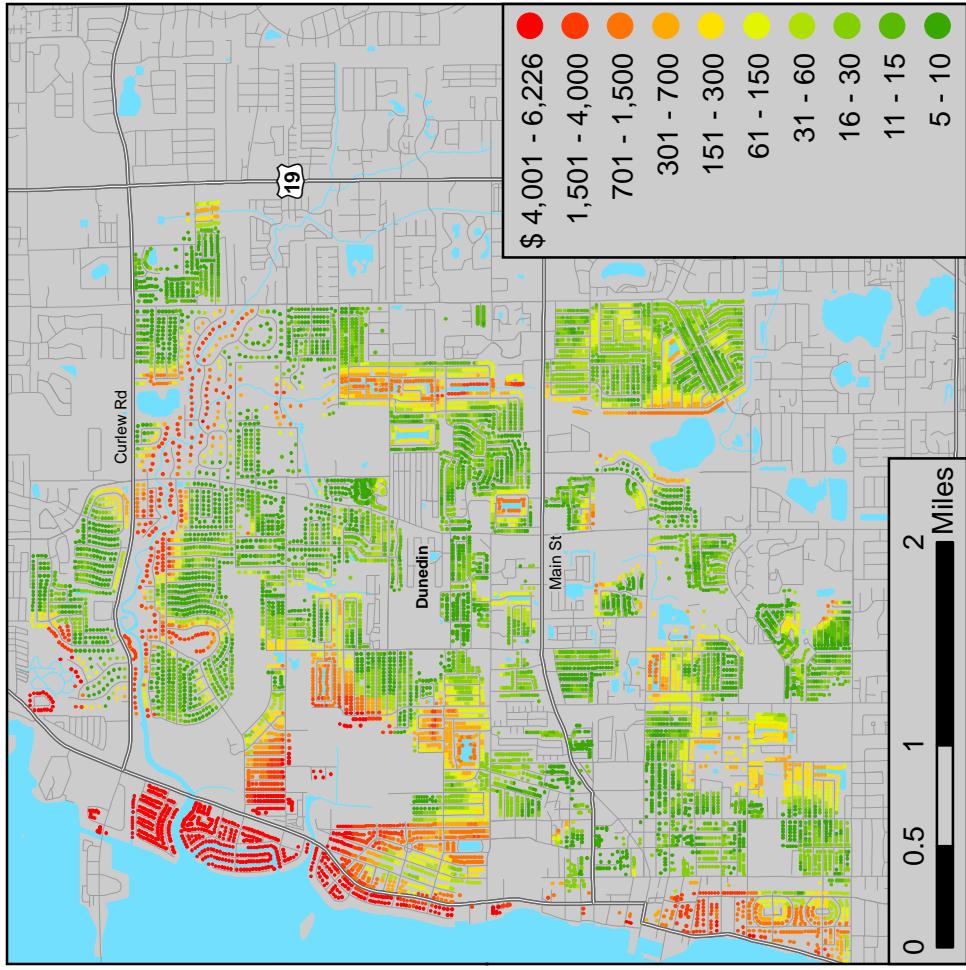
Note:

1. Source: National Flood Hazard Layer Digital Flood Insurance Rate Maps.

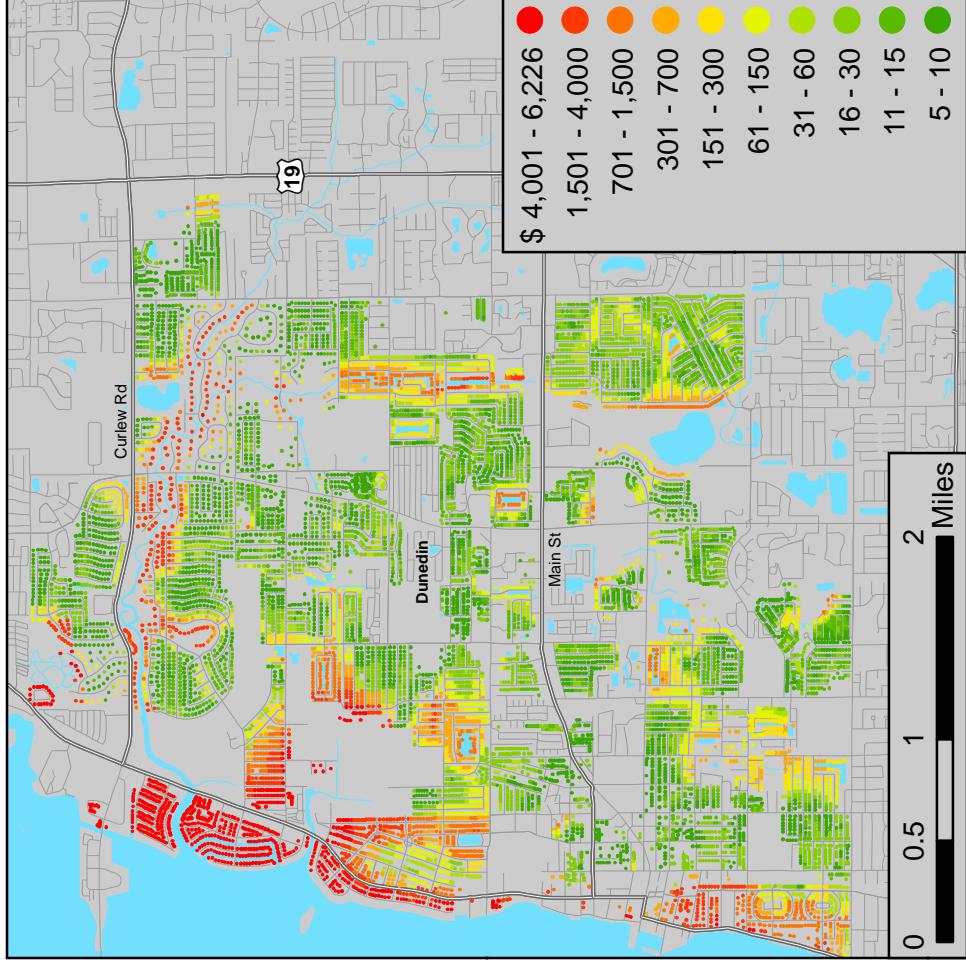
**National Association of REALTORS®**  
**Expected Losses**  
**Pinellas County, Florida**

**Map FL-B**

**Subsidized (Base Risk 1)**



**Unsubsidized (Base Risk 2)**



**Notes:**

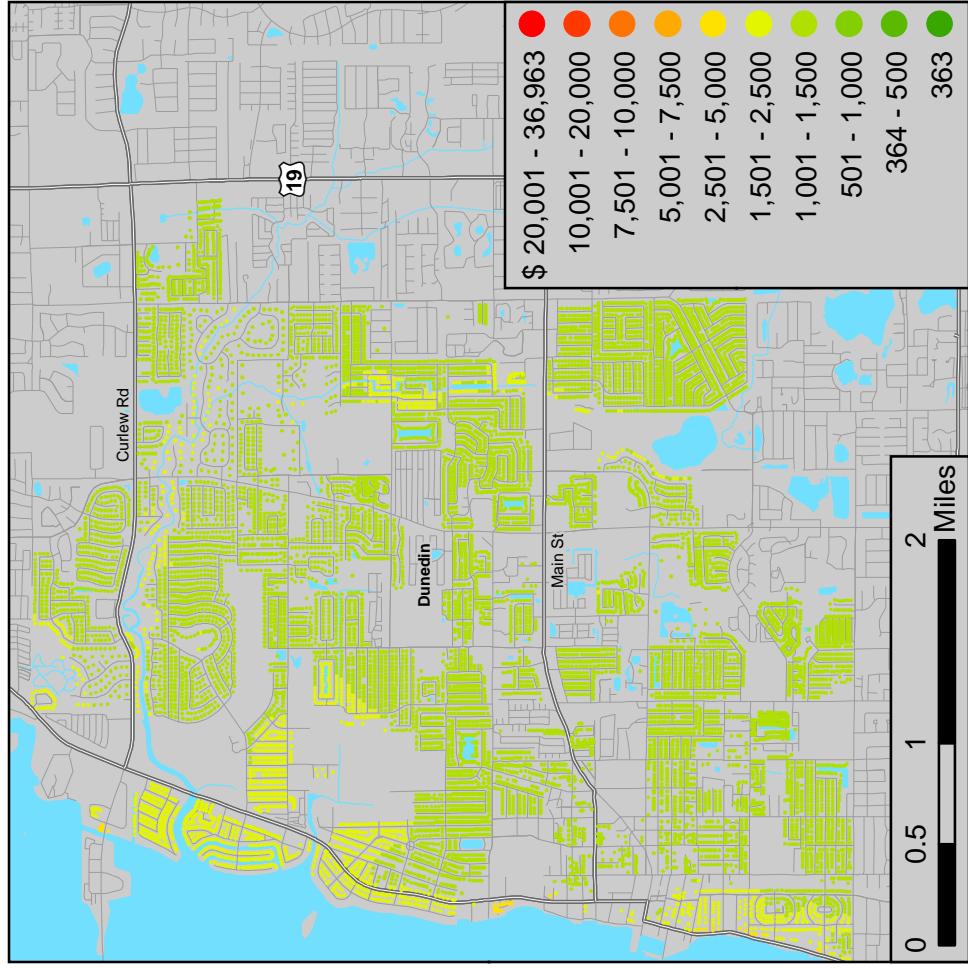
1. Base Risk 1: 1-Story, \$175k Coverage A, Masonry, 1970 (subsidized)
2. Base Risk 2: 1-Story, \$175k Coverage A, Masonry, 1995 (unsubsidized)

Milliman

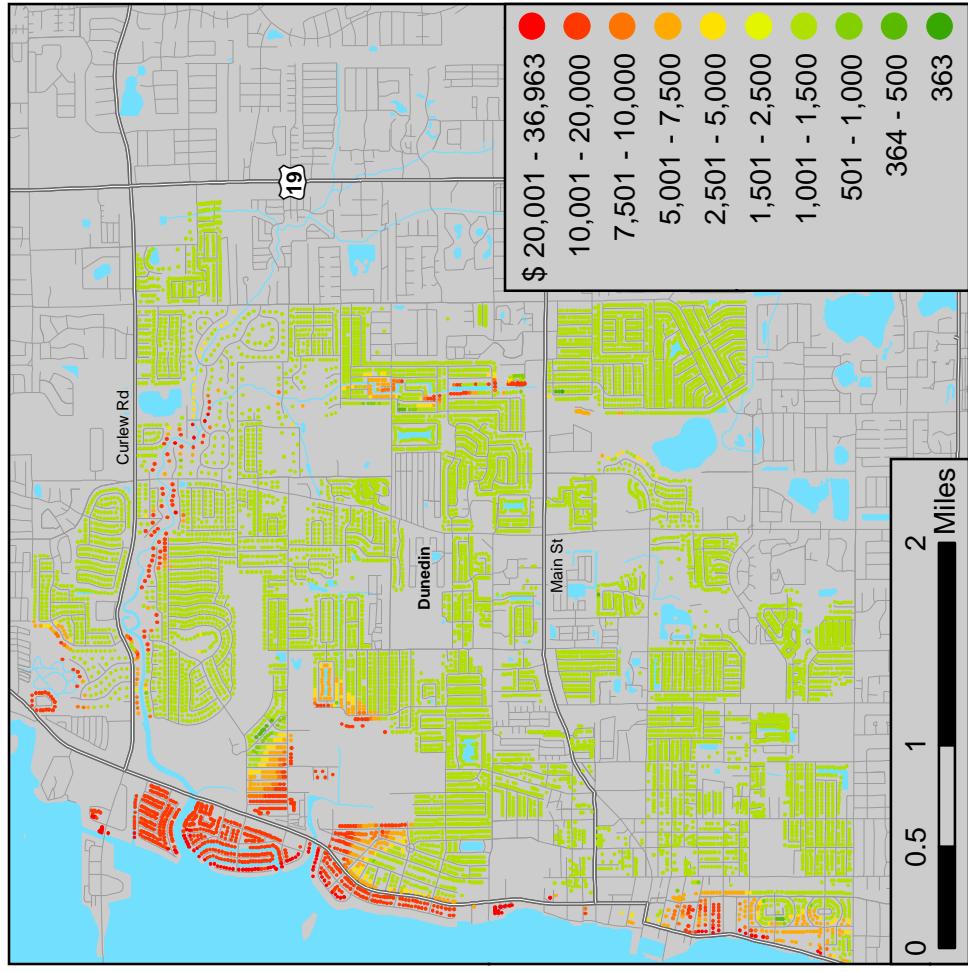
**National Association of REALTORS®**  
**NFIP Premium**  
**Pinellas County, Florida**

**Map FL-C**

**Subsidized (Base Risk 1)**



**Unsubsidized (Base Risk 2)**



**Notes:**

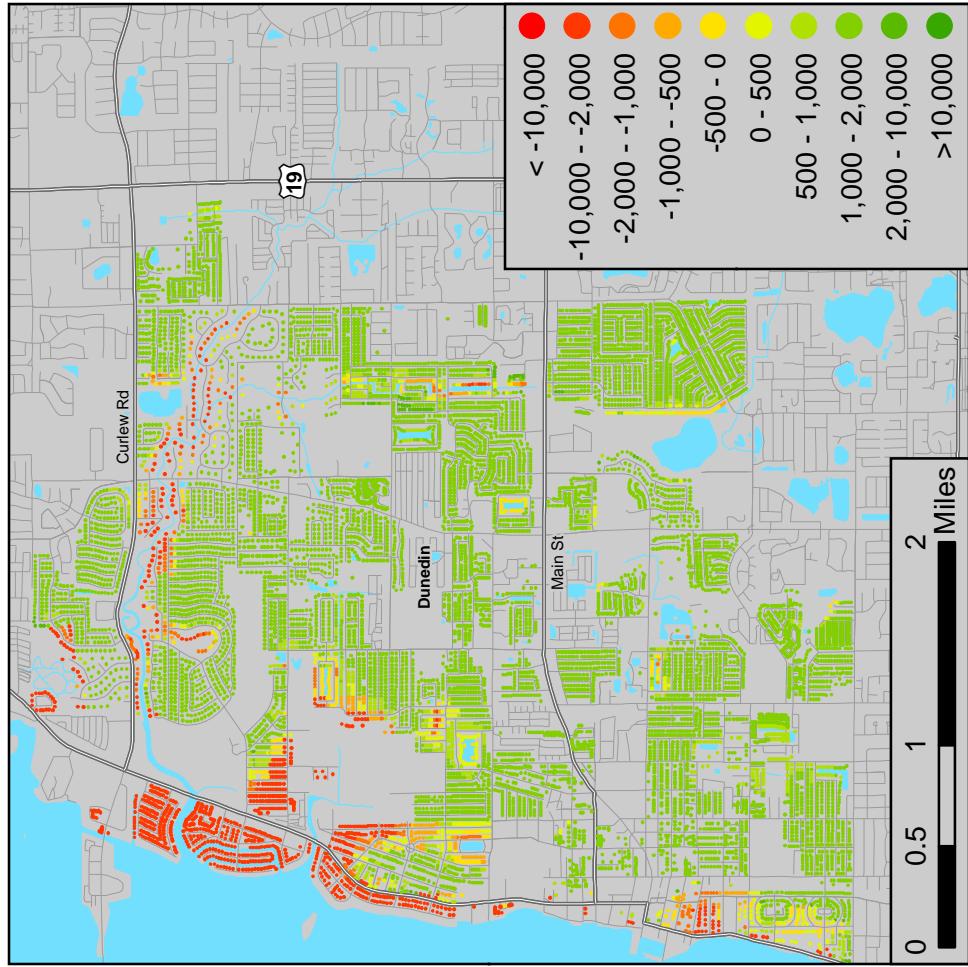
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Milliman

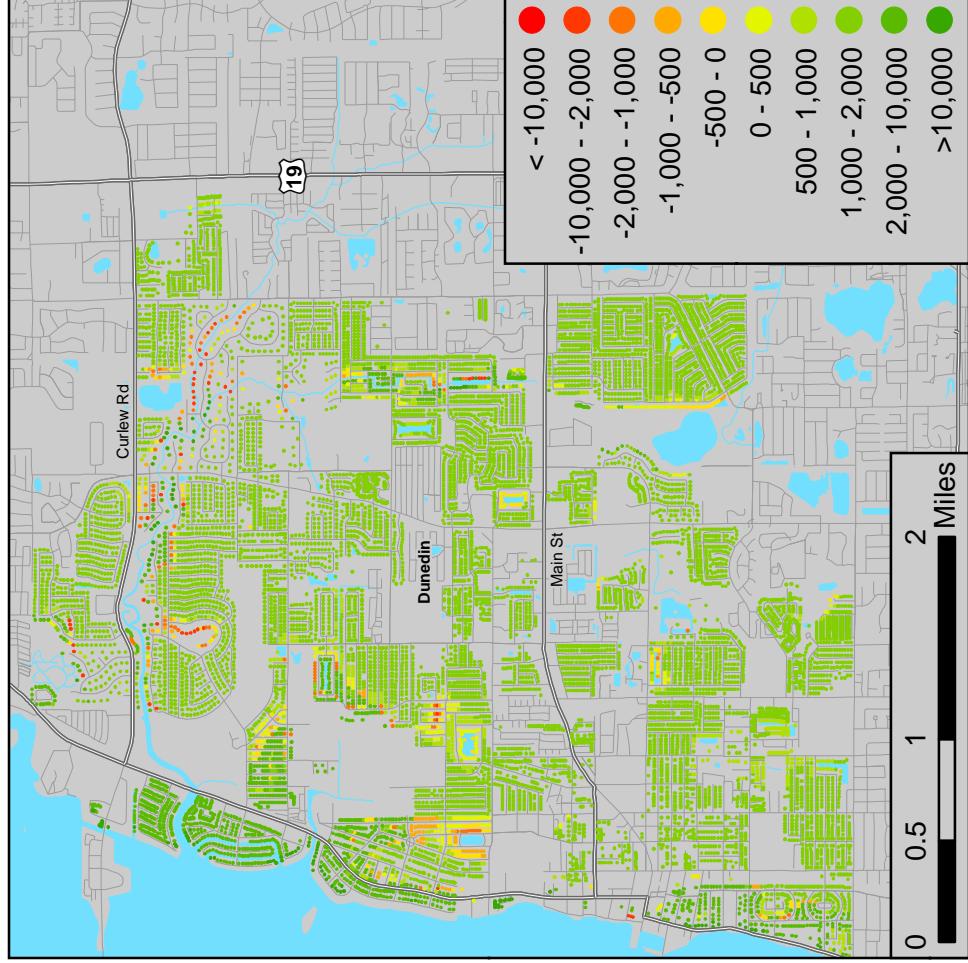
**National Association of REALTORS®**  
**Premium Above/Below Target**  
**Pinellas County, Florida**

**Map FL-D**

**Subsidized (Base Risk 1)**



**Unsubsidized (Base Risk 2)**



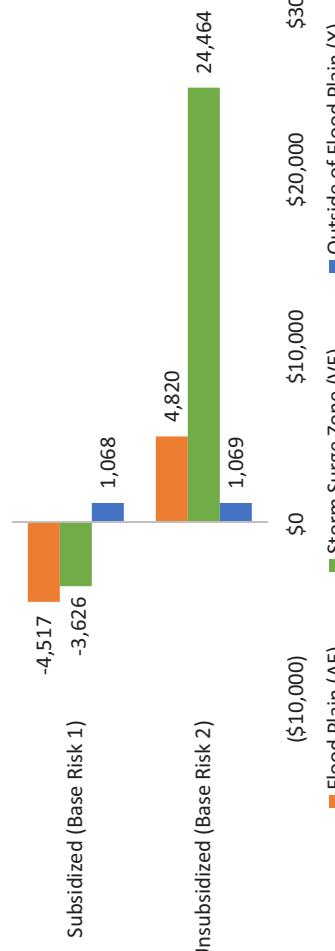
**Notes:**

1. Base Risk 1: 1-Story, \$175k Coverage A, Masonry, 1970 (subsidized)
2. Base Risk 2: 1-Story, \$175k Coverage A, Masonry, 1995 (unsubsidized)

Milliman

National Association of Realtors  
 Summary Statistics by Flood Zone  
 Pinellas County, Florida

Average Premium Above/Below Target



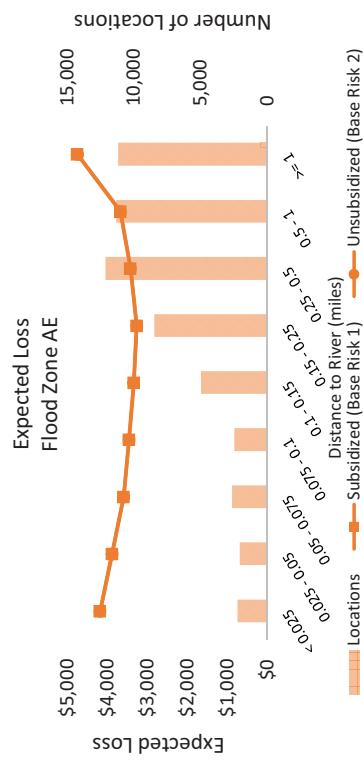
	Subsidized (Base Risk 1)					Unsubsidized (Base Risk 2)					Premium Above/Below Target
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)		
Flood Zone (Note 1)											
	Count	Average Loss	Average Premium	Target Premium	Average Above/Below Target	Average Loss	Average Premium	Target Premium	Average Above/Below Target		
Flood Plain (AE)	57,509	\$3,753	\$2,306	\$6,823	(\$4,517)	\$3,745	\$11,628	\$6,808	\$4,820		
Storm Surge Zone (VE)	1,126	4,258	4,820	8,446	(3,626)	4,249	32,892	8,428	24,464		
Outside of Flood Plain (X)	184,972	211	1,452	383	1,068	210	1,452	383	1,069		
Total	243,607	\$1,066	\$1,669	\$1,941	(\$272)	\$1,063	\$4,000	\$1,937	\$2,063		

Notes:

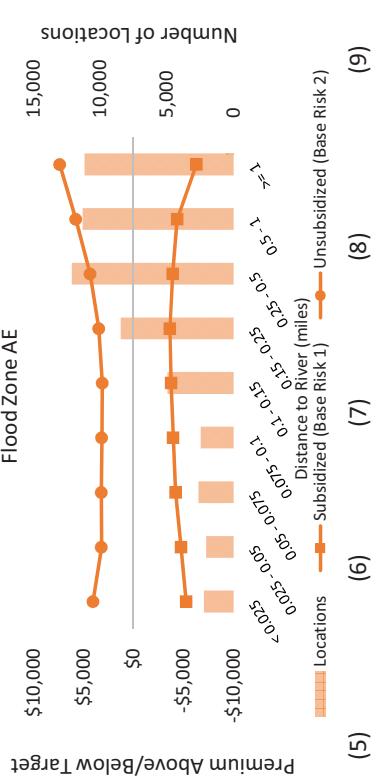
1. Flood zones other than AE, VE, and X are excluded.
2. Base Risk 1 = 1-Story, \$175k Coverage A, Masonry, 1970 (subsidized);  
 Base Risk 2 = 1-Story, \$175k Coverage A, Masonry, 1995 (unsubsidized).
3. Column (4) = (2) x (1 + contingency) / (1 - Expense), where expense is 39.5% and contingency is 10% for flood zone AE and X, 20% for VE.

National Association of Realtors  
Summary Statistics by Distance to River  
Pinellas County, Florida

Flood Zone AE



Average Premium Above/Below Target  
Flood Zone AE



Subsidized (Base Risk 1)

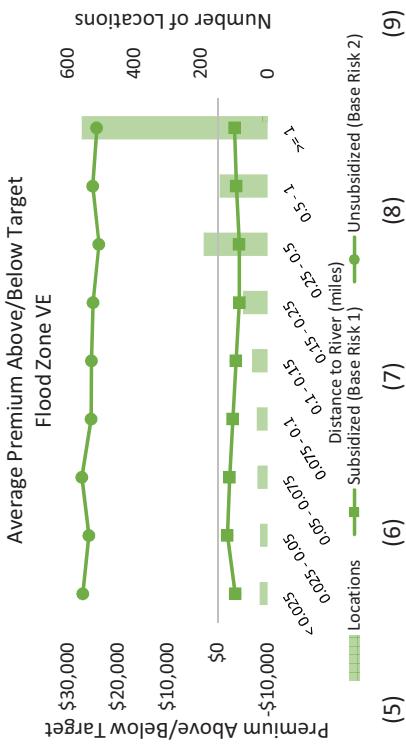
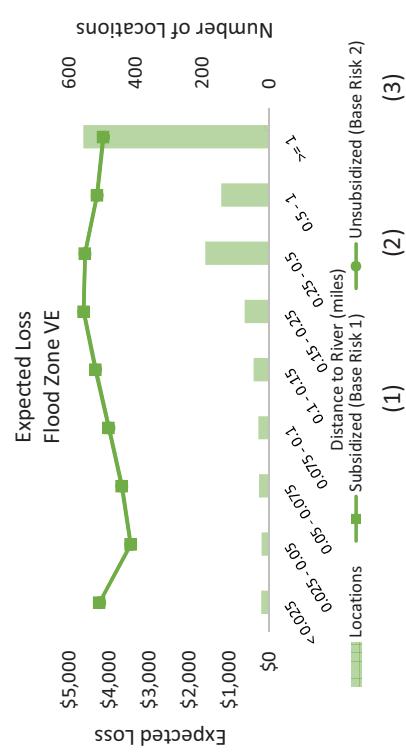
Distance to River (miles)	Subsidized (Base Risk 1)			Unsubsidized (Base Risk 2)		
	Average Premium	Target Premium	Premium Above/Below Target	Average Premium	Target Premium	Premium Above/Below Target
< 0.025	\$2,320	\$7,597	(\$5,277)	\$4,173	\$11,630	\$7,586
0.025 - 0.05	2,307	7,053	(4,746)	3,873	10,236	7,042
0.05 - 0.075	2,631	6,524	(4,219)	3,582	9,720	6,513
0.075 - 0.1	2,480	6,280	(3,975)	3,448	9,431	6,268
0.1 - 0.15	4,977	6,070	(3,771)	3,332	9,177	6,058
0.15 - 0.25	8,465	5,934	(3,642)	3,257	9,390	5,922
0.25 - 0.5	12,146	6,215	(3,925)	3,411	10,541	6,202
0.5 - 1	11,333	6,674	(4,369)	3,663	12,421	6,659
>= 1	11,177	8,638	(6,303)	4,738	15,988	8,614
Total	57,509	\$6,823	(\$4,517)	\$3,745	\$11,628	\$6,808

Notes:

1. Data includes Flood Zone AE only.
2. Base Risk 1 = 1-Story, \$175k Coverage A, Masonry, 1970 (subsidized);  
Base Risk 2 = 1-Story, \$175k Coverage A, Masonry, 1995 (unsubsidized).
3. Column (4) = (2) x (1 + contingency) / (1 - Expense), where contingency is 10% and expense is 39.5%

National Association of Realtors  
Summary Statistics by Distance to River  
Pinellas County, Florida

Flood Zone VE



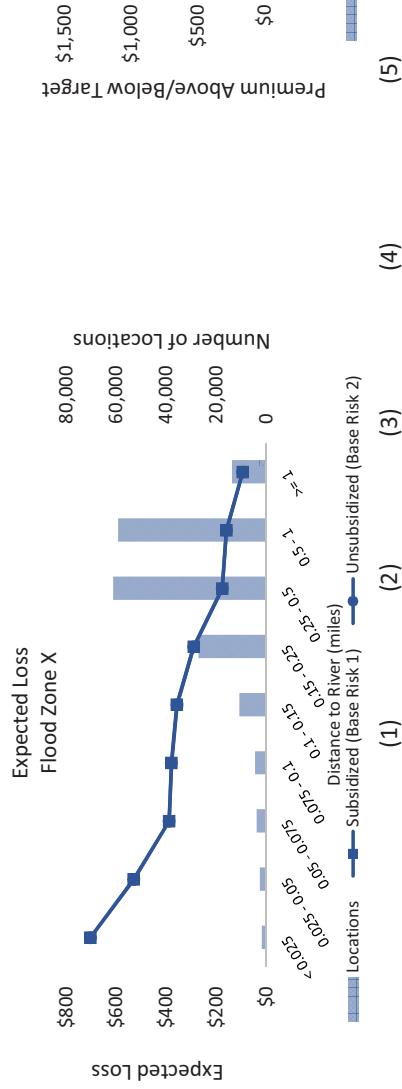
Distance to River (miles)	Subsidized (Base Risk 1)			Unsubsidized (Base Risk 2)		
	(1)	(2)	(3)	(4)	(5)	(6)
< 0.025						
0.025 - 0.05						
0.05 - 0.075						
0.075 - 0.1						
0.1 - 0.15						
0.15 - 0.25						
0.25 - 0.5						
0.5 - 1						
>= 1						
Total	1,126	\$4,258	\$4,820	\$8,446	(\$3,626)	\$4,249
						\$32,892
						\$8,428
						\$24,464

Notes:

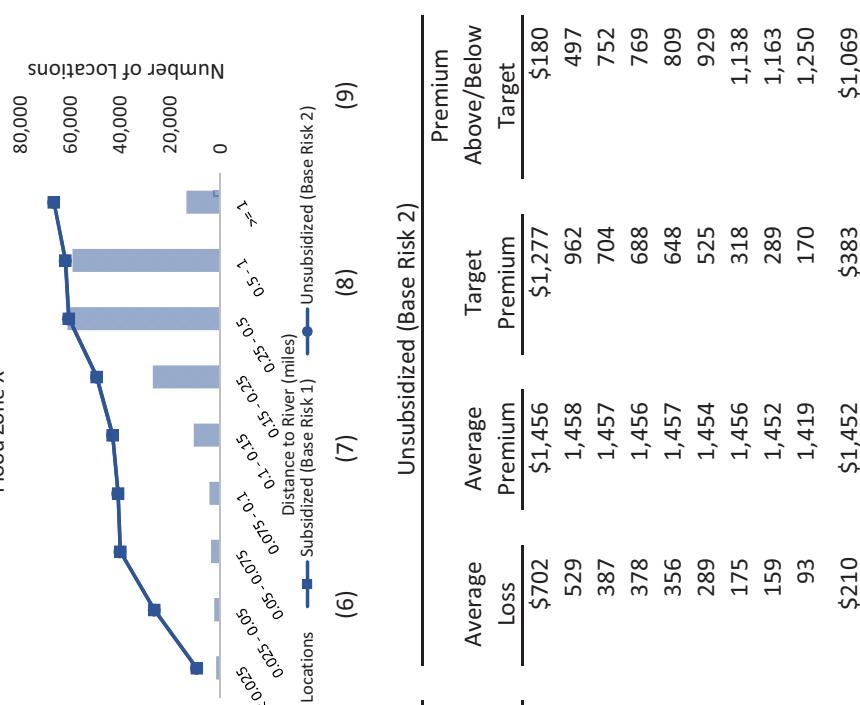
1. Data includes Flood Zone VE only.
2. Base Risk 1 = 1-Story, \$175k Coverage A, Masonry, 1970 (subsidized);  
Base Risk 2 = 1-Story, \$175k Coverage A, Masonry, 1995 (unsubsidized).
3. Column (4) = (2) x (1 + contingency) / (1 - Expense), where contingency is 20% and expense is 39.5%

National Association of Realtors  
Summary Statistics by Distance to River  
Pinellas County, Florida

Flood Zone X



Average Premium Above/Below Target



Subsidized (Base Risk 1)

Unsubsidized (Base Risk 2)

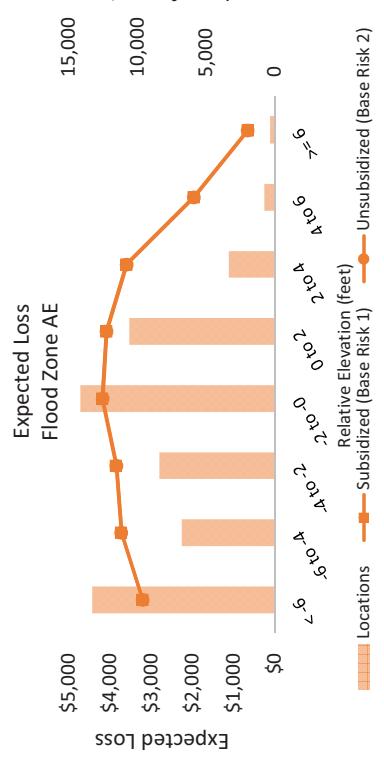
Distance to River (miles)	Subsidized (Base Risk 1)			Unsubsidized (Base Risk 2)		
	Average Premium	Target Premium	Premium Above/Below Target	Average Premium	Target Premium	Premium Above/Below Target
< 0.025	\$1,456	\$1,278	\$178	\$702	\$1,456	\$1,277
0.025 - 0.05	1,458	963	495	529	1,458	962
0.05 - 0.075	1,457	706	751	387	1,457	704
0.075 - 0.1	1,456	689	767	378	1,456	688
0.1 - 0.15	1,457	649	808	356	1,457	648
0.15 - 0.25	1,454	526	928	289	1,454	525
0.25 - 0.5	1,456	319	1,138	175	1,456	318
0.5 - 1	1,452	289	1,163	159	1,452	289
>= 1	1,419	170	1,249	93	1,419	170
Total	\$1,452	\$383	\$1,068	\$210	\$1,452	\$383

Notes:

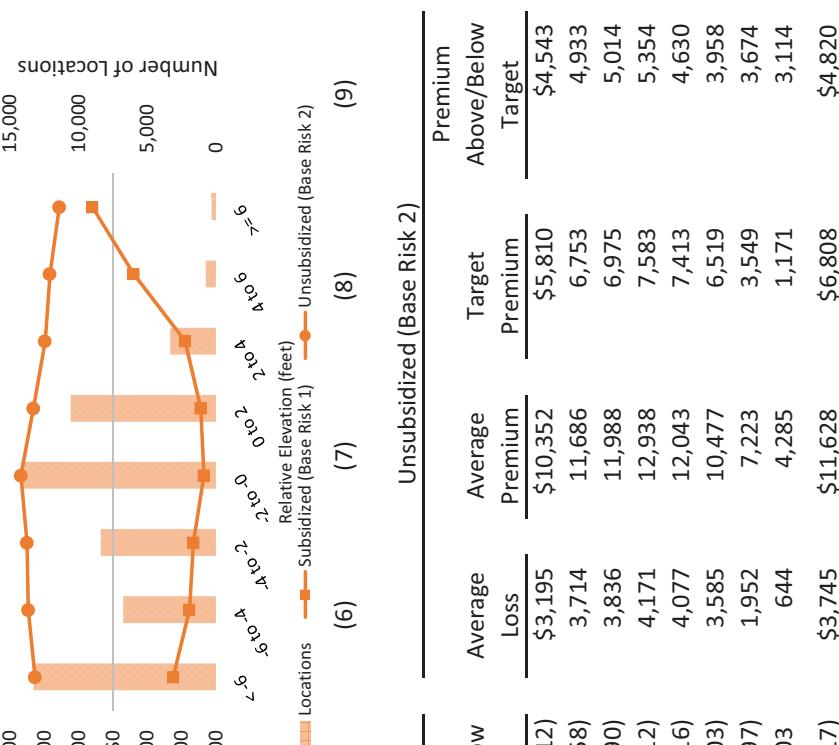
1. Data includes Flood Zone X only.
2. Base Risk 1 = 1-Story, \$175k Coverage A, Masonry, 1970 (subsidized);  
Base Risk 2 = 1-Story, \$175k Coverage A, Masonry, 1995 (unsubsidized).
3. Column (4) = (2) x (1 + contingency) / (1 - Expense), where contingency is 10% and expense is 39.5%

