NAR Brief
MILLIMAN FLOOD INSURANCE STUDY

Top Line Summary
- Independent actuaries studied National Flood Insurance Program (NFIP) rates in 5 counties.
- The study finds that many property owners are overcharged while others are undercharged.
- NAR recommends several changes to better align NFIP rates to the property-specific risk.

Key Study Findings
- NFIP rates are currently not well aligned with risk.
- NFIP rates do not track with other risk factors such as distance to coast/river.
- Doing so could increase NFIP participation and strengthen solvency.
- A Zones (high risk): NFIP uses one rate table to charge most high risk properties across the U.S.
    - As a result, two property owners facing different risks could pay the same premium rate.
        - For example, storm surge flooding in coastal areas causes more damage than riverine flooding – yet in the A zone, rates do not reflect this difference.
    - Also, because 20% of properties are subsidized, adjacent properties with identical risk profiles could pay dramatically different rates.
- X Zones (low risk): While the A zone table accounts for the relative elevation of the property, the X zone table does not; many will not voluntarily opt in as long as the average rate is so high.
    - Thus some low risk properties pay more than high risk properties that are elevated.

Recommendations
- Divide the A zone into coastal and inland subzones and calculate a rate table for each.
- Incorporate risk factors such as distance to river/coast, in addition to property elevation.
- Develop an X zone table that accounts for property elevation and other appropriate risk factors.

Methodology
- This is a case study, not a full actuarial study of FEMA's rate-making process.
- Selected 5 counties: Pinellas, FL; Harris, TX; Ocean, NJ; Merced, CA; and Hancock, Ohio.
- Identified a typical high risk property for each county (e.g., 1-story $175,000 masonry structure built in 1970) then varied one attribute (e.g., built in 1995 instead of 1970).
- Assumed that all properties in the county reflect these characteristics so only the location and elevation of the property would vary.
- Calculated the rate two ways: first as NFIP would then as a private insurance company would, and compared the results.
- Evaluated how the rates change with other risk factors including the distance to coast/river.

For more information: please contact Austin Perez, 202-383-1046 or aperez@realtors.org, at the National Association of REALTORS.

NATIONAL ASSOCIATION of REALTORS®

NATIONAL FLOOD INSURANCE PROGRAM ANALYSIS FOR NATIONAL ASSOCIATION OF REALTORS®

Prepared by: Matt Chamberlain, FCAS, MAAA
                 Consulting Actuary

                 Nancy Watkins, FCAS, MAAA
                 Principal and Consulting Actuary

                 Milliman, Inc.
                 San Francisco, California

                 August 12, 2015

NATIONAL FLOOD INSURANCE PROGRAM
ANALYSIS FOR NATIONAL ASSOCIATION OF REALTORS®

TABLE OF CONTENTS

EXHIBITS

- Map FL-A – Overview
- Map FL-B – Expected Loss
- Map FL-C – NFIP Premiums
- Map FL-D – Premium Above/Below Target
- Exhibit FL-E – Florida Summary Statistics By Flood Zone
- Exhibit FL-F – Florida Summary Statistics By Distance-to-River
- Exhibit FL-G – Florida Summary Statistics By Relative Elevation
- Exhibit FL-H – Florida Summary Statistics By Distance-to-Coast
- Exhibit FL-I – Florida Multivariate Analysis
- Maps TX-A to TX-D – Texas Maps
- Exhibit TX-E to TX-H – Texas Exhibits
- Maps NJ-A to NJ-D – New Jersey Maps
- Exhibit NJ-E to NJ-H – New Jersey Exhibits
- Maps CA-A to CA-D – California Maps
- Exhibit CA-E to CA-G – California Exhibits
- Maps OH-A to OH-D – Ohio Maps
- Exhibit OH-E to OH-G – Ohio Exhibits
- Expense Exhibits

EXECUTIVE SUMMARY

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.[1] 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

---

[1] 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

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%
TOTAL	5,242,285	100%

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

  o Locations analyzed are 243,607 points in Pinellas County, FL.
  o Base Risk 1 is 1970 year built, prior to the introduction of the Flood Rate Insurance Maps (FIRMs), so NFIP premiums are subsidized.
  o Base Risk 2 is 1995 year built, after the introduction of FIRMs, so NFIP premiums are unsubsidized.
  o Both modeled risks are 1-story; Masonry construction; Coverage A $175,000; Coverage C 50% of Coverage A;[2] Deductible $2,000.

- Harris County, Texas

  o Locations analyzed are 951,240 points in Harris County, TX.
  o Base Risk 1 is 1 story, $125,000 Coverage A.
  o Base Risk 2 is 2 story, $250,000 Coverage A.
  o Both modeled risks are 1995 Frame construction; Coverage C 50% of Coverage A; Deductible $2,000.

---

[2] 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

    o Locations analyzed are 292,211 points in Ocean County, NJ.
    o Base Risk 1 is at grade (not elevated).
    o Base Risk 2 is elevated 10 feet above grade.
    o 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

    o Locations analyzed are 41,920 points in Merced County, CA.
    o Base Risk 1 is 1 story, $150,000 Coverage A.
    o Base Risk 2 is 2 story, $250,000 Coverage A.
    o Both Modeled risks are 1995 Frame; Coverage C 50% of Coverage A; Deductible $2,000.

- Hancock County, Ohio

    o Locations analyzed are 23,523 points in Hancock County, OH.
    o Base Risk 1 has a basement.
    o Base Risk 2 does not have a basement.
    o 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.[3]

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.

---

[3] 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
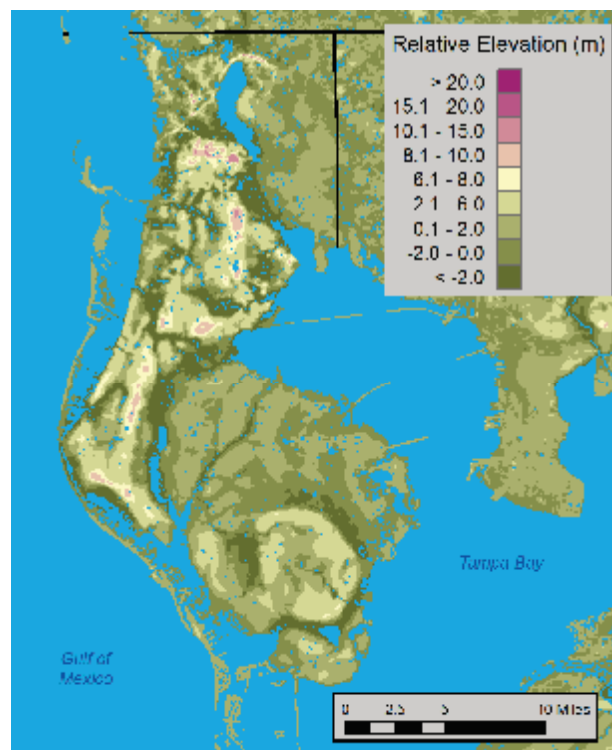
- FEMA Flood Zone. We utilized FEMA flood zones because they are the basis of the NFIP pricing. We determined FEMA flood zones based on the National Flood Hazard Layer.

DETAILED DISCUSSION

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.

TABLE 2: ESTIMATED TAKE-UP RATES	
County	**County Take-up Rate**
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:

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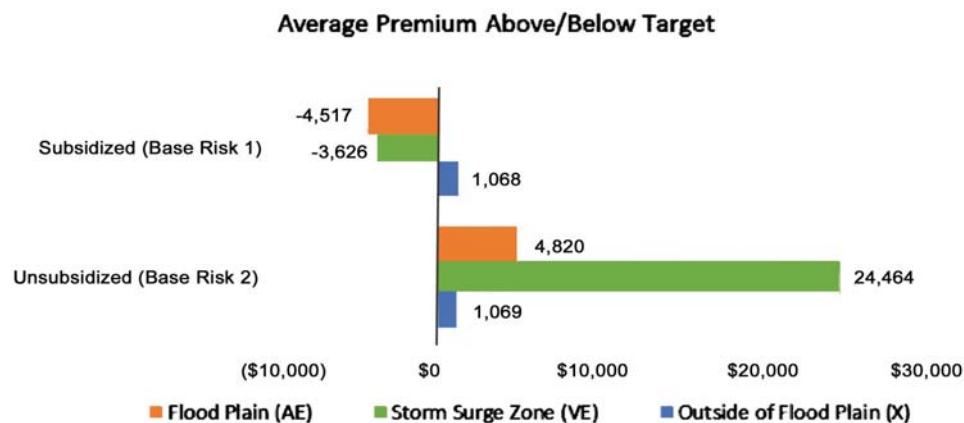
This is a subsidy from the newer risks to the older risks. A similar pattern exists for VE, but not for X because there are no separate rates for pre-FIRM and post-FIRM risks in the X zone.

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%

TABLE 4: AVERAGE RELATIVE NFIP PREMIUM (HARRIS COUNTY)			
Flood Zone	**AE**	**VE**	**X**
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:

TABLE 5: ELEVATED (BASE RISK 2)				
Flood Zone	**Average Loss**	**Average Premium**	**Target Premium**	**Premium Above/Below Target**
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

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
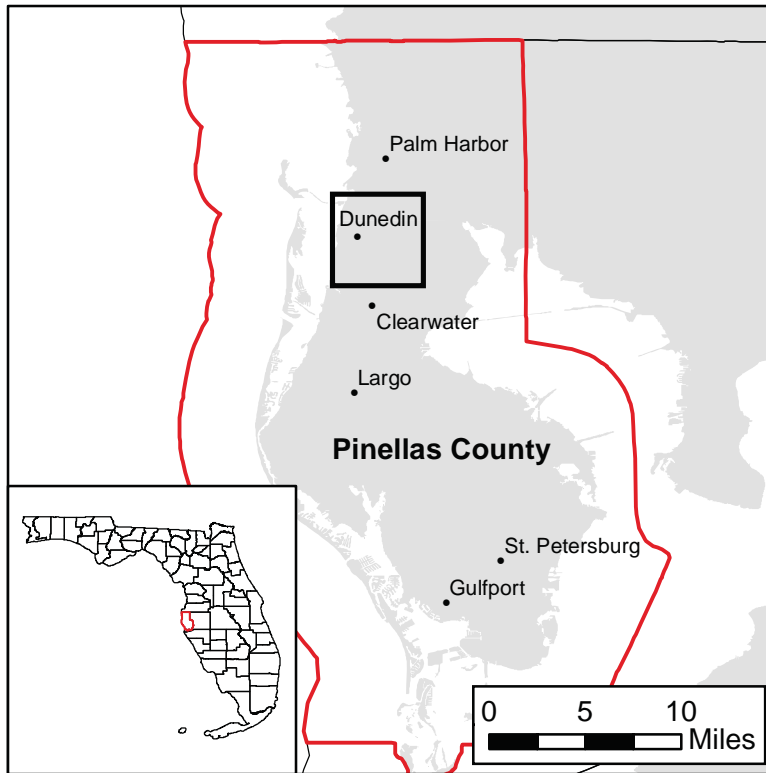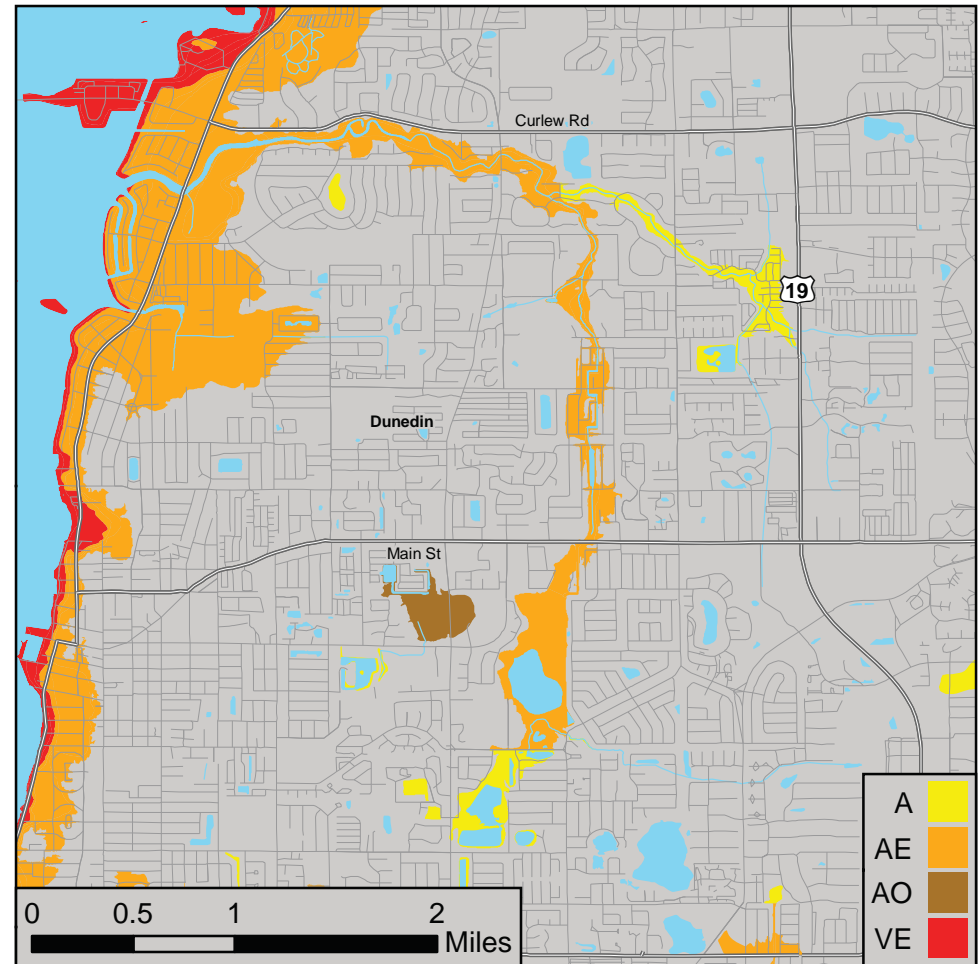
National Association of REALTORS®
Pinellas County, Florida

Extent of Mapped Area

FEMA Flood Zones

Palm Harbor

Dunedin

Clearwater

Largo

Pinellas County

St. Petersburg

Gulfport

0   5   10
Miles

Curlew Rd

19

Dunedin

Main St

0   0.5   1   2
Miles

A
AE
AO
VE

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

Milliman

National Association of REALTORS®
Expected Losses
Pinellas County, Florida

Map FL-B

Subsidized (Base Risk 1)
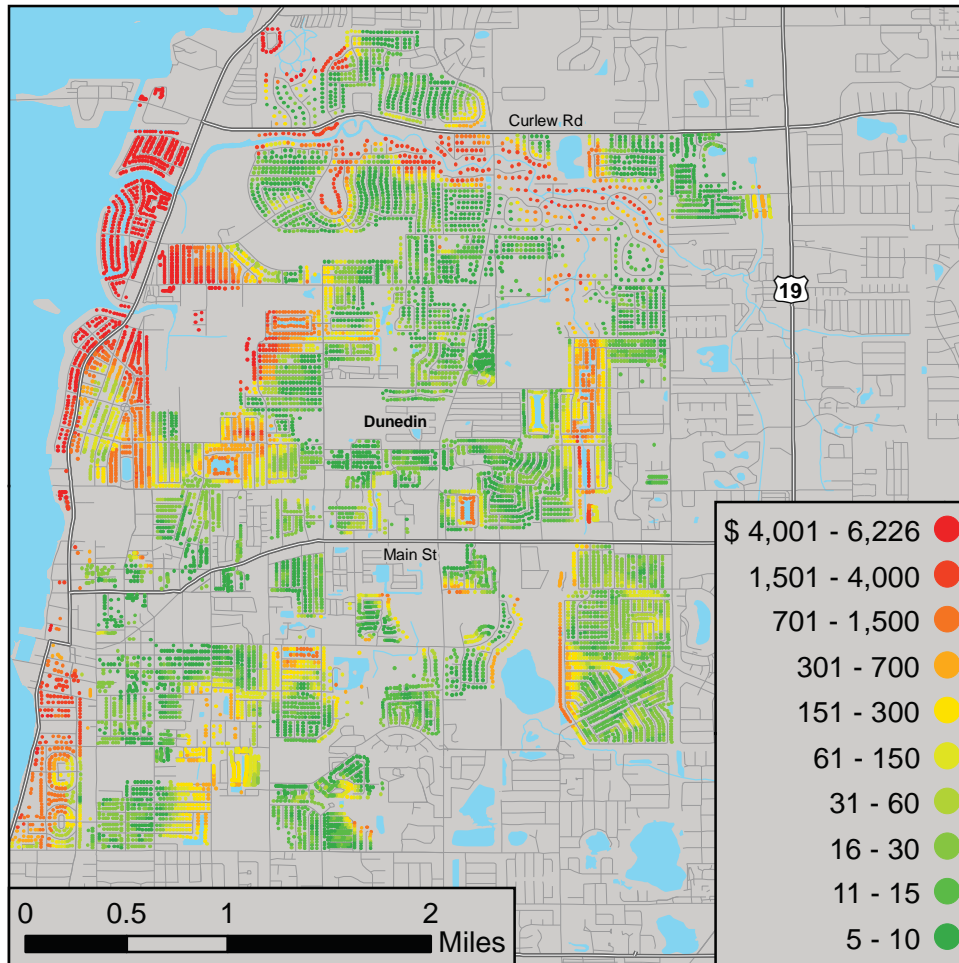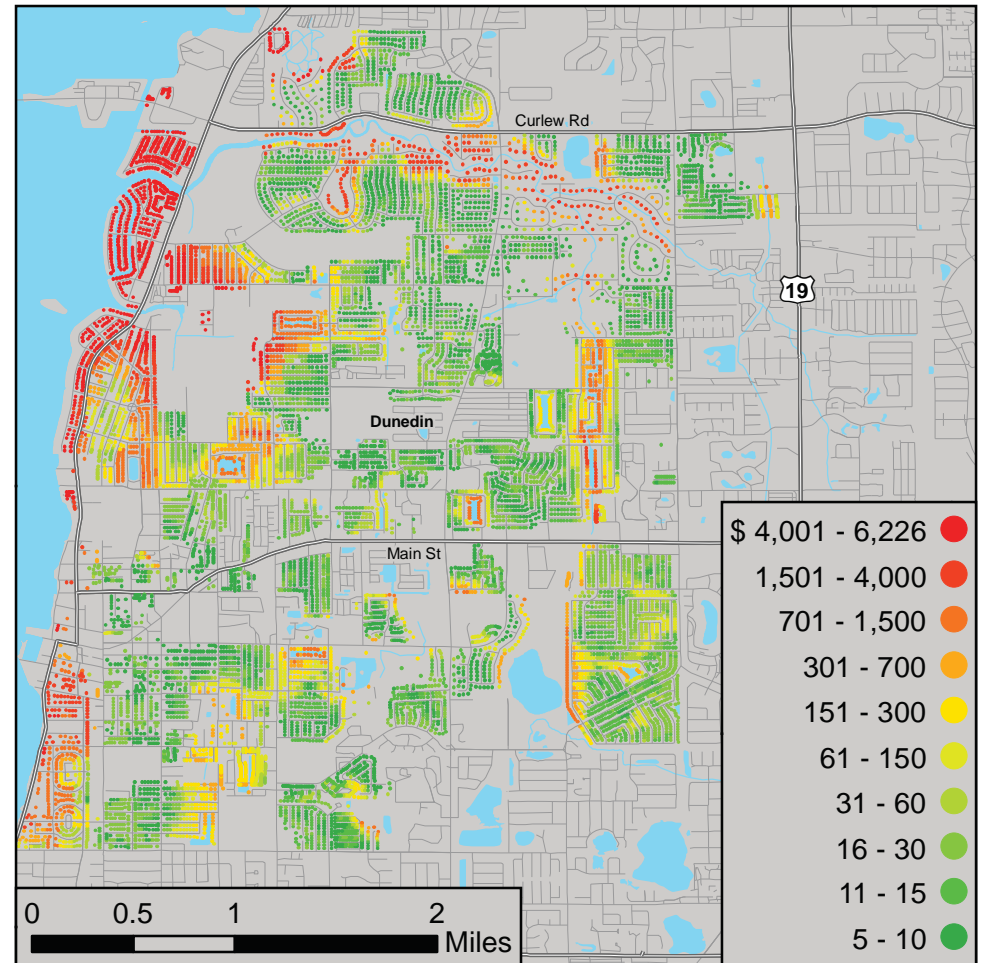
Unsubsidized (Base Risk 2)

Curlew Rd

19

Dunedin

Main St

$ 4,001 - 6,226 ●
1,501 - 4,000 ●
701 - 1,500 ●
301 - 700 ●
151 - 300 ●
61 - 150 ●
31 - 60 ●
16 - 30 ●
11 - 15 ●
5 - 10 ●

0   0.5   1   2
Miles

Curlew Rd

19

Dunedin

Main St

$ 4,001 - 6,226 ●
1,501 - 4,000 ●
701 - 1,500 ●
301 - 700 ●
151 - 300 ●
61 - 150 ●
31 - 60 ●
16 - 30 ●
11 - 15 ●
5 - 10 ●

0   0.5   1   2
Miles

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

Subsidized (Base Risk 1)

Unsubsidized (Base Risk 2)

Legend (both maps):

Premium	Color
$ 20,001 - 36,963	red
10,001 - 20,000	red-orange
7,501 - 10,000	orange
5,001 - 7,500	orange-yellow
2,501 - 5,000	yellow
1,501 - 2,500	yellow-green
1,001 - 1,500	light green
501 - 1,000	green
364 - 500	green
363	green

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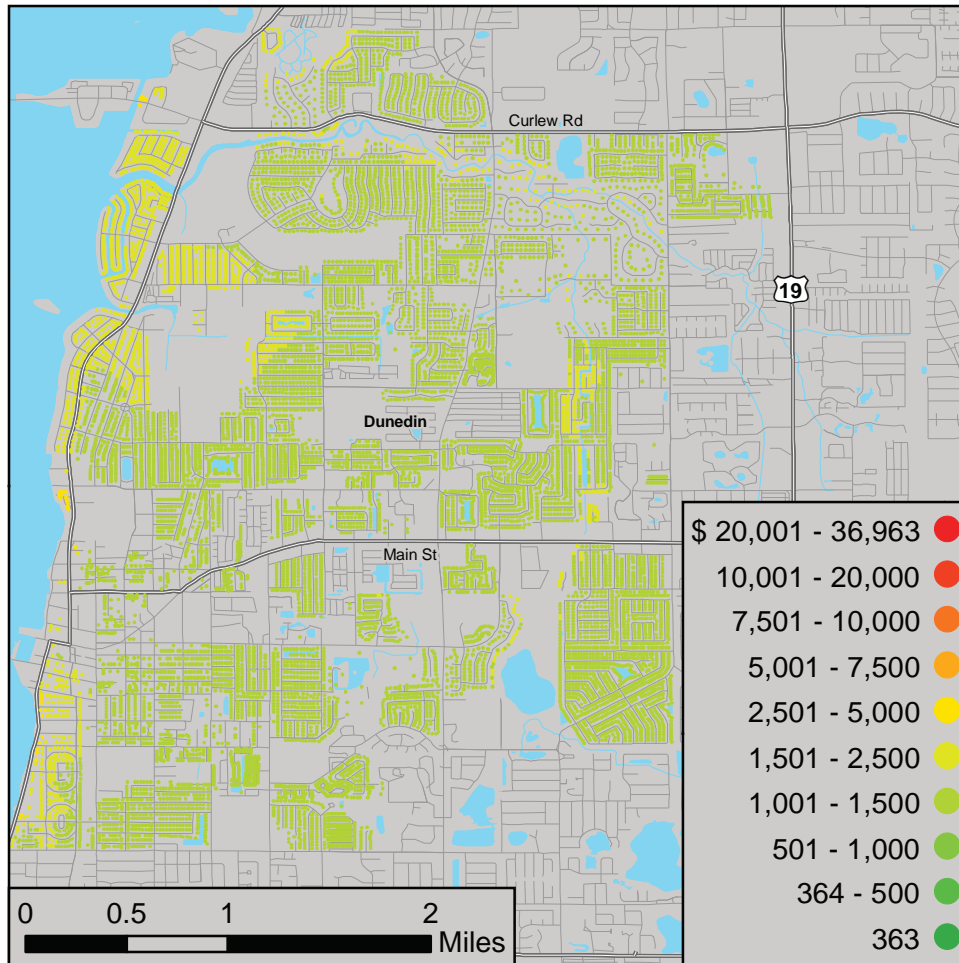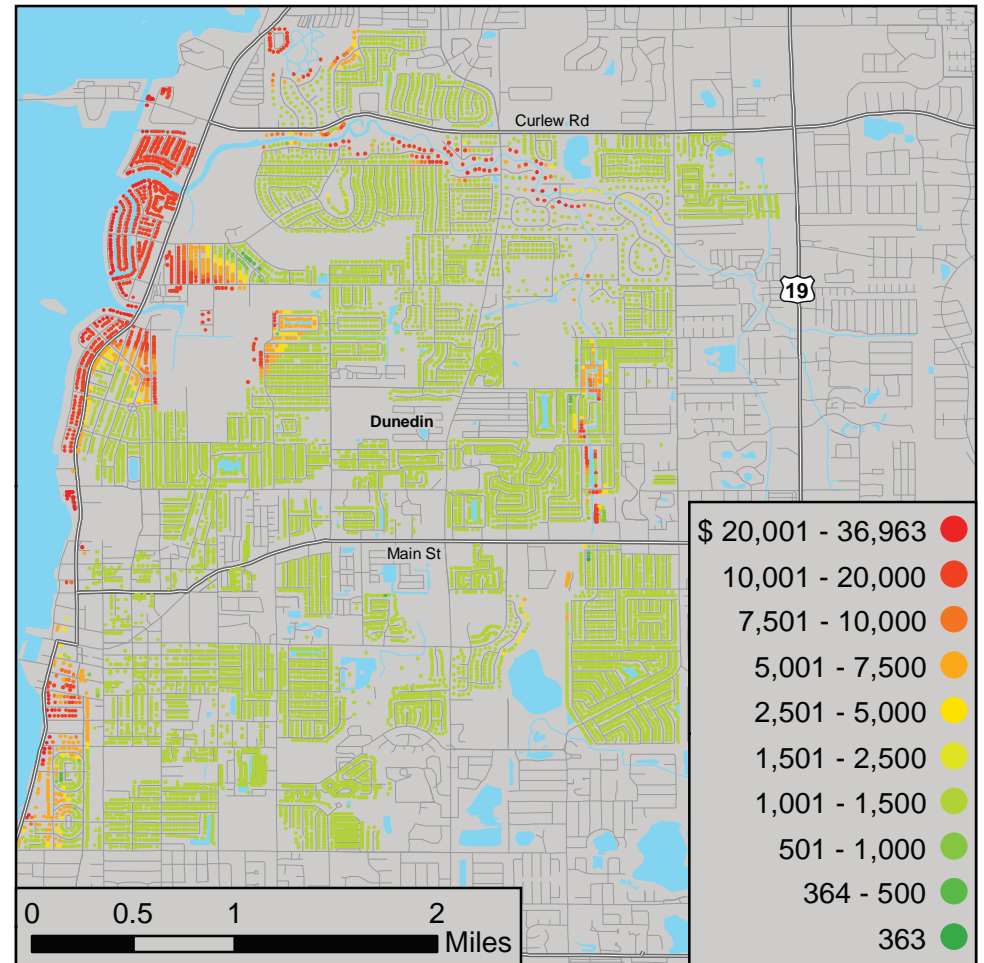
National Association of REALTORS®
Premium Above/Below Target
Pinellas County, Florida

Map FL-D

Subsidized (Base Risk 1)

Unsubsidized (Base Risk 2)

Curlew Rd

19

Dunedin

Main St

< -10,000	🔴
-10,000 - -2,000	🔴
-2,000 - -1,000	🟠
-1,000 - -500	🟠
-500 - 0	🟡
0 - 500	🟡
500 - 1,000	🟢
1,000 - 2,000	🟢
2,000 - 10,000	🟢
>10,000	🟢

0   0.5   1   2   Miles

Curlew Rd

19

Dunedin

Main St

< -10,000	🔴
-10,000 - -2,000	🔴
-2,000 - -1,000	🟠
-1,000 - -500	🟠
-500 - 0	🟡
0 - 500	🟡
500 - 1,000	🟢
1,000 - 2,000	🟢
2,000 - 10,000	🟢
>10,000	🟢

0   0.5   1   2   Miles

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

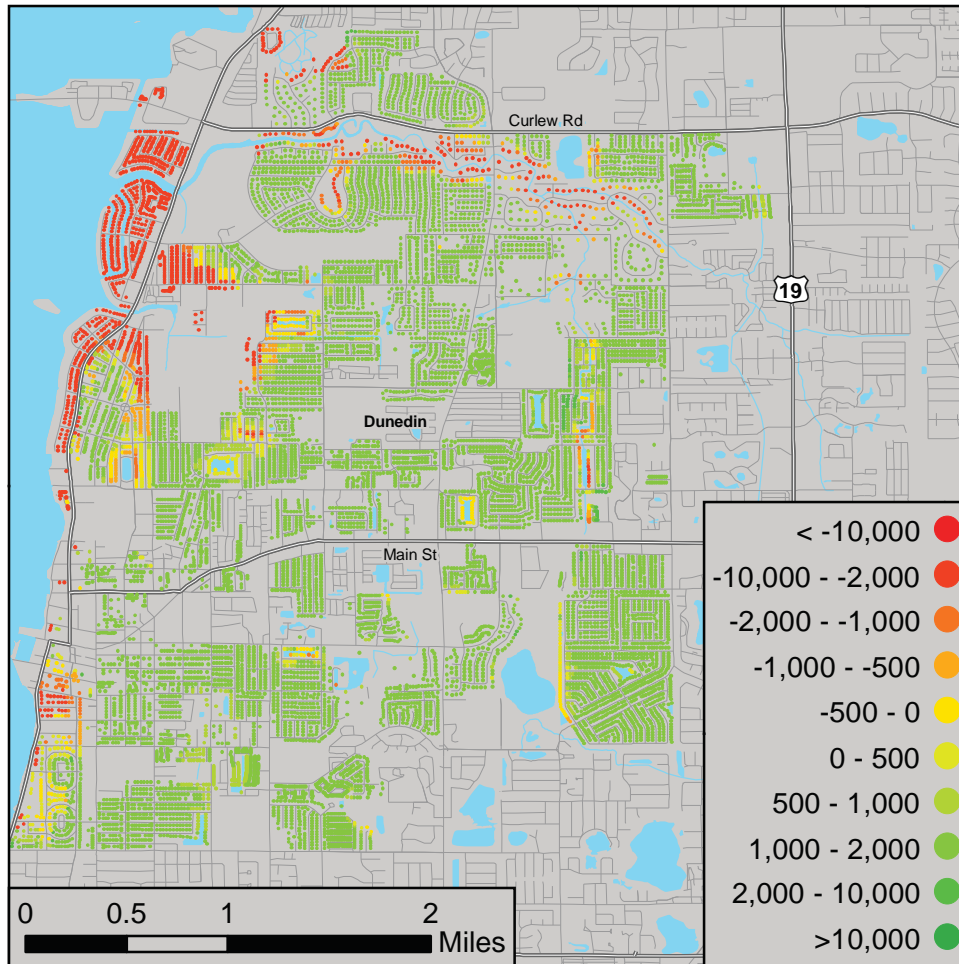|	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Subsidized (Base Risk 1)				Unsubsidized (Base Risk 2)			
					Premium				Premium
Flood Zone		Average	Average	Target	Above/Below	Average	Average	Target	Above/Below
(Note 1)	Count	Loss	Premium	Premium	Target	Loss	Premium	Premium	Target
Flood Plain (AE)	57,509	$3,753	$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);
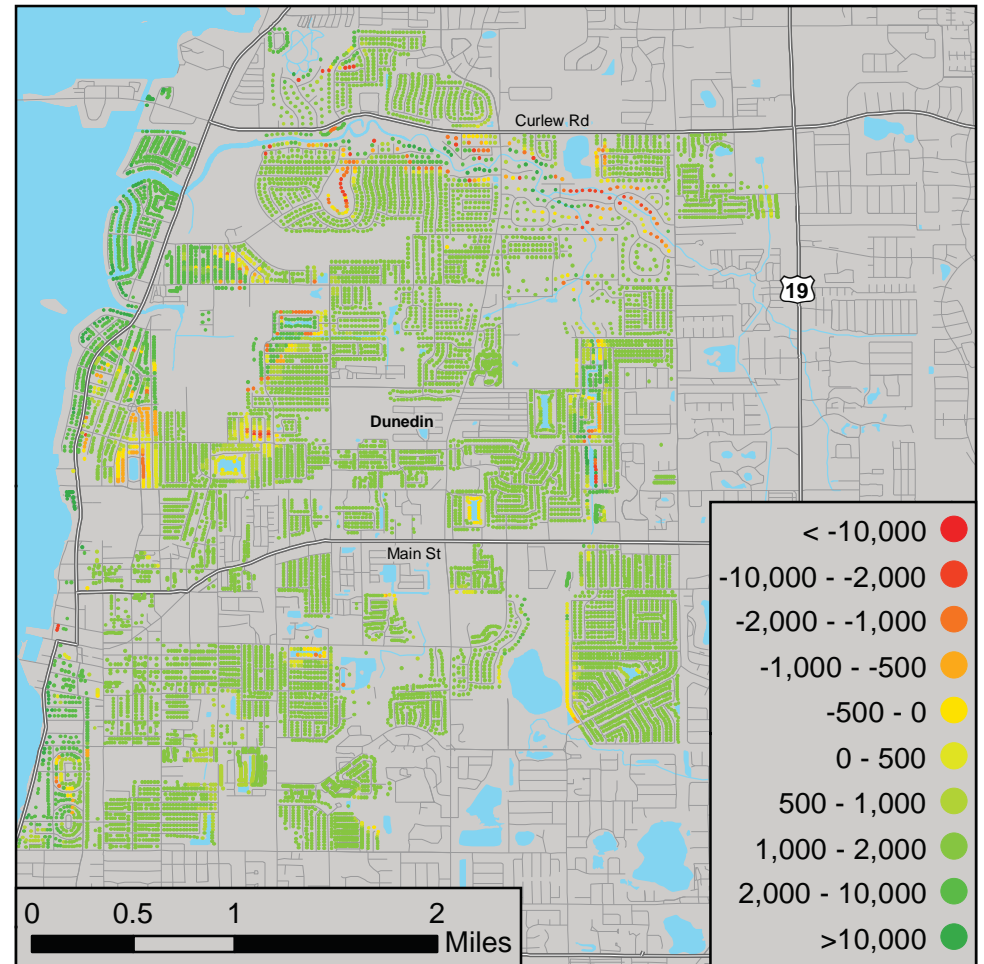   Base Risk 2 = 1-Story, $175k Coverage A, Masonry, 1995 (unsubsidized).