National Association of Realtors  
Summary Statistics by Relative Elevation  
Pinellas County, Florida

Flood Zone AE



Average Premium Above/Below Target  
Flood Zone AE



Subsidized (Base Risk 1)

	Subsidized (Base Risk 1)			Unsubsidized (Base Risk 2)		
	(1)	(2)	(3)	(4)	(5)	(6)
Relative Elevation (feet)				Average Premium	Average Premium	Average Premium
				Target	Target	Target
				Premium	Premium	Premium
				Above/Below Target	Above/Below Target	Above/Below Target
				(\$5,819)	(\$3,195)	(\$5,810)
				\$2,307	\$3,512	\$10,352
				\$5,819	\$3,195	\$4,543

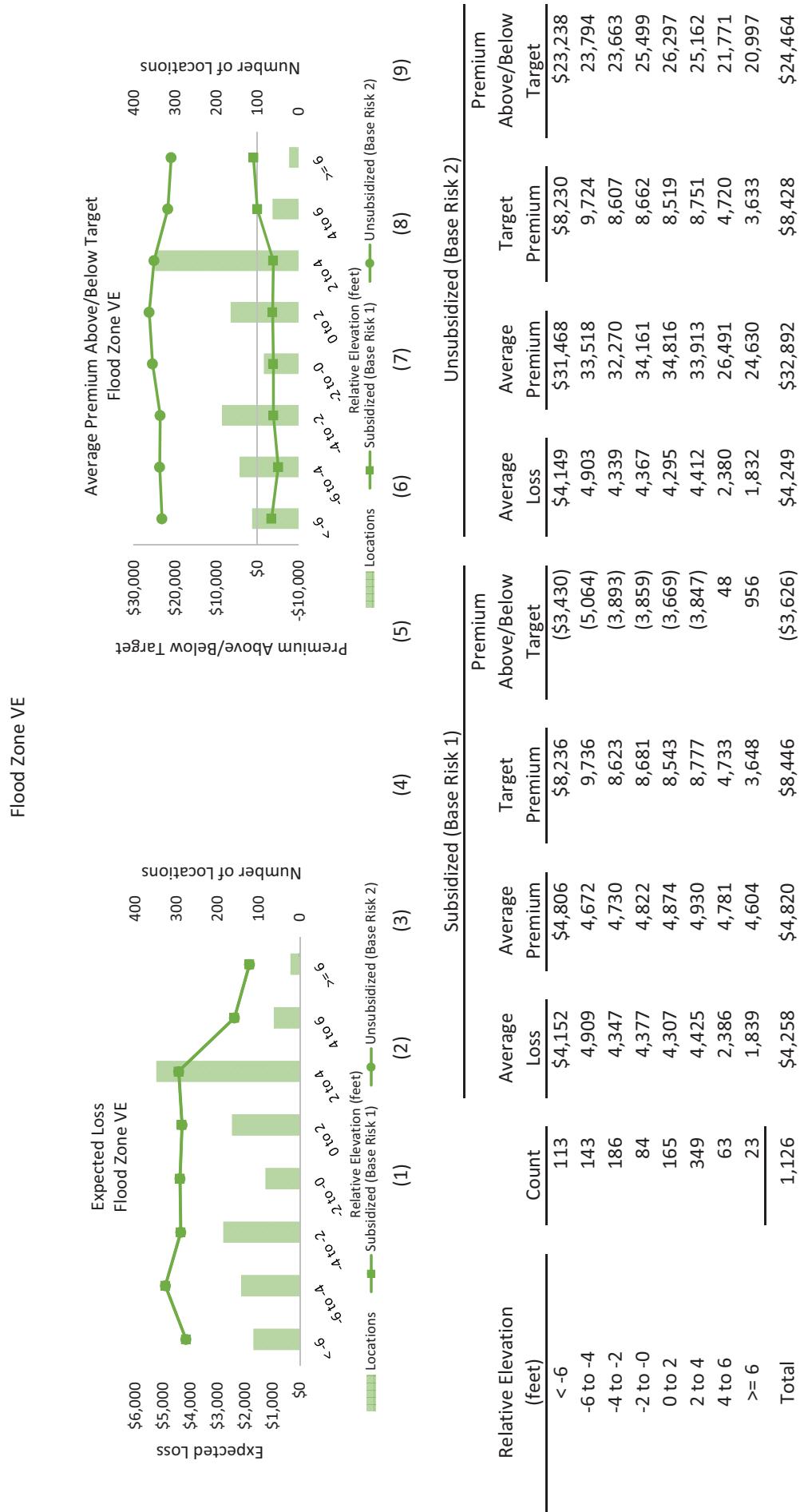
Subsidized (Base Risk 1)

	Subsidized (Base Risk 1)			Unsubsidized (Base Risk 2)		
	(1)	(2)	(3)	(4)	(5)	(6)
Relative Elevation (feet)				Average Loss	Average Loss	Average Loss
				Target	Target	Target
				Premium	Premium	Premium
				Above/Below Target	Above/Below Target	Above/Below Target
				(\$5,819)	\$3,195	\$5,810
				\$2,307	\$3,512	\$4,543
				\$5,819	\$3,195	\$4,543

Notes:

1. Data includes Flood Zone AE only.
2. Base Risk 1 = 1-Story, \$175k Coverage A, Masonry, 1970 (subsidized);  
Base Risk 2 = 1-Story, \$175k Coverage A, Masonry, 1995 (unsubsidized).
3. Column (4) = (2) x (1 + contingency) / (1 - Expense), where contingency is 10% and expense is 39.5%

National Association of Realtors  
Summary Statistics by Relative Elevation  
Pinellas County, Florida

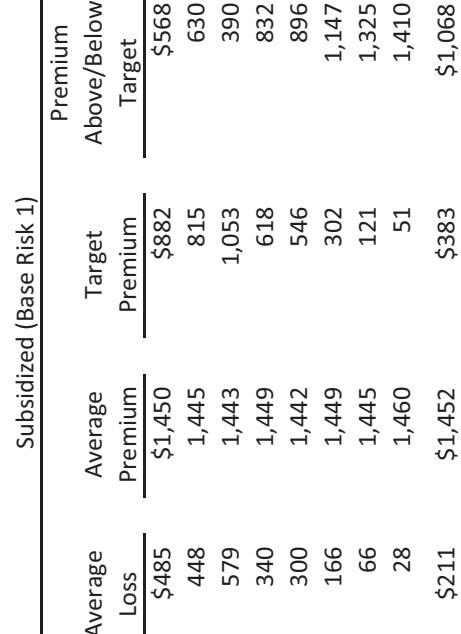
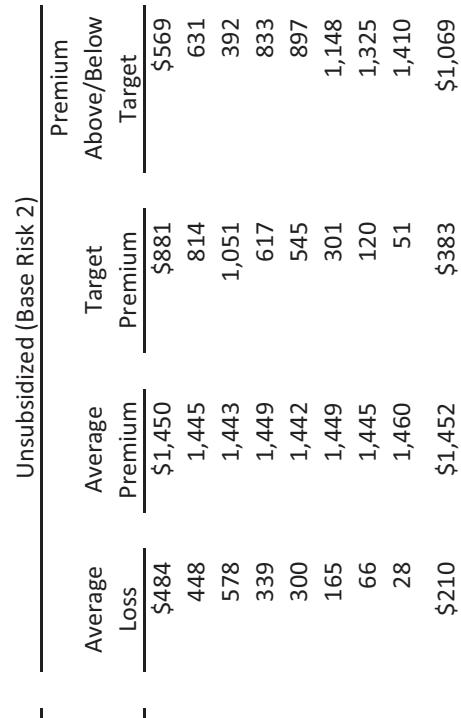
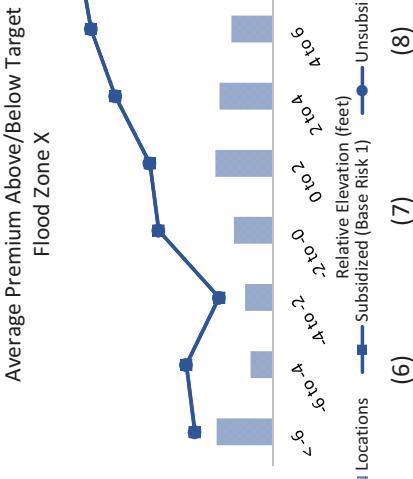
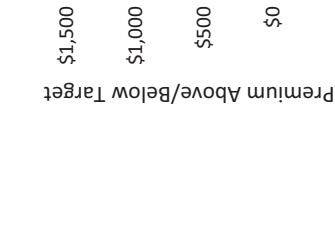
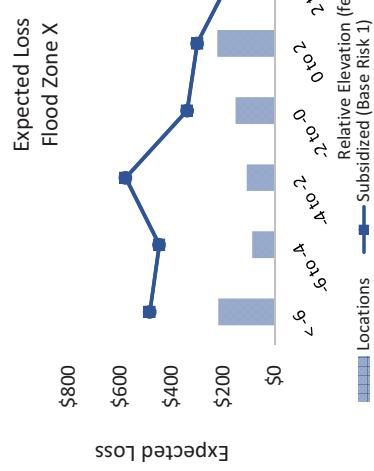


Notes:

1. Data includes Flood Zone VE only.
2. Base Risk 1 = 1-Story, \$175k Coverage A, Masonry, 1970 (subsidized);  
Base Risk 2 = 1-Story, \$175k Coverage A, Masonry, 1995 (unsubsidized).
3. Column (4) = (2) x (1 + contingency) / (1 - Expense), where contingency is 20% and expense is 39.5%

National Association of Realtors  
Summary Statistics by Relative Elevation  
Pinellas County, Florida

Flood Zone X

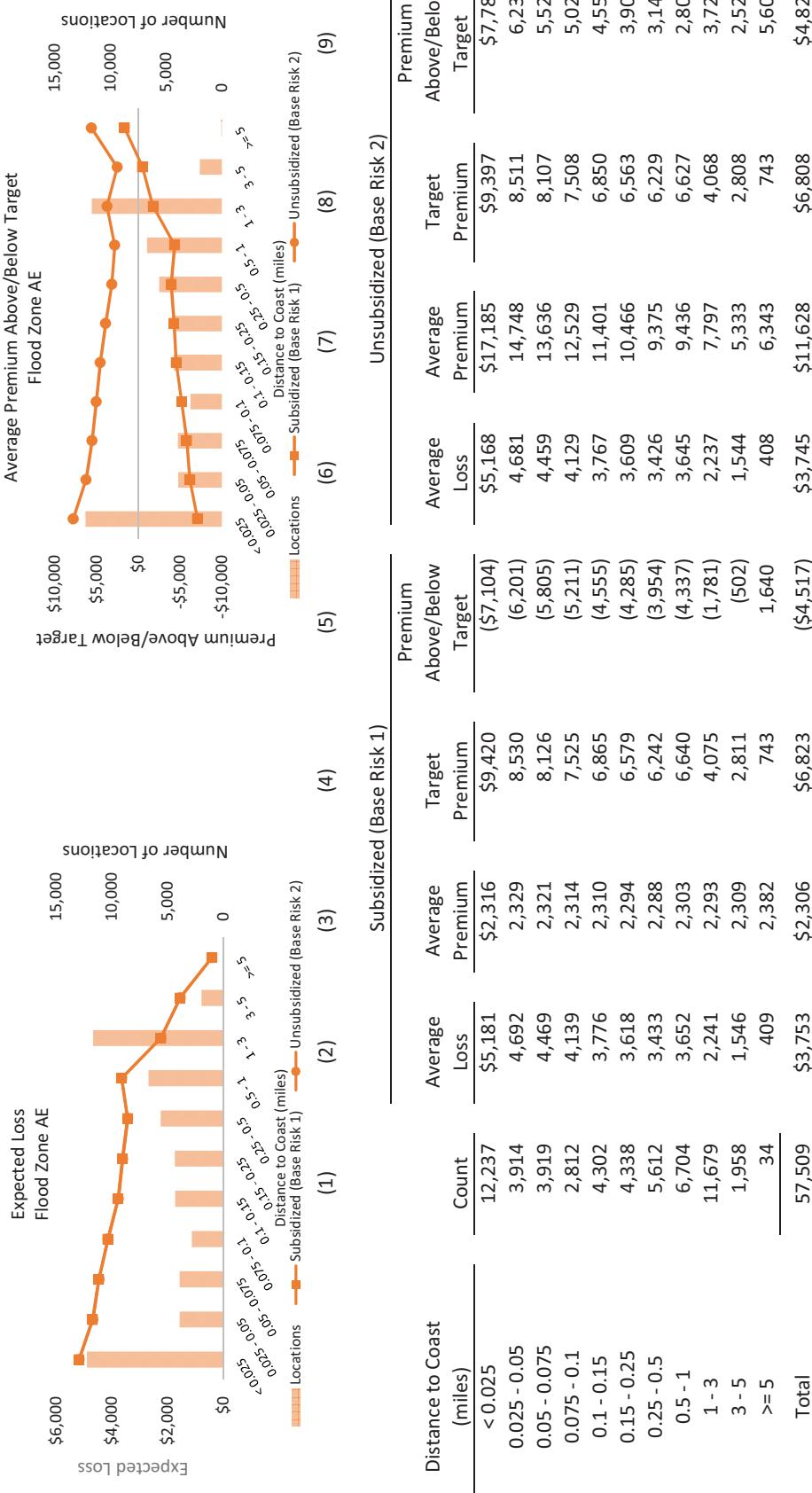


Notes:

1. Data includes Flood Zone X only.
2. Base Risk 1 = 1-Story, \$175k Coverage A, Masonry, 1970 (subsidized);  
Base Risk 2 = 1-Story, \$175k Coverage A, Masonry, 1995 (unsubsidized).
3. Column (4) = (2) x (1 + contingency) / (1 - Expense), where contingency is 10% and expense is 39.5%

National Association of Realtors  
Summary Statistics by Distance to Coast  
Pinellas County, Florida

Flood Zone AE

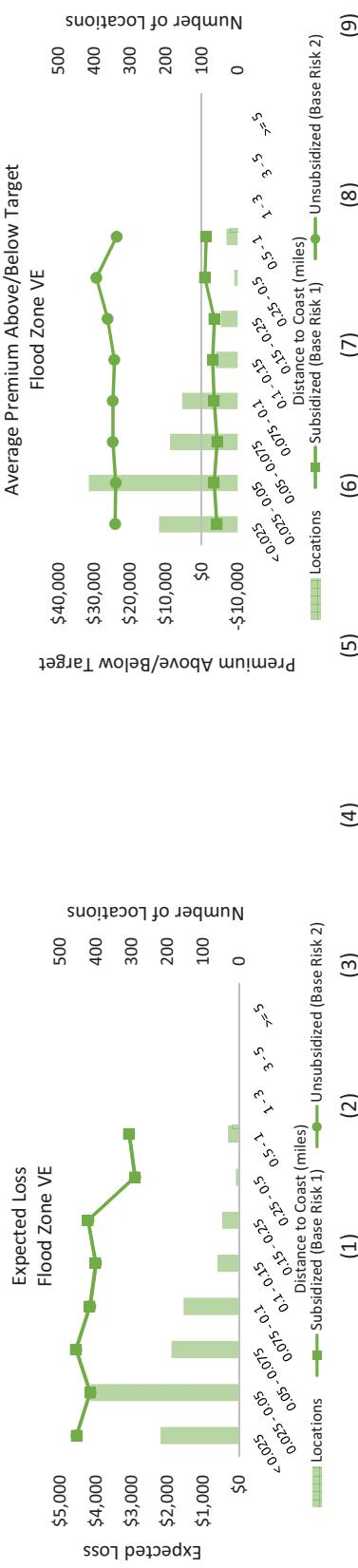


Notes:

1. Data includes Flood Zone AE only.
2. Base Risk 1 = 1-Story, \$175k Coverage A, Masonry, 1970 (subsidized);  
Base Risk 2 = 1-Story, \$175k Coverage A, Masonry, 1995 (unsubsidized).
3. Column (4) = (2) x (1 + contingency) / (1 - Expense), where contingency is 10% and expense is 39.5%

National Association of Realtors  
Summary Statistics by Distance to Coast  
Pinellas County, Florida

Flood Zone VE



Distance to Coast (miles)	Subsidized (Base Risk 1)			Unsubsidized (Base Risk 2)			
	Average Loss	Average Premium	Target Premium	Average Loss	Average Premium	Target Premium	
<0.025	\$4,770	\$9,008	\$4,537	\$4,239	\$33,201	\$8,998	
0.025 - 0.05	4,840	8,254	(3,414)	4,153	32,268	8,236	
0.05 - 0.075	4,746	9,048	(4,302)	4,550	33,886	9,025	
0.075 - 0.1	4,860	8,272	(3,412)	4,159	33,088	8,250	
0.1 - 0.15	4,009	4,899	7,952	(3,054)	3,996	32,322	7,927
0.15 - 0.25	4,222	4,890	8,374	(3,484)	4,209	34,613	8,349
0.25 - 0.5	9	2,913	4,890	5,778	(888)	35,189	5,759
0.5 - 1	31	3,080	4,890	6,110	(1,220)	29,881	6,088
1 - 3	0	0	0	0	0	0	0
3 - 5	0	0	0	0	0	0	0
>= 5	0	0	0	0	0	0	0
Total	1,126	\$4,258	\$4,820	\$8,446	(\$3,626)	\$4,249	\$32,892
							\$24,464

Notes:

1. Data includes Flood Zone VE only.
2. Base Risk 1 = 1-Story, \$175k Coverage A, Masonry, 1970 (subsidized);  
Base Risk 2 = 1-Story, \$175k Coverage A, Masonry, 1995 (unsubsidized).
3. Column (4) = (2) x (1 + contingency) / (1 - Expense), where contingency is 20% and expense is 39.5%

National Association of Realtors  
Summary Statistics by Distance to Coast  
Pinellas County, Florida

Flood Zone X



Distance to Coast (miles)	Count	Subsidized (Base Risk 1)			Unsubsidized (Base Risk 2)			Premium Above/Below Target	Premium Above/Below Target
		Average Premium	Target Premium	Premium Above/Below Target	Average Premium	Target Premium	Premium Above/Below Target		
< 0.025	128	\$1,425	\$7,686	(\$6,261)	\$4,216	\$1,425	\$7,665	(\$6,240)	(2,523)
0.025 - 0.05	185	1,453	3,987	(2,534)	2,187	1,453	3,976	(1,344)	(1,344)
0.05 - 0.075	315	1,450	2,800	(1,351)	1,536	1,450	2,793		
0.075 - 0.1	490	1,454	1,380	74	757	1,454	1,376		
0.1 - 0.15	1,647	1,451	1,114	337	611	1,451	1,111		
0.15 - 0.25	5,386	1,450	668	782	366	1,450	666		
0.25 - 0.5	16,299	1,453	351	1,102	193	1,453	350		
0.5 - 1	32,705	191	1,453	346	1,107	190	1,453	346	1,107
1 - 3	104,896	183	1,454	333	1,121	183	1,454	333	1,121
3 - 5	21,659	254	1,436	462	974	254	1,436	461	975
> 5	1,262	76	1,493	138	1,355	76	1,493	138	1,355
Total	184,972	\$211	\$1,452	\$383	\$1,068	\$210	\$1,452	\$383	\$1,069

Notes:

1. Data includes Flood Zone X only.
2. Base Risk 1 = 1-Story, \$175k Coverage A, Masonry, 1970 (subsidized);  
Base Risk 2 = 1-Story, \$175k Coverage A, Masonry, 1995 (unsubsidized).
3. Column (4) = (2) x (1 + contingency) / (1 - Expense), where contingency is 10% and expense is 39.5%

**Estimation of Rating Factor - Distance to Coast!**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
Distance To Coast (Meters)	Distance To Coast (Meters)	V1	Adjusted LN (Distance to Coast)	V2	V3	V4											
								Indicated Exponent		Rebased Exponent				Indicated Factor			
								X Non-X		X Non-X				X Non-X		X Non-X	
								(Note 2)		(Note 3)				(Note 4)		(Note 4)	
<= 0.005	8	2.200	2.200	5.300	7.000	(0.323)	(2.305)	0.000	0.000	0.760	0.240	0.000	0.000	2.14	1.27	1.00	1.00
0.006	10	2.268	2.268	5.300	7.000	(0.333)	(2.306)	0.000	0.000	0.750	0.240	0.000	0.000	2.12	1.27	1.00	1.00
0.007	11	2.422	2.422	5.300	7.000	(0.355)	(2.307)	0.000	0.000	0.728	0.239	0.000	0.000	2.07	1.27	1.00	1.00
0.008	13	2.555	2.555	5.300	7.000	(0.375)	(2.308)	0.000	0.000	0.708	0.238	0.000	0.000	2.03	1.27	1.00	1.00
0.009	14	2.673	2.673	5.300	7.000	(0.392)	(2.308)	0.000	0.000	0.691	0.237	0.000	0.000	2.00	1.27	1.00	1.00
0.010	16	2.778	2.778	5.300	7.000	(0.408)	(2.309)	0.000	0.000	0.676	0.236	0.000	0.000	1.97	1.27	1.00	1.00
0.060	97	4.570	4.570	5.300	7.000	(0.670)	(2.321)	0.000	0.000	0.413	0.225	0.000	0.000	1.51	1.25	1.00	1.00
0.110	177	5.176	5.176	5.300	7.000	(0.759)	(2.325)	0.000	0.000	0.324	0.221	0.000	0.000	1.38	1.25	1.00	1.00
0.160	257	5.551	5.551	5.300	5.551	(0.814)	(2.342)	0.000	0.000	0.269	0.203	0.000	0.000	1.31	1.23	1.00	1.00
0.210	338	5.823	5.823	5.300	5.823	(0.854)	(2.361)	0.000	0.000	0.229	0.185	0.000	0.000	1.26	1.20	1.00	1.00
0.260	418	6.037	6.037	5.300	6.037	(0.886)	(2.375)	0.000	0.000	0.198	0.171	0.000	0.000	1.22	1.19	1.00	1.00
0.310	499	6.212	6.212	5.300	6.212	(0.911)	(2.387)	0.000	0.000	0.172	0.159	0.000	0.000	1.19	1.17	1.00	1.00
0.360	579	6.382	6.382	5.300	6.362	(0.933)	(2.397)	0.000	0.000	0.150	0.149	0.000	0.000	1.16	1.16	1.00	1.00
0.410	660	6.492	660	5.300	6.492	(0.952)	(2.405)	0.000	0.000	0.131	0.140	0.000	0.000	1.14	1.15	1.00	1.00
0.460	740	6.607	6.607	5.300	6.607	(0.969)	(2.413)	0.000	0.000	0.114	0.132	0.000	0.000	1.12	1.14	1.00	1.00
0.510	821	6.710	6.710	5.300	6.710	(0.984)	(2.420)	0.000	0.000	0.099	0.125	0.000	0.000	1.10	1.13	1.00	1.00
0.560	901	6.804	6.804	5.300	6.804	(0.998)	(2.426)	0.000	0.000	0.085	0.119	0.000	0.000	1.09	1.13	1.00	1.00
0.610	982	6.889	6.889	5.300	6.889	(1.011)	(2.432)	0.000	0.000	0.073	0.113	0.000	0.000	1.08	1.12	1.00	1.00
0.660	1,062	6.968	6.968	5.300	6.968	(1.022)	(2.437)	0.000	0.000	0.061	0.108	0.000	0.000	1.11	1.10	1.00	1.00
0.710	1,143	7.041	7.041	5.300	7.000	(1.033)	(2.451)	0.000	0.000	0.050	0.085	0.000	0.000	1.05	1.10	1.00	1.00
0.760	1,223	7.109	7.109	5.300	7.000	(1.043)	(2.470)	0.000	0.000	0.040	0.076	0.000	0.000	1.04	1.08	1.00	1.00
0.810	1,304	7.173	7.173	5.300	7.000	(1.052)	(2.487)	0.000	0.000	0.031	0.058	0.000	0.000	1.03	1.06	1.00	1.00
0.860	1,384	7.233	7.233	5.300	7.000	(1.061)	(2.504)	0.000	0.000	0.022	0.042	0.000	0.000	1.02	1.04	1.00	1.00
0.910	1,465	7.289	7.289	5.300	7.000	(1.069)	(2.519)	0.000	0.000	0.014	0.026	0.000	0.000	1.01	1.03	1.00	1.00
0.960	1,545	7.343	7.343	5.300	7.000	(1.077)	(2.534)	0.000	0.000	0.011	0.026	0.000	0.000	1.01	1.01	1.00	1.00
1.000	1,609	7.384	7.384	5.300	7.000	(1.083)	(2.545)	0.000	0.000	0.000	0.026	0.000	0.000	1.00	1.00	1.00	1.00
1.560	2,414	7.789	7.300	7.000	7.789	(1.143)	(2.658)	0.000	0.000	(0.059)	(0.112)	0.000	0.000	0.94	0.89	1.00	1.00
2.000	3,219	8.077	5.300	7.000	8.077	(1.185)	(2.737)	0.000	0.000	(0.102)	(0.192)	0.000	0.000	0.83	0.83	1.00	1.00
2.500	4,023	8.300	5.300	7.000	8.300	(1.218)	(2.799)	0.000	0.000	(0.134)	(0.253)	0.000	0.000	0.78	0.78	1.00	1.00
3.000	4,828	8.482	5.300	7.000	8.482	(1.244)	(2.849)	0.000	0.000	(0.161)	(0.304)	0.000	0.000	0.85	0.74	1.00	1.00
3.500	5,633	8.636	5.300	7.000	8.636	(1.267)	(2.882)	0.000	0.000	(0.184)	(0.346)	0.000	0.000	0.83	0.71	1.00	1.00
4.000	6,437	8.770	5.300	7.000	8.770	(1.286)	(2.929)	0.000	0.000	(0.203)	(0.383)	0.000	0.000	0.82	0.68	1.00	1.00
4,500	7,242	8.888	5.300	7.000	8.888	(1.304)	(2.961)	0.000	0.000	(0.221)	(0.416)	0.000	0.000	0.80	0.66	1.00	1.00
5,000	8,047	8,983	5.300	7.000	8,983	(1.319)	(2.991)	0.000	0.000	(0.236)	(0.445)	0.000	0.000	0.79	0.64	1.00	1.00
5,500	8,851	9,088	5.300	7.000	9,088	(1.333)	(3,017)	0.000	0.000	(0.250)	(0,471)	0.000	0.000	0.78	0.62	1.00	1.00
6,000	9,656	9,175	5.300	7.000	9,175	(1.346)	(3,041)	0.000	0.000	(0.263)	(0,496)	0.000	0.000	0.77	0.61	1.00	1.00
6,500	10,461	9,325	5,300	7,000	9,200	(1.358)	(3,048)	0.000	0.000	(0.275)	(0,502)	0.000	0.000	0.76	0.61	1.00	1.00
7,000	11,265	9,329	5,300	7,000	9,200	(1.369)	(3,048)	0.000	0.000	(0.285)	(0,502)	0.000	0.000	0.75	0.61	1.00	1.00

Coefficients (Page 5)	V1	V2	V3	V4
Storm Surge X	-0.147	-0.007	-0.067	-0.277
Inland Flood X				
Inland Flood Non-X				
Storm Surge Non-X				

Notes:

1. Column (3) = Max (Log Distance to Coast, 2.2),

Column (4) = Min (Log Distance to Coast, 5.3).

Column (5) = Min [Max Log Distance to Coast, 5.3],

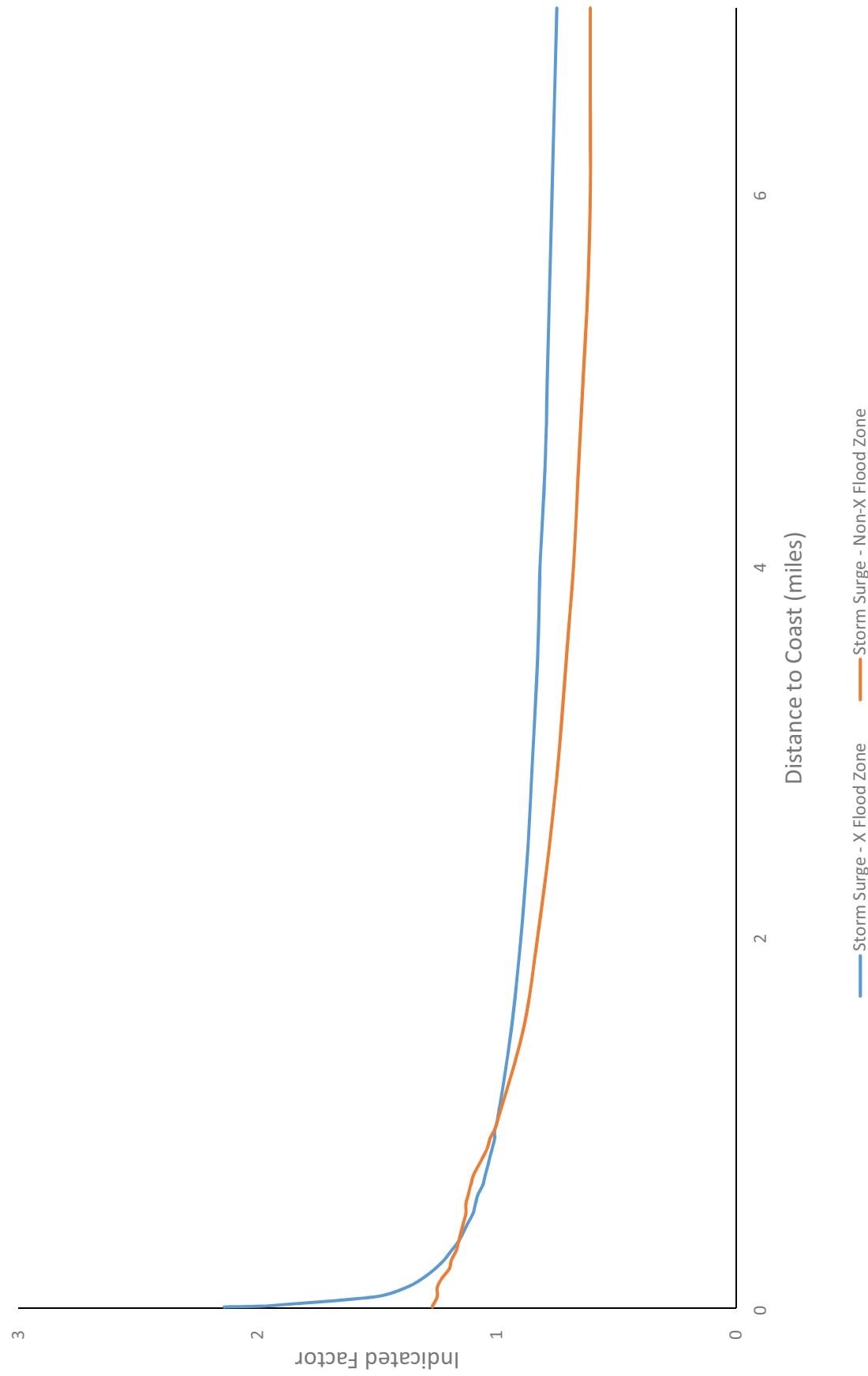
Column (6) = Min [Max Log Distance to Coast, 7.9].

2. (7) is the sumproduct of (3) to (6) and the respective coefficients. Columns (8) to (14) are calculated similarly.

3. (11) = Column (7) - Column (7) for DTC 1,609. Columns (11) to (14) are calculated similarly.

4. Column (15) = EXP [Column (11)]. Columns (16) to (18) are calculated similarly.

National Association of Realtors  
Florida - Pinellas County  
Distance to Coast - Indicated Factors



Note: Data is from Page 1a.

National Association of Realtors  
Florida - Pinellas County

Estimation of Rating Factor - Distance to River

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	Indicated Factor													
																			Rebased Exponent			Storm Surge			Inland Flood							
																			V1	V2	Adjusted LN(Distance to River) V3	V4	V5	V6	X	Non-X	X	Non-X				
Distance To River (Meters)	Distance To River (Meters)	(Note 1)	(Note 2)	(Note 2)	(Note 2)	(Note 2)	(Note 2)	(Note 2)	(Note 2)	(Note 2)	(Note 2)	(Note 2)																				
<= 0.004	6	3.200	3.400	2.000	2.100	4.500	0.543	(0.172)	(0.839)	(1.515)	0.593	0.167	1.384	1.062	1.81	1.18	3.99	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89
0.005	8	3.200	3.400	2.085	2.100	4.500	0.543	(0.172)	(0.875)	(1.515)	0.593	0.167	1.349	1.062	1.81	1.18	3.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85
0.006	10	3.200	3.400	2.268	2.268	4.500	0.543	(0.172)	(0.951)	(1.571)	0.583	0.167	1.272	1.005	1.81	1.18	3.57	2.73	2.73	2.73	2.73	2.73	2.73	2.73	2.73	2.73	2.73	2.73	2.73	2.73	2.73	2.73
0.007	11	3.200	3.400	2.422	2.422	4.500	0.543	(0.172)	(1.016)	(1.623)	0.593	0.167	1.207	0.953	1.81	1.18	3.34	2.59	2.59	2.59	2.59	2.59	2.59	2.59	2.59	2.59	2.59	2.59	2.59	2.59	2.59	2.59
0.008	13	3.200	3.400	2.555	2.555	4.500	0.543	(0.172)	(1.072)	(1.669)	0.593	0.167	1.151	0.908	1.81	1.18	3.16	2.48	2.48	2.48	2.48	2.48	2.48	2.48	2.48	2.48	2.48	2.48	2.48	2.48	2.48	2.48
0.009	14	3.200	3.400	2.673	2.673	4.500	0.543	(0.172)	(1.121)	(1.708)	0.593	0.167	1.102	0.868	1.81	1.18	3.01	2.38	2.38	2.38	2.38	2.38	2.38	2.38	2.38	2.38	2.38	2.38	2.38	2.38	2.38	2.38
0.010	16	3.200	3.400	2.778	2.778	4.500	0.543	(0.172)	(1.166)	(1.744)	0.583	0.167	1.058	0.833	1.81	1.18	2.88	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30
0.050	80	4.388	4.388	4.388	4.388	4.500	0.543	(0.172)	(1.841)	(2.288)	0.391	0.117	0.383	0.288	1.48	1.12	1.47	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
0.100	161	5.081	5.081	5.081	5.081	4.500	0.863	(0.258)	(2.131)	(2.430)	0.273	0.082	0.092	0.146	1.31	1.09	1.09	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	
0.150	241	5.486	5.486	5.300	5.300	4.500	0.982	(0.298)	(2.223)	(2.503)	0.204	0.061	0.000	0.074	1.23	1.06	1.06	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08		
0.200	322	5.774	5.774	5.300	5.300	4.500	0.982	(0.298)	(2.223)	(2.554)	0.156	0.046	0.000	0.022	1.17	1.05	1.05	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02		
0.250	402	5.997	5.997	5.300	5.300	4.500	0.982	(0.298)	(2.223)	(2.577)	0.118	0.035	0.000	0.022	1.12	1.04	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
0.300	483	6.180	6.180	5.300	5.300	4.500	0.982	(0.298)	(2.223)	(2.577)	0.087	0.026	0.000	0.000	1.09	1.03	1.03	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
0.350	563	6.334	6.334	5.300	5.300	4.500	0.982	(0.298)	(2.223)	(2.577)	0.075	0.018	0.000	0.000	1.06	1.02	1.02	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
0.400	644	6.467	6.467	5.300	5.300	4.500	0.982	(0.298)	(2.223)	(2.577)	0.078	0.011	0.000	0.000	1.04	1.01	1.01	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
0.450	724	6.585	6.585	5.300	5.300	4.500	0.982	(0.298)	(2.223)	(2.577)	0.078	0.005	0.000	0.000	1.02	1.01	1.01	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
0.500	805	6.690	6.690	5.300	5.300	4.500	0.982	(0.298)	(2.223)	(2.577)	0.000	0.000	0.000	0.000	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		

Coefficients (Page 5)

Storm Surge X

Storm Surge Non-X

Inland Flood X

Inland Flood Non-X

Notes:

1. Column (3) = Min [Max (Log Distance to River: 3.2), 7.7].

Column (4) = Min [Max Log Distance to River: 3.4], 7.1.

Column (5) = Min [Max Log Distance to River: 2], 5.31.

Column (6) = Min [Max Log Distance to River: 2.1], 4.5.

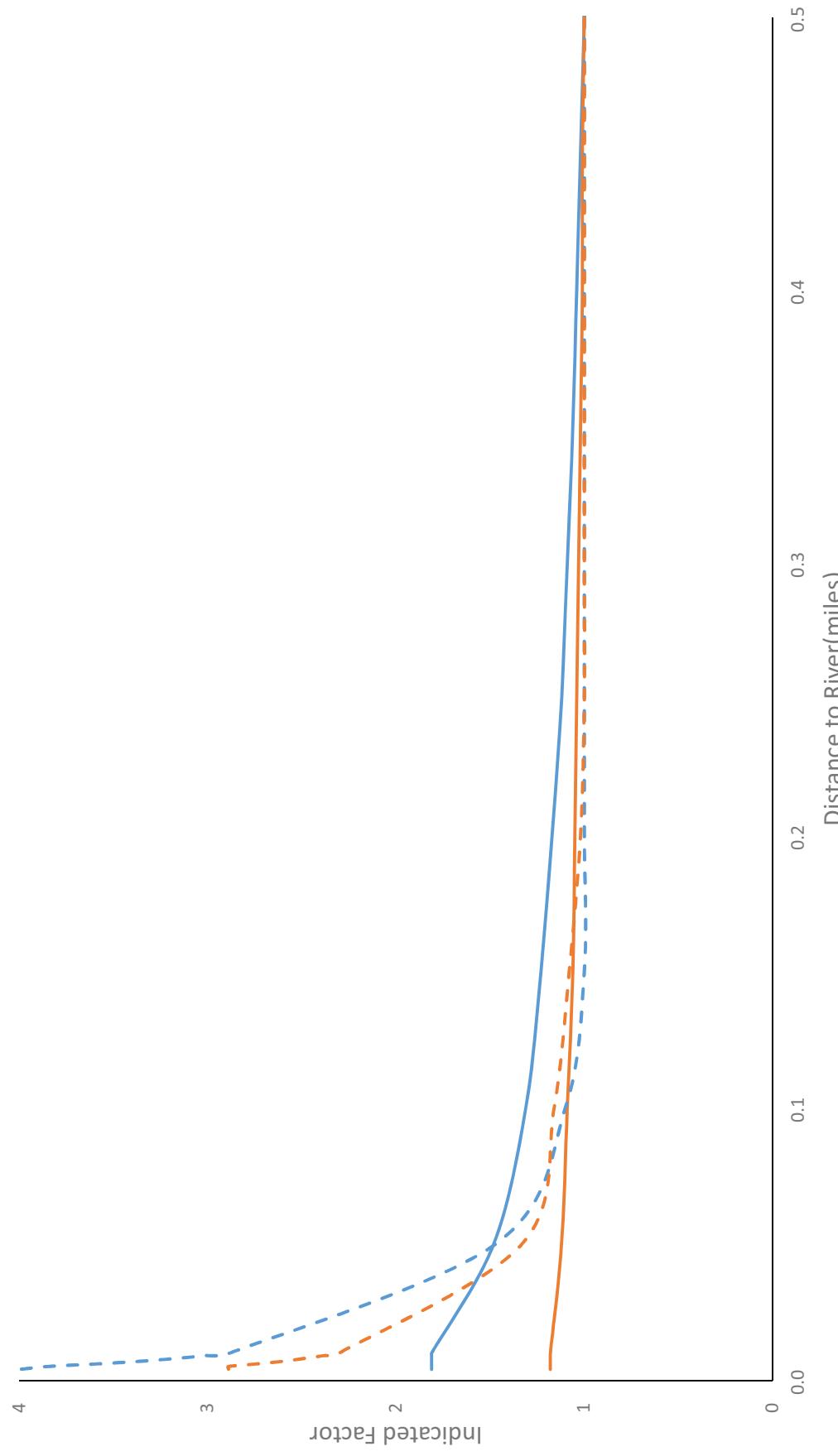
Column (6) = Min [Max (Log Distance to River: 4.5), 5.9].

2. (8) is the sumproduct of (3) to (7) and the respective coefficients. Columns (9) to (15) are calculated similarly.

3. (12) = Column (8) - Column (8). For DTR 805. Columns (13) to (19) are calculated similarly.

4. Column (16) = EXP [Column (12)].

National Association of Realtors  
Florida - Pinellas County  
Distance to River - Indicated Factors



Note: Data is from Page 2a.

National Association of Realtors  
Florida - Pinellas County

**Estimation of Rating Factor - Elevation**

Elevation (Meters)	Indicated Exponent												Indicated Factor			
	Storm Surge				Inland Flood				Storm Surge				Inland Flood		Inland Flood	
	V1 (Note 1)	V2 (Note 1)	V3 (Note 1)	V4 (Note 1)	V5 (Note 1)	V6 (Note 1)	V7 (Note 2)	V8 (Note 2)	V9 (Note 3)	V10 (Note 3)	V11 (Note 4)	V12 (Note 4)	X Non-X	X Non-X	X Non-X	X Non-X
0	0	3	0	2	5	(5.796)	(19.055)	0.000	0.000	0.000	0.000	0.000	1.00000	1.00000	1.00000	1.00000
1	1	3	1	2	5	(6.150)	(19.259)	0.000	0.000	(0.383)	(0.204)	0.000	0.68157	0.81508	1.00000	1.00000
2	2	3	2	3	5	(6.533)	(19.464)	0.000	0.000	(0.767)	(0.409)	0.000	0.46453	0.66436	1.00000	1.00000
3	3	3	2	3	5	(6.946)	(20.719)	0.000	0.000	(1.160)	(1.664)	0.000	0.31661	0.18356	1.00000	1.00000
4	3	4	2	4	5	(8.878)	(21.974)	0.000	0.000	(3.082)	(2.919)	0.000	0.05397	0.04586	1.00000	1.00000
5	3	5	2	5	5	(10.810)	(23.229)	0.000	0.000	(5.014)	(4.174)	0.000	0.00664	0.01538	1.00000	1.00000
6	3	6	2	5	6	(12.742)	(26.538)	0.000	0.000	(6.946)	(7.483)	0.000	0.00096	0.00056	1.00000	1.00000
7	3	7	2	5	7	(14.675)	(29.847)	0.000	0.000	(8.878)	(10.792)	0.000	0.00014	0.00002	1.00000	1.00000
8	3	8	2	5	8	(16.607)	(33.156)	0.000	0.000	(10.810)	(14.101)	0.000	0.00002	0.00000	1.00000	1.00000

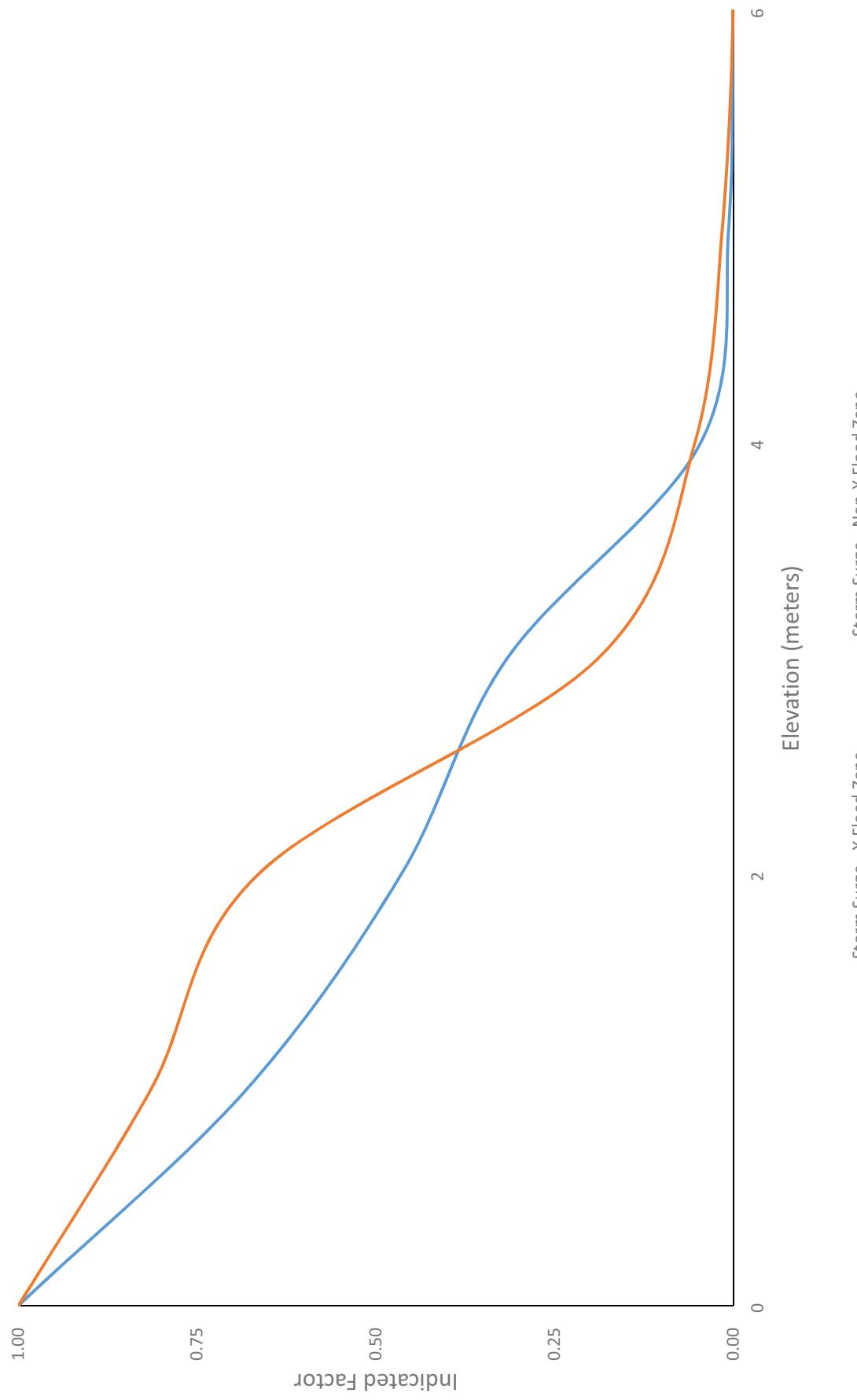
Coefficients (Page 5)      V1      V2      V3      V4      V5

Storm Surge X  
Storm Surge Non-X  
Inland Flood X  
Inland Flood Non-X

Notes:

- Column (2) = Min [Max (Elevation, 0), 3].
- Column (3) = Min [Max (Elevation, 3), 8].
- Column (4) = Min [Max (Elevation, 0), 2].
- Column (5) = Min [Max (Elevation, 2), 5].
- Column (6) = Min [Max (Elevation, 5), 8].
- (7) is the sumproduct of (2) to (6) and the respective coefficients. Columns (8) to (10) are calculated similarly.
- (11) = Column (7) - Column (7) for DTR 00. Columns (12) to (14) are calculated similarly.
- Column (15) = EXP [Column (11)]. Columns (16) to (18) are calculated similarly.

National Association of Realtors  
Florida - Pinellas County  
Elevation - Indicated Factors



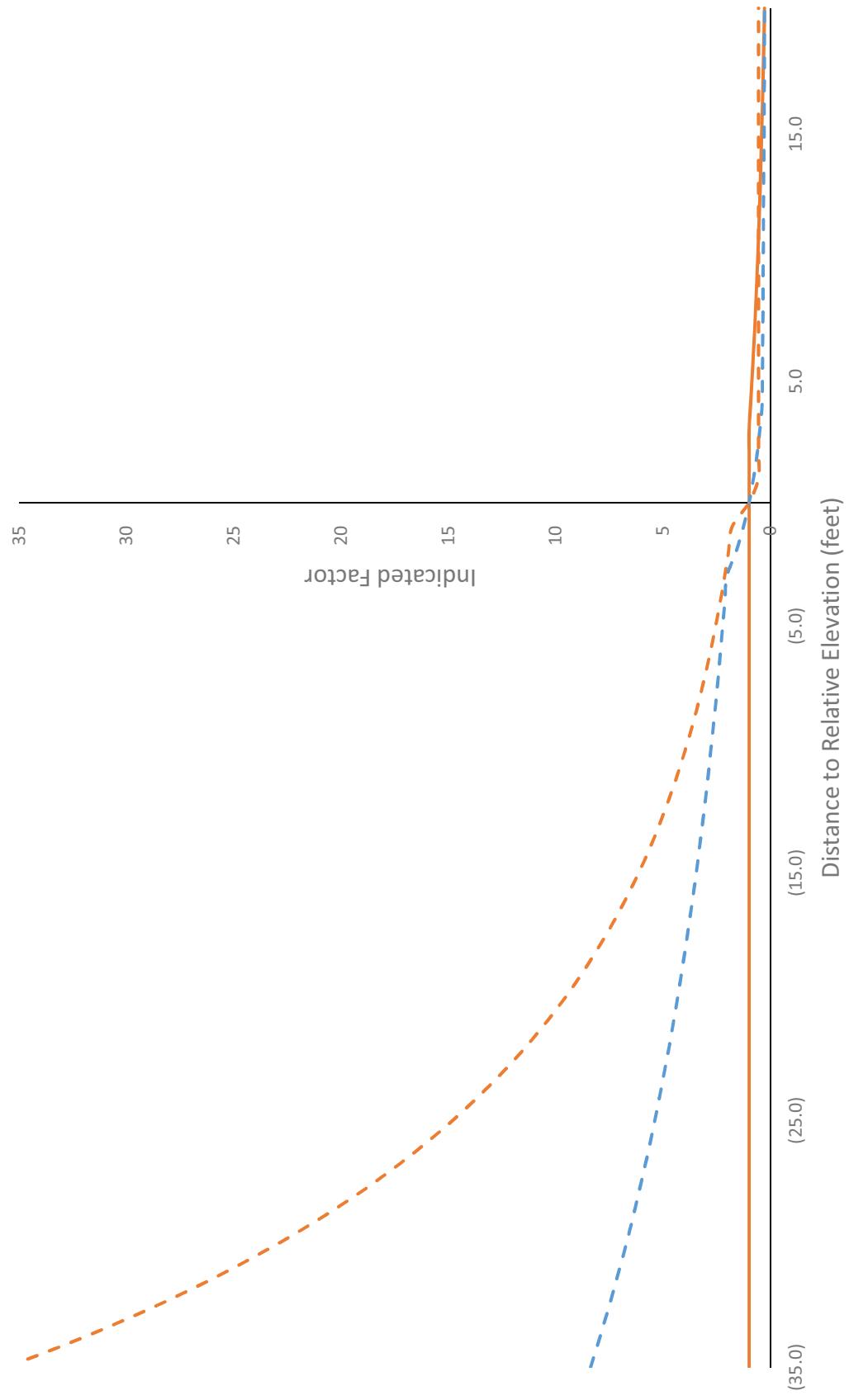
Note: Data is from Page 3a.

## Estimation of Rating Factor - Relative Elevation

	V1	V2	V3	V4	V5	V6
Coefficients (Page 5)						
Storm Surge X						
Storm Surge Non-X	-0.075	-0.044	-0.237	-0.022	-0.088	-0.587
Inland Flood X						
Inland Flood Non-X						

Column (2) = Min (Max (Elevation, 0), 3);  
 Column (3) = Min (Max (Elevation, 3), 8);  
 Column (4) = Min (Max (Elevation, 0), 2);  
 Column (6) = Min (Max (Elevation, 2), 5);  
 Column (7) = Min (Max (Elevation, 5), 8);  
 (8) is the sumproduct of (2) and (7) and the respective coefficients. Columns (9) to (11) are calculated similarly.  
 Column (12) = Column (8) for DTR 0.0. Columns (13) to (15) are calculated similarly.  
 Column (16) = EXP (Column (12)).

National Association of Realtors  
Florida - Pinellas County  
Relative Elevation - Indicated Factors



Note: Data is from Page 4a.

National Association of Realtors

Regression Output

		(1)	(2)	(3)	(4)	(5)	(6)	(7)
Storm Surge - "X" Flood Zone								
Item	Value	Degrees of Freedom	Coefficient	Standard Error	Lower Wald 95% Confidence Limit	Upper Wald 95% Confidence Limit	Wald Chi-Square	Probability of > Wald Chi-Square
Intercept		1	16.010	0.523	14.985	17.034	939	0.000
Distance to Coast (DTC)	max{2.2, LN(DTC)}	1	-0.147	0.041	-0.226	-0.067	13	0.000
Distance to River (DTR)	max{3.2, min[7.7, LN(DTR)]}	1	-0.170	0.054	-0.275	-0.065	10	0.002
Elevation	max[0, min(3, elev)] max[3, min(8, elev)]	1	-0.383	0.136	-0.650	-0.117	8	0.005
Scale		0	7925.368	0.000	7925.368	7925.368	0	0.000
Storm Surge - "Non-X" Flood Zone								
Item	Value	Degrees of Freedom	Coefficient	Standard Error	Lower Wald 95% Confidence Limit	Upper Wald 95% Confidence Limit	Wald Chi-Square	Probability of > Wald Chi-Square
Intercept		1	30.534	1.882	26.846	34.223	263	0.000
Distance to Coast (DTC)	max{2.2, min[5.3, LN(DTC)]} max{5.3, min[7, LN(DTC)]} max{7, min[9.2, LN(DTC)]}	1 1 1	-0.007 -0.067 -0.277	0.002 0.004 0.006	-0.011 -0.074 -0.289	-0.002 -0.060 -0.264	8 312 1,915	0.005 0.000 0.000
Distance to River (DTR)	max{3.4, min[7, LN(DTR)]}	1	-0.051	0.002	-0.055	-0.047	667	0.000
Elevation	max[0, min(2, elev)] max[2, min(5, elev)] max[5, min(8, elev)]	1 1 1	-0.204 -1.255 -3.309	0.004 0.009 0.377	-0.212 -1.272 -4.047	-0.197 -1.238 -2.571	3,234 20,999 77	0.000 0.000 0.000
Relative Elevation	max(3, rel_elev)	1	-0.075	0.008	-0.090	-0.060	97	0.000
Scale		0	5161.384	0.000	5161.384	5161.384	0	0.000
Inland Flood - "X" Flood Zone								
Item	Value	Degrees of Freedom	Coefficient	Standard Error	Lower Wald 95% Confidence Limit	Upper Wald 95% Confidence Limit	Wald Chi-Square	Probability of > Wald Chi-Square
Intercept		1	6.373	0.108	6.160	6.585	3,457	0.000
Distance to River (DTR)	max{2, min[5.3, LN(DTR)]}	1	-0.420	0.020	-0.459	-0.380	427	0.000
Relative Elevation	max[-35, min(-3, rel_elev)] max[-3, min(4, rel_elev)] max[4, min(19, rel_elev)]	1 1 1	-0.044 -0.237 -0.022	0.003 0.003 0.002	-0.049 -0.244 -0.025	-0.039 -0.231 -0.018	286 5,713 166	0.000 0.000 0.000
Scale		0	1135.755	0.000	1135.755	1135.755	0	0.000
Inland Flood - "Non-X" Flood Zone								
Item	Value	Degrees of Freedom	Coefficient	Standard Error	Lower Wald 95% Confidence Limit	Upper Wald 95% Confidence Limit	Wald Chi-Square	Probability of > Wald Chi-Square
Intercept		1	6.829	0.057	6.717	6.941	14,361	0.000
Distance to River (DTR)	max{2.1, min[4.5, LN(DTR)]} max{4.5, min[5.9, LN(DTR)]}	1 1	-0.338 -0.179	0.013 0.011	-0.365 -0.201	-0.312 -0.157	634 256	0.000 0.000
Relative Elevation	max[-35, min(-1, rel_elev)] max[-1, min(1, rel_elev)]	1 1	-0.088 -0.587	0.001 0.010	-0.089 -0.608	-0.086 -0.567	10,388 3,191	0.000 0.000
Scale		0	4233.685	0.000	4233.685	4233.685	0	0.000

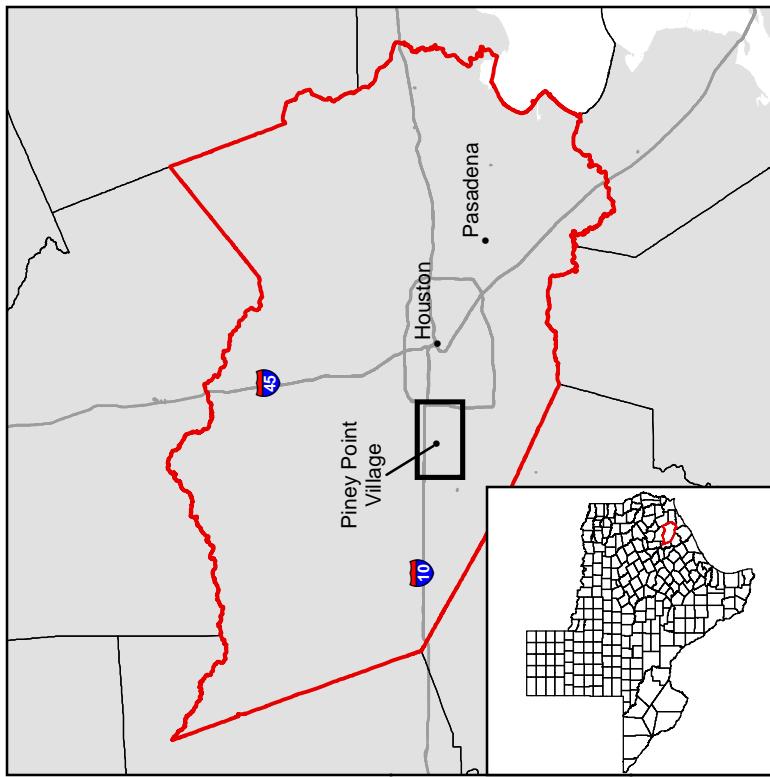
Note:

1. Coefficients estimated by GLM performed in SAS.

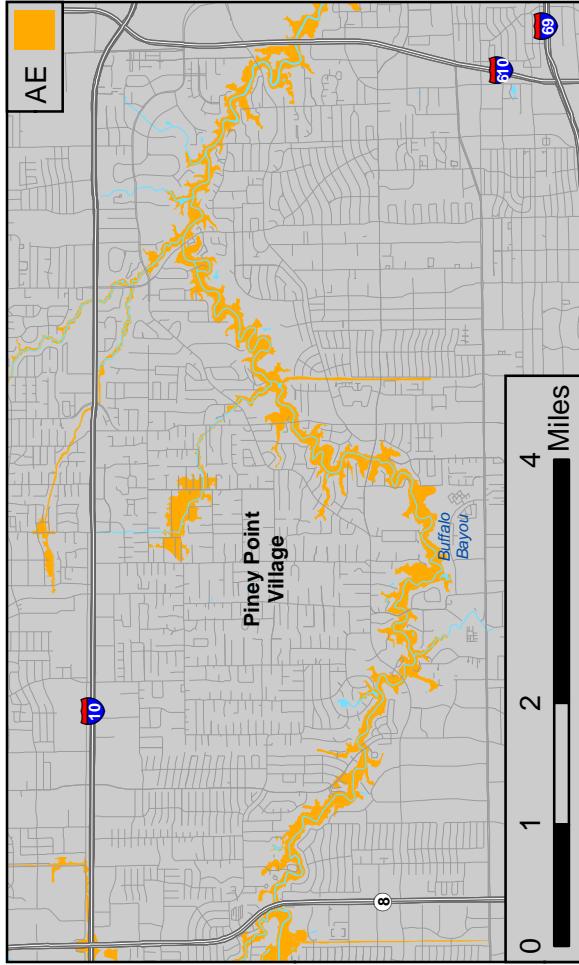
**National Association of REALTORS®**  
**Expected Losses**  
**Harris County, Texas**

**Map TX-A**

**Extent of Mapped Area**



**FEMA Flood Zones**

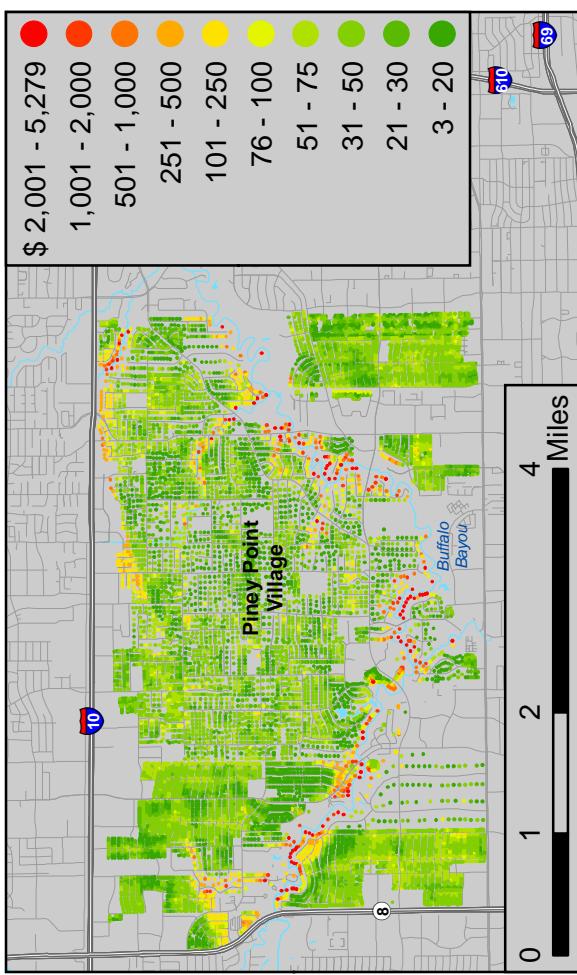


Note:  
1. Source: National Flood Hazard Layer Digital Flood Insurance Rate Maps.

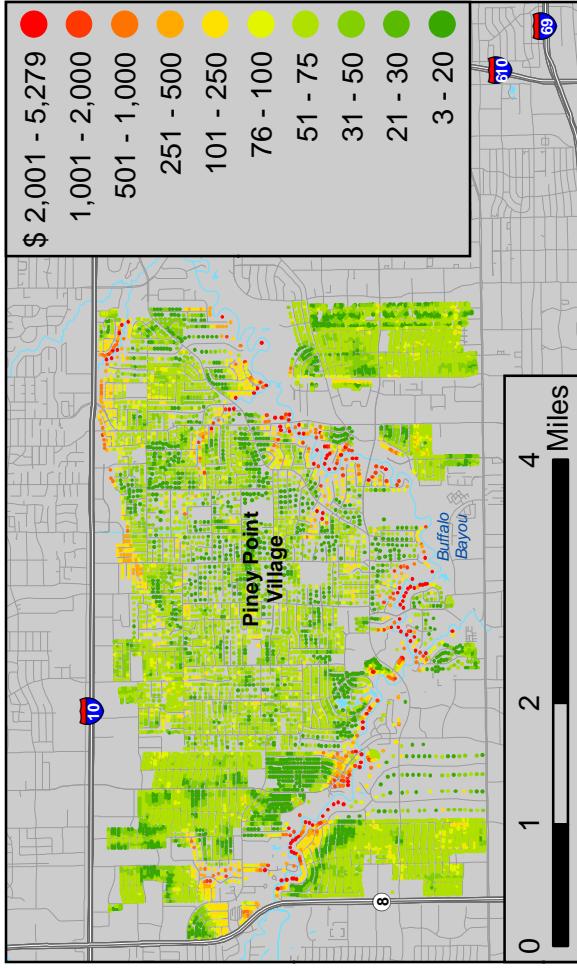
**National Association of REALTORS®**  
**Expected Losses**  
**Harris County, Texas**

**Map TX-B**

**One Story (Base Risk 1)**



**Two Story (Base Risk 2)**

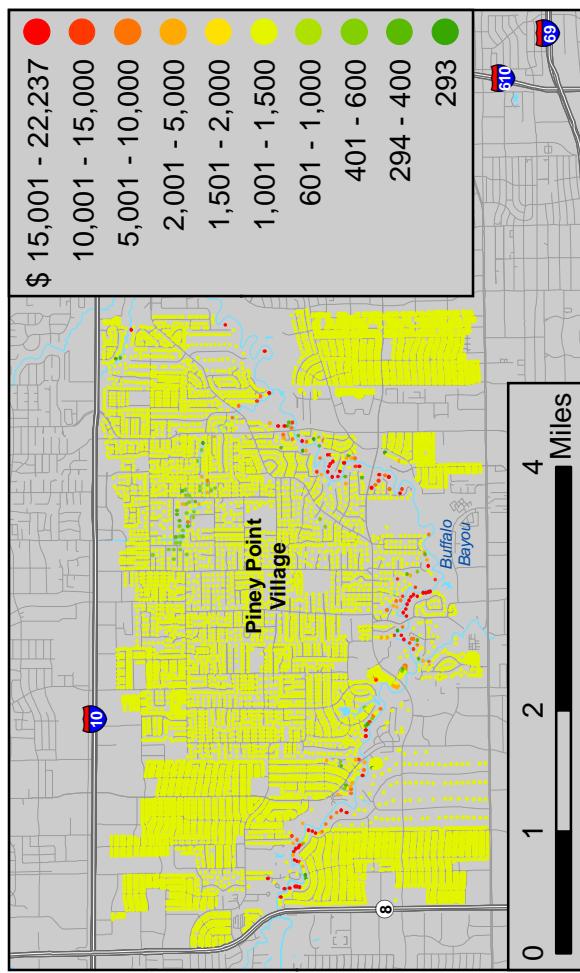


- Notes:**
1. Base Risk 1: 1-Story, \$125k Coverage A, Frame, 1995
  2. Base Risk 2: 2-Story, \$250k Coverage A, Frame, 1995

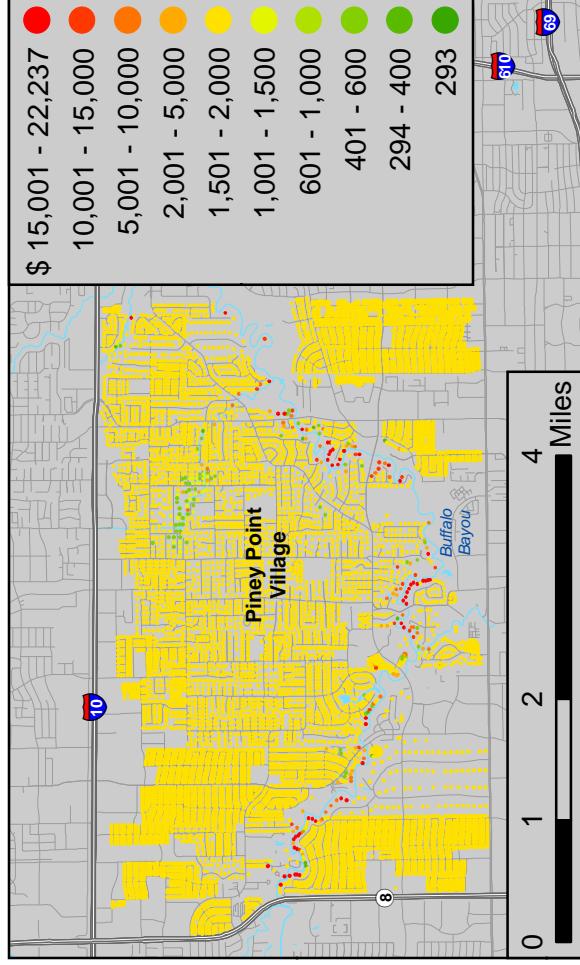
National Association of REALTORS®  
NFIP Premium  
Harris County, Texas

Map TX-C

One Story (Base Risk 1)



Two Story (Base Risk 2)

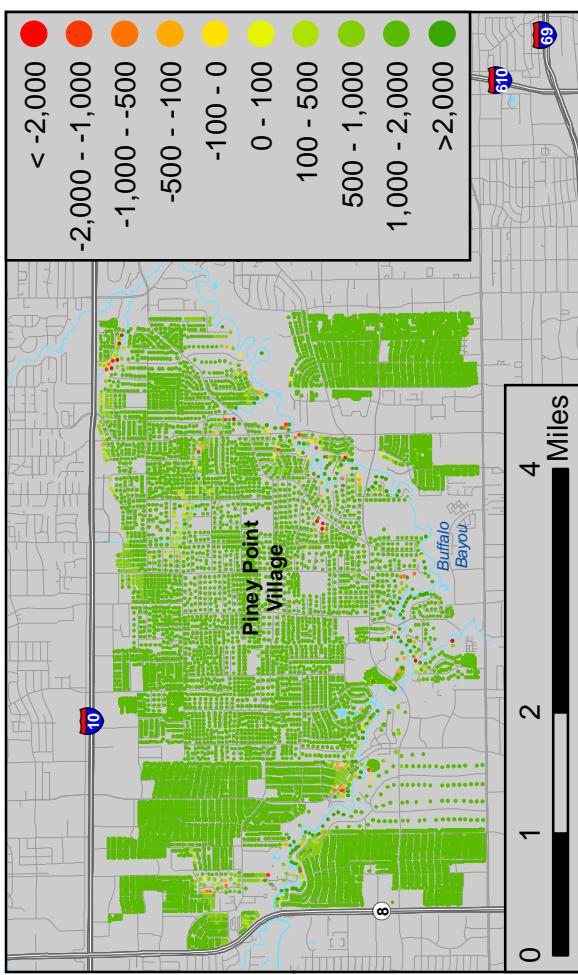


- Notes:
1. Base Risk 1: 1-Story, \$125k Coverage A, Frame, 1995
  2. Base Risk 2: 2-Story, \$250k Coverage A, Frame, 1995