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

Expected Loss
Flood Zone AE

Average Premium Above/Below Target
Flood Zone AE

| | | (1) | | (2) | | (3) | | (4) | | (5) | | (6) | | (7) | | (8) | | (9) |

		Subsidized (Base Risk 1)				Unsubsidized (Base Risk 2)			
Distance to River (miles)	Count	Average Loss	Average Premium	Target Premium	Premium Above/Below Target	Average Loss	Average Premium	Target Premium	Premium Above/Below Target
< 0.025	2,227	$4,179	$2,320	$7,597	($5,277)	$4,173	$11,630	$7,586	$4,043
0.025 - 0.05	2,073	3,879	2,307	7,053	(4,746)	3,873	10,236	7,042	3,194
0.05 - 0.075	2,631	3,588	2,305	6,524	(4,219)	3,582	9,720	6,513	3,207
0.075 - 0.1	2,480	3,454	2,304	6,280	(3,975)	3,448	9,431	6,268	3,163
0.1 - 0.15	4,977	3,338	2,299	6,070	(3,771)	3,332	9,177	6,058	3,119
0.15 - 0.25	8,465	3,264	2,292	5,934	(3,642)	3,257	9,390	5,922	3,468
0.25 - 0.5	12,146	3,418	2,291	6,215	(3,925)	3,411	10,541	6,202	4,339
0.5 - 1	11,333	3,671	2,305	6,674	(4,369)	3,663	12,421	6,659	5,762
>= 1	11,177	4,751	2,335	8,638	(6,303)	4,738	15,988	8,614	7,374
Total	57,509	$3,753	$2,306	$6,823	($4,517)	$3,745	$11,628	$6,808	$4,820

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%

Milliman

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

Flood Zone VE

Expected Loss
Flood Zone VE

Average Premium Above/Below Target
Flood Zone VE

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |

		Subsidized (Base Risk 1)				Unsubsidized (Base Risk 2)			
					Premium				Premium
Distance to River		Average	Average	Target	Above/Below	Average	Average	Target	Above/Below
(miles)	Count	Loss	Premium	Premium	Target	Loss	Premium	Premium	Target
< 0.025	24	$4,243	$4,890	$8,416	($3,527)	$4,231	$35,315	$8,392	$26,923
0.025 - 0.05	23	3,465	4,902	6,873	(1,971)	3,455	32,556	6,853	25,702
0.05 - 0.075	31	3,686	4,890	7,312	(2,422)	3,676	34,415	7,291	27,125
0.075 - 0.1	33	4,012	4,890	7,958	(3,068)	4,001	33,200	7,936	25,264
0.1 - 0.15	47	4,342	4,902	8,612	(3,710)	4,331	33,799	8,590	25,208
0.15 - 0.25	74	4,641	4,843	9,204	(4,361)	4,633	34,072	9,189	24,883
0.25 - 0.5	192	4,605	4,795	9,133	(4,339)	4,601	32,829	9,126	23,703
0.5 - 1	144	4,304	4,771	8,537	(3,766)	4,298	33,438	8,525	24,913
>= 1	558	4,149	4,818	8,230	(3,412)	4,137	32,347	8,207	24,140
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

Expected Loss
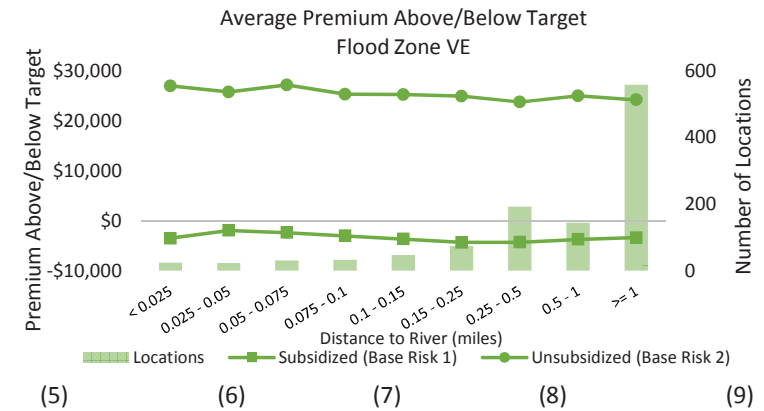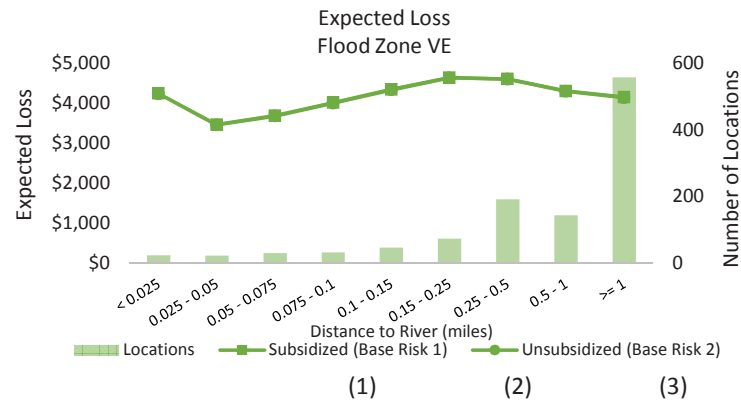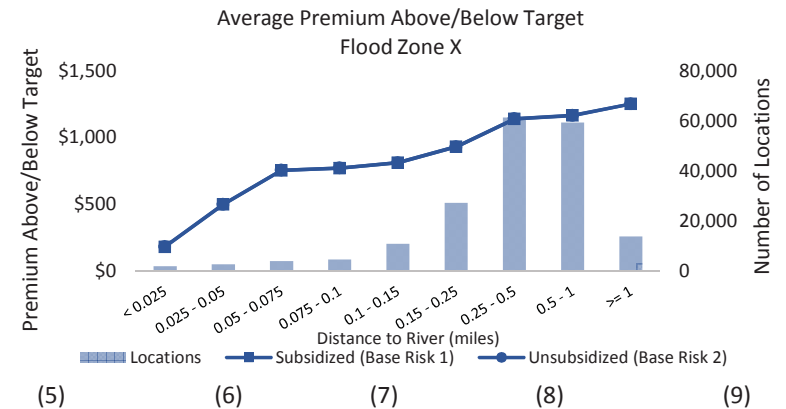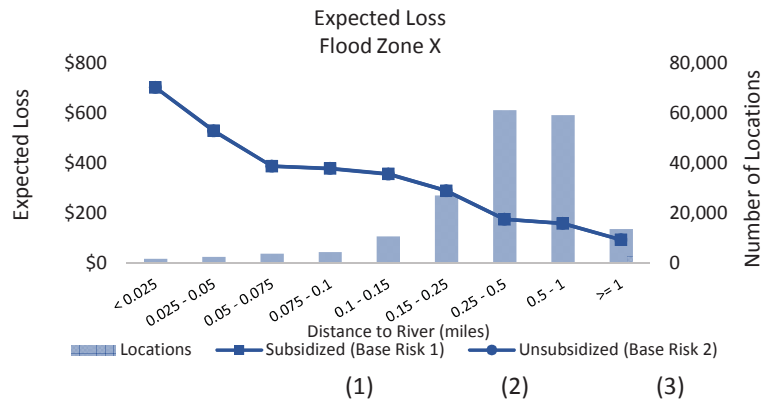Flood Zone X

Average Premium Above/Below Target
Flood Zone X

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Subsidized (Base Risk 1)				Unsubsidized (Base Risk 2)			
Distance to River (miles)	Count	Average Loss	Average Premium	Target Premium	Premium Above/Below Target	Average Loss	Average Premium	Target Premium	Premium Above/Below Target
< 0.025	1,820	$703	$1,456	$1,278	$178	$702	$1,456	$1,277	$180
0.025 - 0.05	2,562	530	1,458	963	495	529	1,458	962	497
0.05 - 0.075	3,854	388	1,457	706	751	387	1,457	704	752
0.075 - 0.1	4,510	379	1,456	689	767	378	1,456	688	769
0.1 - 0.15	10,755	357	1,457	649	808	356	1,457	648	809
0.15 - 0.25	27,175	289	1,454	526	928	289	1,454	525	929
0.25 - 0.5	61,356	175	1,456	319	1,138	175	1,456	318	1,138
0.5 - 1	59,237	159	1,452	289	1,163	159	1,452	289	1,163
>= 1	13,703	94	1,419	170	1,249	93	1,419	170	1,250
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%

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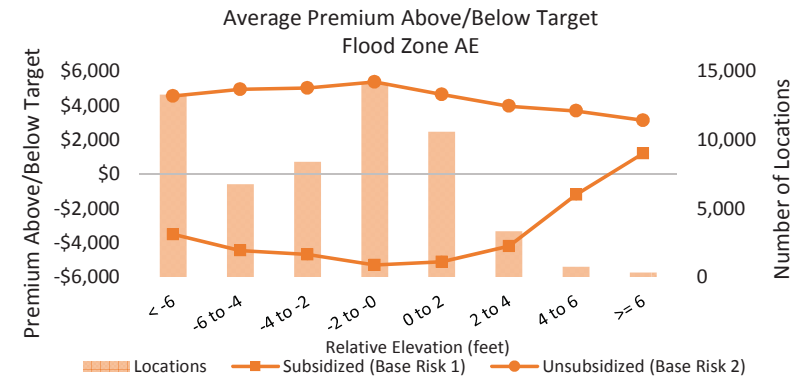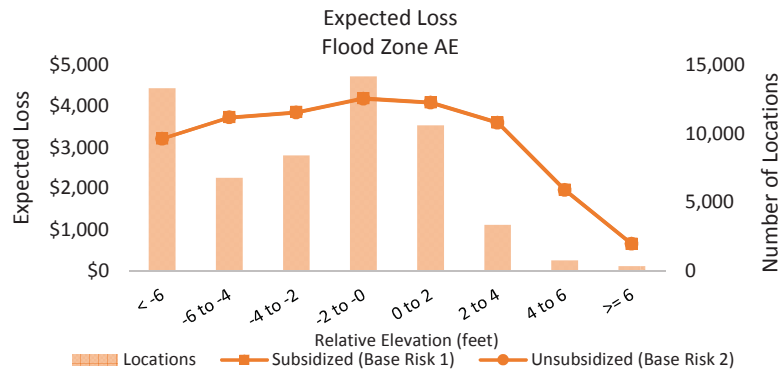Pinellas County, Florida

Flood Zone AE

Expected Loss
Flood Zone AE

Average Premium Above/Below Target
Flood Zone AE

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Subsidized (Base Risk 1)				Unsubsidized (Base Risk 2)			
Relative Elevation (feet)	Count	Average Loss	Average Premium	Target Premium	Premium Above/Below Target	Average Loss	Average Premium	Target Premium	Premium Above/Below Target
< -6	13,286	$3,201	$2,307	$5,819	($3,512)	$3,195	$10,352	$5,810	$4,543
-6 to -4	6,749	3,722	2,309	6,767	(4,458)	3,714	11,686	6,753	4,933
-4 to -2	8,389	3,845	2,301	6,991	(4,690)	3,836	11,988	6,975	5,014
-2 to -0	14,141	4,181	2,290	7,602	(5,312)	4,171	12,938	7,583	5,354
0 to 2	10,575	4,086	2,313	7,429	(5,116)	4,077	12,043	7,413	4,630
2 to 4	3,325	3,595	2,333	6,536	(4,203)	3,585	10,477	6,519	3,958
4 to 6	730	1,959	2,365	3,562	(1,197)	1,952	7,223	3,549	3,674
>= 6	314	647	2,379	1,176	1,203	644	4,285	1,171	3,114
Total	57,509	$3,753	$2,306	$6,823	($4,517)	$3,745	$11,628	$6,808	$4,820

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%

Milliman

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

Flood Zone VE

Expected Loss
Flood Zone VE

Average Premium Above/Below Target
Flood Zone VE

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

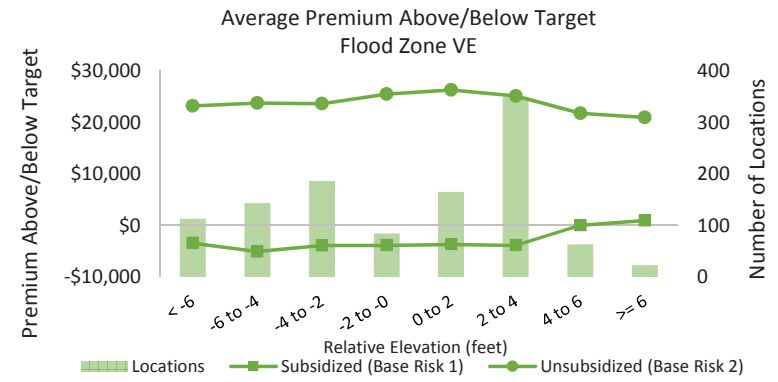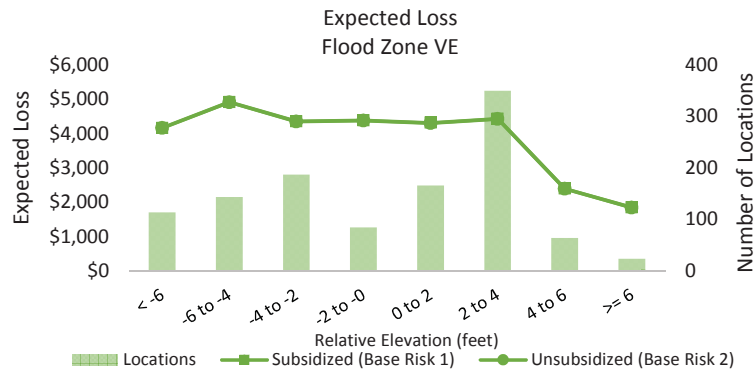|		Subsidized (Base Risk 1)				Unsubsidized (Base Risk 2)			
Relative Elevation (feet)	Count	Average Loss	Average Premium	Target Premium	Premium Above/Below Target	Average Loss	Average Premium	Target Premium	Premium Above/Below Target
< -6	113	$4,152	$4,806	$8,236	($3,430)	$4,149	$31,468	$8,230	$23,238
-6 to -4	143	4,909	4,672	9,736	(5,064)	4,903	33,518	9,724	23,794
-4 to -2	186	4,347	4,730	8,623	(3,893)	4,339	32,270	8,607	23,663
-2 to -0	84	4,377	4,822	8,681	(3,859)	4,367	34,161	8,662	25,499
0 to 2	165	4,307	4,874	8,543	(3,669)	4,295	34,816	8,519	26,297
2 to 4	349	4,425	4,930	8,777	(3,847)	4,412	33,913	8,751	25,162
4 to 6	63	2,386	4,781	4,733	48	2,380	26,491	4,720	21,771
>= 6	23	1,839	4,604	3,648	956	1,832	24,630	3,633	20,997
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%

Milliman

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

Flood Zone X

Expected Loss
Flood Zone X

Average Premium Above/Below Target
Flood Zone X

		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Subsidized (Base Risk 1)					Unsubsidized (Base Risk 2)			
Relative Elevation (feet)	Count	Average Loss	Average Premium	Target Premium	Premium Above/Below Target	Average Loss	Average Premium	Target Premium	Premium Above/Below Target	
< -6	21,864	$485	$1,450	$882	$568	$484	$1,450	$881	$569	
-6 to -4	8,627	448	1,445	815	630	448	1,445	814	631	
-4 to -2	10,811	579	1,443	1,053	390	578	1,443	1,051	392	
-2 to -0	15,133	340	1,449	618	832	339	1,449	617	833	
0 to 2	22,264	300	1,442	546	896	300	1,442	545	897	
2 to 4	20,692	166	1,449	302	1,147	165	1,449	301	1,148	
4 to 6	16,106	66	1,445	121	1,325	66	1,445	120	1,325	
>= 6	69,475	28	1,460	51	1,410	28	1,460	51	1,410	
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%

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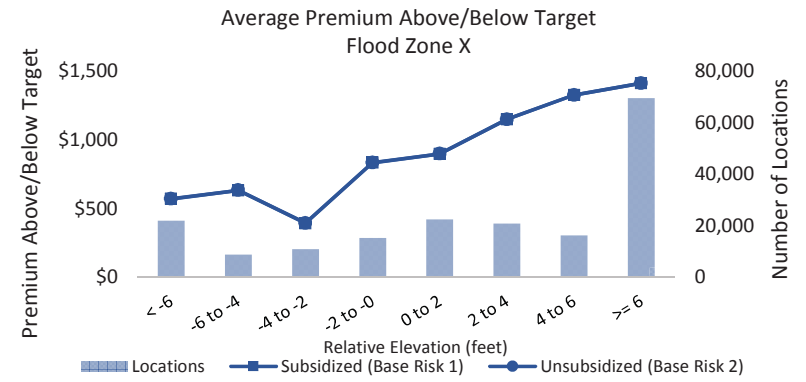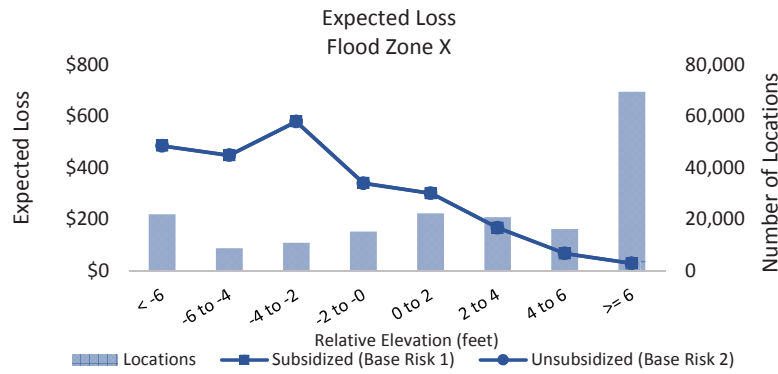Pinellas County, Florida

Flood Zone AE

Expected Loss
Flood Zone AE

Average Premium Above/Below Target
Flood Zone AE

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

		Subsidized (Base Risk 1)				Unsubsidized (Base Risk 2)		
Distance to Coast (miles)	Count	Average Loss	Average Premium	Target Premium	Premium Above/Below Target	Average Loss	Average Premium	Target Premium	Premium Above/Below Target
< 0.025	12,237	$5,181	$2,316	$9,420	($7,104)	$5,168	$17,185	$9,397	$7,789
0.025 - 0.05	3,914	4,692	2,329	8,530	(6,201)	4,681	14,748	8,511	6,237
0.05 - 0.075	3,919	4,469	2,321	8,126	(5,805)	4,459	13,636	8,107	5,528
0.075 - 0.1	2,812	4,139	2,314	7,525	(5,211)	4,129	12,529	7,508	5,021
0.1 - 0.15	4,302	3,776	2,310	6,865	(4,555)	3,767	11,401	6,850	4,551
0.15 - 0.25	4,338	3,618	2,294	6,579	(4,285)	3,609	10,466	6,563	3,903
0.25 - 0.5	5,612	3,433	2,288	6,242	(3,954)	3,426	9,375	6,229	3,147
0.5 - 1	6,704	3,652	2,303	6,640	(4,337)	3,645	9,436	6,627	2,809
1 - 3	11,679	2,241	2,293	4,075	(1,781)	2,237	7,797	4,068	3,729
3 - 5	1,958	1,546	2,309	2,811	(502)	1,544	5,333	2,808	2,526
>= 5	34	409	2,382	743	1,640	408	6,343	743	5,601
Total	57,509	$3,753	$2,306	$6,823	($4,517)	$3,745	$11,628	$6,808	$4,820

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
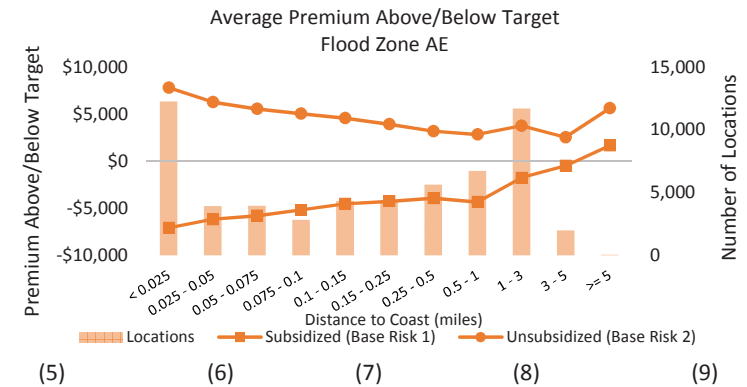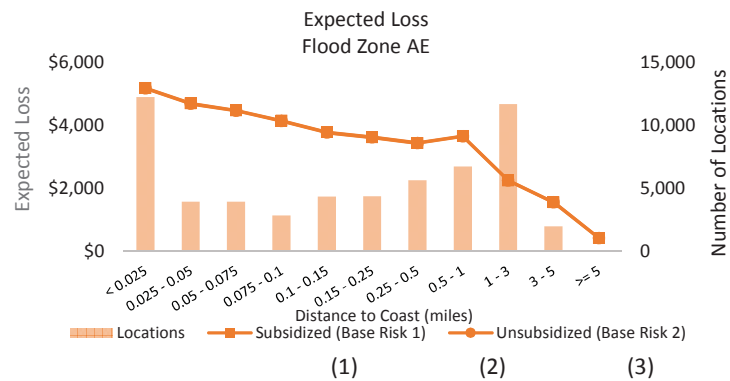Summary Statistics by Distance to Coast
Pinellas County, Florida

Flood Zone VE

Expected Loss
Flood Zone VE

Average Premium Above/Below Target
Flood Zone VE

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

		Subsidized (Base Risk 1)				Unsubsidized (Base Risk 2)			
Distance to Coast (miles)	Count	Average Loss	Average Premium	Target Premium	Premium Above/Below Target	Average Loss	Average Premium	Target Premium	Premium Above/Below Target
< 0.025	219	$4,542	$4,770	$9,008	($4,239)	$4,537	$33,201	$8,998	$24,203
0.025 - 0.05	415	4,161	4,840	8,254	(3,414)	4,153	32,268	8,236	24,031
0.05 - 0.075	189	4,562	4,746	9,048	(4,302)	4,550	33,886	9,025	24,861
0.075 - 0.1	155	4,171	4,860	8,272	(3,412)	4,159	33,088	8,250	24,838
0.1 - 0.15	61	4,009	4,899	7,952	(3,054)	3,996	32,322	7,927	24,395
0.15 - 0.25	47	4,222	4,890	8,374	(3,484)	4,209	34,613	8,349	26,263
0.25 - 0.5	9	2,913	4,890	5,778	(888)	2,903	35,189	5,759	29,430
0.5 - 1	31	3,080	4,890	6,110	(1,220)	3,069	29,881	6,088	23,793
1 - 3	0								
3 - 5	0								
>= 5	0								
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
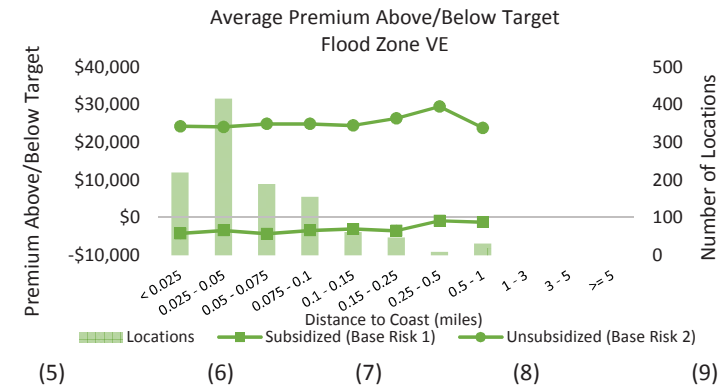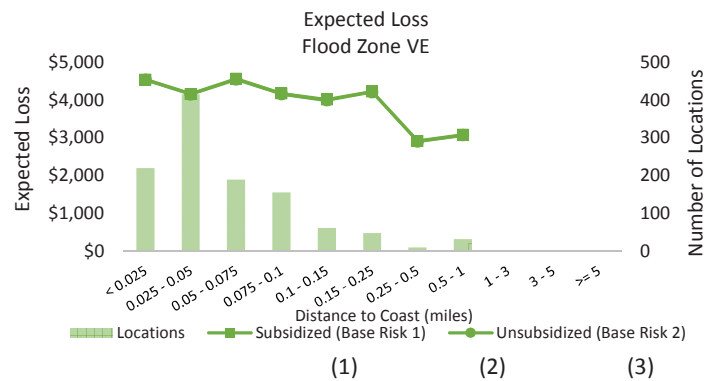Summary Statistics by Distance to Coast
Pinellas County, Florida

Flood Zone X
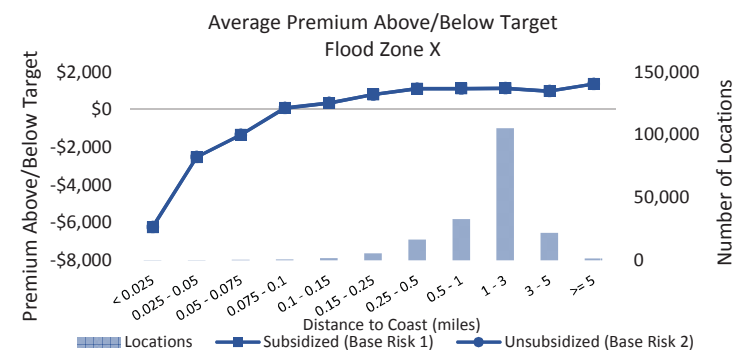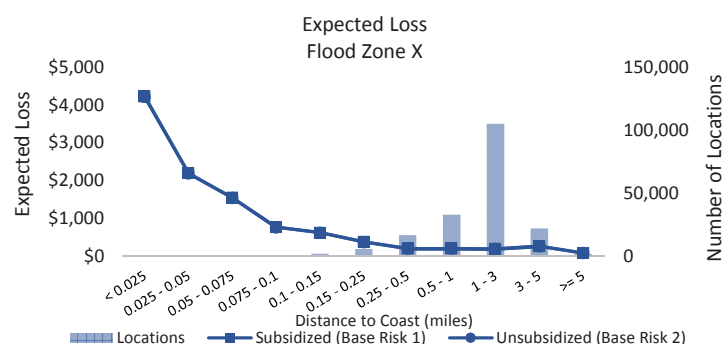

Expected Loss
Flood Zone X

Average Premium Above/Below Target
Flood Zone X

(1)   (2)   (3)   (4)   (5)   (6)   (7)   (8)   (9)

		Subsidized (Base Risk 1)				Unsubsidized (Base Risk 2)			
Distance to Coast (miles)	Count	Average Loss	Average Premium	Target Premium	Premium Above/Below Target	Average Loss	Average Premium	Target Premium	Premium Above/Below Target
< 0.025	128	$4,228	$1,425	$7,686	($6,261)	$4,216	$1,425	$7,665	($6,240)
0.025 - 0.05	185	2,193	1,453	3,987	(2,534)	2,187	1,453	3,976	(2,523)
0.05 - 0.075	315	1,540	1,450	2,800	(1,351)	1,536	1,450	2,793	(1,344)
0.075 - 0.1	490	759	1,454	1,380	74	757	1,454	1,376	78
0.1 - 0.15	1,647	613	1,451	1,114	337	611	1,451	1,111	340
0.15 - 0.25	5,386	367	1,450	668	782	366	1,450	666	784
0.25 - 0.5	16,299	193	1,453	351	1,102	193	1,453	350	1,103
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%

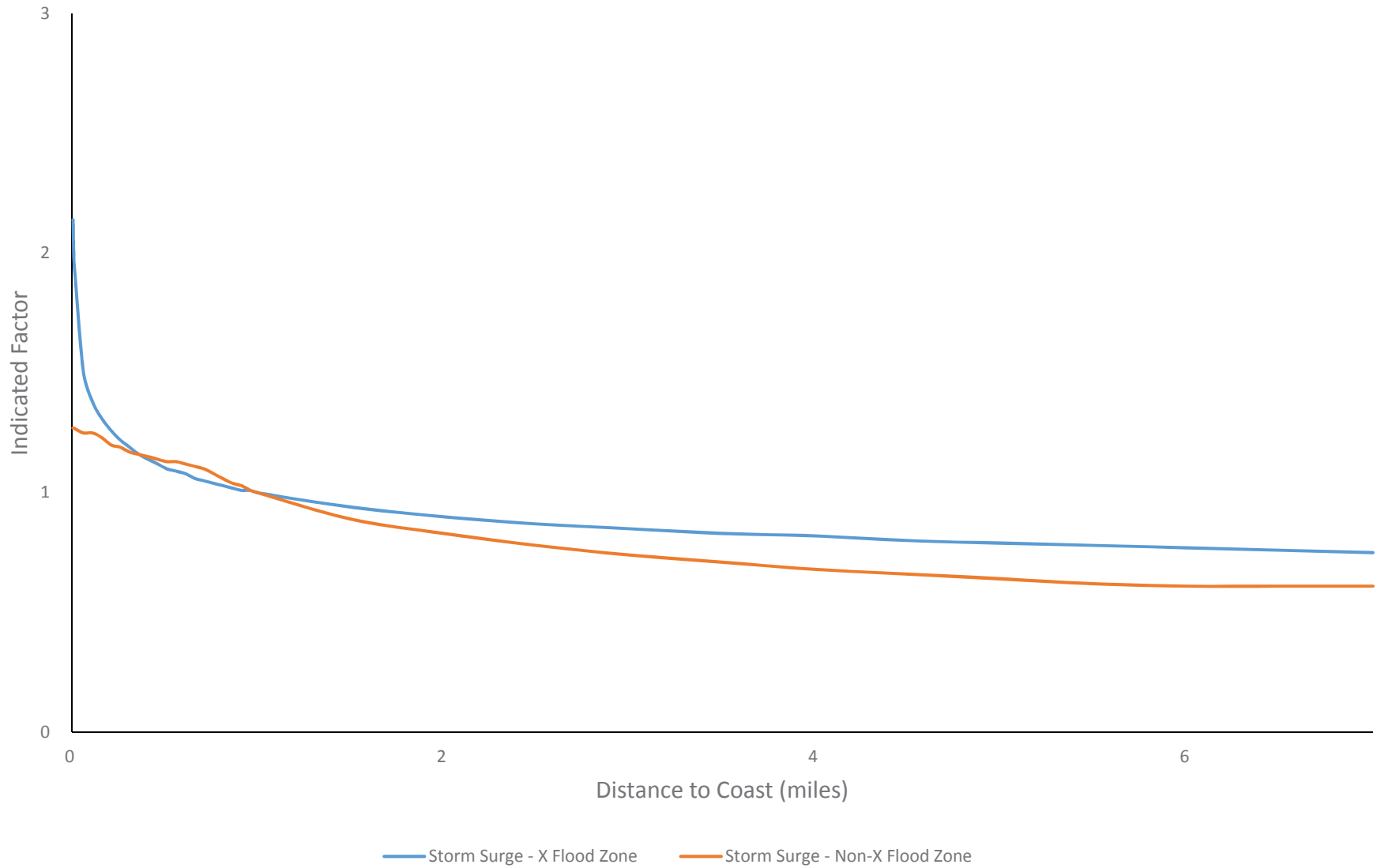Milliman

National Association of Realtors
Florida - Pinellas County

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)
						Indicated Exponent				Rebased Exponent				Indicated Factor			
						Storm Surge		Inland Flood		Storm Surge		Inland Flood		Storm Surge		Inland Flood	
Distance	Distance	Adjusted LN (Distance to Coast)				X	Non-X	X	Non-X	X	Non-X	X	Non-X	X	Non-X	X	Non-X
To Coast	To Coast	V1	V2	V3	V4												
(Miles)	(Meters)	(Note 1)	(Note 1)	(Note 1)	(Note 1)	(Note 2)	(Note 2)	(Note 2)	(Note 2)	(Note 3)	(Note 3)	(Note 3)	(Note 3)	(Note 4)	(Note 4)	(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	5.300	5.551	7.000	(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	5.300	5.823	7.000	(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	5.300	6.037	7.000	(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	5.300	6.212	7.000	(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	6.362	5.300	6.362	7.000	(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	5.300	6.492	7.000	(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	5.300	6.607	7.000	(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	5.300	6.710	7.000	(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	5.300	6.804	7.000	(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	5.300	6.889	7.000	(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	5.300	6.968	7.000	(1.022)	(2.437)	0.000	0.000	0.061	0.108	0.000	0.000	1.06	1.11	1.00	1.00
0.710	1,143	7.041	5.300	7.000	7.041	(1.033)	(2.451)	0.000	0.000	0.050	0.095	0.000	0.000	1.05	1.10	1.00	1.00
0.760	1,223	7.109	5.300	7.000	7.109	(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	5.300	7.000	7.173	(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	5.300	7.000	7.233	(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	5.300	7.000	7.289	(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	5.300	7.000	7.343	(1.077)	(2.534)	0.000	0.000	0.006	0.011	0.000	0.000	1.01	1.01	1.00	1.00
1.000	1,609	7.384	5.300	7.000	7.384	(1.083)	(2.545)	0.000	0.000	0.000	0.000	0.000	0.000	1.00	1.00	1.00	1.00
1.500	2,414	7.789	5.300	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	0.90	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	0.87	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)	(2.892)	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	8.993	5.300	7.000	8.993	(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	9.255	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			
Storm Surge Non-X		-0.007	-0.067	-0.277
Inland Flood X				
Inland Flood Non-X				

Notes:
1. Column (3) = Max (Log Distance to Coast, 2.2).
   Column (4) = Min [Max (Log Distance to Coast, 2.2), 5.3].
   Column (5) = Min [Max (Log Distance to Coast, 5.3), 7].
   Column (6) = Min [Max (Log Distance to Coast, 7), 9.2].
2. (7) is the sumproduct of (3) to (6) and the respective coefficients. Columns (8) to (10) are calculated similarly.
3. (11) = Column (7) - Column (7) for DTC 1,609. Columns (12) to (14) are calculated similarly.
4. Column (15) = EXP [Column (11)]. Columns (16) to (18) are calculated similarly.