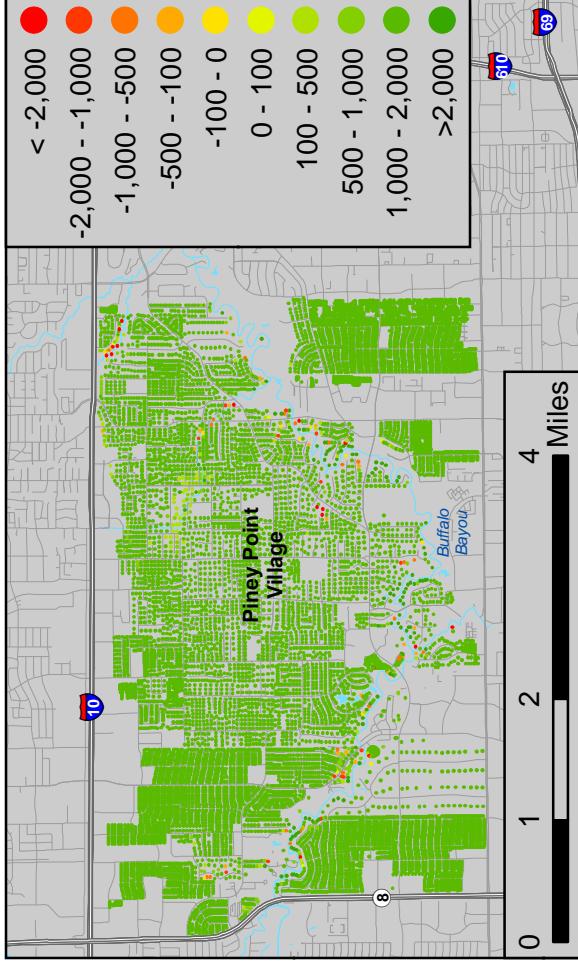
**National Association of REALTORS®**  
Premium Above/Below Target  
**Harris County, Texas**

**Map TX-D**

**One Story (Base Risk 1)**



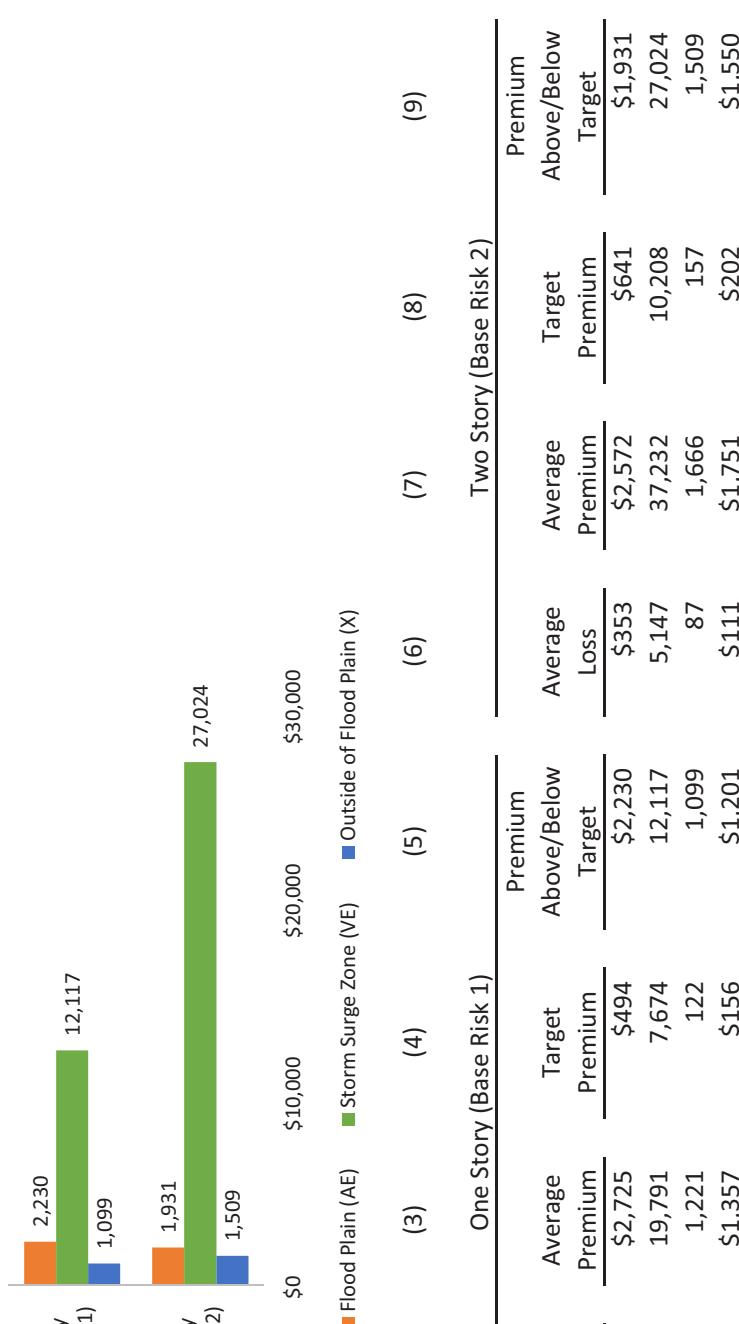
**Two Story (Base Risk 2)**



- Notes:**
1. Base Risk 1: 1-Story, \$125k Coverage A, Frame, 1995
  2. Base Risk 2: 2-Story, \$250k Coverage A, Frame, 1995

National Association of Realtors  
 Summary Statistics by Flood Zone  
 Harris County, Texas

Average Premium Above/Below Target

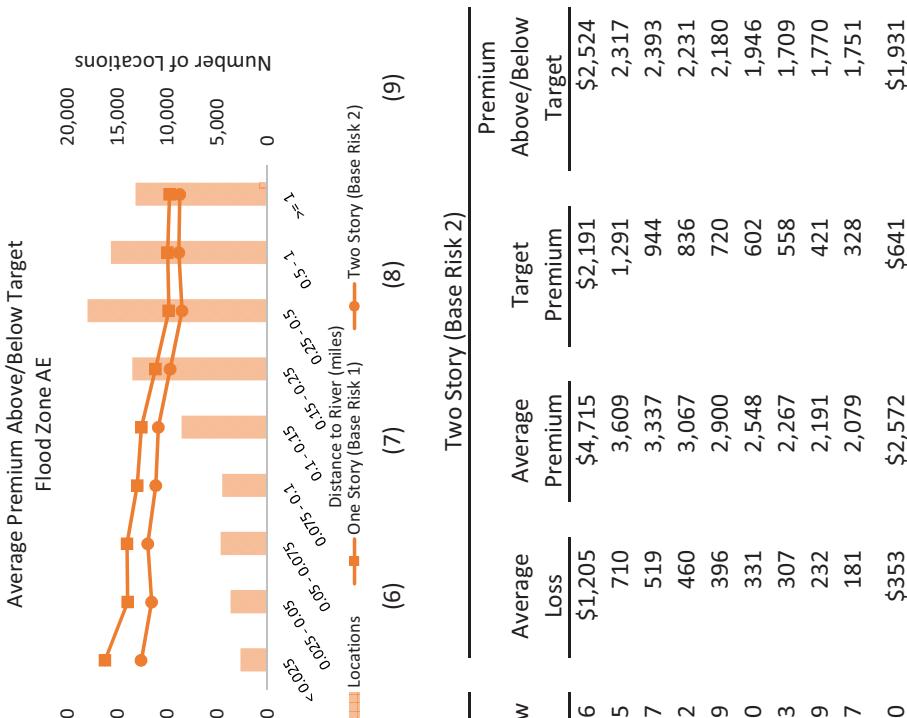
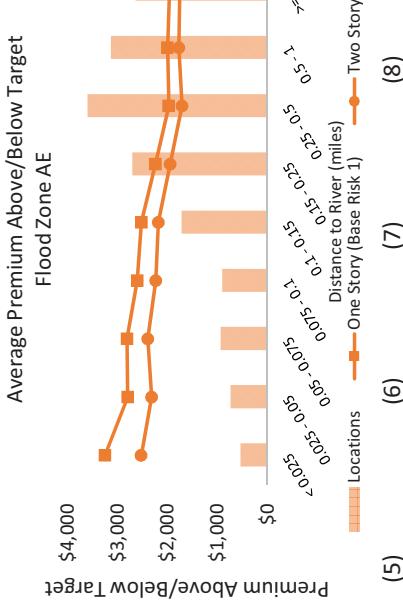
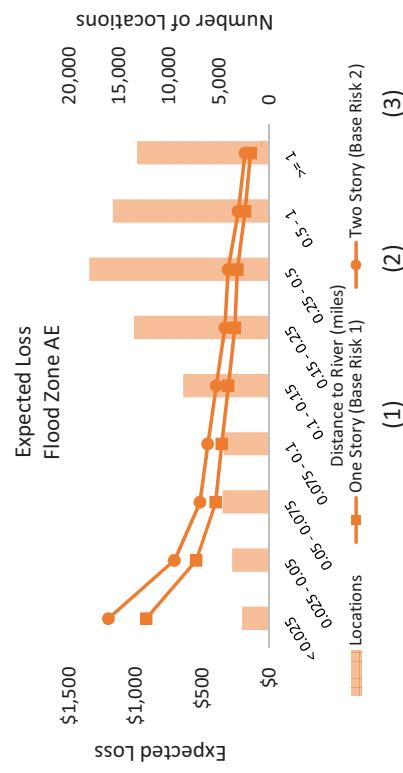


Notes:

1. Flood zones other than AE, VE, and X are excluded.
2. Base Risk 1 = 1-Story, \$125k Coverage A, Frame, 1995;  
 Base Risk 2 = 2-Story, \$250k Coverage A, Frame, 1995.
3. Column (4) = (2) x (1 + contingency) / (1 - Expense), where expense is 39.5% and contingency is 10% for flood zone AE and X, 20% for VE.

National Association of Realtors  
Summary Statistics by Distance to River  
Harris County, Texas

Flood Zone AE



One Story (Base Risk 1)

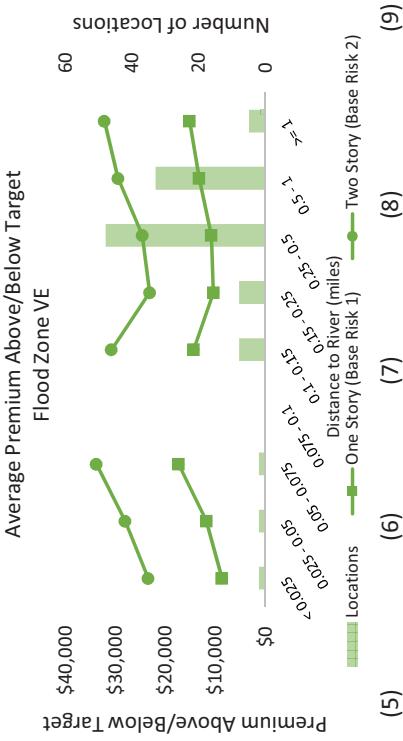
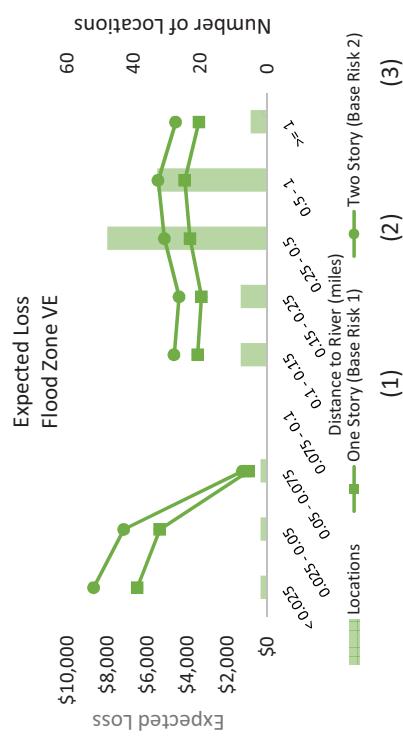
Distance to River (miles)	One Story (Base Risk 1)		Two Story (Base Risk 2)	
	Average Premium	Target Premium	Average Premium	Target Premium
< 0.025	\$920	\$1,673	\$1,205	\$4,715
0.025 - 0.05	546	3,789	2,795	3,609
0.05 - 0.075	4,688	401	2,807	519
0.075 - 0.1	4,557	355	2,602	460
0.1 - 0.15	8,606	3,075	2,519	396
0.15 - 0.25	13,530	2,705	466	2,240
0.25 - 0.5	18,009	2,404	431	1,973
0.5 - 1	15,665	179	326	1,999
>= 1	13,228	140	254	1,957
Total	84,702	\$2,725	\$494	\$2,230

Notes:

1. Data includes Flood Zone AE only.
2. Base Risk 1 = 1-Story, \$125k Coverage A, Frame, 1995;  
Base Risk 2 = 2-Story, \$250k Coverage A, Frame, 1995.
3. Column (4) = (2) x (1 + contingency) / (1 - Expense), where contingency is 10% and expense is 39.5%

National Association of Realtors  
Summary Statistics by Distance to River  
Harris County, Texas

Flood Zone VE



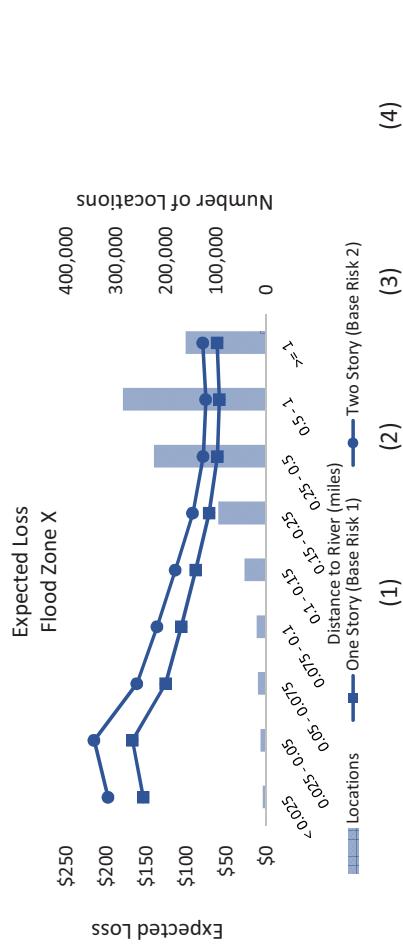
Distance to River (miles)	One Story (Base Risk 1)			Two Story (Base Risk 2)			Premium Above/Below Target
	Count	Average Loss	Premium Target	Average Loss	Premium Target	Average Premium	
< 0.025	2	\$6,498	\$21,614	\$8,726	\$8,664	\$40,641	\$23,456
0.025 - 0.05	2	5,366	22,497	10,643	11,854	42,310	28,095
0.05 - 0.075	2	925	19,250	1,834	17,416	36,269	33,835
0.075 - 0.1	0	0	0	0	0	0	0
0.1 - 0.15	8	3,472	21,274	6,886	14,388	40,029	30,807
0.15 - 0.25	8	3,277	16,908	6,500	10,407	4,396	23,156
0.25 - 0.5	48	3,860	18,502	7,656	10,845	5,139	24,630
0.5 - 1	33	4,120	21,438	8,172	13,266	5,449	29,479
>= 1	5	3,408	21,944	6,759	15,185	4,569	32,208
Total	108	\$3,869	\$19,791	\$7,674	\$12,117	\$5,147	\$37,232
							\$10,208
							\$27,024

Notes:

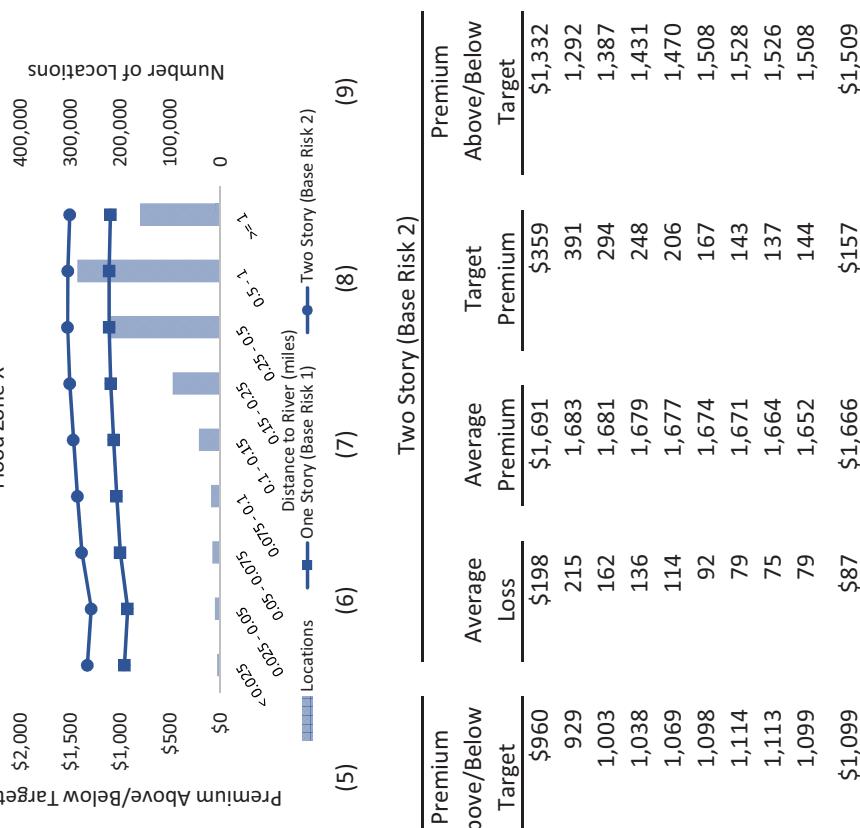
1. Data includes Flood Zone VE only.
2. Base Risk 1 = 1-Story, \$125k Coverage A, Frame, 1995;
3. Column (4) = (2) x (1 + contingency) / (1 - Expense), where contingency is 20% and expense is 39.5%

National Association of Realtors  
Summary Statistics by Distance to River  
Harris County, Texas

Flood Zone X



Average Premium Above/Below Target



One Story (Base Risk 1)

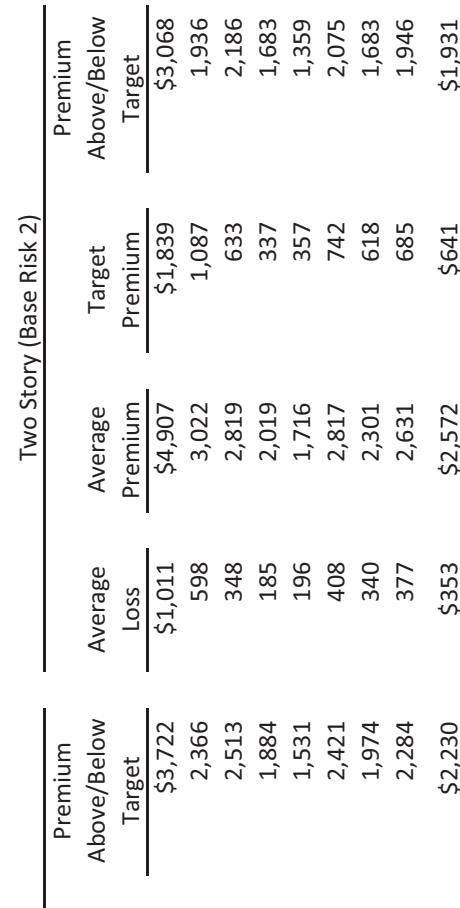
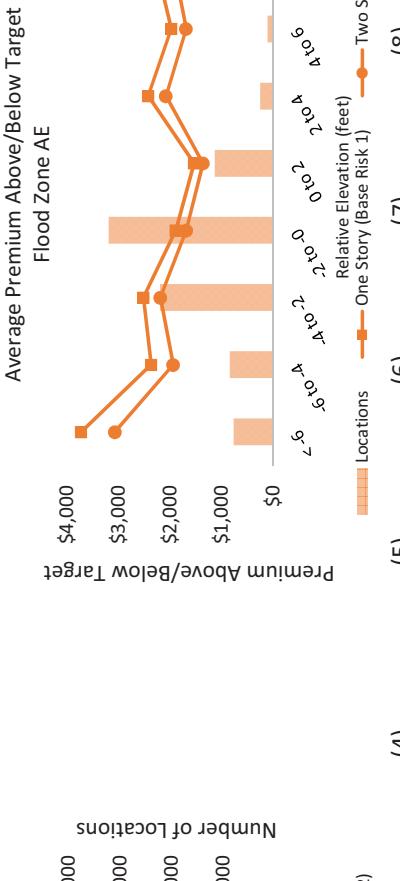
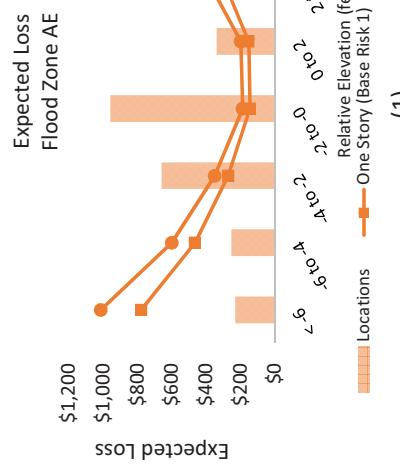
Distance to River (miles)	One Story (Base Risk 1)			Two Story (Base Risk 2)		
	Average Loss	Premium	Average Premium Above/Below Target	Average Loss	Premium	Average Premium Above/Below Target
< 0.025	\$154	\$1,239	\$279	\$198	\$1,691	\$359
0.025 - 0.05	167	1,233	304	929	1,683	391
0.05 - 0.075	126	1,232	229	1,003	1,681	294
0.075 - 0.1	106	1,230	193	1,038	136	1,679
0.1 - 0.15	88	1,229	160	1,069	114	1,677
0.15 - 0.25	71	1,227	129	1,098	92	1,674
0.25 - 0.5	61	1,225	111	1,114	79	1,671
0.5 - 1	58	1,219	106	1,113	75	1,664
>= 1	61	1,211	111	1,099	79	1,652
Total	\$67	\$1,221	\$122	\$1,099	\$87	\$1,666

Notes:

1. Data includes Flood Zone X only.
2. Base Risk 1 = 1-Story, \$125k Coverage A, Frame, 1995;  
Base Risk 2 = 2-Story, \$250k Coverage A, Frame, 1995.
3. Column (4) = (2) x (1 + contingency) / (1 - Expense), where contingency is 10% and expense is 39.5%

National Association of Realtors  
Summary Statistics by Relative Elevation  
Harris County, Texas

Flood Zone AE



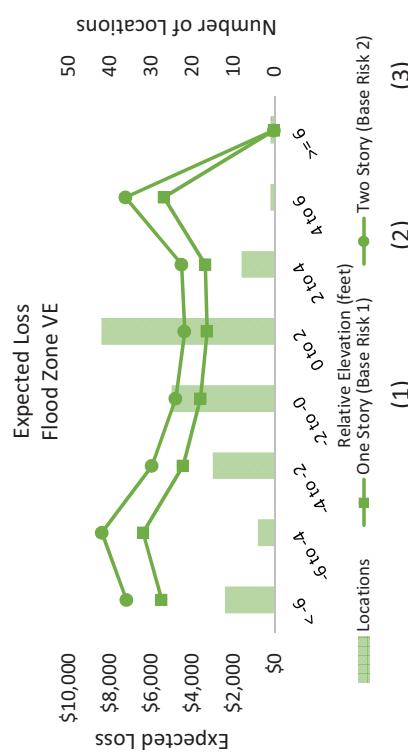
One Story (Base Risk 1)			Two Story (Base Risk 2)		
Relative Elevation (feet)	Average Loss	Premium	Average Loss	Premium	Premium
	Count	Target	Count	Target	Above/Below Target
< -6	7,625	\$5,133	3,722	\$1,011	\$4,907
-6 to -4	8,377	462	2,366	598	3,022
-4 to -2	21,938	270	2,513	348	2,819
-2 to 0	31,946	143	1,884	185	2,019
0 to 2	11,259	151	1,531	196	1,716
2 to 4	2,477	312	2,421	408	2,817
4 to 6	999	261	1,974	340	2,301
≥ 6	81	292	2,814	377	2,631
Total	84,702	\$272	\$2,725	\$494	\$2,230

Notes:

1. Data includes Flood Zone AE only.
2. Base Risk 1 = 1-Story, \$125k Coverage A, Frame, 1995;  
Base Risk 2 = 2-Story, \$250k Coverage A, Frame, 1995.
3. Column (4) = (2) x (1 + contingency) / (1 - expense), where contingency is 10% and expense is 39.5%

National Association of Realtors  
Summary Statistics by Relative Elevation  
Harris County, Texas

Flood Zone VE



One Story (Base Risk 1)

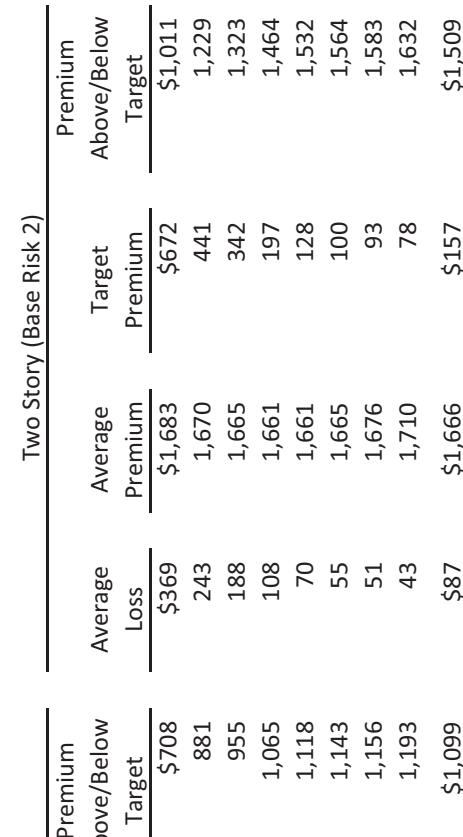
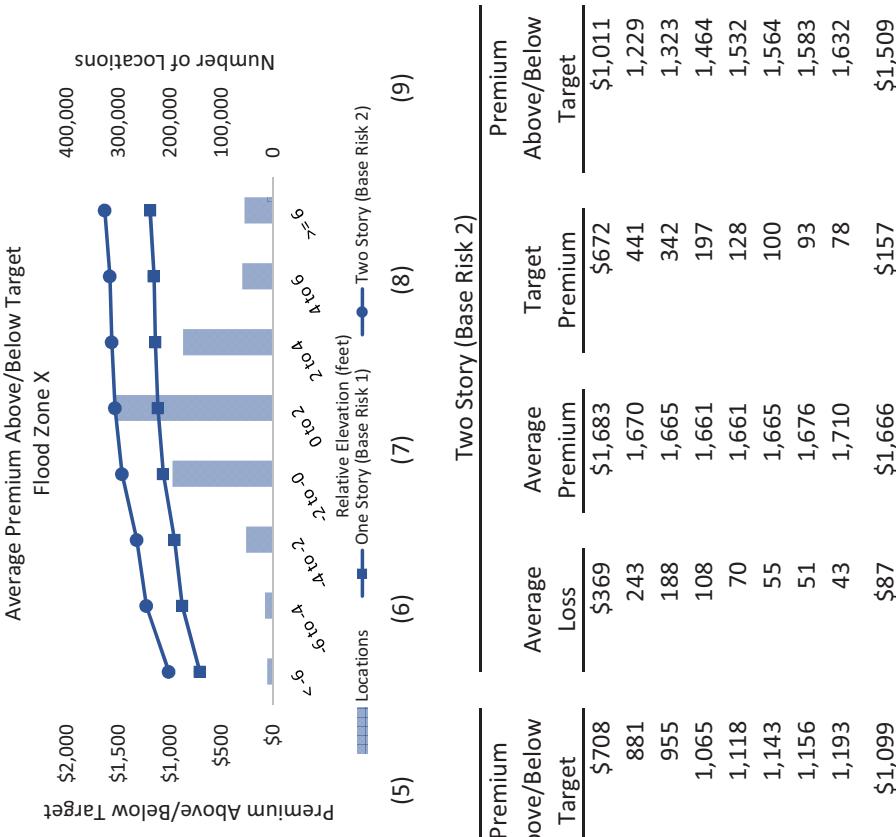
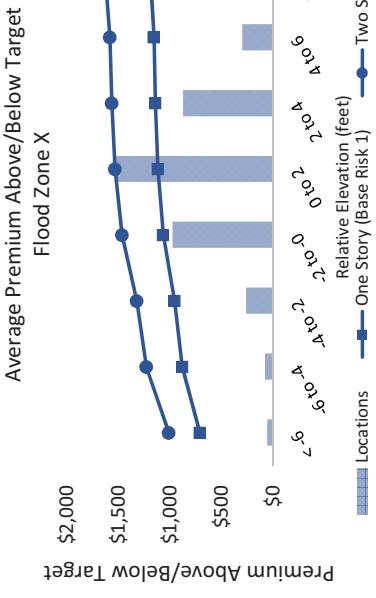
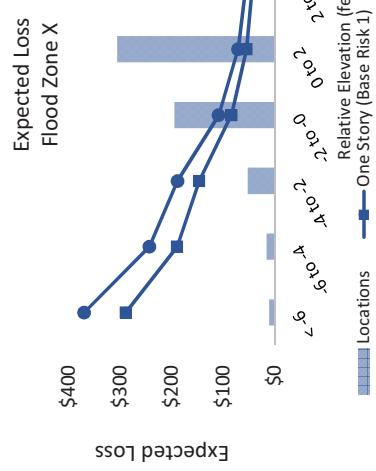
	One Story (Base Risk 1)			Two Story (Base Risk 2)		
	Average	Premium	Above/Below Target	Average	Premium	Above/Below Target
Count	12	\$5,486	\$10,881	\$12,335	\$7,183	\$43,636
< -6	4	6,383	12,661	11,071	8,382	44,598
-6 to -4	15	4,446	19,914	8,819	11,095	5,950
-4 to -2	25	3,596	24,309	7,133	17,176	4,800
-2 to 0	42	3,276	17,074	6,499	10,575	4,369
0 to 2	8	3,360	16,502	6,665	9,837	4,514
2 to 4	1	5,373	4,517	10,657	(6,140)	7,233
4 to 6	1	16	3,836	32	3,803	21
>= 6	1					
Total	108	\$3,869	\$19,791	\$7,674	\$12,117	\$5,147

Notes:

1. Data includes Flood Zone VE only.
2. Base Risk 1 = 1-Story, \$125k Coverage A, Frame, 1995;  
Base Risk 2 = 2-Story, \$250k Coverage A, Frame, 1995.
3. Column (4) = (2) x (1 + contingency) / (1 - Expense), where contingency is 20% and expense is 39.5%

National Association of Realtors  
Summary Statistics by Relative Elevation  
Harris County, Texas

Flood Zone X

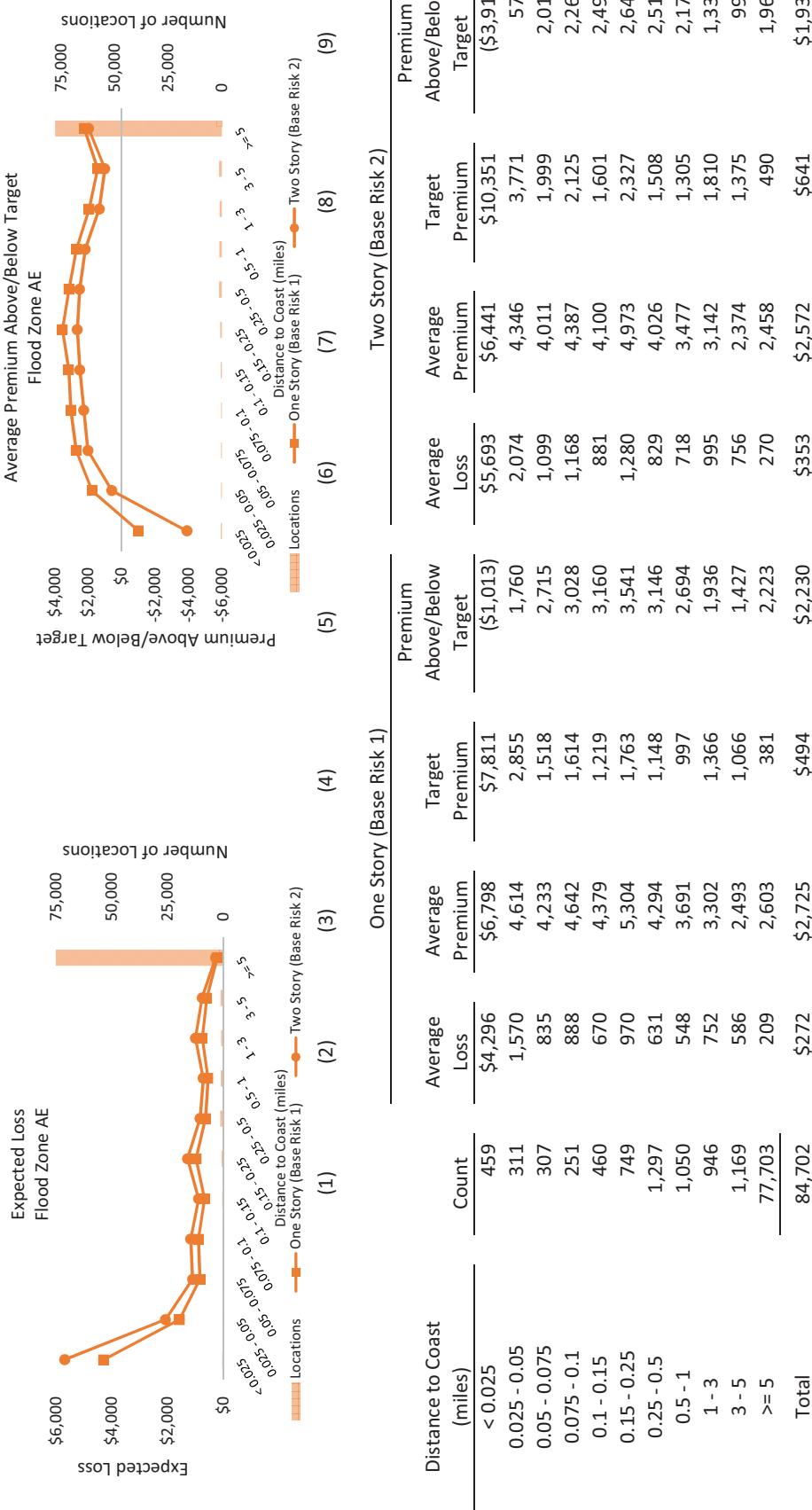


Notes:

1. Data includes Flood Zone X only.
2. Base Risk 1 = 1-Story, \$125k Coverage A, Frame, 1995;  
Base Risk 2 = 2-Story, \$250k Coverage A, Frame, 1995.
3. Column (4) = (2) x (1 + contingency) / (1 - Expense), where contingency is 10% and expense is 39.5%

National Association of Realtors  
Summary Statistics by Distance to Coast  
Harris County, Texas

Flood Zone AE

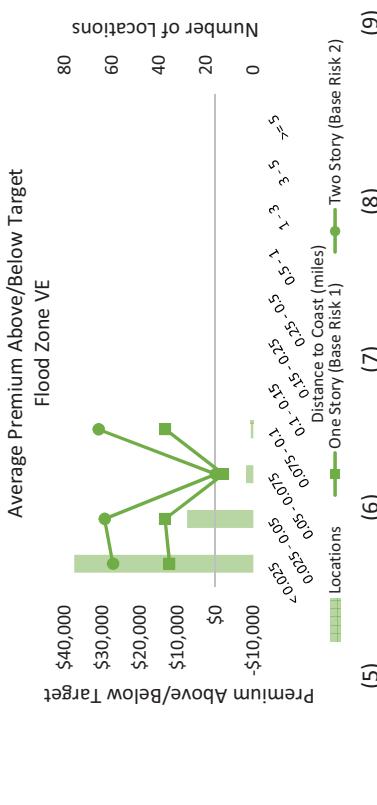
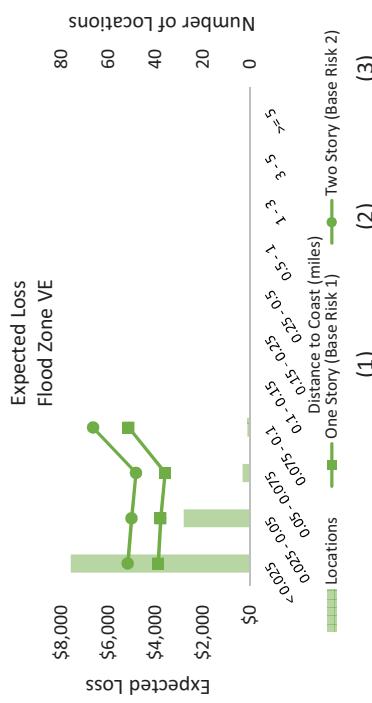