Milliman

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

Indicated Factor

Distance to Coast (miles)

—— Storm Surge - X Flood Zone   —— Storm Surge - Non-X Flood Zone

Note: Data is from Page 1a.

Milliman

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 Exponent				Rebased Exponent				Indicated Factor			
							Storm Surge		Inland Flood		Storm Surge		Inland Flood		Storm Surge		Inland Flood	
Distance To River (Miles)	Distance To River (Meters)	V1 (Note 1)	V2 (Note 1)	V3 (Note 1)	V4 (Note 1)	V5 (Note 1)	X (Note 2)	Non-X (Note 2)	X (Note 2)	Non-X (Note 2)	X (Note 3)	Non-X (Note 3)	X (Note 3)	Non-X (Note 3)	X (Note 4)	Non-X (Note 4)	X (Note 4)	Non-X (Note 4)
<= 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
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	2.89
0.006	10	3.200	3.400	2.268	2.268	4.500	(0.543)	(0.172)	(0.951)	(1.571)	0.593	0.167	1.272	1.005	1.81	1.18	3.57	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
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
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
0.010	16	3.200	3.400	2.778	2.778	4.500	(0.543)	(0.172)	(1.166)	(1.744)	0.593	0.167	1.058	0.833	1.81	1.18	2.88	2.30
0.050	80	4.388	4.388	4.388	4.388	4.500	(0.745)	(0.223)	(1.841)	(2.288)	0.391	0.117	0.383	0.288	1.48	1.12	1.47	1.33
0.100	161	5.081	5.081	5.081	4.500	5.081	(0.863)	(0.258)	(2.131)	(2.430)	0.273	0.082	0.092	0.146	1.31	1.09	1.10	1.16
0.150	241	5.486	5.486	5.300	4.500	5.486	(0.932)	(0.278)	(2.223)	(2.503)	0.204	0.061	0.000	0.074	1.23	1.06	1.00	1.08
0.200	322	5.774	5.774	5.300	4.500	5.774	(0.980)	(0.293)	(2.223)	(2.554)	0.156	0.046	0.000	0.022	1.17	1.05	1.00	1.02
0.250	402	5.997	5.997	5.300	4.500	5.900	(1.018)	(0.304)	(2.223)	(2.577)	0.118	0.035	0.000	0.000	1.12	1.04	1.00	1.00
0.300	483	6.180	6.180	5.300	4.500	5.900	(1.049)	(0.313)	(2.223)	(2.577)	0.087	0.026	0.000	0.000	1.09	1.03	1.00	1.00
0.350	563	6.334	6.334	5.300	4.500	5.900	(1.075)	(0.321)	(2.223)	(2.577)	0.061	0.018	0.000	0.000	1.06	1.02	1.00	1.00
0.400	644	6.467	6.467	5.300	4.500	5.900	(1.098)	(0.328)	(2.223)	(2.577)	0.038	0.011	0.000	0.000	1.04	1.01	1.00	1.00
0.450	724	6.585	6.585	5.300	4.500	5.900	(1.118)	(0.334)	(2.223)	(2.577)	0.018	0.005	0.000	0.000	1.02	1.01	1.00	1.00
0.500	805	6.690	6.690	5.300	4.500	5.900	(1.136)	(0.339)	(2.223)	(2.577)	0.000	0.000	0.000	0.000	1.00	1.00	1.00	1.00
0.550	885	6.786	6.786	5.300	4.500	5.900	(1.152)	(0.344)	(2.223)	(2.577)	(0.016)	(0.005)	0.000	0.000	0.98	1.00	1.00	1.00
0.600	966	6.873	6.873	5.300	4.500	5.900	(1.167)	(0.349)	(2.223)	(2.577)	(0.031)	(0.009)	0.000	0.000	0.97	0.99	1.00	1.00
0.650	1,046	6.953	6.953	5.300	4.500	5.900	(1.180)	(0.353)	(2.223)	(2.577)	(0.045)	(0.013)	0.000	0.000	0.96	0.99	1.00	1.00
0.700	1,127	7.027	7.000	5.300	4.500	5.900	(1.193)	(0.355)	(2.223)	(2.577)	(0.057)	(0.016)	0.000	0.000	0.94	0.98	1.00	1.00
0.750	1,207	7.096	7.000	5.300	4.500	5.900	(1.205)	(0.355)	(2.223)	(2.577)	(0.069)	(0.016)	0.000	0.000	0.93	0.98	1.00	1.00
0.800	1,287	7.160	7.000	5.300	4.500	5.900	(1.216)	(0.355)	(2.223)	(2.577)	(0.080)	(0.016)	0.000	0.000	0.92	0.98	1.00	1.00
0.850	1,368	7.221	7.000	5.300	4.500	5.900	(1.226)	(0.355)	(2.223)	(2.577)	(0.090)	(0.016)	0.000	0.000	0.91	0.98	1.00	1.00
0.900	1,448	7.278	7.000	5.300	4.500	5.900	(1.236)	(0.355)	(2.223)	(2.577)	(0.100)	(0.016)	0.000	0.000	0.91	0.98	1.00	1.00
0.950	1,529	7.332	7.000	5.300	4.500	5.900	(1.245)	(0.355)	(2.223)	(2.577)	(0.109)	(0.016)	0.000	0.000	0.90	0.98	1.00	1.00
1.000	1,609	7.384	7.000	5.300	4.500	5.900	(1.254)	(0.355)	(2.223)	(2.577)	(0.118)	(0.016)	0.000	0.000	0.89	0.98	1.00	1.00
1.250	2,012	7.607	7.000	5.300	4.500	5.900	(1.291)	(0.355)	(2.223)	(2.577)	(0.156)	(0.016)	0.000	0.000	0.86	0.98	1.00	1.00
1.500	2,414	7.700	7.000	5.300	4.500	5.900	(1.307)	(0.355)	(2.223)	(2.577)	(0.171)	(0.016)	0.000	0.000	0.84	0.98	1.00	1.00
1.750	2,816	7.700	7.000	5.300	4.500	5.900	(1.307)	(0.355)	(2.223)	(2.577)	(0.171)	(0.016)	0.000	0.000	0.84	0.98	1.00	1.00
2.000	3,219	7.700	7.000	5.300	4.500	5.900	(1.307)	(0.355)	(2.223)	(2.577)	(0.171)	(0.016)	0.000	0.000	0.84	0.98	1.00	1.00
2.250	3,621	7.700	7.000	5.300	4.500	5.900	(1.307)	(0.355)	(2.223)	(2.577)	(0.171)	(0.016)	0.000	0.000	0.84	0.98	1.00	1.00
2.500	4,023	7.700	7.000	5.300	4.500	5.900	(1.307)	(0.355)	(2.223)	(2.577)	(0.171)	(0.016)	0.000	0.000	0.84	0.98	1.00	1.00
2.750	4,426	7.700	7.000	5.300	4.500	5.900	(1.307)	(0.355)	(2.223)	(2.577)	(0.171)	(0.016)	0.000	0.000	0.84	0.98	1.00	1.00

Coefficients (Page 5)	V1	V2	V3	V4	V5
Storm Surge X	-0.170				
Storm Surge Non-X		-0.051			
Inland Flood X			-0.420		
Inland Flood Non-X				-0.338	-0.179

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].
   Column (5) = Min [Max (Log Distance to River, 2), 5.3].
   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 (11) are calculated similarly.
3. (12) = Column (8) - Column (8) for DTR 805. Columns (13) to (15) are calculated similarly.
4. Column (16) = EXP [Column (12)]. Columns (17) to (19) are calculated similarly.

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

Note: Data is from Page 2a.

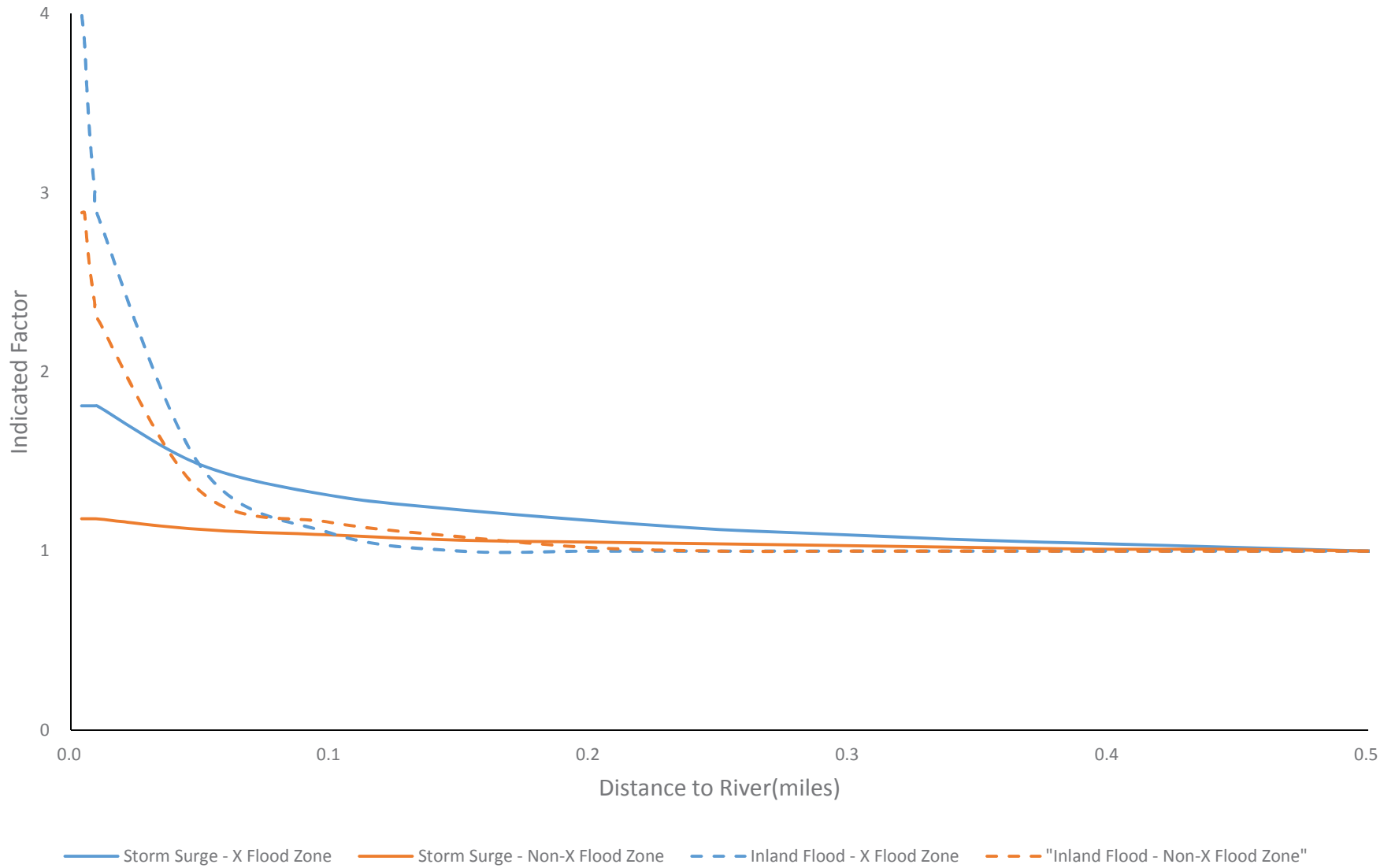National Association of Realtors
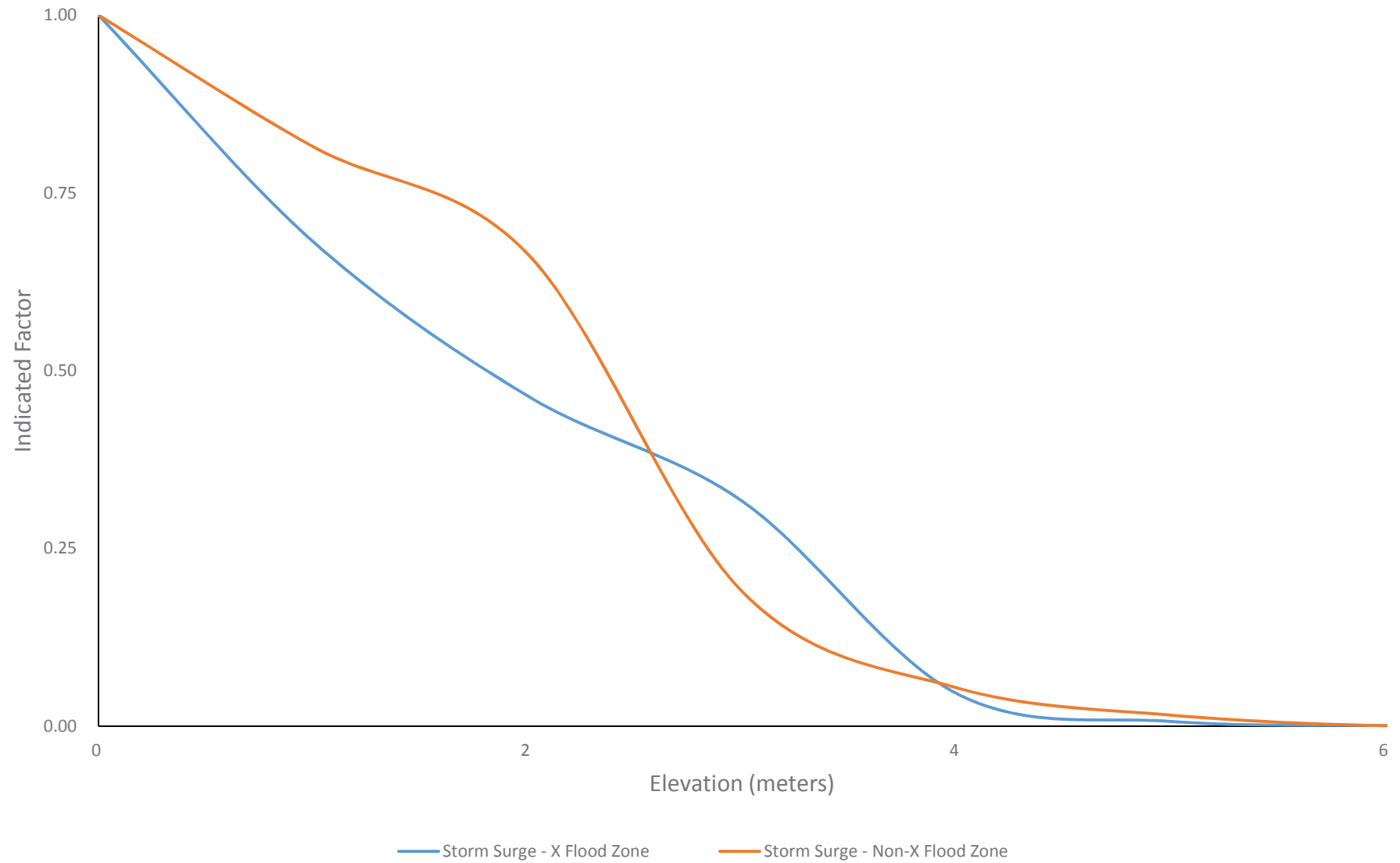Florida - Pinellas County

Estimation of Rating Factor - Elevation

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
						Indicated Exponent				Rebased Exponent				Indicated Factor			
		Adjusted LN (Distance to River)				Storm Surge		Inland Flood		Storm Surge		Inland Flood		Storm Surge		Inland Flood	
Elevation	V1	V2	V3	V4	V5	X	Non-X	X	Non-X	X	Non-X	X	Non-X	X	Non-X	X	Non-X
(Meters)	(Note 1)	(Note 1)	(Note 1)	(Note 1)	(Note 1)	(Note 2)	(Note 2)	(Note 2)	(Note 2)	(Note 3)	(Note 3)	(Note 3)	(Note 3)	(Note 4)	(Note 4)	(Note 4)	(Note 4)
0	0	3	0	2	5	(5.796)	(19.055)	0.000	0.000	0.000	0.000	0.000	0.000	1.00000	1.00000	1.00000	1.00000
1	1	3	1	2	5	(6.180)	(19.259)	0.000	0.000	(0.383)	(0.204)	0.000	0.000	0.68157	0.81508	1.00000	1.00000
2	2	3	2	2	5	(6.563)	(19.464)	0.000	0.000	(0.767)	(0.409)	0.000	0.000	0.46453	0.66436	1.00000	1.00000
3	3	3	2	3	5	(6.946)	(20.719)	0.000	0.000	(1.150)	(1.664)	0.000	0.000	0.31661	0.18936	1.00000	1.00000
4	3	4	2	4	5	(8.878)	(21.974)	0.000	0.000	(3.082)	(2.919)	0.000	0.000	0.04586	0.05397	1.00000	1.00000
5	3	5	2	5	5	(10.810)	(23.229)	0.000	0.000	(5.014)	(4.174)	0.000	0.000	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	0.000	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	0.000	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	0.000	0.00002	0.00000	1.00000	1.00000

Coefficients (Page 5)	V1	V2	V3	V4	V5
Storm Surge X	-0.383	-1.932			
Storm Surge Non-X			-0.204	-1.255	-3.309
Inland Flood X					
Inland Flood Non-X					

Notes:
1. 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].
2. (7) is the sumproduct of (2) to (6) and the respective coefficients. Columns (8) to (10) are calculated similarly.
3. (11) = Column (7) - Column (7) for DTR 00. Columns (12) to (14) are calculated similarly.
4. Column (15) = EXP [Column (11)]. Columns (16) to (18) are calculated similarly.

Milliman

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

Note: Data is from Page 3a.

Milliman

National Association of Realtors
Florida - Pinellas County
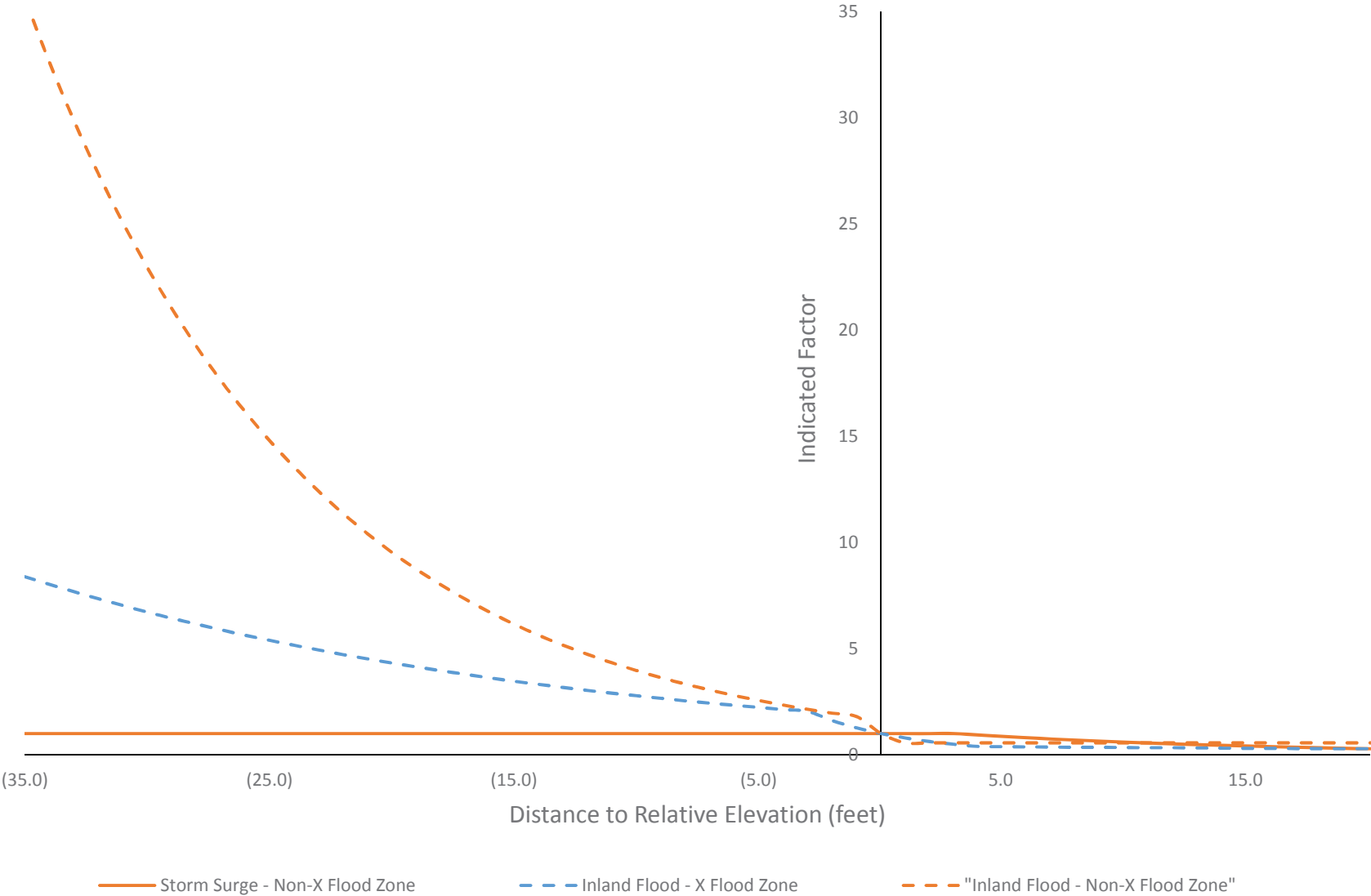
Estimation of Rating Factor - Relative Elevation

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
											Rebased Exponent				Indicated Factor			
							Indicated Exponent				Storm Surge		Inland Flood		Storm Surge		Inland Flood	
Relative		Adjusted LN (Distance to River)					Storm Surge		Inland Flood									
Elevation	V1	V2	V3	V4	V5	V6	X	Non-X	X	Non-X	X	Non-X	X	Non-X	X	Non-X	X	Non-X
(Feet)	(Note 1)	(Note 1)	(Note 1)	(Note 1)	(Note 1)	(Note 1)	(Note 2)	(Note 2)	(Note 2)	(Note 2)	(Note 3)	(Note 3)	(Note 3)	(Note 3)	(Note 4)	(Note 4)	(Note 4)	(Note 4)
(35)	3	(35)	(3)	4	(35)	(1)	0.000	(0.224)	2.173	3.661	0.000	0.000	2.127	3.573	1.00	1.00	8.39	35.62
(34)	3	(34)	(3)	4	(34)	(1)	0.000	(0.224)	2.128	3.573	0.000	0.000	2.083	3.485	1.00	1.00	8.03	32.62
(33)	3	(33)	(3)	4	(33)	(1)	0.000	(0.224)	2.084	3.485	0.000	0.000	2.038	3.397	1.00	1.00	7.68	29.88
(32)	3	(32)	(3)	4	(32)	(1)	0.000	(0.224)	2.040	3.397	0.000	0.000	1.994	3.309	1.00	1.00	7.35	27.37
(31)	3	(31)	(3)	4	(31)	(1)	0.000	(0.224)	1.996	3.309	0.000	0.000	1.950	3.222	1.00	1.00	7.03	25.07
(30)	3	(30)	(3)	4	(30)	(1)	0.000	(0.224)	1.952	3.222	0.000	0.000	1.906	3.134	1.00	1.00	6.72	22.96
(29)	3	(29)	(3)	4	(29)	(1)	0.000	(0.224)	1.907	3.134	0.000	0.000	1.862	3.046	1.00	1.00	6.43	21.03
(28)	3	(28)	(3)	4	(28)	(1)	0.000	(0.224)	1.863	3.046	0.000	0.000	1.817	2.958	1.00	1.00	6.16	19.26
(27)	3	(27)	(3)	4	(27)	(1)	0.000	(0.224)	1.819	2.958	0.000	0.000	1.773	2.870	1.00	1.00	5.89	17.64
(26)	3	(26)	(3)	4	(26)	(1)	0.000	(0.224)	1.775	2.870	0.000	0.000	1.729	2.783	1.00	1.00	5.63	16.16
(25)	3	(25)	(3)	4	(25)	(1)	0.000	(0.224)	1.731	2.783	0.000	0.000	1.685	2.695	1.00	1.00	5.39	14.80
(24)	3	(24)	(3)	4	(24)	(1)	0.000	(0.224)	1.686	2.695	0.000	0.000	1.641	2.607	1.00	1.00	5.16	13.56
(23)	3	(23)	(3)	4	(23)	(1)	0.000	(0.224)	1.642	2.607	0.000	0.000	1.596	2.519	1.00	1.00	4.94	12.42
(22)	3	(22)	(3)	4	(22)	(1)	0.000	(0.224)	1.598	2.519	0.000	0.000	1.552	2.431	1.00	1.00	4.72	11.37
(21)	3	(21)	(3)	4	(21)	(1)	0.000	(0.224)	1.554	2.431	0.000	0.000	1.508	2.344	1.00	1.00	4.52	10.42
(20)	3	(20)	(3)	4	(20)	(1)	0.000	(0.224)	1.510	2.344	0.000	0.000	1.464	2.256	1.00	1.00	4.32	9.54
(19)	3	(19)	(3)	4	(19)	(1)	0.000	(0.224)	1.465	2.256	0.000	0.000	1.420	2.168	1.00	1.00	4.14	8.74
(18)	3	(18)	(3)	4	(18)	(1)	0.000	(0.224)	1.421	2.168	0.000	0.000	1.375	2.080	1.00	1.00	3.96	8.01
(17)	3	(17)	(3)	4	(17)	(1)	0.000	(0.224)	1.377	2.080	0.000	0.000	1.331	1.992	1.00	1.00	3.79	7.33
(16)	3	(16)	(3)	4	(16)	(1)	0.000	(0.224)	1.333	1.992	0.000	0.000	1.287	1.904	1.00	1.00	3.62	6.72
(15)	3	(15)	(3)	4	(15)	(1)	0.000	(0.224)	1.289	1.904	0.000	0.000	1.243	1.817	1.00	1.00	3.46	6.15
(14)	3	(14)	(3)	4	(14)	(1)	0.000	(0.224)	1.244	1.817	0.000	0.000	1.198	1.729	1.00	1.00	3.32	5.63
(13)	3	(13)	(3)	4	(13)	(1)	0.000	(0.224)	1.200	1.729	0.000	0.000	1.154	1.641	1.00	1.00	3.17	5.16
(12)	3	(12)	(3)	4	(12)	(1)	0.000	(0.224)	1.156	1.641	0.000	0.000	1.110	1.553	1.00	1.00	3.03	4.73
(11)	3	(11)	(3)	4	(11)	(1)	0.000	(0.224)	1.112	1.553	0.000	0.000	1.066	1.465	1.00	1.00	2.90	4.33
(10)	3	(10)	(3)	4	(10)	(1)	0.000	(0.224)	1.068	1.465	0.000	0.000	1.022	1.378	1.00	1.00	2.78	3.97
(9)	3	(9)	(3)	4	(9)	(1)	0.000	(0.224)	1.023	1.378	0.000	0.000	0.977	1.290	1.00	1.00	2.66	3.63
(8)	3	(8)	(3)	4	(8)	(1)	0.000	(0.224)	0.979	1.290	0.000	0.000	0.933	1.202	1.00	1.00	2.54	3.33
(7)	3	(7)	(3)	4	(7)	(1)	0.000	(0.224)	0.935	1.202	0.000	0.000	0.889	1.114	1.00	1.00	2.43	3.05
(6)	3	(6)	(3)	4	(6)	(1)	0.000	(0.224)	0.891	1.114	0.000	0.000	0.845	1.026	1.00	1.00	2.33	2.79
(5)	3	(5)	(3)	4	(5)	(1)	0.000	(0.224)	0.846	1.026	0.000	0.000	0.801	0.939	1.00	1.00	2.23	2.56
(4)	3	(4)	(3)	4	(4)	(1)	0.000	(0.224)	0.802	0.939	0.000	0.000	0.756	0.851	1.00	1.00	2.13	2.34
(3)	3	(3)	(3)	4	(3)	(1)	0.000	(0.224)	0.758	0.851	0.000	0.000	0.712	0.763	1.00	1.00	2.04	2.14
(2)	3	(3)	(2)	4	(2)	(1)	0.000	(0.224)	0.521	0.763	0.000	0.000	0.475	0.675	1.00	1.00	1.61	1.96
(1)	3	(3)	(1)	4	(1)	(1)	0.000	(0.224)	0.283	0.675	0.000	0.000	0.237	0.587	1.00	1.00	1.27	1.80
0	3	(3)	0	4	(1)	0	0.000	(0.224)	0.046	0.088	0.000	0.000	0.000	0.000	1.00	1.00	1.00	1.00
1	3	(3)	1	4	(1)	1	0.000	(0.224)	(0.192)	(0.500)	0.000	0.000	(0.237)	(0.587)	1.00	1.00	0.79	0.56
2	3	(3)	2	4	(1)	1	0.000	(0.224)	(0.429)	(0.500)	0.000	0.000	(0.475)	(0.587)	1.00	1.00	0.62	0.56
3	3	(3)	3	4	(1)	1	0.000	(0.224)	(0.666)	(0.500)	0.000	0.000	(0.712)	(0.587)	1.00	1.00	0.49	0.56
4	4	(3)	4	4	(1)	1	0.000	(0.299)	(0.904)	(0.500)	0.000	(0.075)	(0.950)	(0.587)	1.00	0.93	0.39	0.56
5	5	(3)	4	5	(1)	1	0.000	(0.373)	(0.925)	(0.500)	0.000	(0.149)	(0.971)	(0.587)	1.00	0.86	0.38	0.56
6	6	(3)	4	6	(1)	1	0.000	(0.448)	(0.947)	(0.500)	0.000	(0.224)	(0.993)	(0.587)	1.00	0.80	0.37	0.56
7	7	(3)	4	7	(1)	1	0.000	(0.523)	(0.969)	(0.500)	0.000	(0.299)	(1.015)	(0.587)	1.00	0.74	0.36	0.56
8	8	(3)	4	8	(1)	1	0.000	(0.598)	(0.991)	(0.500)	0.000	(0.373)	(1.036)	(0.587)	1.00	0.69	0.35	0.56
9	9	(3)	4	9	(1)	1	0.000	(0.672)	(1.012)	(0.500)	0.000	(0.448)	(1.058)	(0.587)	1.00	0.64	0.35	0.56
10	10	(3)	4	10	(1)	1	0.000	(0.747)	(1.034)	(0.500)	0.000	(0.523)	(1.080)	(0.587)	1.00	0.59	0.34	0.56
11	11	(3)	4	11	(1)	1	0.000	(0.822)	(1.056)	(0.500)	0.000	(0.598)	(1.101)	(0.587)	1.00	0.55	0.33	0.56
12	12	(3)	4	12	(1)	1	0.000	(0.896)	(1.077)	(0.500)	0.000	(0.672)	(1.123)	(0.587)	1.00	0.51	0.33	0.56
13	13	(3)	4	13	(1)	1	0.000	(0.971)	(1.099)	(0.500)	0.000	(0.747)	(1.145)	(0.587)	1.00	0.47	0.32	0.56
14	14	(3)	4	14	(1)	1	0.000	(1.046)	(1.121)	(0.500)	0.000	(0.822)	(1.167)	(0.587)	1.00	0.44	0.31	0.56
15	15	(3)	4	15	(1)	1	0.000	(1.120)	(1.142)	(0.500)	0.000	(0.896)	(1.188)	(0.587)	1.00	0.41	0.30	0.56
16	16	(3)	4	16	(1)	1	0.000	(1.195)	(1.164)	(0.500)	0.000	(0.971)	(1.210)	(0.587)	1.00	0.38	0.30	0.56
17	17	(3)	4	17	(1)	1	0.000	(1.270)	(1.186)	(0.500)	0.000	(1.046)	(1.232)	(0.587)	1.00	0.35	0.29	0.56
18	18	(3)	4	18	(1)	1	0.000	(1.344)	(1.208)	(0.500)	0.000	(1.120)	(1.253)	(0.587)	1.00	0.33	0.29	0.56
19	19	(3)	4	19	(1)	1	0.000	(1.419)	(1.229)	(0.500)	0.000	(1.195)	(1.275)	(0.587)	1.00	0.30	0.28	0.56
20	20	(3)	4	19	(1)	1	0.000	(1.494)	(1.229)	(0.500)	0.000	(1.270)	(1.275)	(0.587)	1.00	0.28	0.28	0.56

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

Notes:
1. 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].
2. (8) is the sumproduct of (2) to (7) and the respective coefficients. Columns (9) to (11) are calculated similarly.
3. (12) = Column (8) - Column (8) for DTR 00. Columns (13) to (15) are calculated similarly.
4. Column (16) = EXP [Column (12)]. Columns (17) to (19) are calculated similarly.