Notes:

1. Data includes Flood Zone AE only.
2. Base Risk 1 = 1-Story, \$125k Coverage A, Frame, 1995;  
Base Risk 2 = 2-Story, \$250k Coverage A, Frame, 1995.
3. Column (4) = (2) x (1 + contingency) / (1 - Expense), where contingency is 10% and expense is 39.5%

National Association of Realtors  
Summary Statistics by Distance to Coast  
Harris County, Texas

Flood Zone VE



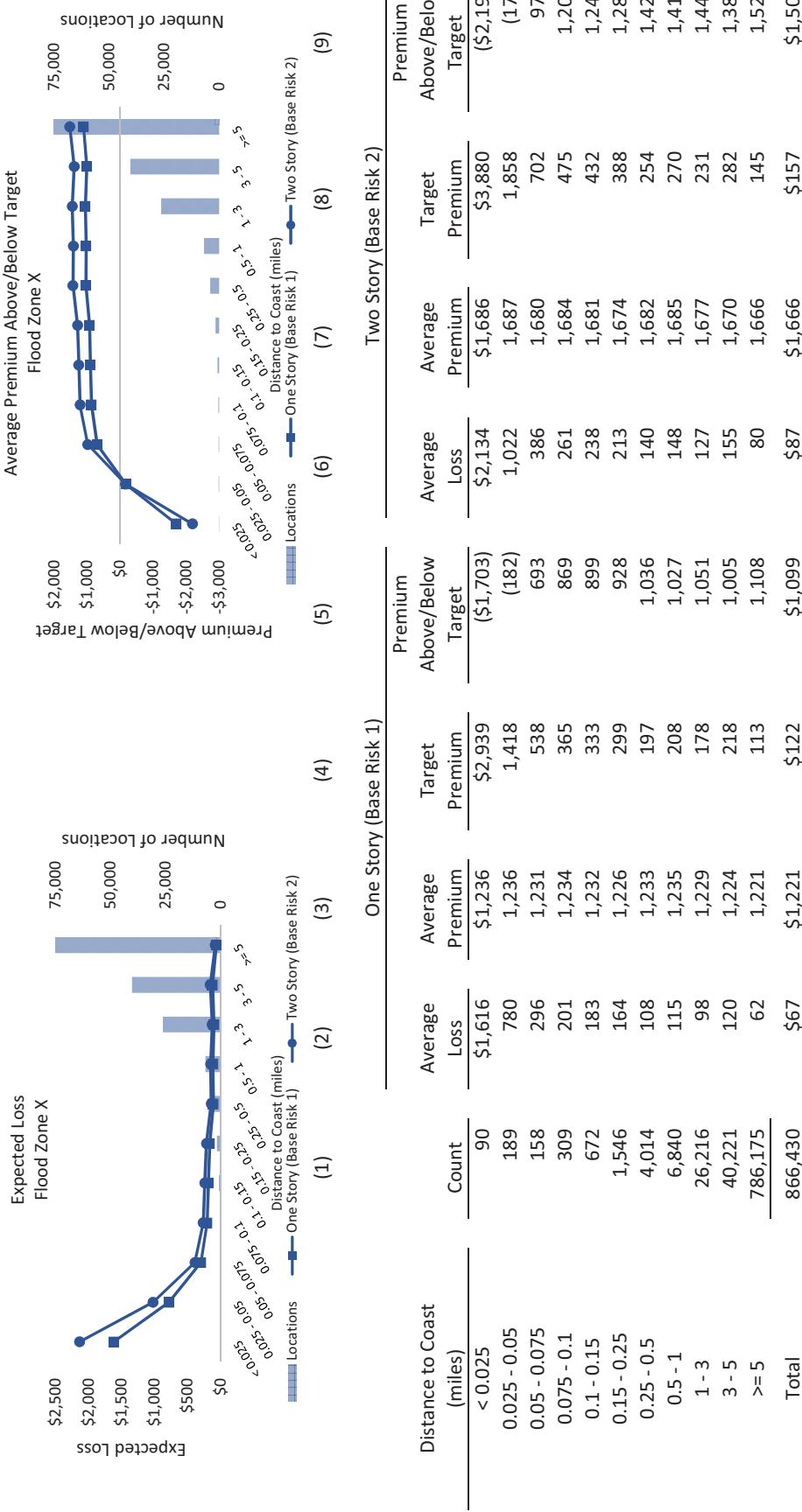
Distance to Coast (miles)	One Story (Base Risk 1)			Two Story (Base Risk 1)			Premium Above/Below Target		
	Count	Average Loss	Average Premium	Target Premium	Premium Above/Below Target	Average Loss	Average Premium	Target Premium	Premium Above/Below Target
< 0.025	76	\$3,893	\$19,907	\$7,722	\$12,185	\$5,185	\$37,451	\$10,285	\$27,166
0.025 - 0.05	28	3,788	20,924	7,513	13,411	5,021	39,359	9,959	29,400
0.05 - 0.075	3	3,593	5,047	7,127	(2,080)	4,836	9,517	9,593	(75)
0.075 - 0.1	1	5,139	23,499	10,193	13,306	6,656	44,169	13,202	30,967
0.1 - 0.15	0								
0.15 - 0.25	0								
0.25 - 0.5	0								
Total	108	\$3,869	\$19,791	\$7,674	\$12,117	\$5,147	\$37,232	\$10,208	\$27,024

Notes:

1. Data includes Flood Zone VE only.
2. Base Risk 1 = 1-Story, \$125k Coverage A, Frame, 1995;  
Base Risk 2 = 2-Story, \$250k Coverage A, Frame, 1995.
3. Column (4) = (2) x (1 + contingency) / (1 - Expense), where contingency is 20% and expense is 39.5%

National Association of Realtors  
Summary Statistics by Distance to Coast  
Harris County, Texas

Flood Zone X



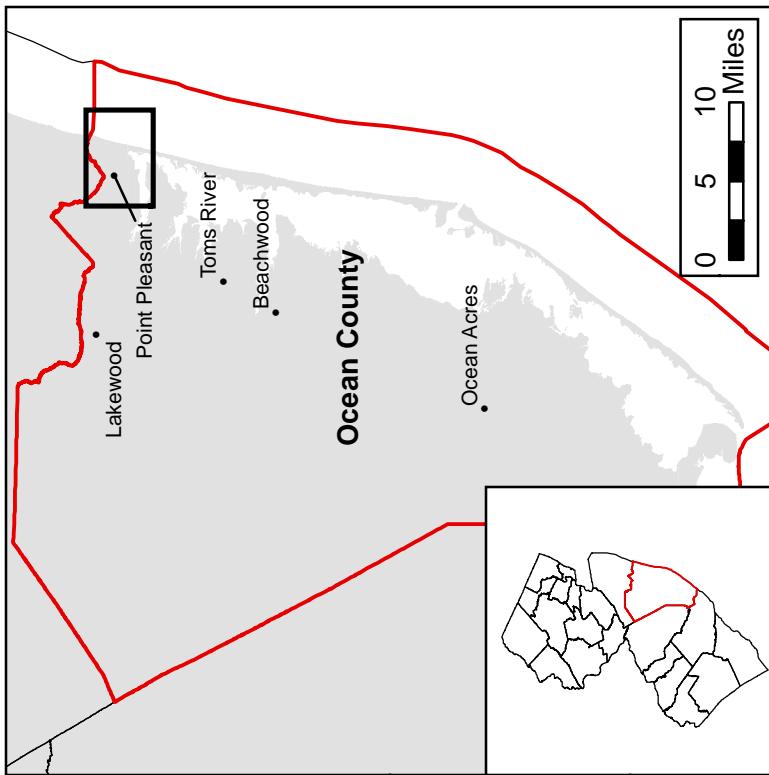
Notes:

1. Data includes Flood Zone X only.
2. Base Risk 1 = 1-Story, \$125k Coverage A, Frame, 1995;  
Base Risk 2 = 2-Story, \$250k Coverage A, Frame, 1995.
3. Column (4) = (2) x (1 + contingency) / (1 - Expense), where contingency is 10% and expense is 39.5%

**National Association of REALTORS®  
Ocean County, New Jersey**

**Map NJ-A**

**Extent of Mapped Area**



**FEMA Flood Zones**

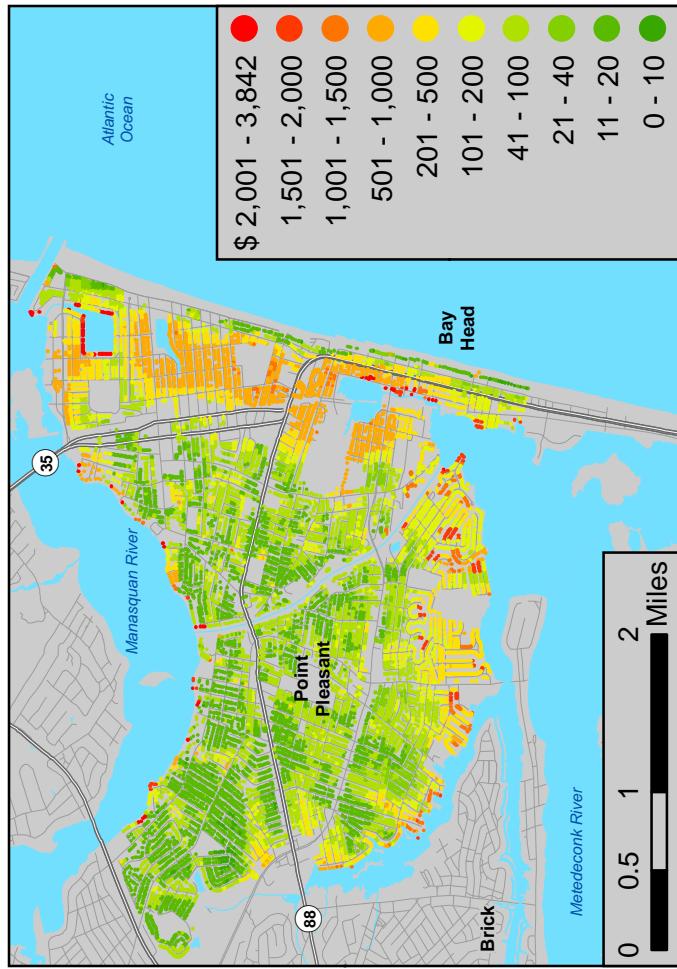


Note:  
1. Source: National Flood Hazard Layer Digital Flood Insurance Rate Maps.

**National Association of REALTORS®**  
**Expected Losses**  
**Ocean County, New Jersey**

**Map NJ-B**

**Not Elevated (Base Risk 1)**



**Elevated (Base Risk 2)**



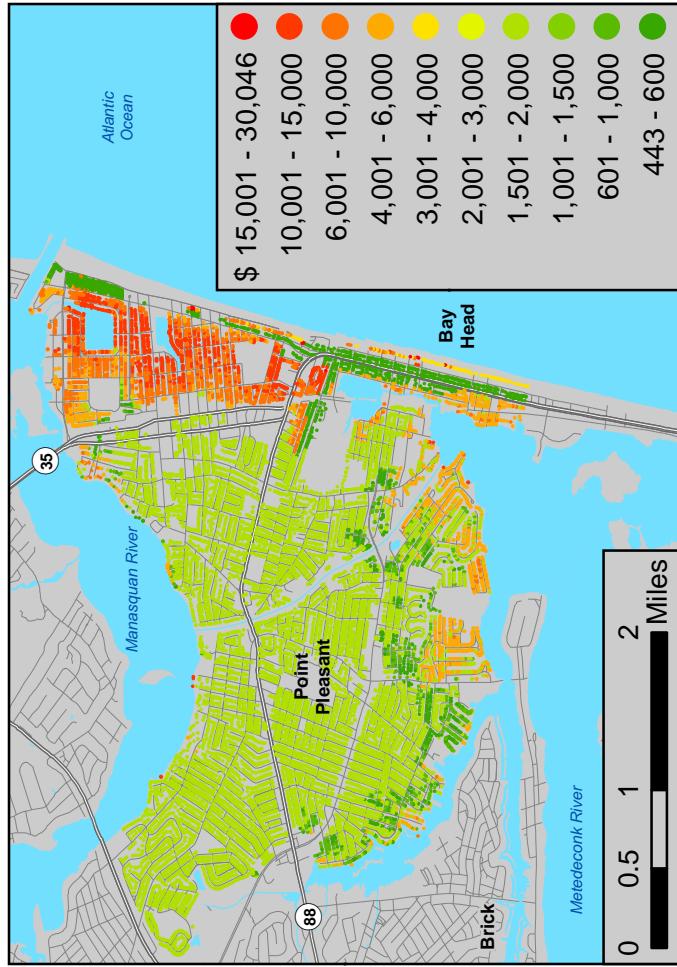
**Notes:**

1. Base Risk 1: 1-Story, \$175k Coverage A, Frame, 1995, Not Elevated
2. Base Risk 2: 1-Story, \$175k Coverage A, Frame, 1995, Elevated

National Association of REALTORS®  
NFIP Premium  
Ocean County, New Jersey

Map NJ-C

Not Elevated (Base Risk 1)



Elevated (Base Risk 2)



Notes:

1. Base Risk 1: 1-Story, \$175k Coverage A, Frame, 1995, Not Elevated
2. Base Risk 2: 1-Story, \$175k Coverage A, Frame, 1995, Elevated

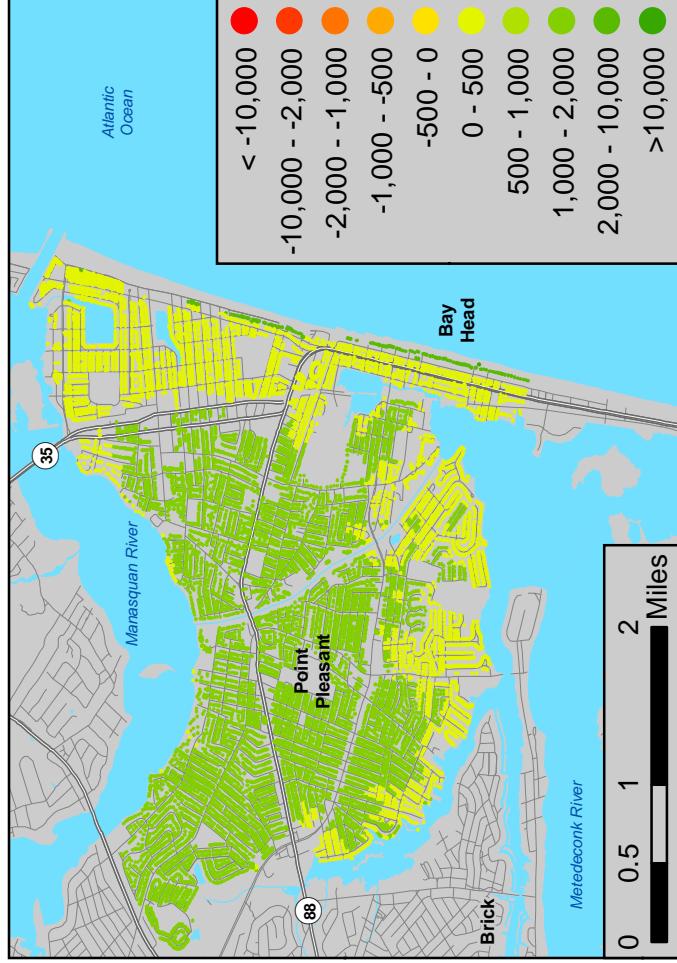
**National Association of REALTORS®**  
Premium Above/Below Target  
Ocean County, New Jersey

**Map NJ-D**

**Not Elevated (Base Risk 1)**



**Elevated (Base Risk 2)**



- Notes:**
1. Base Risk 1: 1-Story, \$175k Coverage A, Frame, 1995, Not Elevated
  2. Base Risk 2: 1-Story, \$175k Coverage A, Frame, 1995, Elevated

National Association of Realtors  
 Summary Statistics by Flood Zone  
 Ocean County, New Jersey

Average Premium Above/Below Target



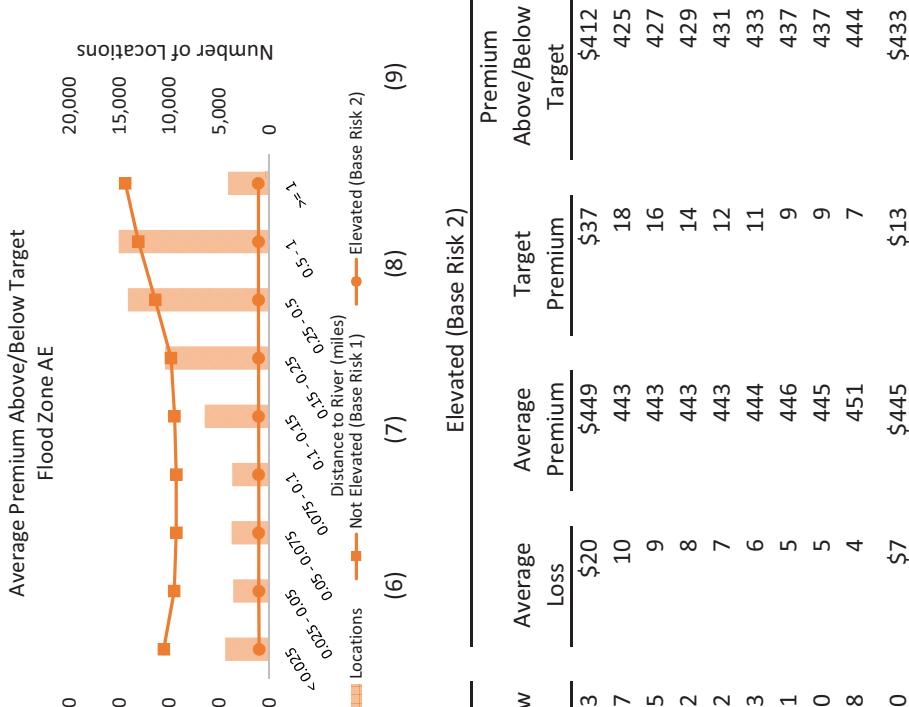
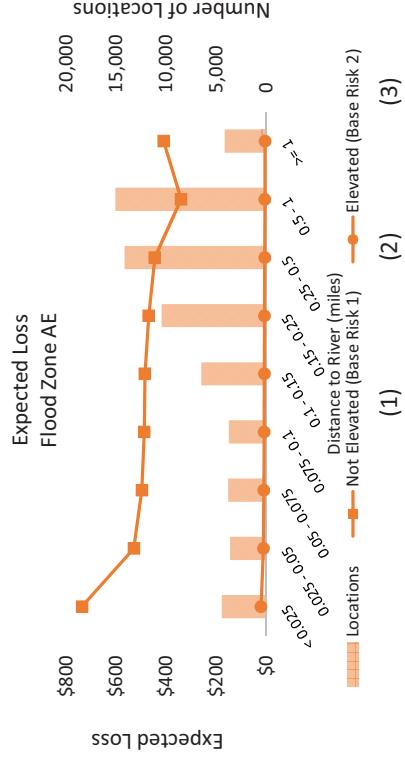
	Not Elevated (Base Risk 1)					Elevated (Base Risk 2)					Premium Above/Below Target		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)				
Flood Zone (Note 1)										Average Loss	Average Premium	Average Loss	Average Premium
Flood Plain (AE)	65,825		\$456	\$5,289	\$829	\$4,460	\$7	\$445	\$13				
Storm Surge Zone (VE)	2,434		122	9,390	243	9,147	4	3,419	7				
Outside of Flood Plain (X)	223,907		46	1,570	84	1,485	2	1,570	3				
Total	292,166		\$139	\$2,473	\$253	\$2,219	\$3	\$1,332	\$5				

Notes:

1. Flood zones other than AE, VE, and X are excluded.
2. Base Risk 1 = 1-Story, \$175k Coverage A, Frame, 1995, Not Elevated;  
 Base Risk 2 = 1-Story, \$175k Coverage A, Frame, 1995, Elevated.
3. Column (4) = (2) x (1 + contingency) / (1 - Expense), where expense is 39.5% and contingency is 10% for flood zone AE and X, 20% for VE.

National Association of Realtors  
Summary Statistics by Distance to River  
Ocean County, New Jersey

Flood Zone AE



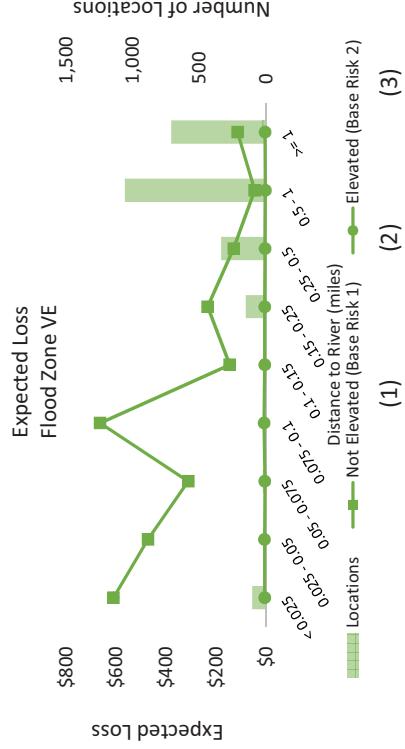
Distance to River (miles)	Not Elevated (Base Risk 1)			Elevated (Base Risk 2)		
	Count	Average Loss	Premium Above/Below Target	Average Loss	Premium Above/Below Target	Premium Above/Below Target
< 0.025	4,421	\$736	\$5,562	\$20	\$449	\$37
0.025 - 0.05	3,608	\$529	4,768	961	3,807	10
0.05 - 0.075	3,798	\$496	4,628	903	3,725	9
0.075 - 0.1	3,717	\$487	4,607	885	3,722	8
0.1 - 0.15	6,461	\$484	4,673	880	3,792	7
0.15 - 0.25	10,447	\$469	4,786	853	3,933	6
0.25 - 0.5	14,154	\$445	5,381	809	4,571	5
0.5 - 1	15,085	\$340	5,859	619	5,240	5
>= 1	4,134	\$410	6,513	745	5,768	4
Total	65,825	\$456	\$5,289	\$829	\$4,460	\$7

Notes:

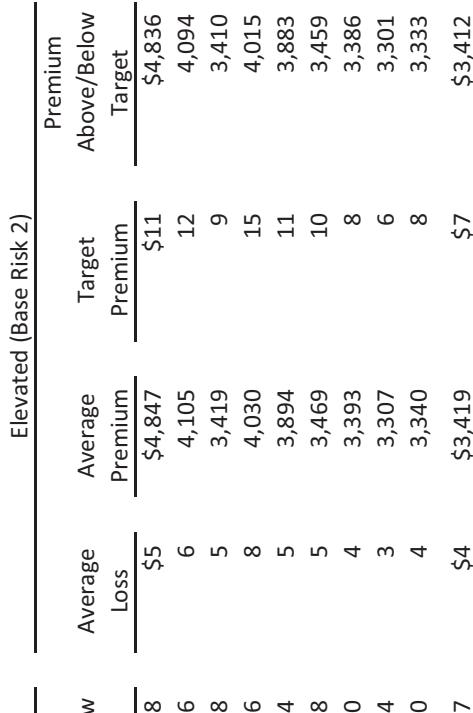
1. Data includes Flood Zone AE only.
2. Base Risk 1 = 1-Story, \$175k Coverage A, Frame, 1995, Not Elevated;  
Base Risk 2 = 1-Story, \$175k Coverage A, Frame, 1995, Elevated.
3. Column (4) = (2) x (1 + contingency) / (1 - Expense), where contingency is 10% and expense is 39.5%

National Association of Realtors  
Summary Statistics by Distance to River  
Ocean County, New Jersey

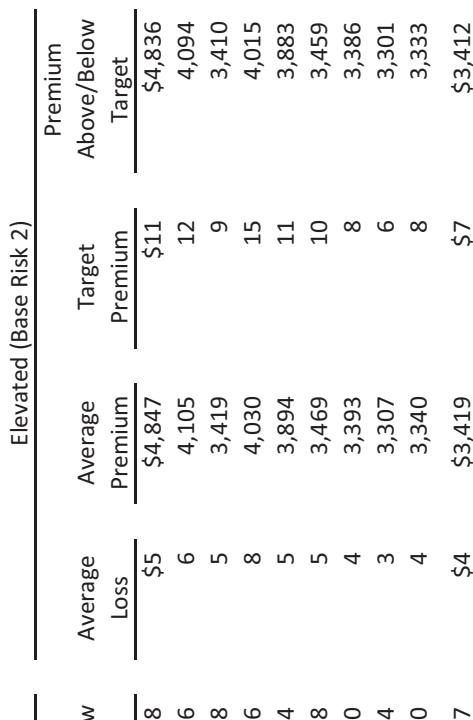
Flood Zone VE



Not Elevated (Base Risk 1)



Elevated (Base Risk 2)

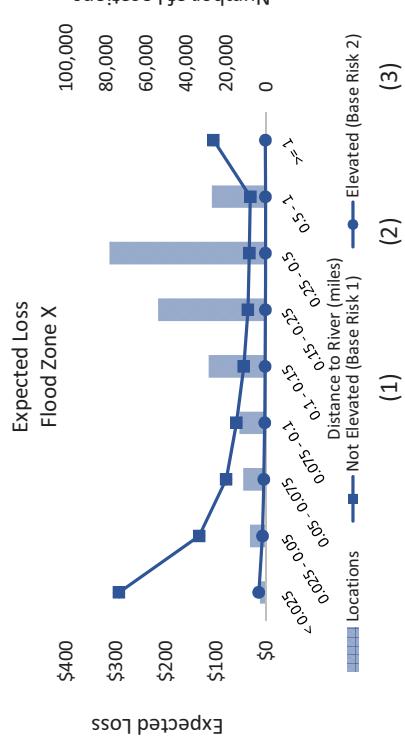


Notes:

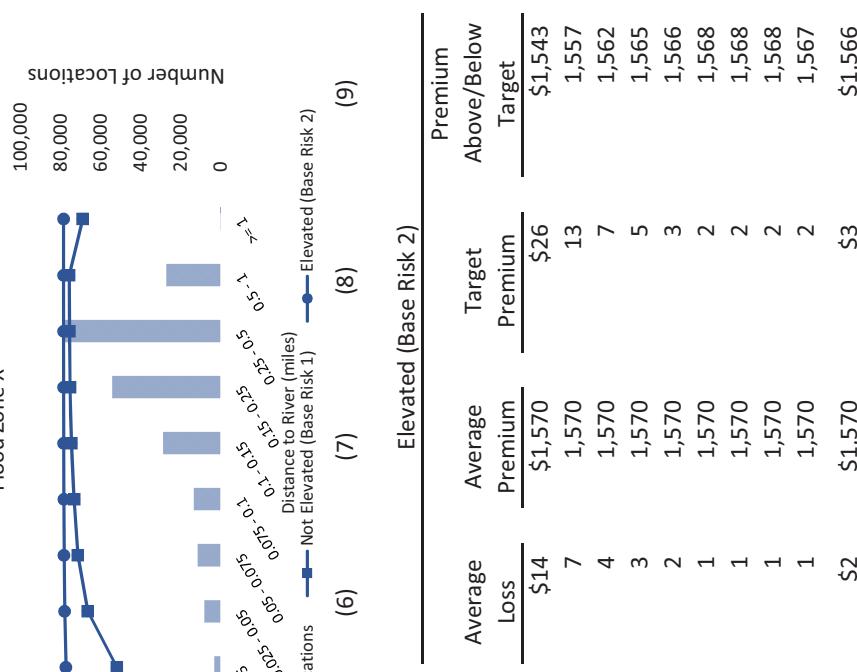
1. Data includes Flood Zone VE only.
2. Base Risk 1 = 1-Story, \$175k Coverage A, Frame, 1995, Not Elevated;  
Base Risk 2 = 1-Story, \$175k Coverage A, Frame, 1995, Elevated.
3. Column (4) = (2) x (1 + contingency) / (1 - Expense), where contingency is 20% and expense is 39.5%

National Association of Realtors  
Summary Statistics by Distance to River  
Ocean County, New Jersey

Flood Zone X



Average Premium Above/Below Target



Not Elevated (Base Risk 1)

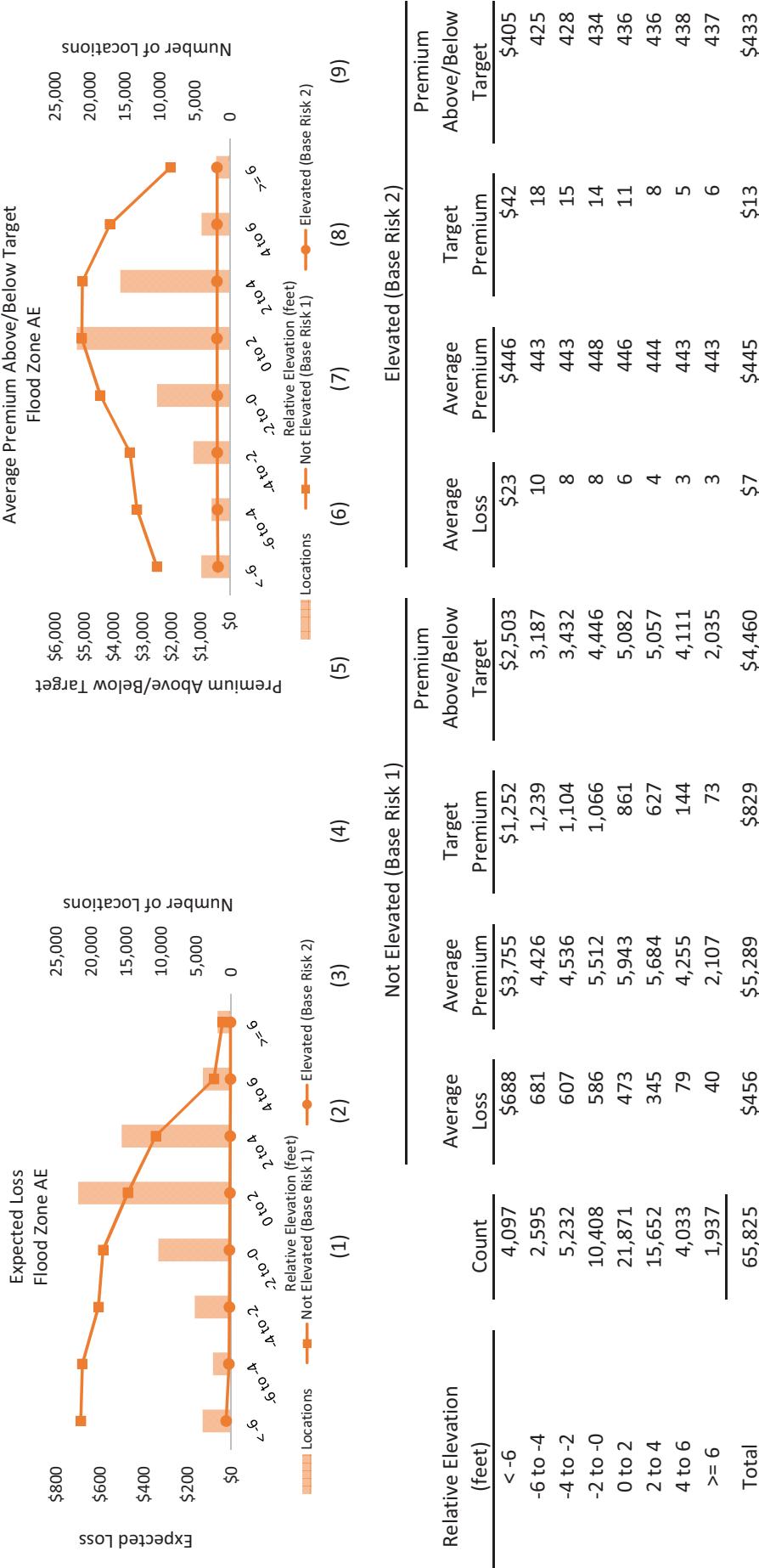
Distance to River (miles)	Elevated (Base Risk 1)			Elevated (Base Risk 2)		
	Count	Average Premium	Premium Above/Below Target	Average Premium	Premium Above/Below Target	Premium Above/Below Target
< 0.025	3,058	\$1,570	\$1,035	\$14	\$1,570	\$26
0.025 - 0.05	7,990	1,570	243	1,327	7	1,570
0.05 - 0.075	11,477	1,570	145	1,425	4	1,570
0.075 - 0.1	13,313	1,570	108	1,462	3	1,570
0.1 - 0.15	28,648	1,570	81	1,489	2	1,570
0.15 - 0.25	54,036	1,570	66	1,504	1	1,570
0.25 - 0.5	78,244	1,570	61	1,509	1	1,570
0.5 - 1	27,024	1,570	57	1,513	1	1,570
>= 1	117	1,570	192	1,378	1	1,570
Total	223,907	\$46	\$1,570	\$84	\$1,485	\$2

Notes:

1. Data includes Flood Zone X only.
2. Base Risk 1 = 1-Story, \$175k Coverage A, Frame, 1995, Not Elevated;  
Base Risk 2 = 1-Story, \$175k Coverage A, Frame, 1995, Elevated.
3. Column (4) = (2) x (1 + contingency) / (1 - Expense), where contingency is 10% and expense is 39.5%

National Association of Realtors  
Summary Statistics by Relative Elevation  
Ocean County, New Jersey

Flood Zone AE

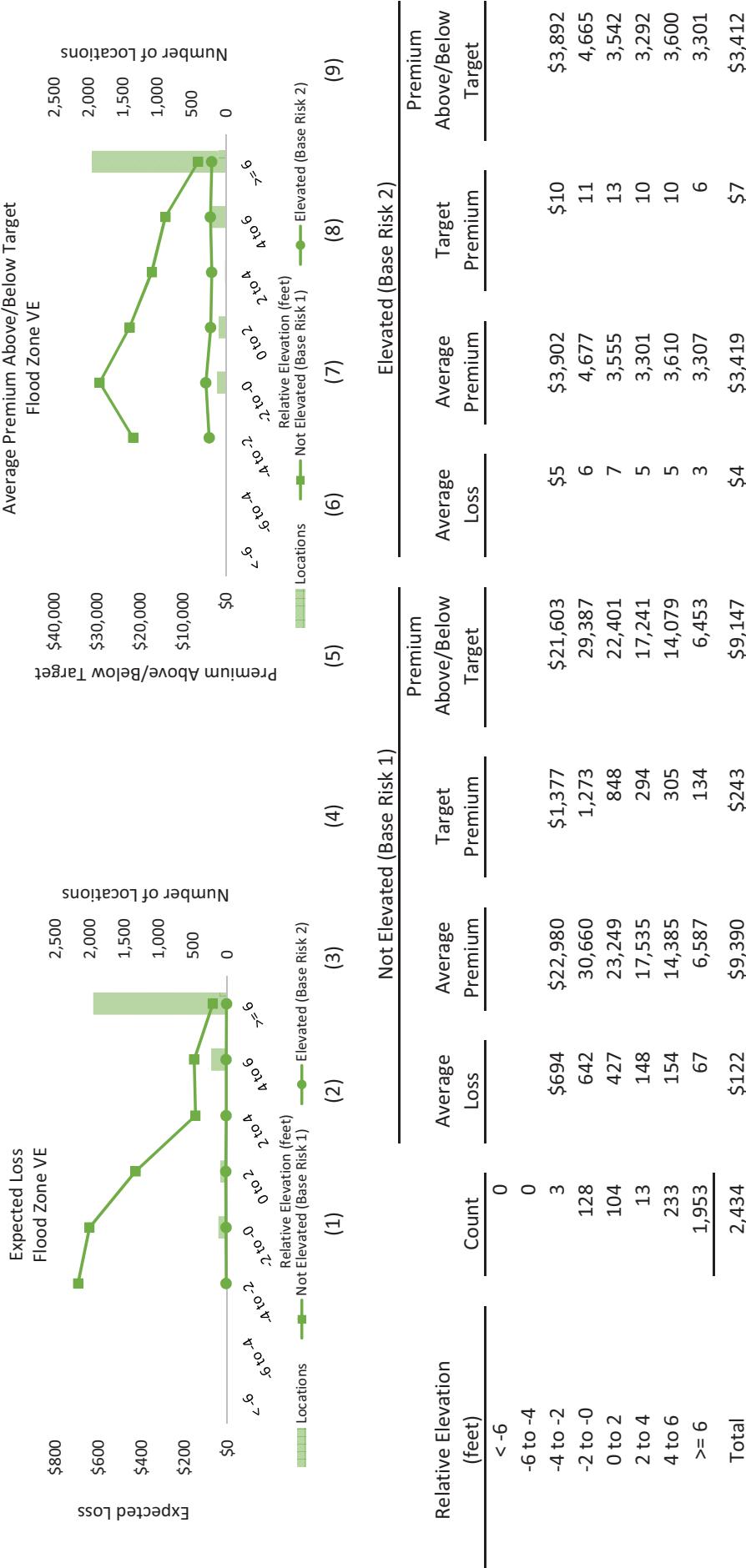


Notes:

1. Data includes Flood Zone AE only.
2. Base Risk 1 = 1-Story, \$175k Coverage A, Frame, 1995, Not Elevated;  
Base Risk 2 = 1-Story, \$175k Coverage A, Frame, 1995, Elevated.
3. Column (4) = (2) x (1 + contingency) / (1 - Expense), where contingency is 10% and expense is 39.5%

National Association of Realtors  
Summary Statistics by Relative Elevation  
Ocean County, New Jersey

Flood Zone VE

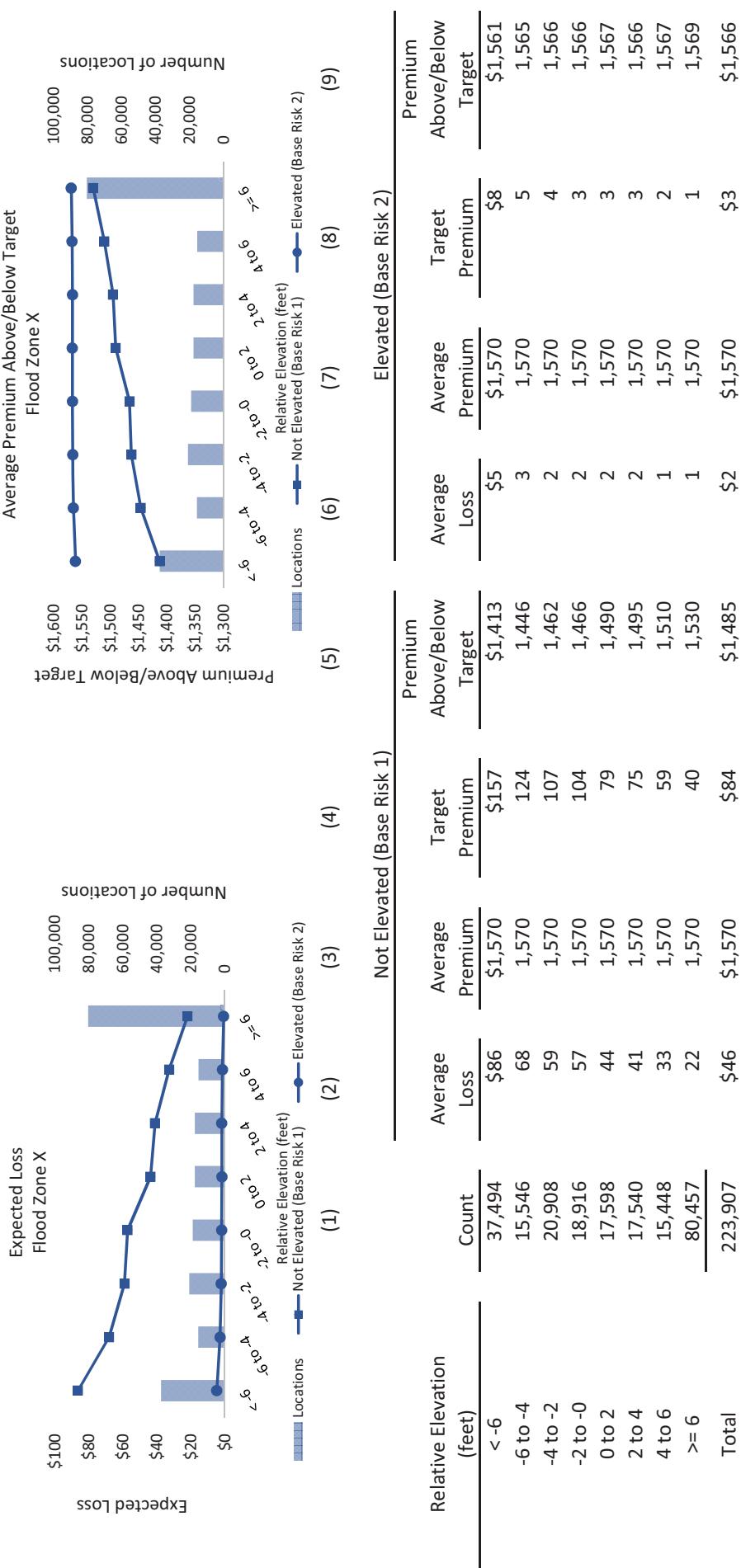


Notes:

1. Data includes Flood Zone VE only.
2. Base Risk 1 = 1-Story, \$175k Coverage A, Frame, 1995, Not Elevated;  
Base Risk 2 = 1-Story, \$175k Coverage A, Frame, 1995, Elevated.
3. Column (4) = (2) x (1 + contingency) / (1 - Expense), where contingency is 20% and expense is 39.5%

National Association of Realtors  
Summary Statistics by Relative Elevation  
Ocean County, New Jersey

Flood Zone X

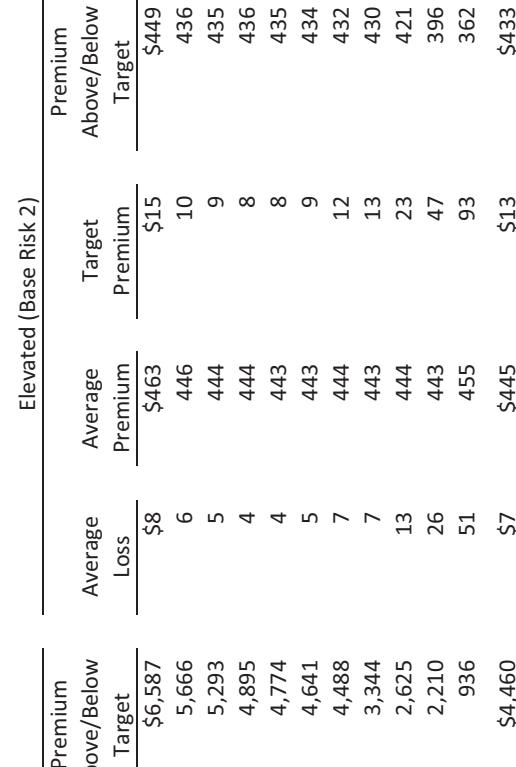
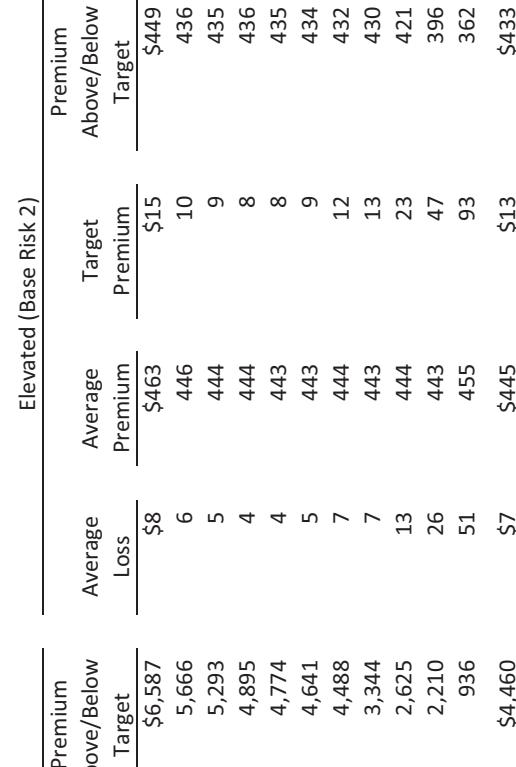
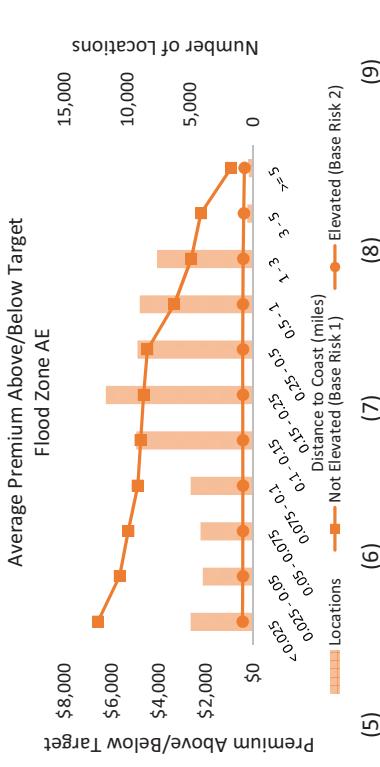
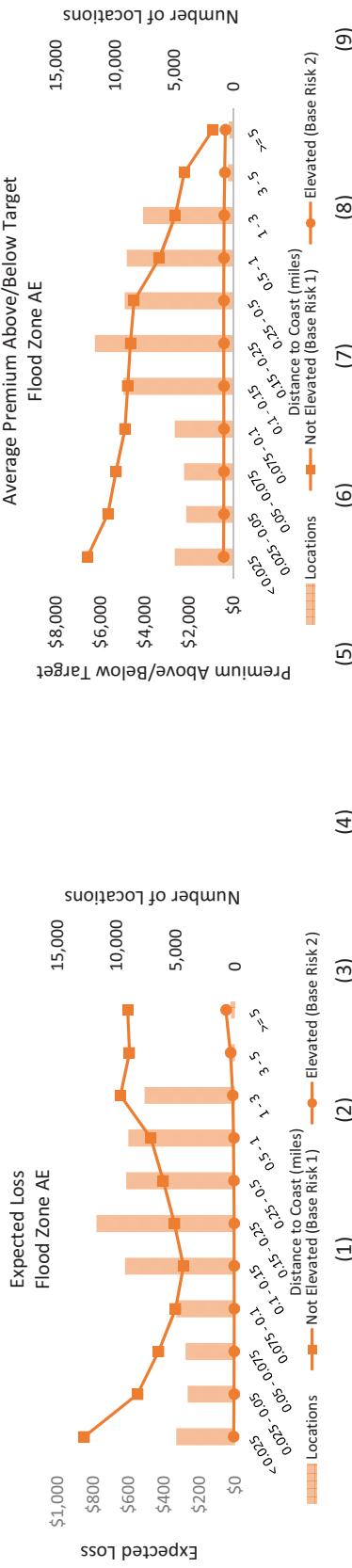


Notes:

1. Data includes Flood Zone X only.
2. Base Risk 1 = 1-Story, \$175k Coverage A, Frame, 1995, Not Elevated;  
Base Risk 2 = 1-Story, \$175k Coverage A, Frame, 1995, Elevated.
3. Column (4) = (2) x (1 + contingency) / (1 - Expense), where contingency is 10% and expense is 39.5%

National Association of Realtors  
Summary Statistics by Distance to Coast  
Ocean County, New Jersey

Flood Zone AE

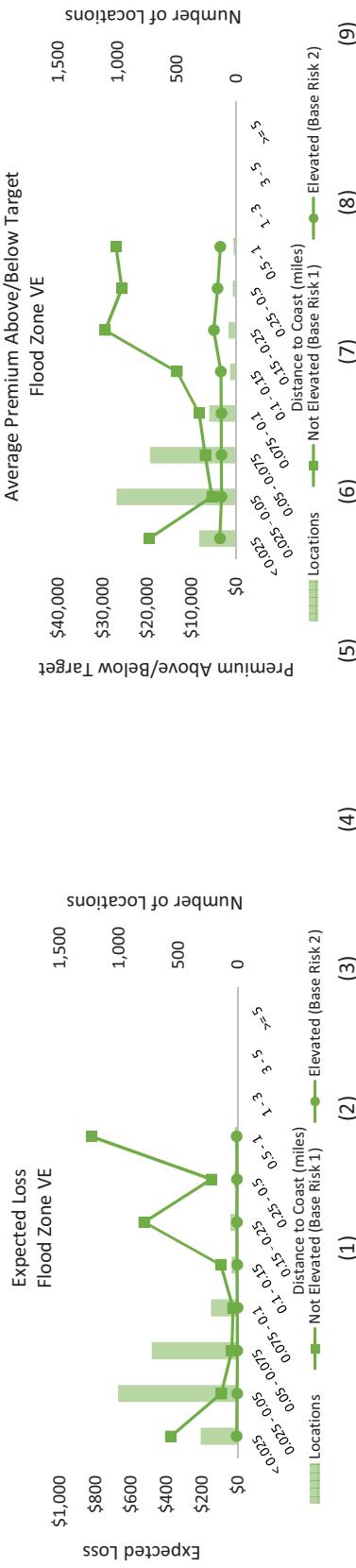


Notes:

1. Data includes Flood Zone AE only.
2. Base Risk 1 = 1-Story, \$175k Coverage A, Frame, 1995, Not Elevated;  
Base Risk 2 = 1-Story, \$175k Coverage A, Frame, 1995, Elevated.
3. Column (4) = (2) x (1 + contingency) / (1 - Expense), where contingency is 10% and expense is 39.5%

National Association of Realtors  
Summary Statistics by Distance to Coast  
Ocean County, New Jersey

Flood Zone VE



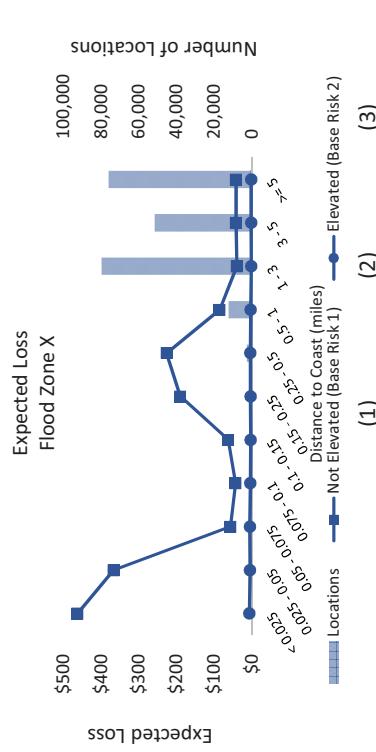
Distance to Coast (miles)	Not Elevated (Base Risk 1)			Elevated (Base Risk 2)		
	Count	Average Loss	Average Premium	Target Premium	Premium Above/Below Target	Premium Above/Below Target
<0.025	311	\$376	\$20,248	\$745	\$19,503	\$3,660
0.025 - 0.05	1,009	92	5,618	182	5,437	3,298
0.05 - 0.075	725	33	6,997	66	6,931	3,314
0.075 - 0.1	226	27	8,344	53	8,291	3,333
0.1 - 0.15	51	95	13,442	188	13,255	3,411
0.15 - 0.25	63	526	30,471	1,043	29,429	5,025
0.25 - 0.5	29	148	25,961	293	25,668	4,174
0.5 - 1	20	821	28,601	1,629	26,972	3,566
1 - 3	0	0	0	0	0	0
3 - 5	0	0	0	0	0	0
>= 5	0	0	0	0	0	0
Total	2,434	\$122	\$9,390	\$243	\$9,147	\$7
					\$3,419	\$3,412

Notes:

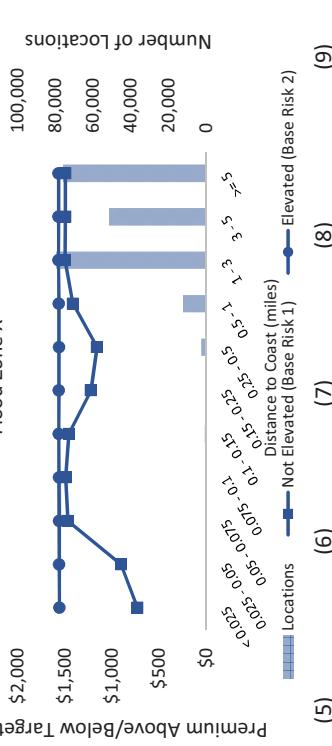
1. Data includes Flood Zone VE only.
2. Base Risk 1 = 1-Story, \$175k Coverage A, Frame, 1995, Not Elevated;  
Base Risk 2 = 1-Story, \$175k Coverage A, Frame, 1995, Elevated.
3. Column (4) = (2) x (1 + contingency) / (1 - Expense), where contingency is 20% and expense is 39.5%

National Association of Realtors  
Summary Statistics by Distance to Coast  
Ocean County, New Jersey

Flood Zone X



Average Premium Above/Below Target  
Flood Zone X



Not Elevated (Base Risk 1)

Distance to Coast (miles)	Count	Average Loss	Average Premium	Not Elevated (Base Risk 1)		Elevated (Base Risk 2)	
				Target Premium	Premium Above/Below Target	Average Loss	Average Premium
<0.025	102	\$463	\$1,570	\$841	\$728	\$7	\$1,570
0.025 - 0.05	67	366	1,570	666	904	5	1,570
0.05 - 0.075	124	57	1,570	103	1,467	5	1,570
0.075 - 0.1	321	43	1,570	78	1,491	4	1,570
0.1 - 0.15	698	62	1,570	113	1,456	3	1,570
0.15 - 0.25	526	190	1,570	345	1,224	4	1,570
0.25 - 0.5	2,659	226	1,570	411	1,159	4	1,570
0.5 - 1	12,298	85	1,570	155	1,415	3	1,570
1 - 3	79,687	39	1,570	72	1,498	2	1,570
3 - 5	51,522	42	1,570	76	1,494	2	1,570
>5	75,903	42	1,570	76	1,493	2	1,570
Total	223,907	\$46	\$1,570	\$84	\$1,485	\$2	\$1,570

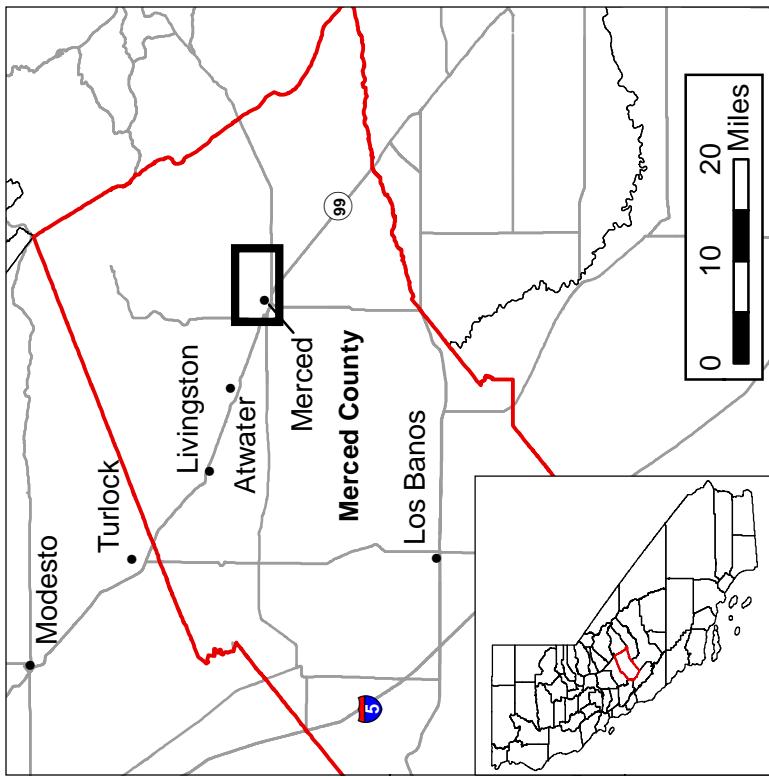
Notes:

1. Data includes Flood Zone X only.
2. Base Risk 1 = 1-Story, \$175k Coverage A, Frame, 1995, Not Elevated;  
Base Risk 2 = 1-Story, \$175k Coverage A, Frame, 1995, Elevated.
3. Column (4) = (2) x (1 + contingency) / (1 - Expense), where contingency is 10% and expense is 39.5%

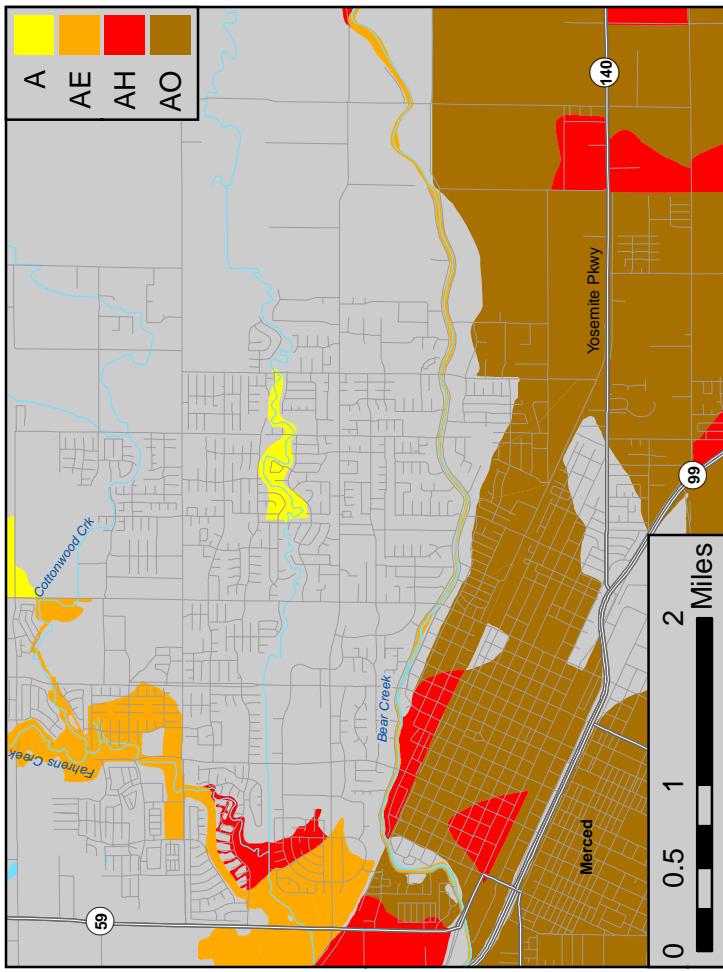
**National Association of REALTORS®**  
**Merced, California**

**Map CA-A**

**Extent of Mapped Area**



**FEMA Flood Zones**

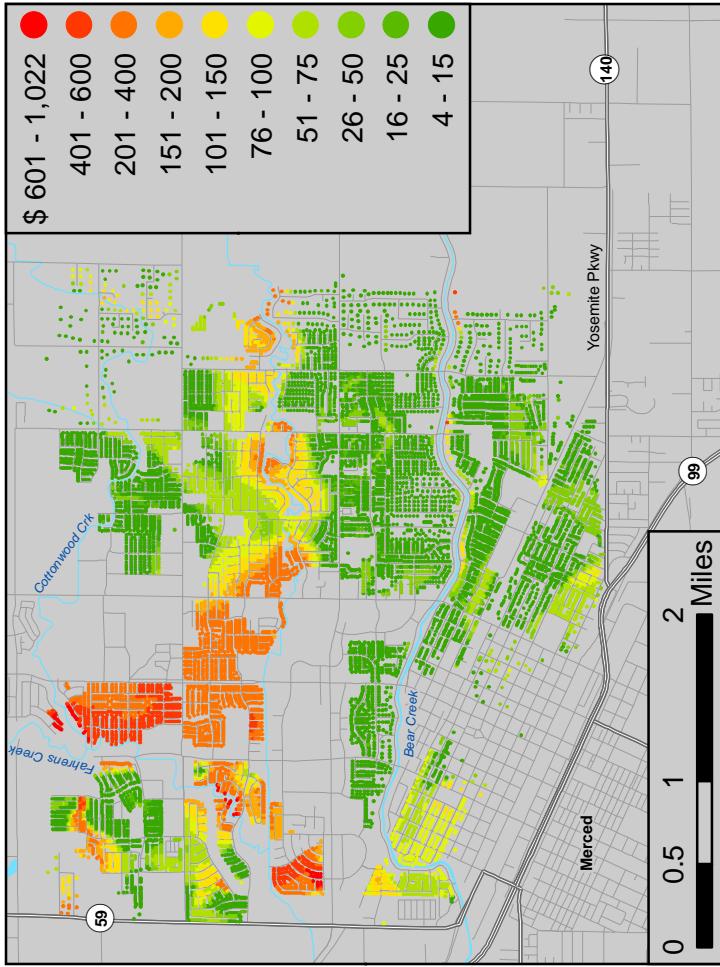


Note:  
1. Source: National Flood Hazard Layer Digital Flood Insurance Rate Maps.

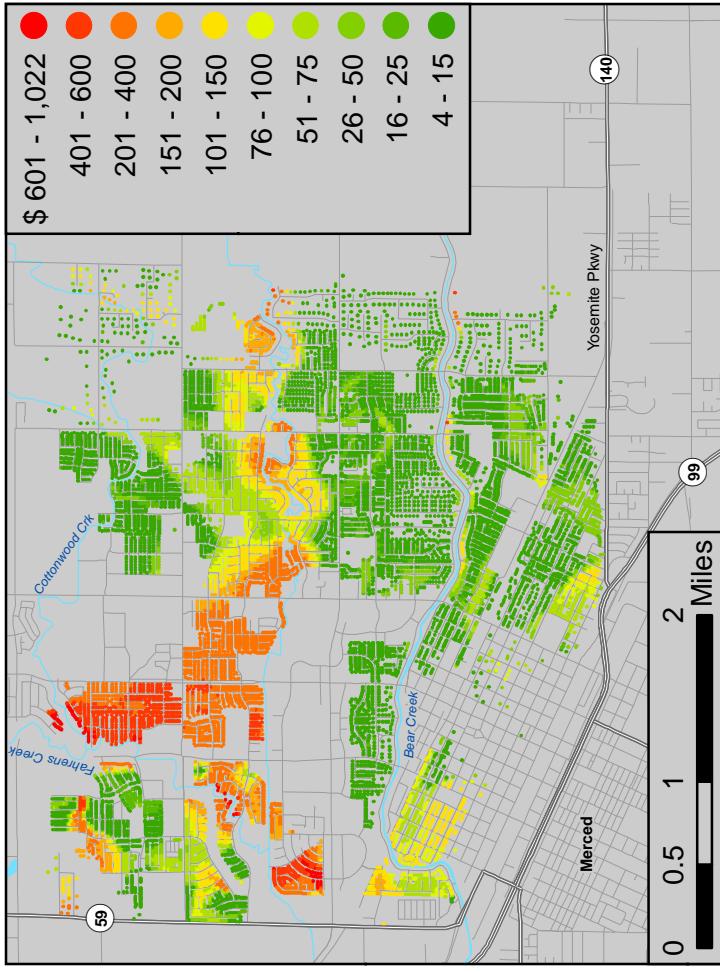
**National Association of REALTORS®**  
**Expected Losses**  
**Merced, California**

**Map CA-B**

**One Story (Base Risk 1)**



**Two Story (Base Risk 2)**

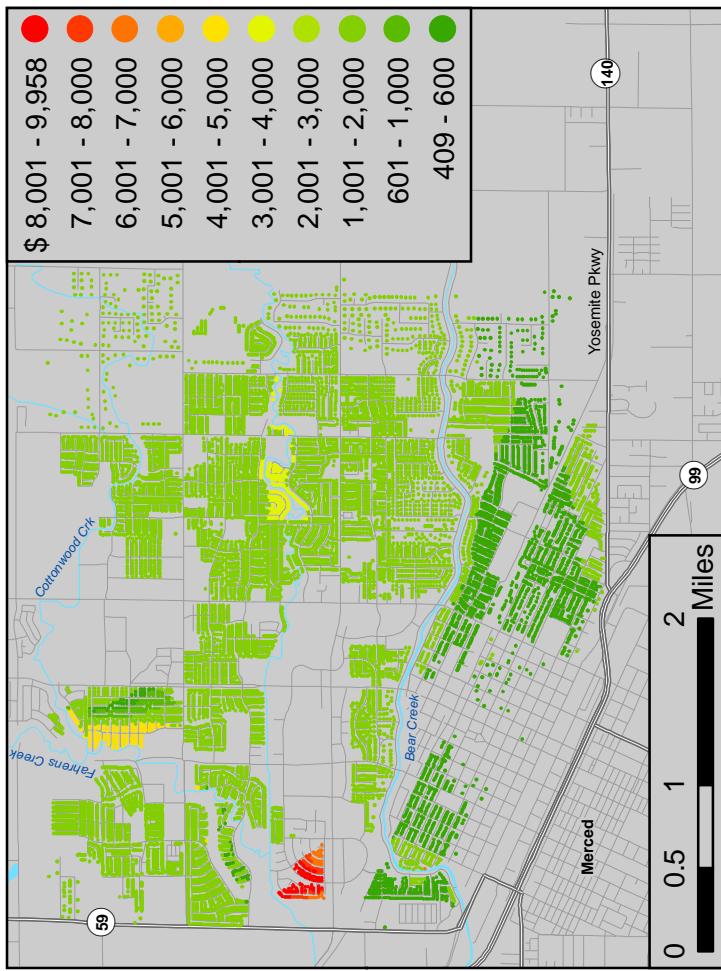


- Notes:**
1. Base Risk 1: 1-Story, \$150k Coverage A, Frame, 1995
  2. Base Risk 2: 2-Story, \$250k Coverage A, Frame, 1995

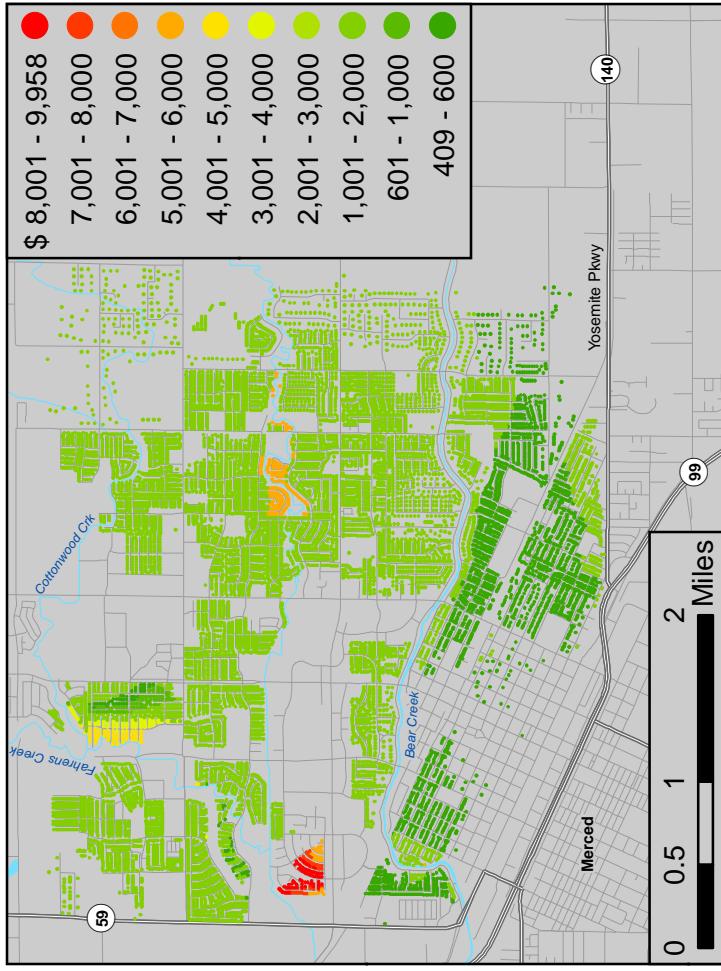
**National Association of REALTORS®**  
**NFIP Premiums**  
**Merced, California**

**Map CA-C**

**One Story (Base Risk 1)**



**Two Story (Base Risk 2)**

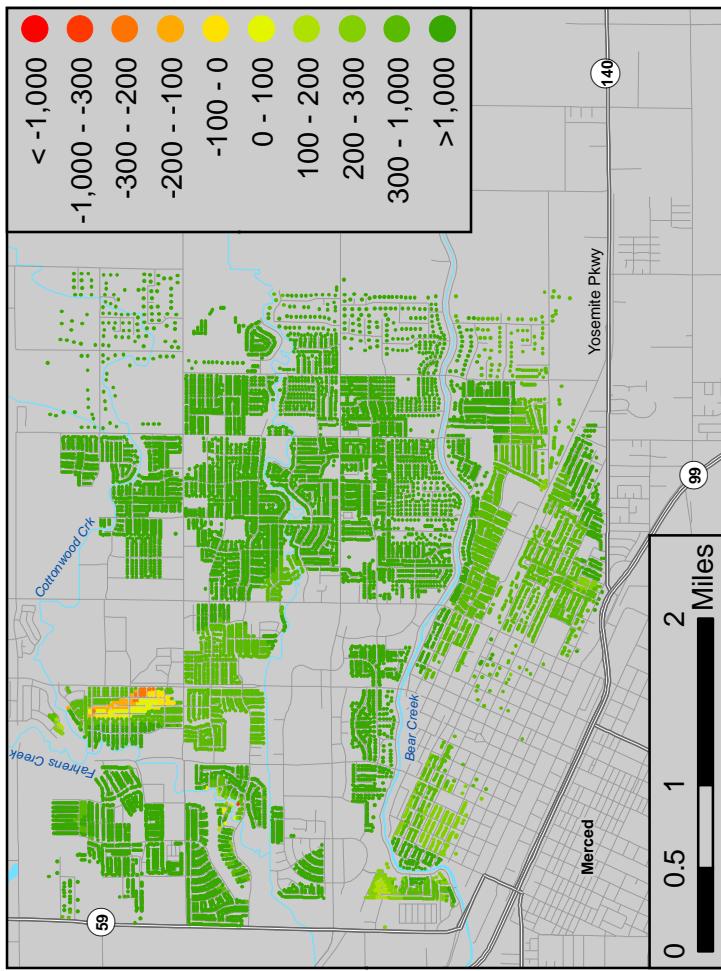


- Notes:**
1. Base Risk 1: 1-Story, \$150k Coverage A, Frame, 1995
  2. Base Risk 2: 2-Story, \$250k Coverage A, Frame, 1995