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

Distance to Relative Elevation (feet)

—— Storm Surge - Non-X Flood Zone   – – Inland Flood - X Flood Zone   – – "Inland Flood - Non-X Flood Zone"

Note: Data is from Page 4a.

Milliman

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)]	1	-0.383	0.136	-0.650	-0.117	8	0.005
	max[3, min(8, elev)]	1	-1.932	0.029	-1.989	-1.875	4,442	0.000
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)]}	1	-0.007	0.002	-0.011	-0.002	8	0.005
	max{5.3, min[7, LN(DTC)]}	1	-0.067	0.004	-0.074	-0.060	312	0.000
	max{7, min[9.2, LN(DTC)]}	1	-0.277	0.006	-0.289	-0.264	1,915	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)]	1	-0.204	0.004	-0.212	-0.197	3,234	0.000
	max[2, min(5, elev)]	1	-1.255	0.009	-1.272	-1.238	20,999	0.000
	max[5, min(8, elev)]	1	-3.309	0.377	-4.047	-2.571	77	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)]	1	-0.044	0.003	-0.049	-0.039	286	0.000
	max[-3, min(4, rel_elev)]	1	-0.237	0.003	-0.244	-0.231	5,713	0.000
	max[4, min(19, rel_elev)]	1	-0.022	0.002	-0.025	-0.018	166	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)]}	1	-0.338	0.013	-0.365	-0.312	634	0.000
	max{4.5, min[5.9, LN(DTR)]}	1	-0.179	0.011	-0.201	-0.157	256	0.000
Relative Elevation	max[-35, min(-1, rel_elev)]	1	-0.088	0.001	-0.089	-0.086	10,388	0.000
	max[-1, min(1, rel_elev)]	1	-0.587	0.010	-0.608	-0.567	3,191	0.000
Scale		0	4233.685	0.000	4233.685	4233.685	0	0.000

Note:
1. Coefficients estimated by GLM performed in SAS.

Extent of Mapped Area

FEMA Flood Zones

AE ▢

Piney Point
Village

I-10

Houston

Pasadena

Piney Point
Village

Buffalo
Bayou

0   1   2   4
Miles

National Association of REALTORS®
Expected Losses
Harris County, Texas

Map TX-B

One Story (Base Risk 1)
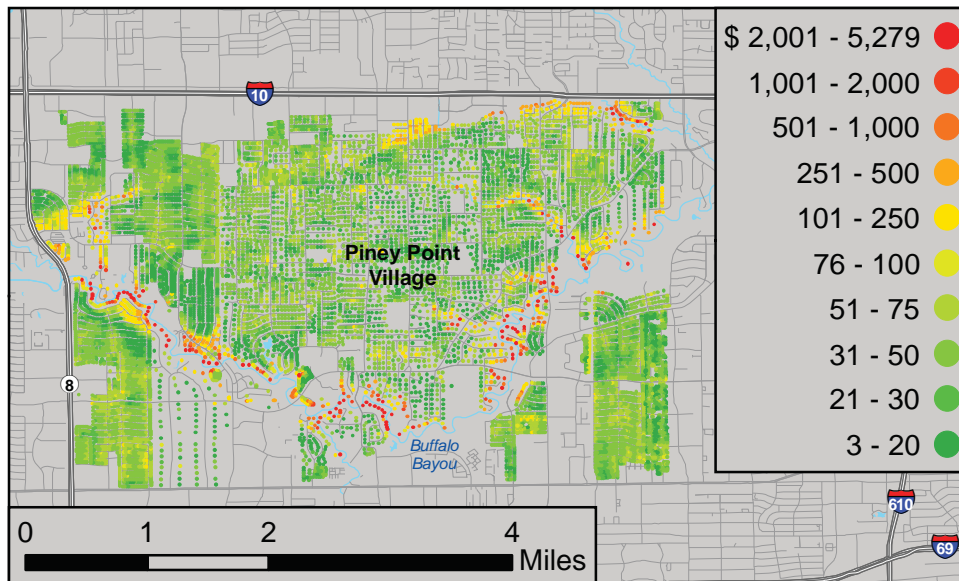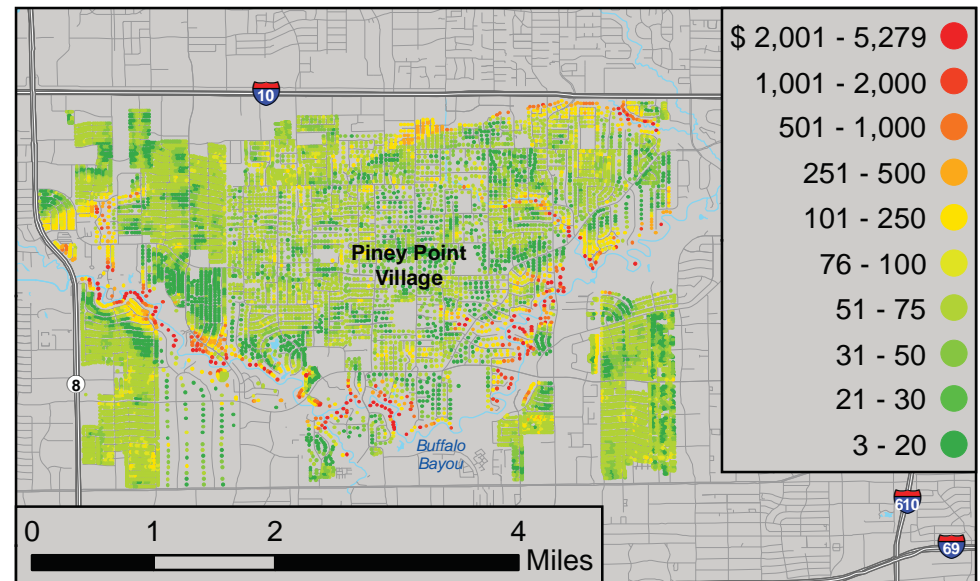
$ 2,001 - 5,279	●
1,001 - 2,000	●
501 - 1,000	●
251 - 500	●
101 - 250	●
76 - 100	●
51 - 75	●
31 - 50	●
21 - 30	●
3 - 20	●

Two Story (Base Risk 2)

$ 2,001 - 5,279	●
1,001 - 2,000	●
501 - 1,000	●
251 - 500	●
101 - 250	●
76 - 100	●
51 - 75	●
31 - 50	●
21 - 30	●
3 - 20	●

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

One Story (Base Risk 1)

Two Story (Base Risk 2)

One Story (Base Risk 1) map legend:

- $ 15,001 - 22,237
- 10,001 - 15,000
- 5,001 - 10,000
- 2,001 - 5,000
- 1,501 - 2,000
- 1,001 - 1,500
- 601 - 1,000
- 401 - 600
- 294 - 400
- 293

Piney Point Village

Buffalo Bayou

0   1   2   4   Miles

Two Story (Base Risk 2) map legend:

- $ 15,001 - 22,237
- 10,001 - 15,000
- 5,001 - 10,000
- 2,001 - 5,000
- 1,501 - 2,000
- 1,001 - 1,500
- 601 - 1,000
- 401 - 600
- 294 - 400
- 293

Piney Point Village

Buffalo Bayou

0   1   2   4   Miles
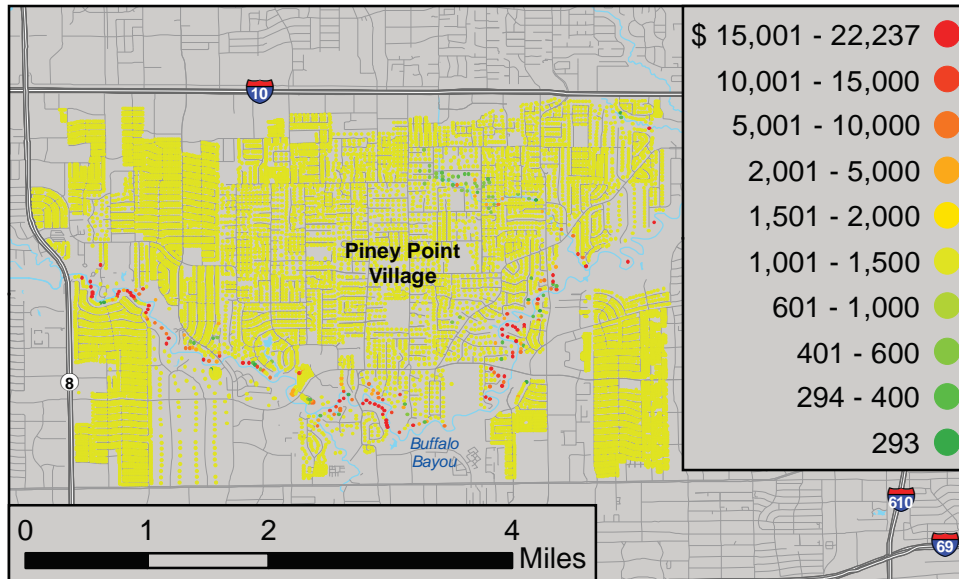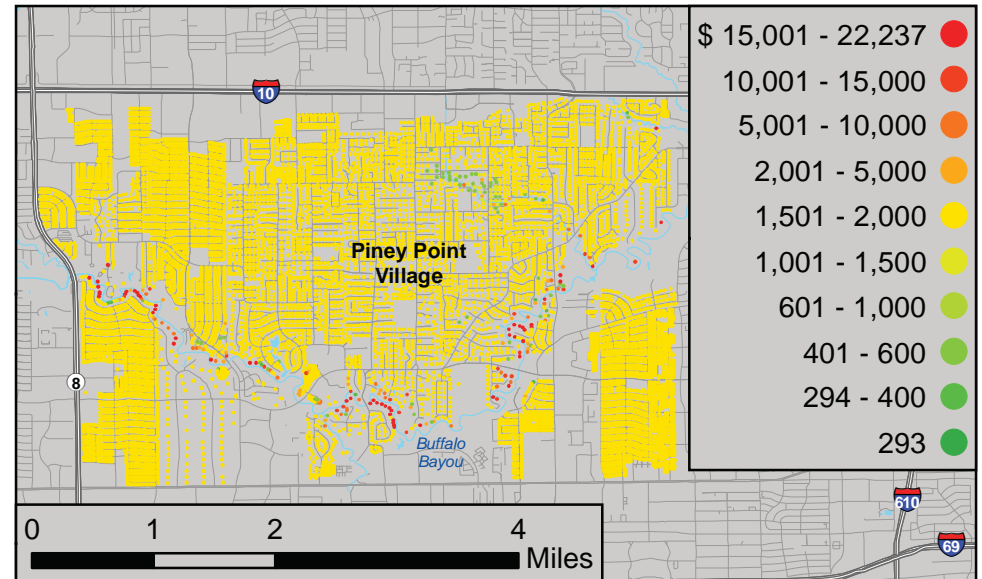
Notes:
1. Base Risk 1: 1-Story, $125k Coverage A, Frame, 1995
2. Base Risk 2: 2-Story, $250k Coverage A, Frame, 1995

National Association of REALTORS®
Premium Above/Below Target
Harris County, Texas
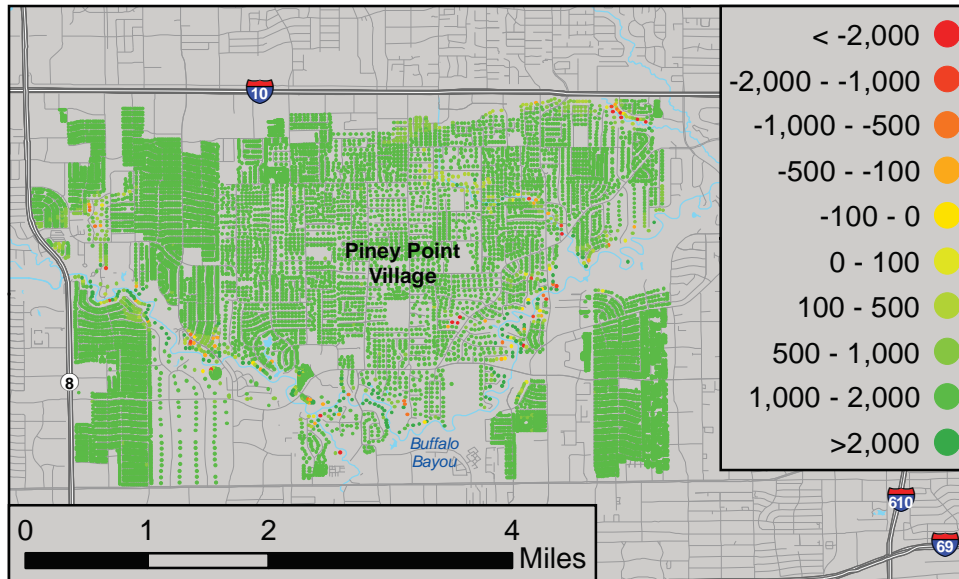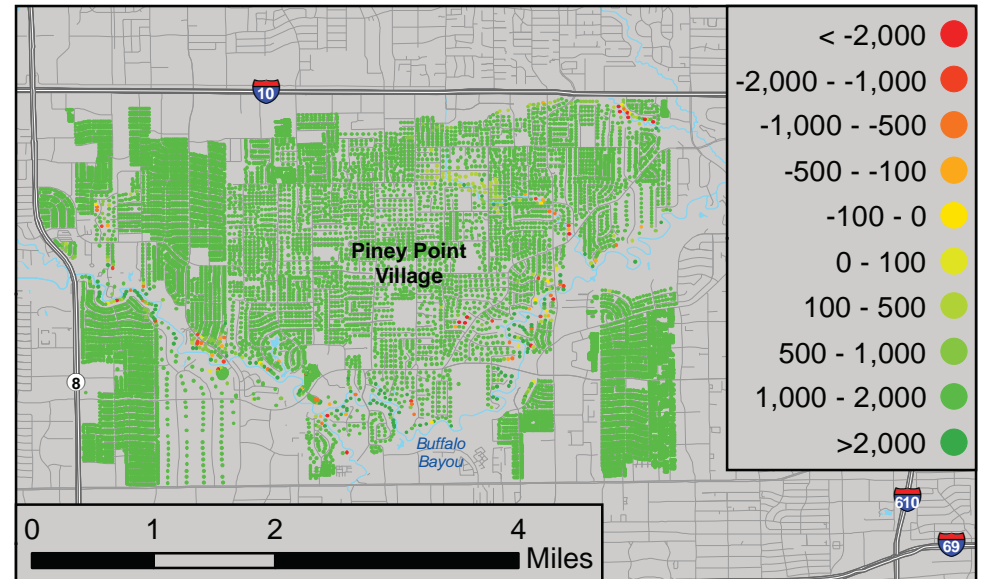
One Story (Base Risk 1)   **Two Story (Base Risk 2)**

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

Milliman

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

Average Premium Above/Below Target

One Story (Base Risk 1): Flood Plain (AE) 2,230; Storm Surge Zone (VE) 12,117; Outside of Flood Plain (X) 1,099

Two Story (Base Risk 2): Flood Plain (AE) 1,931; Storm Surge Zone (VE) 27,024; Outside of Flood Plain (X) 1,509

■ Flood Plain (AE)   ■ Storm Surge Zone (VE)   ■ Outside of Flood Plain (X)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
			One Story (Base Risk 1)			Two Story (Base Risk 2)			
					Premium				Premium
Flood Zone		Average	Average	Target	Above/Below	Average	Average	Target	Above/Below
(Note 1)	Count	Loss	Premium	Premium	Target	Loss	Premium	Premium	Target
Flood Plain (AE)	84,702	$272	$2,725	$494	$2,230	$353	$2,572	$641	$1,931
Storm Surge Zone (VE)	108	3,869	19,791	7,674	12,117	5,147	37,232	10,208	27,024
Outside of Flood Plain (X)	866,430	67	1,221	122	1,099	87	1,666	157	1,509
Total	951,240	$86	$1,357	$156	$1,201	$111	$1,751	$202	$1,550