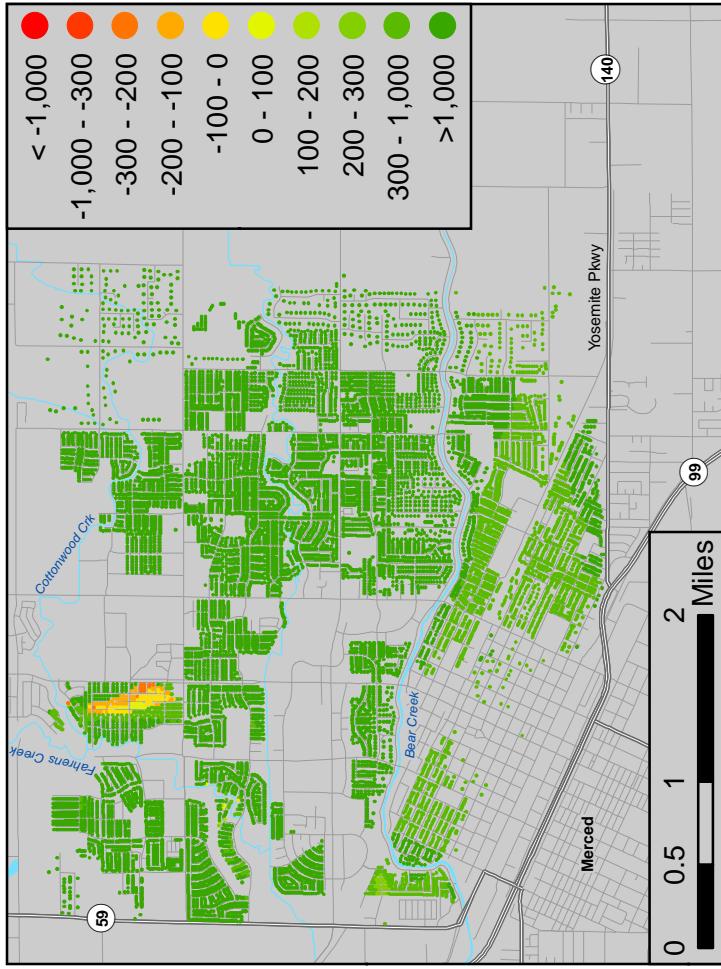
**National Association of REALTORS®**  
Premium Above/Below Target  
**Merced, California**

**Map CA-D**

**One Story (Base Risk 1)**

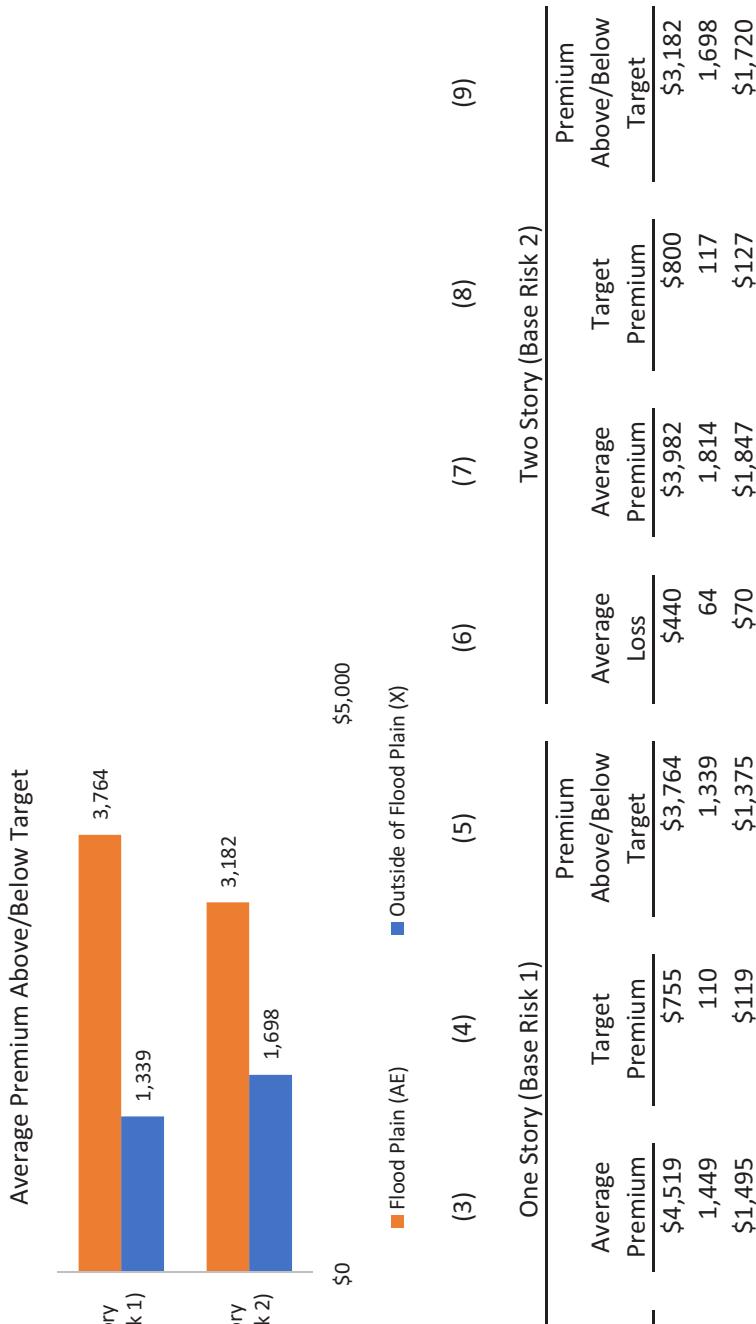


**Two Story (Base Risk 2)**



- Notes:**
1. Base Risk 1: 1-Story, \$150k Coverage A, Frame, 1995
  2. Base Risk 2: 2-Story, \$250k Coverage A, Frame, 1995

National Association of Realtors  
 Summary Statistics by Flood Zone  
 Merced County, California

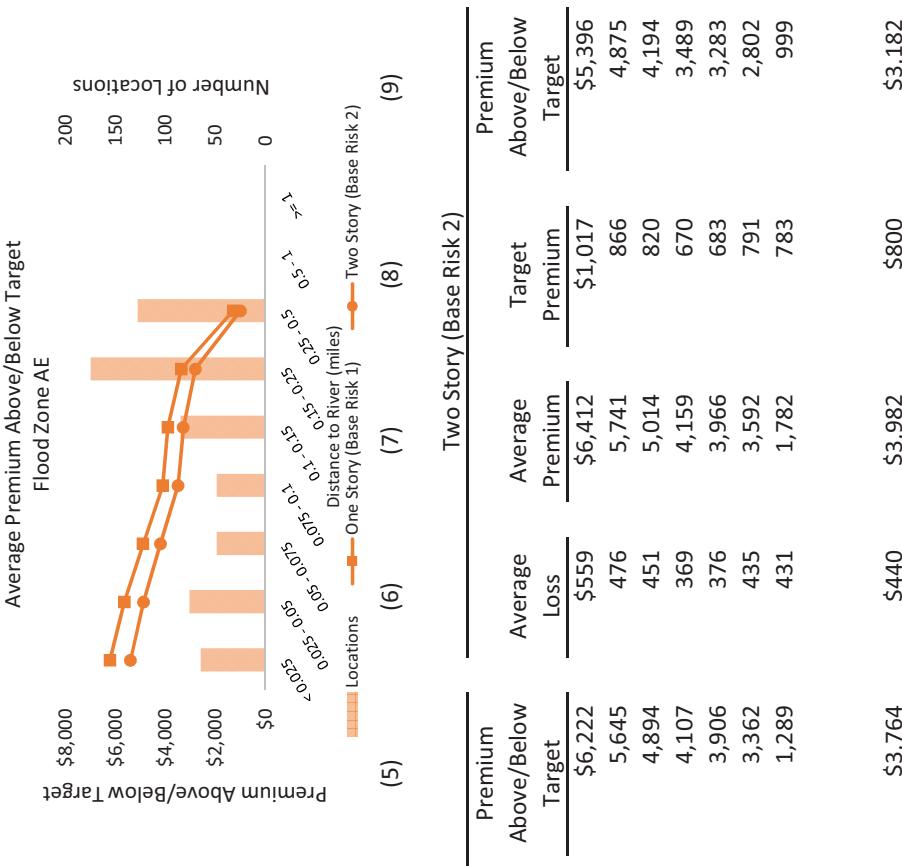
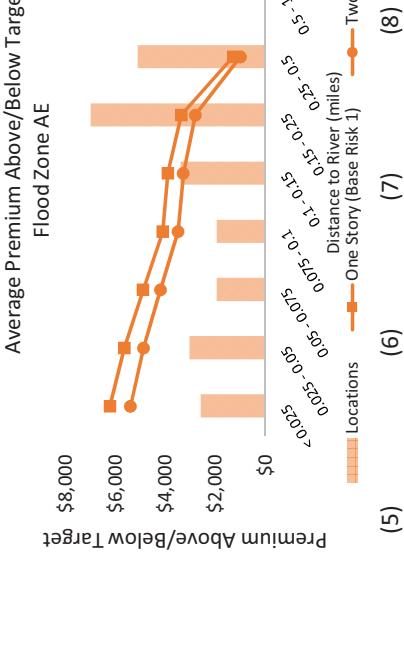
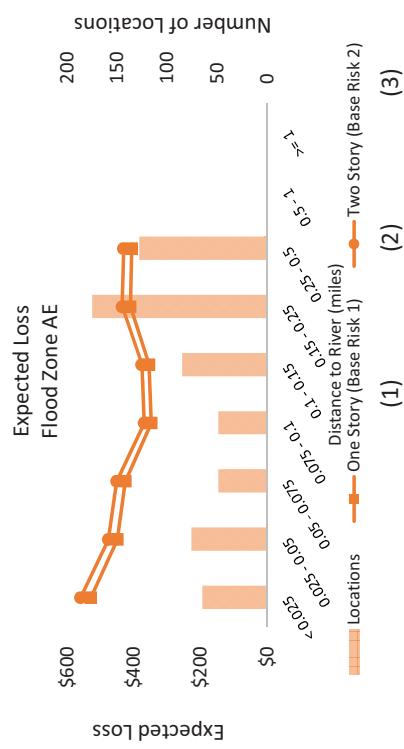


Notes:

1. Flood zones other than AE, VE, and X are excluded.
2. Base Risk 1 = 1-Story, \$150k Coverage A, Frame, 1995;  
 Base Risk 2 = 2-Story, \$250k Coverage A, Frame, 1995.
3. Column (4) = (2) x (1 + contingency) / (1 - Expense), where expense is 39.5% and contingency is 10%.

National Association of Realtors  
Summary Statistics by Distance to River  
Merced County, California

Flood Zone AE

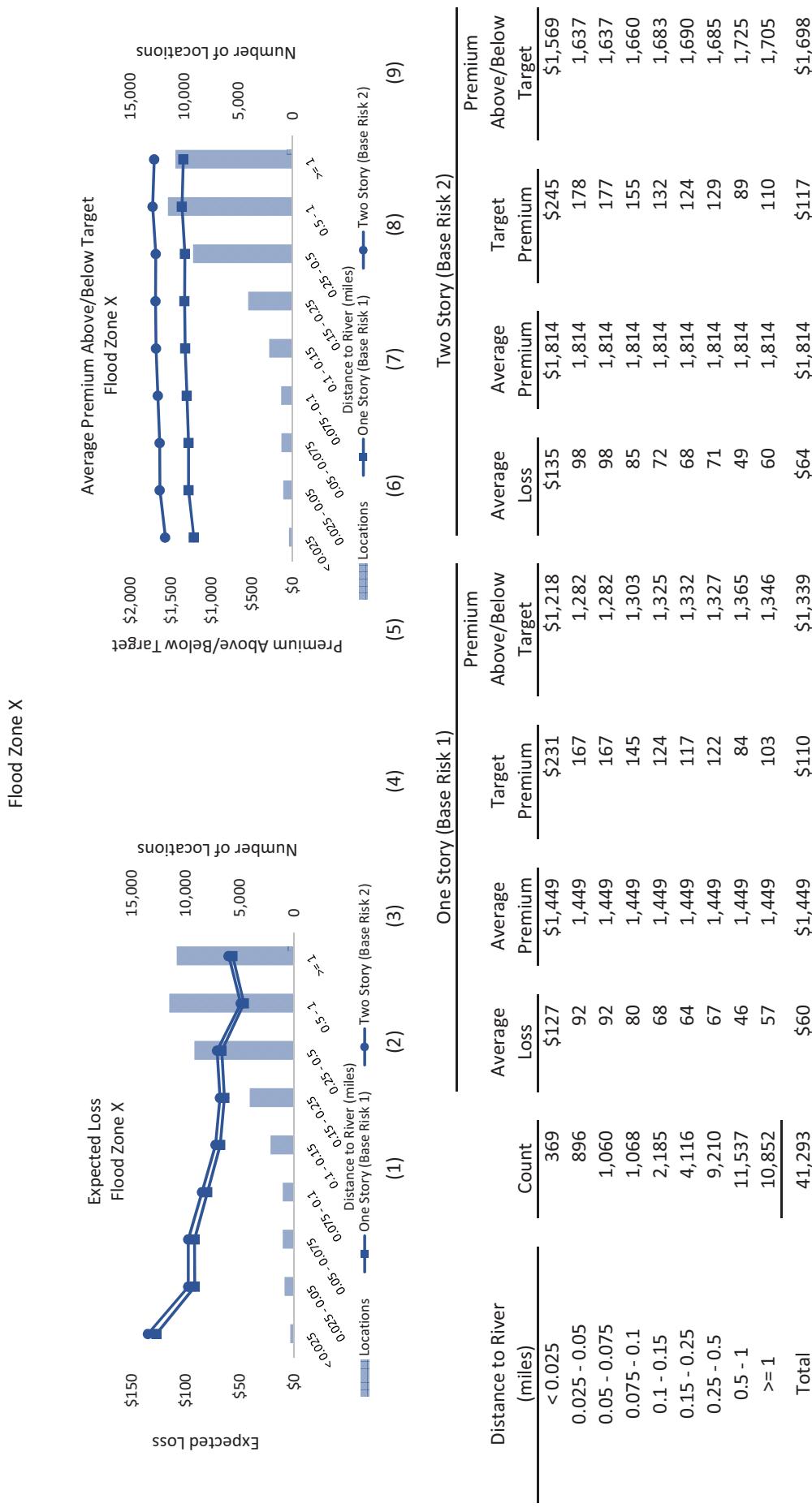


Distance to River (miles)	One Story (Base Risk 1)			Two Story (Base Risk 2)		
	Average Premium	Target Premium	Premium Above/Below Target	Average Premium	Target Premium	Premium Above/Below Target
< 0.025	\$7,183	\$961	\$6,222	\$559	\$6,412	\$1,017
0.025 - 0.05	6,463	817	5,645	476	5,741	866
0.05 - 0.075	5,668	774	4,894	451	5,014	820
0.075 - 0.1	4,739	632	4,107	369	4,159	670
0.1 - 0.15	4,550	644	3,906	376	3,966	683
0.15 - 0.25	4,108	746	3,362	435	3,592	791
0.25 - 0.5	2,028	738	1,289	431	1,782	783
0.5 - 1	0	0	0	0	0	0
Total	\$4,519	\$755	\$3,764	\$440	\$3,982	\$800
						\$3,182

Notes:

1. Data includes Flood Zone AE only.
2. Base Risk 1 = 1-Story, \$150k Coverage A, Frame, 1995;  
Base Risk 2 = 2-Story, \$250k Coverage A, Frame, 1995.
3. Column (4) = (2) x (1 + contingency) / (1 - Expense), where contingency is 10% and expense is 39.5%

National Association of Realtors  
Summary Statistics by Distance to River  
Merced County, California

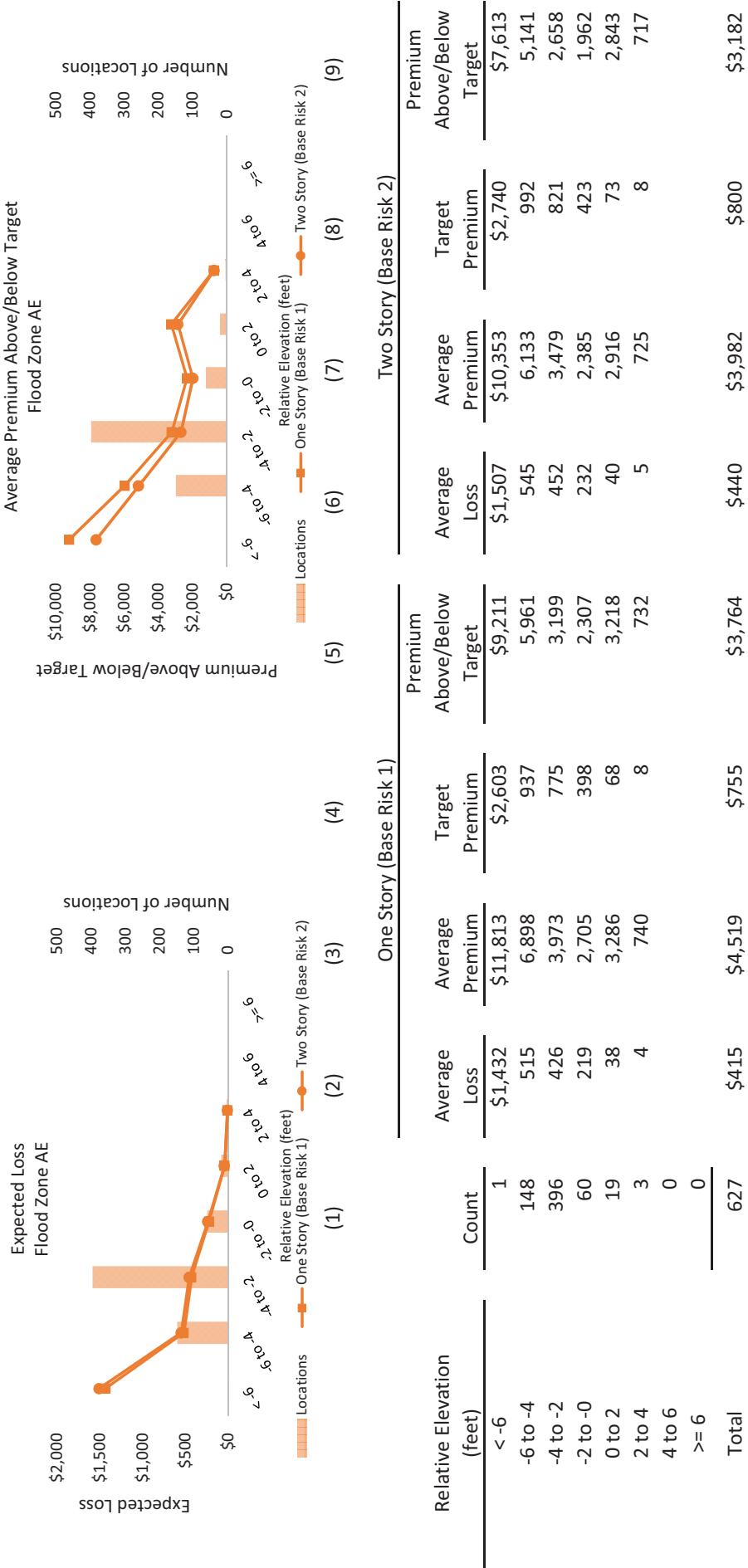


Notes:

1. Data includes Flood Zone X only.
2. Base Risk 1 = 1-Story, \$150k Coverage A, Frame, 1995;  
Base Risk 2 = 2-Story, \$250k Coverage A, Frame, 1995.
3. Column (4) = (2) x (1 + contingency) / (1 - Expense), where contingency is 10% and expense is 39.5%

National Association of Realtors  
Summary Statistics by Relative Elevation  
Merced County, California

Flood Zone AE

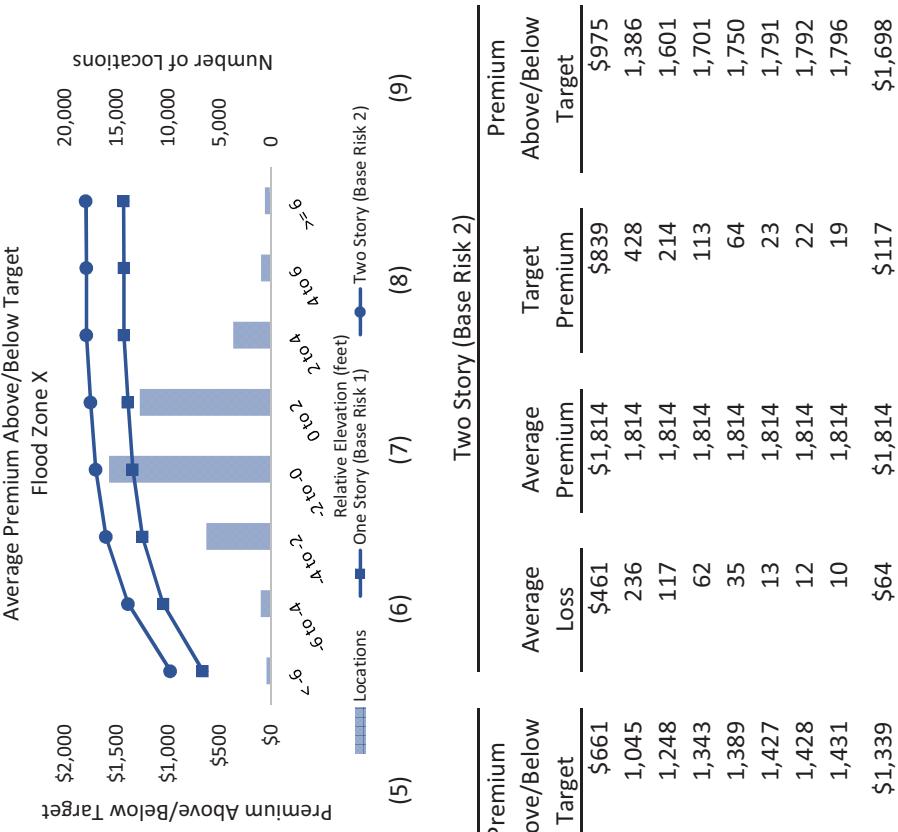
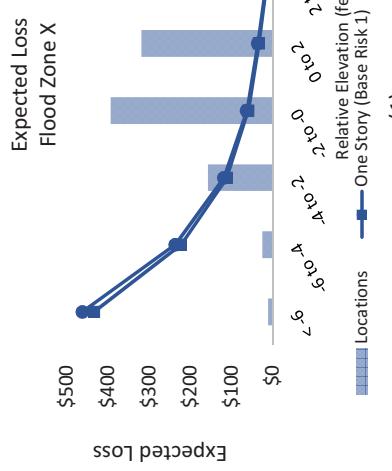


Notes:

1. Data includes Flood Zone AE only.
2. Base Risk 1 = 1-Story, \$150k Coverage A, Frame, 1995;  
Base Risk 2 = 2-Story, \$250k Coverage A, Frame, 1995.
3. Column (4) = (2) x (1 + contingency) / (1 - Expense), where contingency is 10% and expense is 39.5%

National Association of Realtors  
Summary Statistics by Relative Elevation  
Merced County, California

Flood Zone X



Relative Elevation (feet)	Count	One Story (Base Risk 1)			Two Story (Base Risk 2)		
		Average Loss	Premium	Above/Below Target	Average Loss	Premium	Above/Below Target
< -6	416	\$433	\$788	\$661	\$461	\$1,814	\$839
-6 to -4	968	222	1,449	1,045	236	1,814	428
-4 to -2	6,273	111	1,449	201	1,248	117	1,814
-2 to 0	15,706	58	1,449	106	1,343	62	1,814
0 to 2	12,722	33	1,449	60	1,389	35	1,814
2 to 4	3,654	12	1,449	22	1,427	13	1,814
4 to 6	963	12	1,449	21	1,428	12	1,814
>= 6	591	10	1,449	18	1,431	10	1,814
Total	41,293	\$60	\$1,449	\$110	\$1,339	\$64	\$1,814

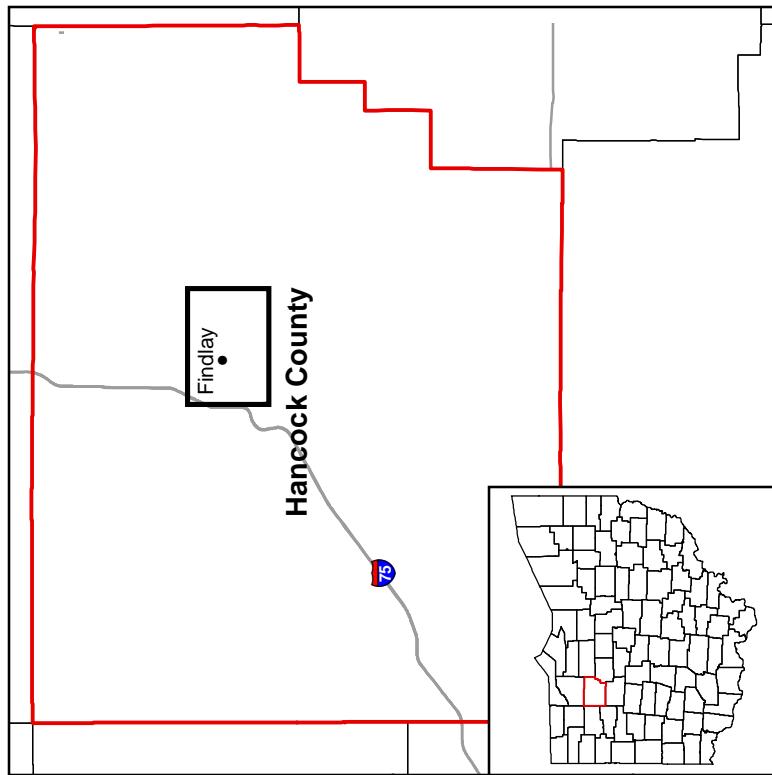
Notes:

1. Data includes Flood Zone X only.
2. Base Risk 1 = 1-Story, \$150k Coverage A, Frame, 1995;  
Base Risk 2 = 2-Story, \$250k Coverage A, Frame, 1995.
3. Column (4) = (2) x (1 + contingency) / (1 - expense), where contingency is 10% and expense is 39.5%

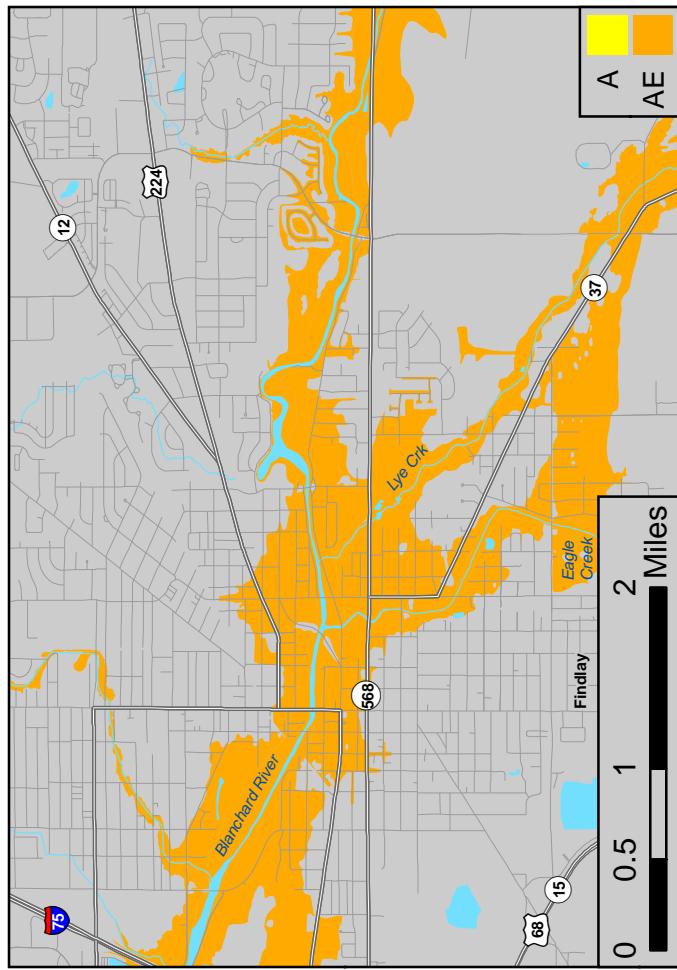
National Association of REALTORS®  
Hancock County, Ohio

Map OH-A

Extent of Mapped Area



FEMA Flood Zones

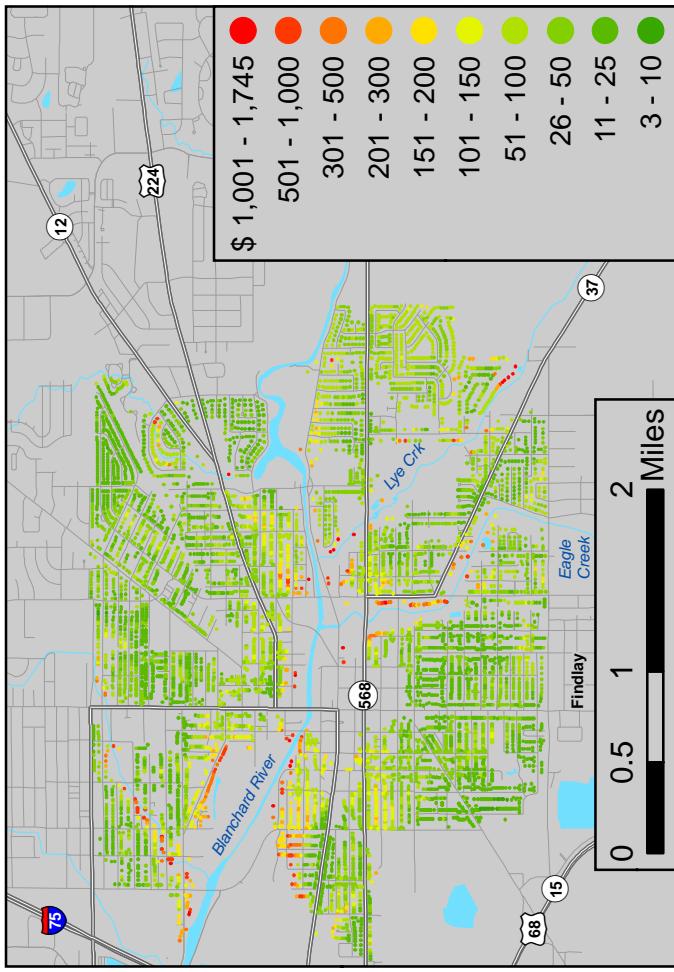


Note:  
1. Source: National Flood Hazard Layer Digital Flood Insurance Rate Maps.

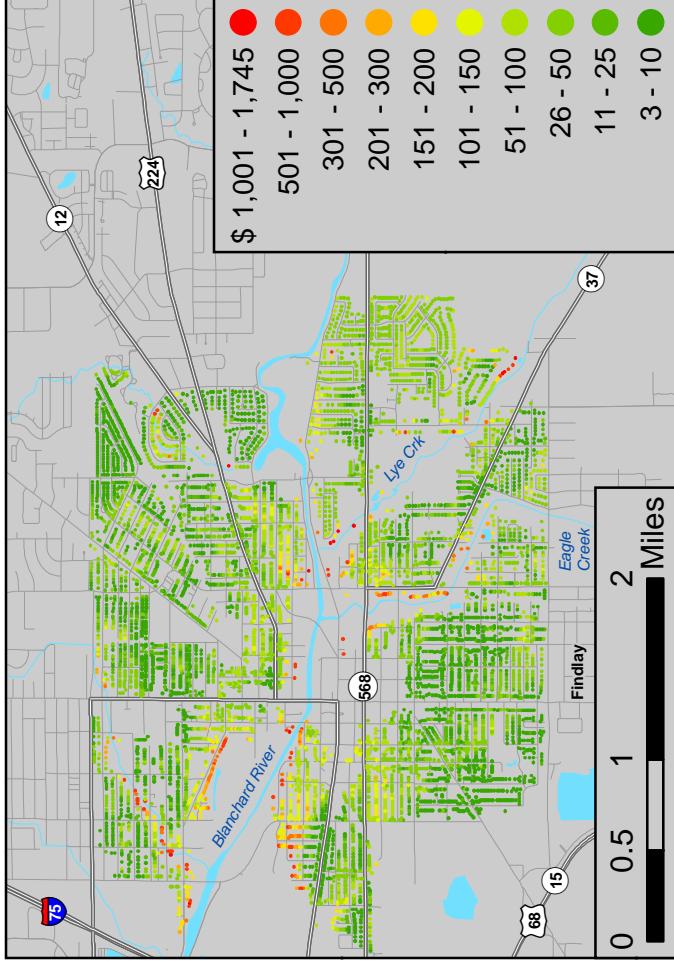
National Association of REALTORS®  
Expected Losses  
Hancock County, Ohio

Map OH-B

Basement (Base Risk 1)



No Basement (Base Risk 2)

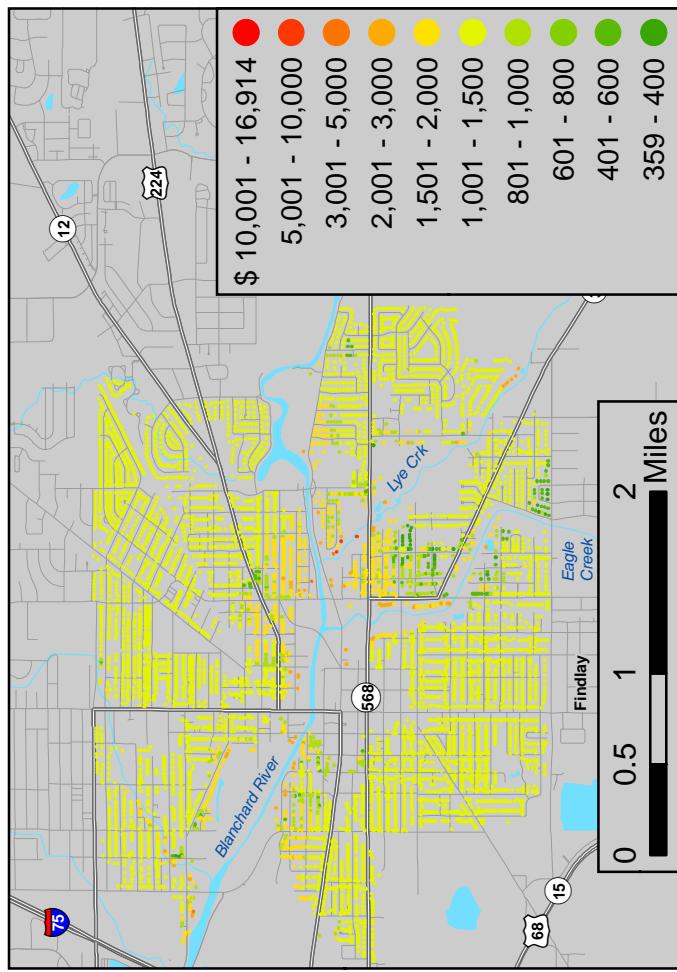


- Notes:
1. Base Risk 1: 1-Story, \$100k Coverage A, Frame, 1995, Basement
  2. Base Risk 2: 1-Story, \$100k Coverage A, Frame, 1995, No Basement

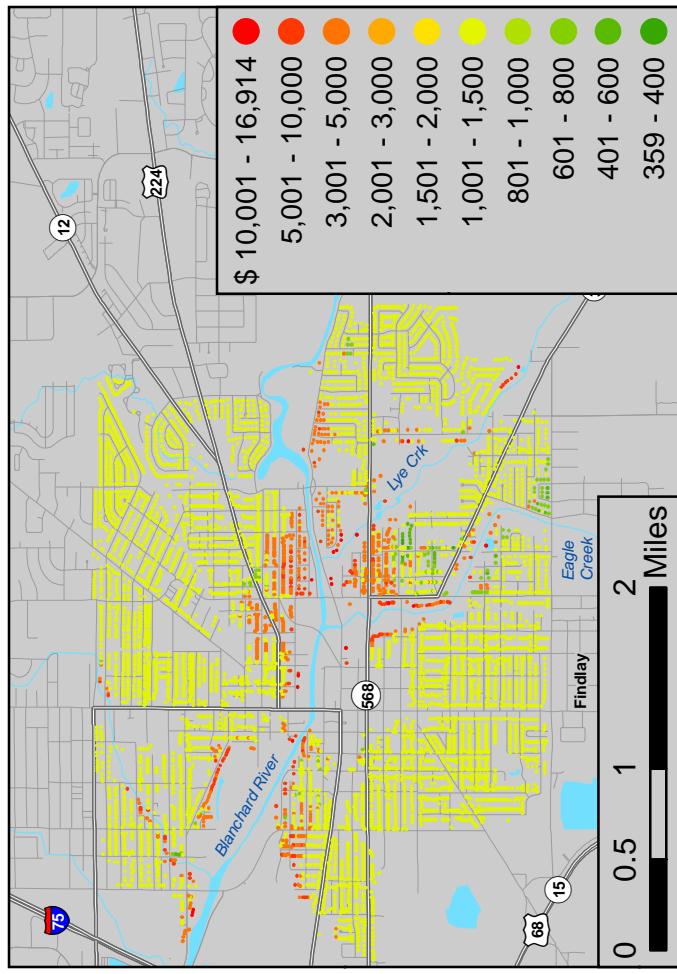
National Association of REALTORS®  
NFIP Premium  
Hancock County, Ohio

Map OH-C

Basement (Base Risk 1)



No Basement (Base Risk 2)



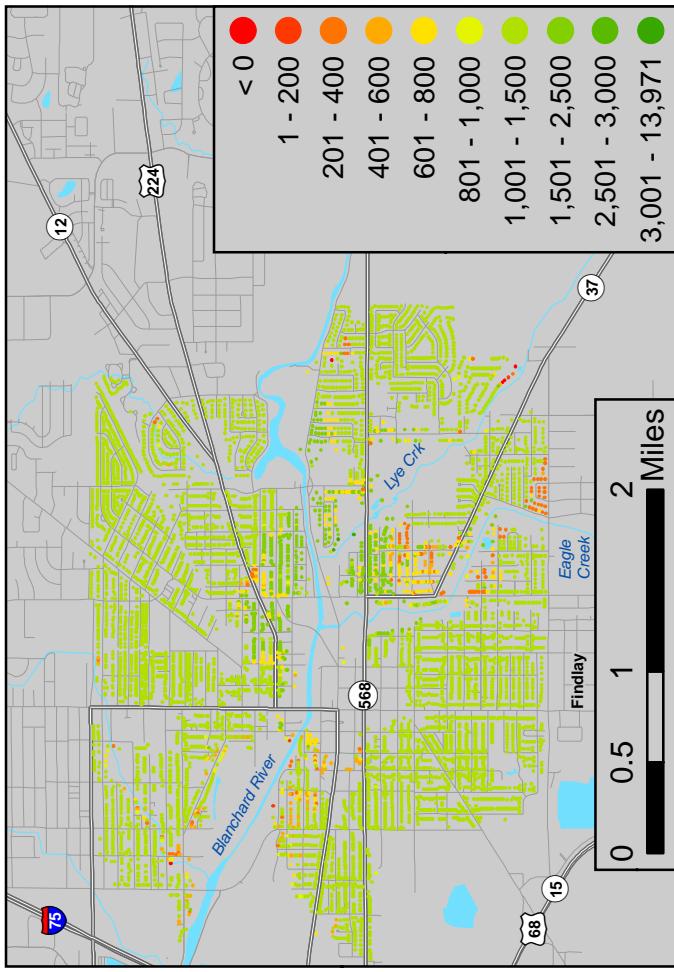
Notes:

1. Base Risk 1: 1-Story, \$100k Coverage A, Frame, 1995, Basement
2. Base Risk 2: 1-Story, \$100k Coverage A, Frame, 1995, No Basement

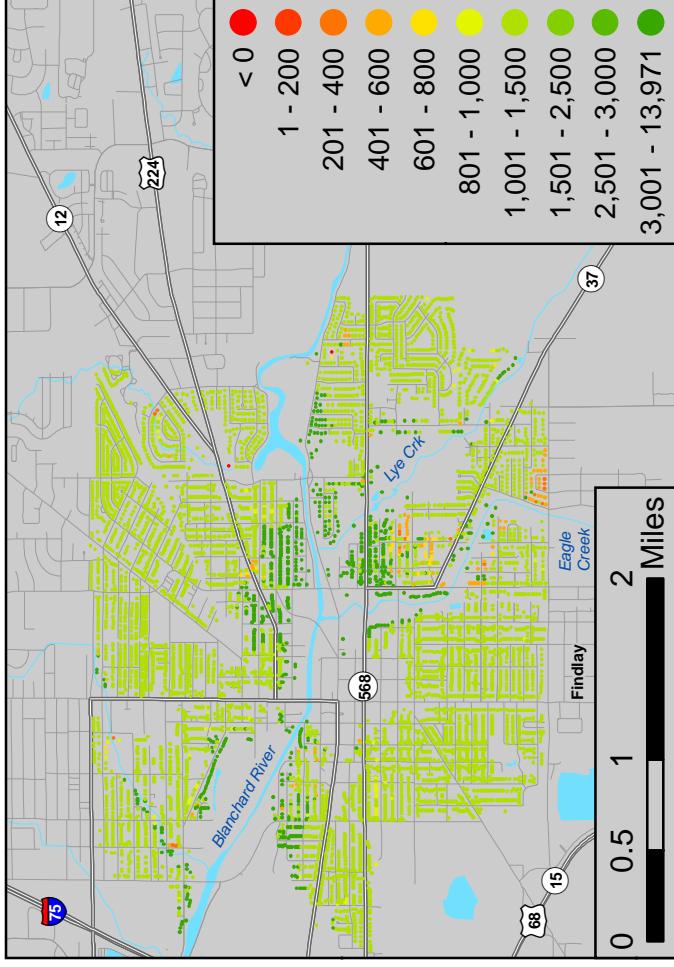
**National Association of REALTORS®**  
**Premium Above/Below Target**  
**Hancock County, Ohio**

**Map OH-D**

**Basement (Base Risk 1)**



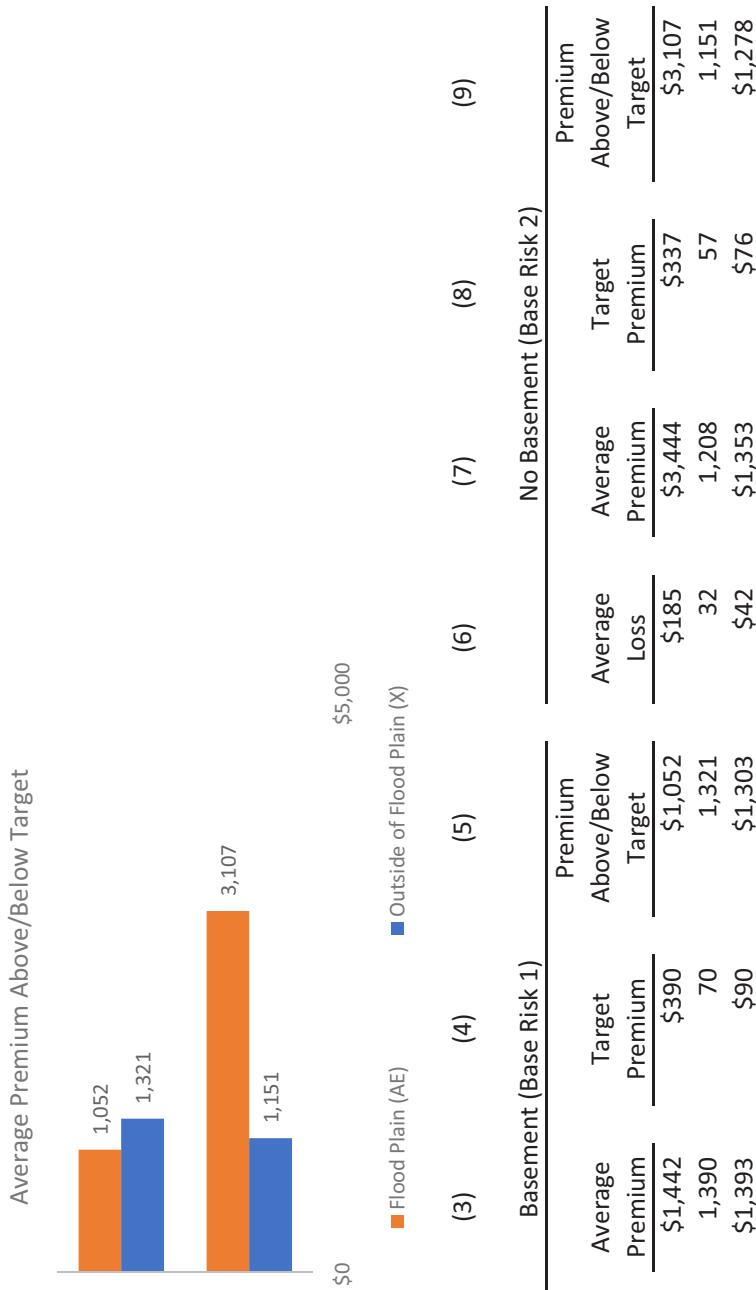
**No Basement (Base Risk 2)**



**Notes:**

1. Base Risk 1: 1-Story, \$100k Coverage A, Frame, 1995, Basement
2. Base Risk 2: 1-Story, \$100k Coverage A, Frame, 1995, No Basement

National Association of Realtors  
 Summary Statistics by Flood Zone  
 Hancock County, Ohio



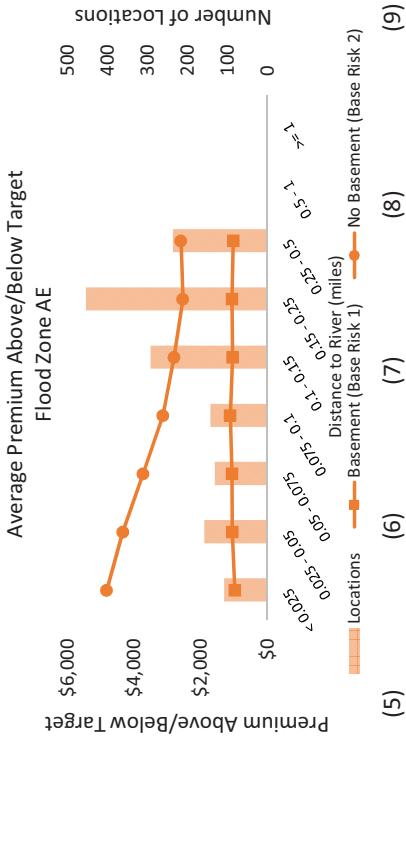
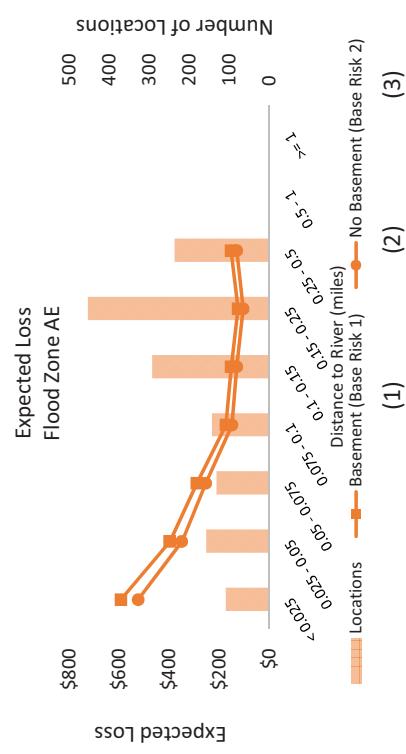
	Basement (Base Risk 1)				No Basement (Base Risk 2)				Premium Above/Below Target
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Flood Zone (Note 1)									
Count	1,526	\$214	Average Loss	Average Premium	Target Premium	Average Loss	Average Premium	Target Premium	Premium Above/Below Target
Flood Plain (AE)	21,997	\$1,442	\$390	\$1,052	\$185	\$3,444	\$337	\$337	\$3,107
Outside of Flood Plain (X)	23,523	38	1,390	70	32	1,208	57	57	1,151
Total		\$50	\$1,393	\$90	\$1,303	\$42	\$1,353	\$76	\$1,278

Notes:

1. Flood zones other than AE, VE, and X are excluded.
2. Base Risk 1 = 1-Story, \$100k Coverage A, Frame, 1995, Basement;  
 Base Risk 2 = 1-Story, \$100k Coverage A, Frame, 1995, No Basement.
3. Column (4) = (2) x (1 + contingency) / (1 - Expense), where expense is 39.5% and contingency is 10%.

National Association of Realtors  
Summary Statistics by Distance to River  
Hancock County, Ohio

Flood Zone AE



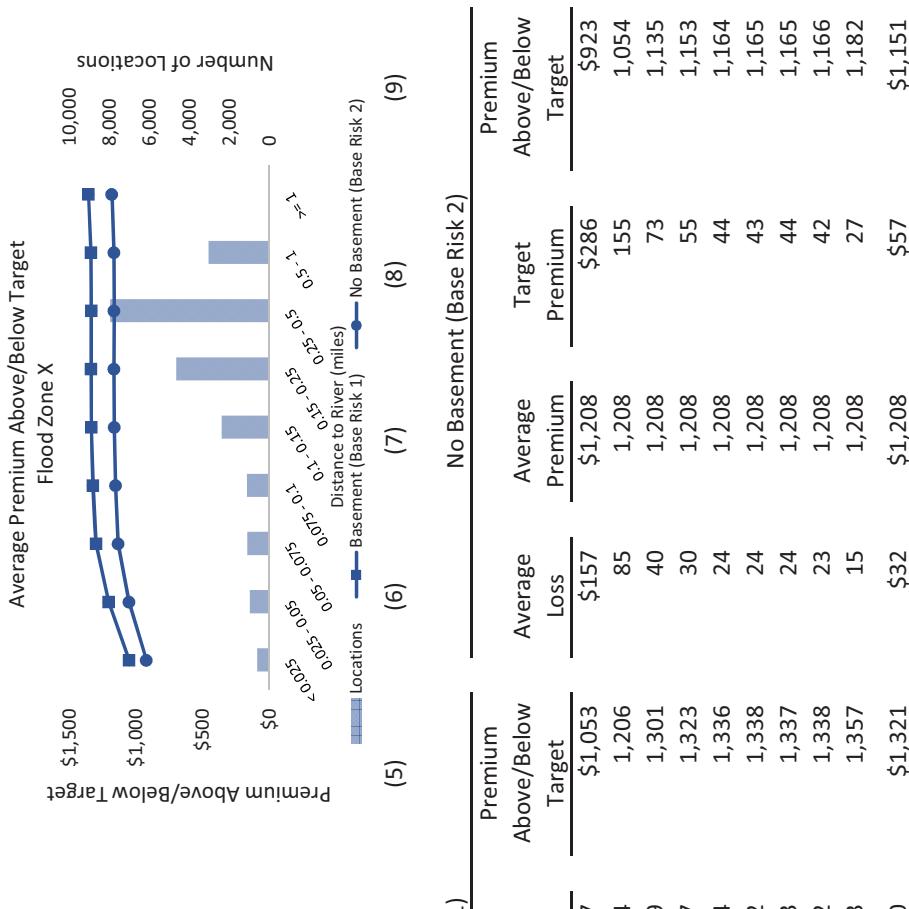
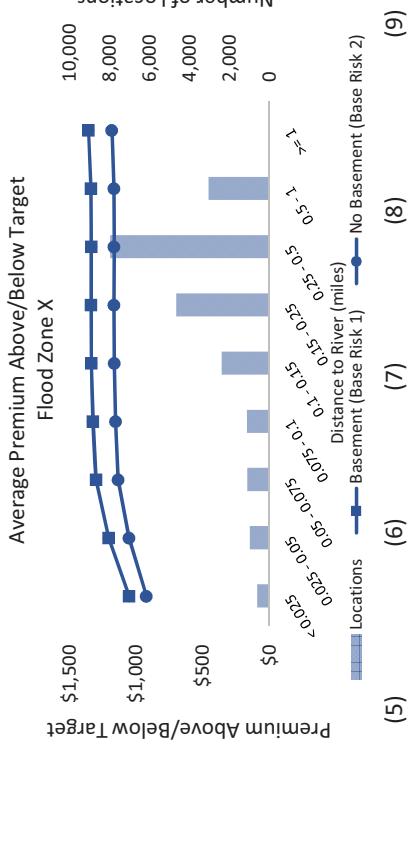
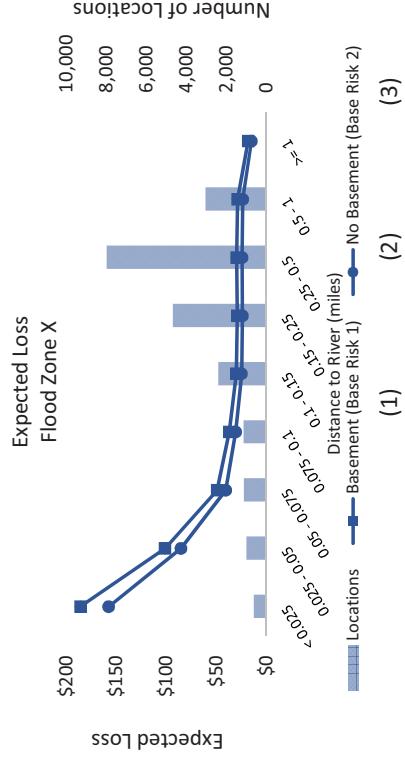
Distance to River (miles)	Basement (Base Risk 1)			No Basement (Base Risk 2)		
	Count	Average Loss	Premium Above/Below Target	Count	Average Loss	Premium Above/Below Target
< 0.025	109	\$2,054	\$1,076	97	\$977	\$524
0.025 - 0.05	158	1,774	723	1,051	349	4,973
0.05 - 0.075	132	1,588	525	1,063	253	4,191
0.075 - 0.1	143	1,435	315	1,120	148	3,409
0.1 - 0.15	293	1,324	276	1,048	130	3,041
0.15 - 0.25	454	1,289	226	1,064	104	2,726
0.25 - 0.5	237	1,301	278	1,023	130	2,832
0.5 - 1	0	0	0	0	0	0
Total	1,526	\$214	\$1,442	900	\$1,052	\$3,444

Notes:

1. Data includes Flood Zone AE only.
2. Base Risk 1 = 1-Story, \$100k Coverage A, Frame, 1995, Basement;  
Base Risk 2 = 1-Story, \$100k Coverage A, Frame, 1995, No Basement.
3. Column (4) = (2) x (1 + contingency) / (1 - Expense), where contingency is 10% and expense is 39.5%

National Association of Realtors  
Summary Statistics by Distance to River  
Hancock County, Ohio

Flood Zone X



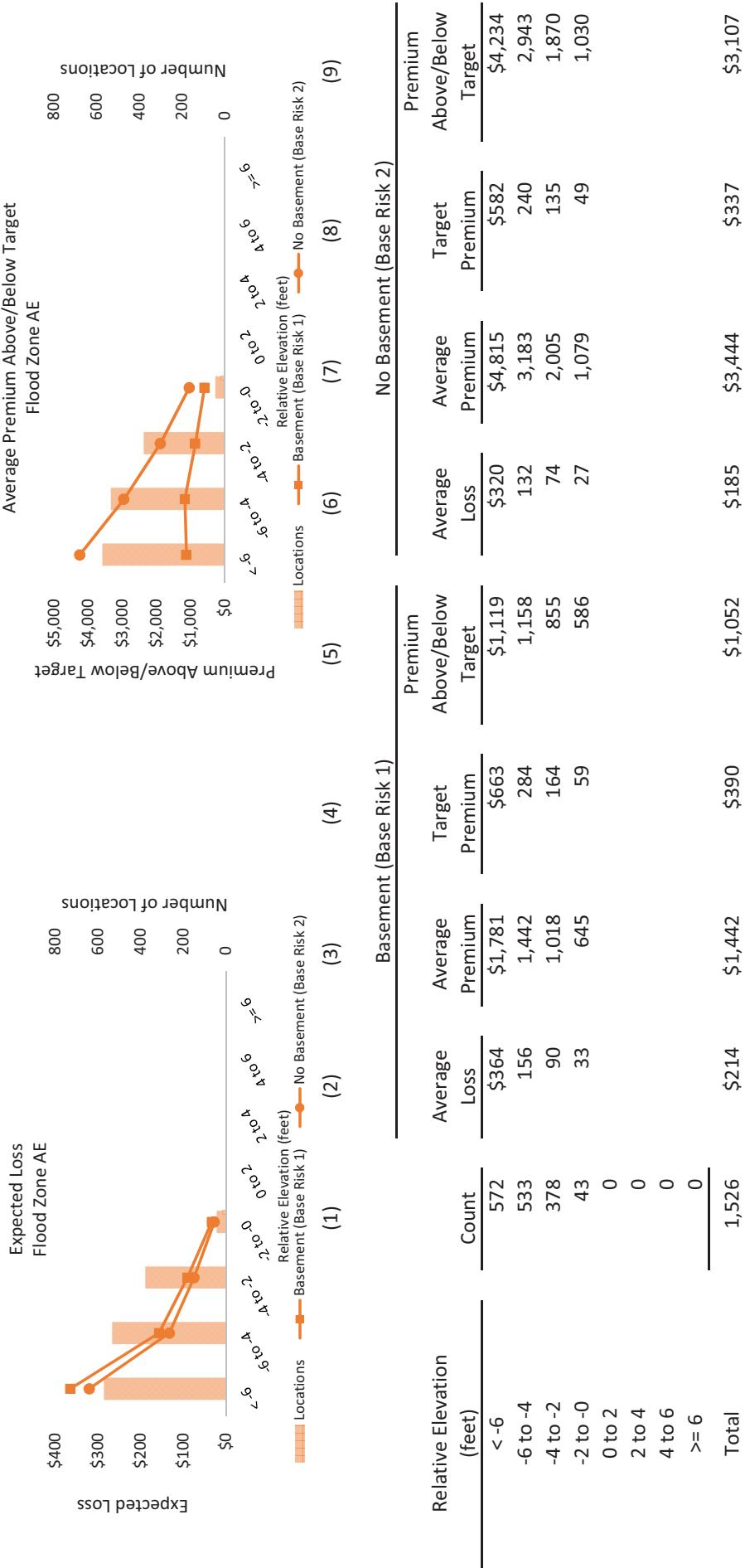
Distance to River (miles)	Basement (Base Risk 1)			No Basement (Base Risk 2)		
	Count	Average Loss	Premium	Target Premium	Average Loss	Premium
<0.025	631	\$186	\$1,390	\$337	\$1,053	\$1,208
0.025 - 0.05	987	101	1,390	184	1,206	85
0.05 - 0.075	1,123	49	1,390	89	1,301	40
0.075 - 0.1	1,132	37	1,390	67	1,323	30
0.1 - 0.15	2,400	30	1,390	54	1,336	24
0.15 - 0.25	4,676	29	1,390	52	1,338	24
0.25 - 0.5	7,978	29	1,390	53	1,337	24
0.5 - 1	3,048	29	1,390	52	1,338	23
>= 1	22	18	1,390	33	1,357	15
Total	21,997	\$38	\$1,390	\$70	\$1,321	\$1,208

Notes:

1. Data includes Flood Zone X only.
2. Base Risk 1 = 1-Story, \$100k Coverage A, Frame, 1995, Basement;  
Base Risk 2 = 1-Story, \$100k Coverage A, Frame, 1995, No Basement.
3. Column (4) = (2) x (1 + contingency) / (1 - Expense), where contingency is 10% and expense is 39.5%

National Association of Realtors  
Summary Statistics by Relative Elevation  
Hancock County, Ohio

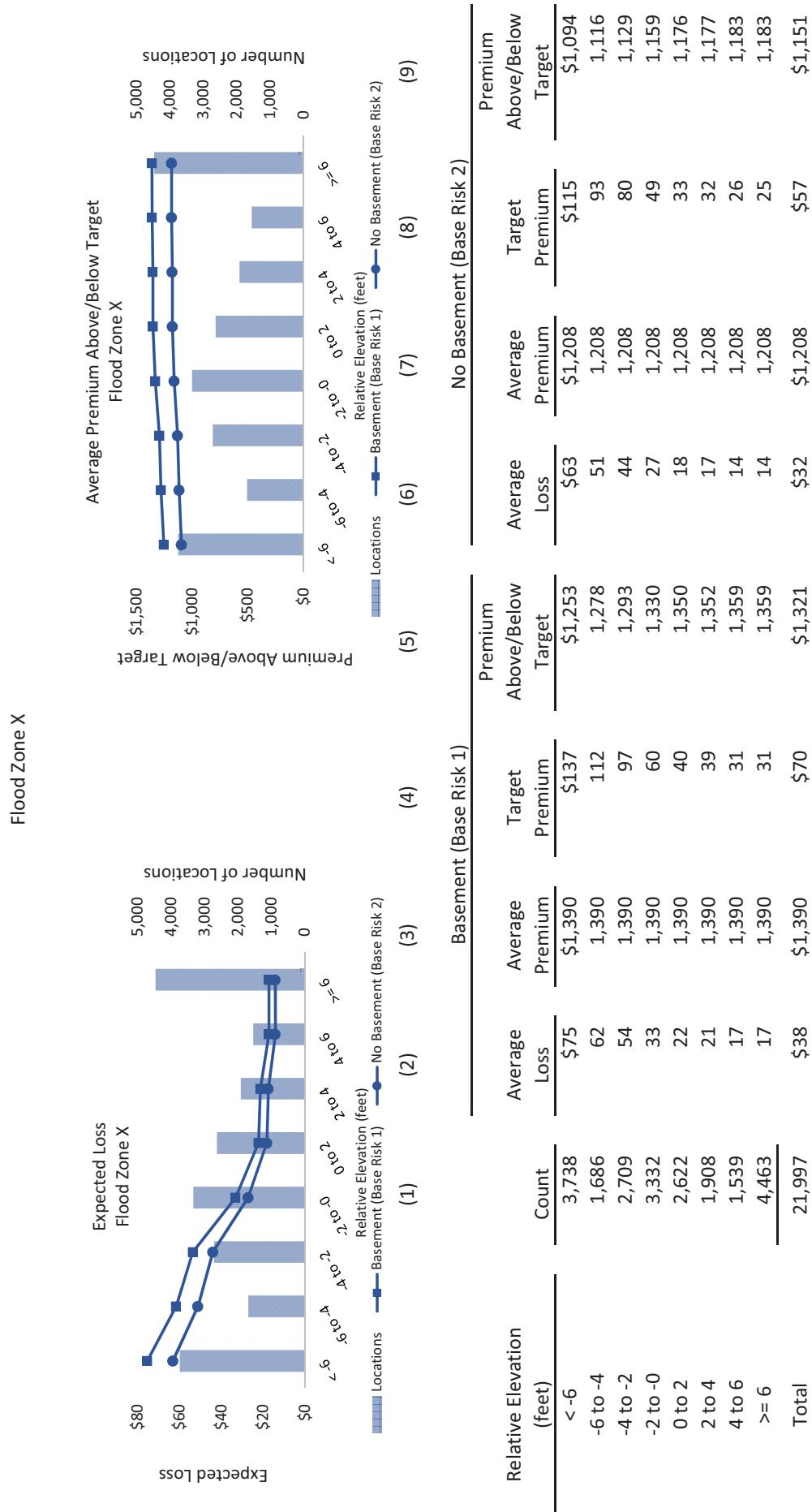
Flood Zone AE



Notes:

1. Data includes Flood Zone AE only.
2. Base Risk 1 = 1-Story, \$100k Coverage A, Frame, 1995, Basement;  
Base Risk 2 = 1-Story, \$100k Coverage A, Frame, 1995, No Basement.
3. Column (4) = (2) x (1 + contingency) / (1 - Expense), where contingency is 10% and expense is 39.5%

National Association of Realtors  
Summary Statistics by Relative Elevation  
Hancock County, Ohio



Notes:

1. Data includes Flood Zone X only.
2. Base Risk 1 = 1-Story, \$100K Coverage A, Frame, 1995, Basement;  
Base Risk 2 = 1-Story, \$100K Coverage A, Frame, 1995, No Basement.
3. Column (4) = (2) x (1 + contingency) / (1 - expense), where contingency is 10% and expense is 39.5%

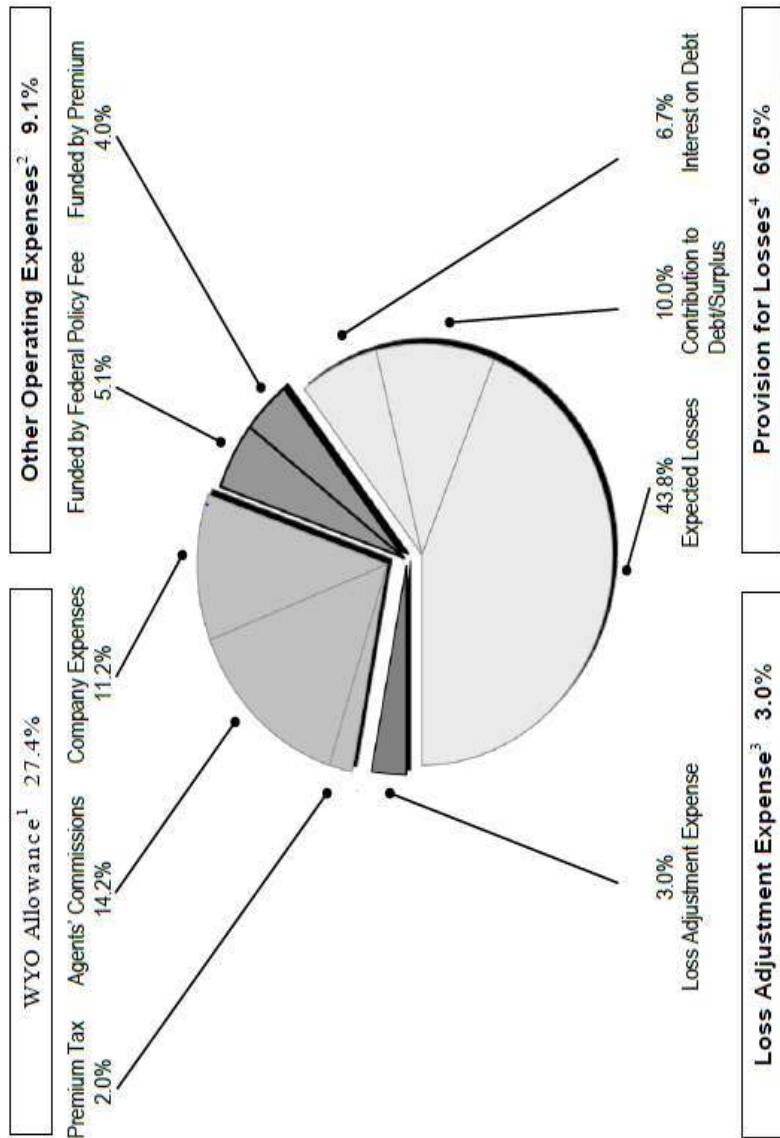
National Association of Realtors  
Expense Comparison

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	NFIP (Notes 1,2)		State Farm Homeowners (Note 3)					
	Non-Storm	Storm	Florida	California	New Jersey	Ohio	Texas	Average
	Surge Zone	Surge Zone	12.0%	10.0%	11.0%	6.0%	20.0%	11.8%
Profit	0.0%	0.0%	0.0%	2.0%	2.0%	2.0%	0.0%	1.2%
Contingency (Note 2)	5.5%	10.1%	0.0%	0.0%	0.0%	0.0%	4.2%	2.5%
Reinsurance	0.0%	0.0%	8.1%	0.0%	0.0%	0.0%	4.2%	2.5%
WYO and Operating Expense	36.5%	36.5%	34.5%	28.7%	25.3%	27.0%	24.0%	27.9%
Total Expense, Profit & Contingency,								
Excluding LAE	42.0%	46.6%	54.6%	40.7%	38.3%	35.0%	48.2%	43.4%
Loss Adjusting Expense (LAE) Ratio	3.0%	3.0%						
Total Expense, including LAE and excluding profit & contingencies.	39.5%	39.5%						

Notes:

1. NFIP expenses are from "NFIP Actuarial Rate Review" in support of the October 1, 2011 rate and rule changes.
2. Contingency ratio for non-storm surge zone of 5.5% of premium is equivalent to the 10% contingency ratio applied to loss. The expected loss ratio including contingency is 60.5%, so  $5.5\% * 0.1 / 1.1$ . Similarly, storm surge zone contingency of 10.1% of premium is equivalent to the 20% ratio applied to loss, so  $10.1\% = 60.5\% * 0.2 / 1.2$ . See NFIP Actuarial Rate Review Supporting October 1, 2011 Rate Changes, Page A-5.
3. For State Farm, expenses are from the following homeowners rate filings:  
California: SFMA-129763814, Florida: 14-15754, New Jersey: SFMA-129500618, Ohio: SFMA-129745412.  
For State Farm, contingency is included with profit in Florida and Texas.

National Association of Realtors  
NFIP Expenses



Note:

1. Source: "NFIP Actuarial Rate Review" in support of the October 1, 2011 rate and rule changes.

National Association of Realtors  
Definition of Terms

- (A) Expense Ratio = Expense / Premium
- (B) Target Premium = (Expected Loss \* (1 + Contingency Load)) / (1 - Expense Ratio)
- (C) Premium Above Target = NFIP Premium – Target Premium
- (D) Example:
  - Expected Losses = \$211
  - Expense Ratio = 39.5%
  - Contingency Load = 10%
  - Target Premium =  $(\$211 * 1.1) / (1 - 0.395) = \$384$
  - NFIP Premium = \$1,452
  - Premium Above Target =  $\$1,452 - \$384 = \$1,068$

Notes on assumptions:

1. NFIP Expense ratio of 39.5% includes WYO Allowance (27.4%), Other Operating Expenses (9.1%) and Loss Adjustment Expense (3.0%).
2. NFIP contingency load = 10% of expected loss in non-Storm Surge zones and 20% in Storm Surge zones.
3. Contribution to Debt/Surplus and Interest on Debt are assumed to be part of profit and not loaded into target premium.