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

Expected Loss
Flood Zone AE

Average Premium Above/Below Target
Flood Zone AE

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
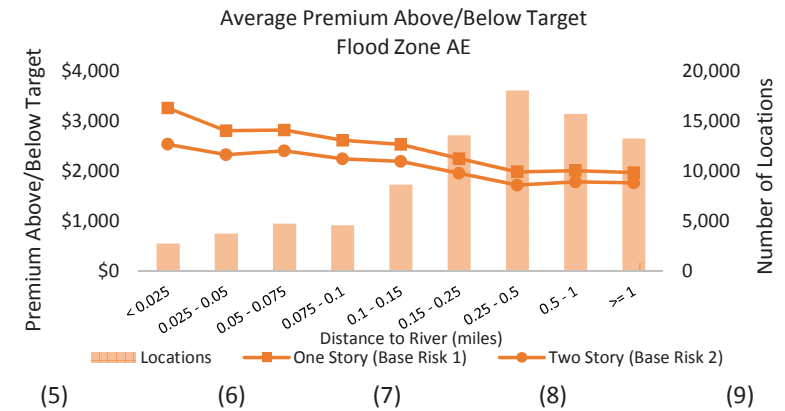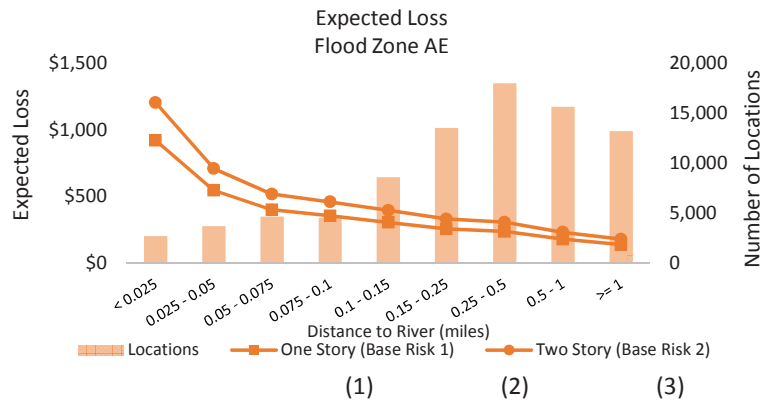
		One Story (Base Risk 1)				Two Story (Base Risk 2)			
Distance to River (miles)	Count	Average Loss	Average Premium	Target Premium	Premium Above/Below Target	Average Loss	Average Premium	Target Premium	Premium Above/Below Target
< 0.025	2,712	$920	$4,920	$1,673	$3,246	$1,205	$4,715	$2,191	$2,524
0.025 - 0.05	3,707	546	3,789	993	2,795	710	3,609	1,291	2,317
0.05 - 0.075	4,688	401	3,537	730	2,807	519	3,337	944	2,393
0.075 - 0.1	4,557	355	3,246	645	2,602	460	3,067	836	2,231
0.1 - 0.15	8,606	306	3,075	556	2,519	396	2,900	720	2,180
0.15 - 0.25	13,530	256	2,705	466	2,240	331	2,548	602	1,946
0.25 - 0.5	18,009	237	2,404	431	1,973	307	2,267	558	1,709
0.5 - 1	15,665	179	2,325	326	1,999	232	2,191	421	1,770
>= 1	13,228	140	2,211	254	1,957	181	2,079	328	1,751
Total	84,702	$272	$2,725	$494	$2,230	$353	$2,572	$641	$1,931

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%

Milliman

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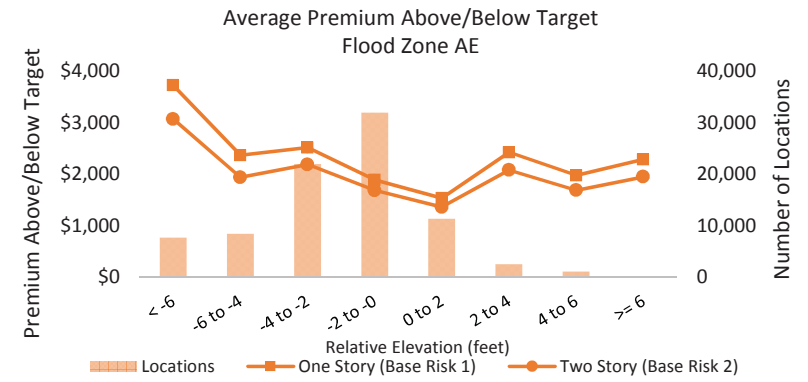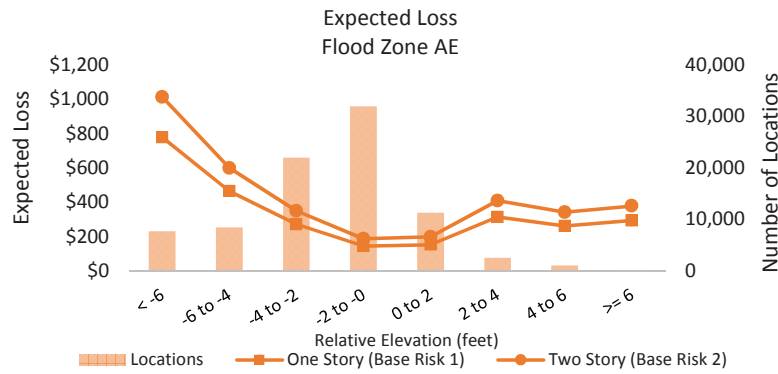Harris County, Texas

Flood Zone VE

		One Story (Base Risk 1)				Two Story (Base Risk 2)			
Distance to River (miles)	Count	Average Loss	Average Premium	Target Premium	Premium Above/Below Target	Average Loss	Average Premium	Target Premium	Premium Above/Below Target
< 0.025	2	$6,498	$21,614	$12,888	$8,726	$8,664	$40,641	$17,185	$23,456
0.025 - 0.05	2	5,366	22,497	10,643	11,854	7,167	42,310	14,215	28,095
0.05 - 0.075	2	925	19,250	1,834	17,416	1,227	36,269	2,434	33,835
0.075 - 0.1	0								
0.1 - 0.15	8	3,472	21,274	6,886	14,388	4,649	40,029	9,222	30,807
0.15 - 0.25	8	3,277	16,908	6,500	10,407	4,396	31,875	8,718	23,156
0.25 - 0.5	48	3,860	18,502	7,656	10,845	5,139	34,824	10,194	24,630
0.5 - 1	33	4,120	21,438	8,172	13,266	5,449	40,287	10,808	29,479
>= 1	5	3,408	21,944	6,759	15,185	4,569	41,270	9,062	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;
    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%

Milliman

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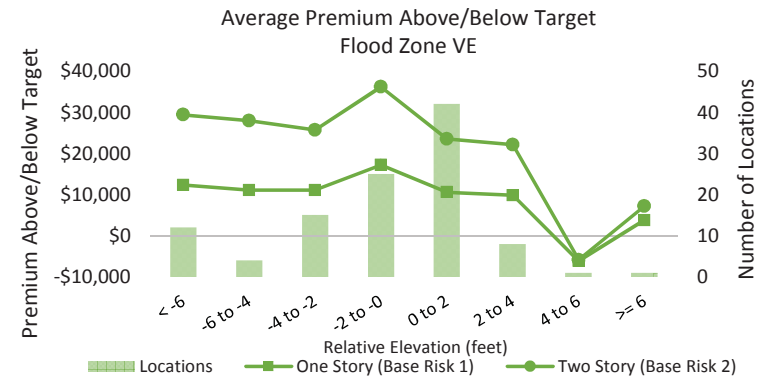Summary Statistics by Distance to River
Harris County, Texas

Flood Zone X

Expected Loss
Flood Zone X

Average Premium Above/Below Target
Flood Zone X

(1)　(2)　(3)　(4)　(5)　(6)　(7)　(8)　(9)
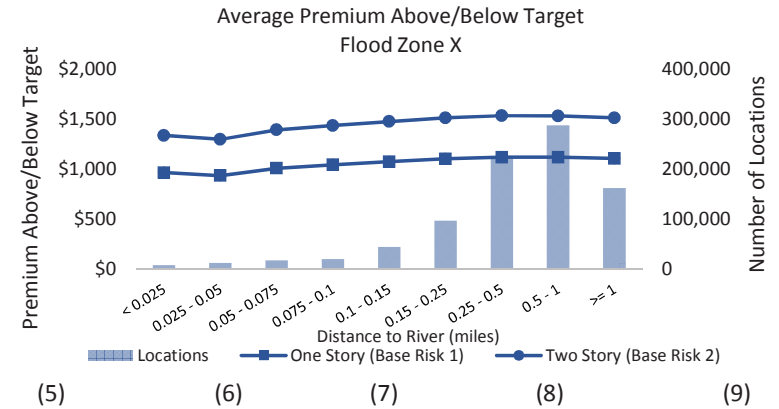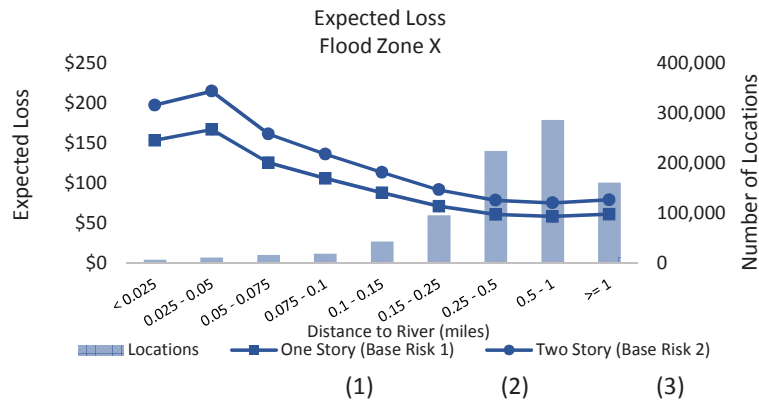
| | | One Story (Base Risk 1) | | | | Two Story (Base Risk 2) | | | |
Distance to River (miles)	Count	Average Loss	Average Premium	Target Premium	Premium Above/Below Target	Average Loss	Average Premium	Target Premium	Premium Above/Below Target
< 0.025	6,903	$154	$1,239	$279	$960	$198	$1,691	$359	$1,332
0.025 - 0.05	11,507	167	1,233	304	929	215	1,683	391	1,292
0.05 - 0.075	16,911	126	1,232	229	1,003	162	1,681	294	1,387
0.075 - 0.1	19,069	106	1,230	193	1,038	136	1,679	248	1,431
0.1 - 0.15	43,374	88	1,229	160	1,069	114	1,677	206	1,470
0.15 - 0.25	95,965	71	1,227	129	1,098	92	1,674	167	1,508
0.25 - 0.5	224,812	61	1,225	111	1,114	79	1,671	143	1,528
0.5 - 1	286,617	58	1,219	106	1,113	75	1,664	137	1,526
>= 1	161,272	61	1,211	111	1,099	79	1,652	144	1,508
Total	866,430	$67	$1,221	$122	$1,099	$87	$1,666	$157	$1,509

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%

Milliman

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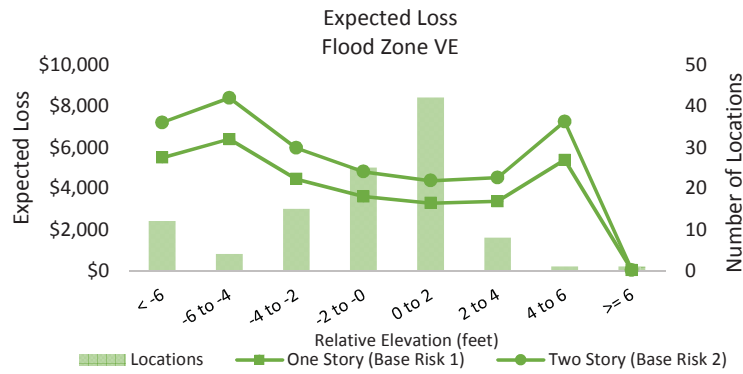Harris County, Texas

Flood Zone AE

Expected Loss
Flood Zone AE

Average Premium Above/Below Target
Flood Zone AE

		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		One Story (Base Risk 1)					Two Story (Base Risk 2)			
Relative Elevation			Average	Average	Target	Premium Above/Below		Average	Average	Target	Premium Above/Below
(feet)	Count		Loss	Premium	Premium	Target	Loss	Premium	Premium	Target
< -6	7,625		$776	$5,133	$1,411	$3,722	$1,011	$4,907	$1,839	$3,068
-6 to -4	8,377		462	3,206	841	2,366	598	3,022	1,087	1,936
-4 to -2	21,938		270	3,004	491	2,513	348	2,819	633	2,186
-2 to -0	31,946		143	2,143	260	1,884	185	2,019	337	1,683
0 to 2	11,259		151	1,806	275	1,531	196	1,716	357	1,359
2 to 4	2,477		312	2,988	567	2,421	408	2,817	742	2,075
4 to 6	999		261	2,447	474	1,974	340	2,301	618	1,683
>= 6	81		292	2,814	530	2,284	377	2,631	685	1,946
Total	84,702		$272	$2,725	$494	$2,230	$353	$2,572	$641	$1,931

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%

Milliman

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

Flood Zone VE

Expected Loss
Flood Zone VE

Average Premium Above/Below Target
Flood Zone VE

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

		One Story (Base Risk 1)				Two Story (Base Risk 2)			
Relative Elevation		Average	Average	Target	Premium Above/Below	Average	Average	Target	Premium Above/Below
(feet)	Count	Loss	Premium	Premium	Target	Loss	Premium	Premium	Target
< -6	12	$5,486	$23,216	$10,881	$12,335	$7,183	$43,636	$14,246	$29,390
-6 to -4	4	6,383	23,733	12,661	11,071	8,382	44,598	16,625	27,973
-4 to -2	15	4,446	19,914	8,819	11,095	5,950	37,488	11,802	25,685
-2 to -0	25	3,596	24,309	7,133	17,176	4,800	45,660	9,521	36,139
0 to 2	42	3,276	17,074	6,499	10,575	4,369	32,163	8,665	23,498
2 to 4	8	3,360	16,502	6,665	9,837	4,514	31,079	8,954	22,125
4 to 6	1	5,373	4,517	10,657	(6,140)	7,233	8,503	14,346	(5,843)
>= 6	1	16	3,836	32	3,803	21	7,202	42	7,160
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
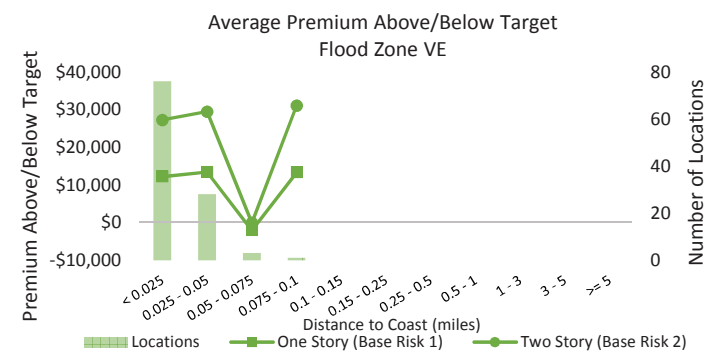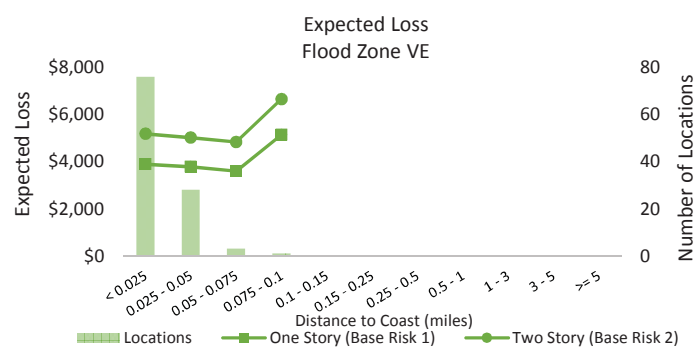Summary Statistics by Relative Elevation
Harris County, Texas

Flood Zone X

Expected Loss
Flood Zone X

Average Premium Above/Below Target
Flood Zone X

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
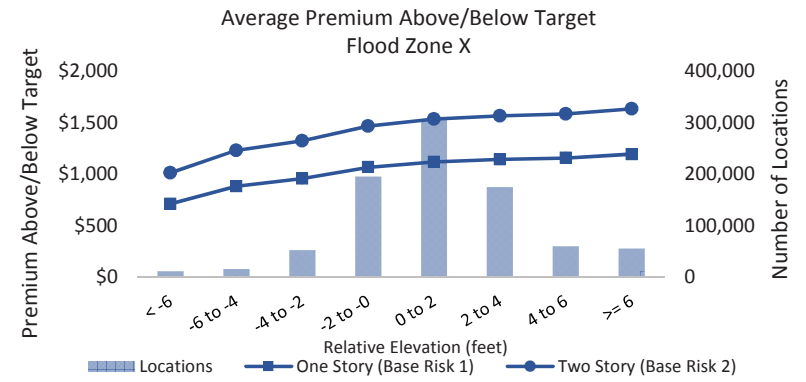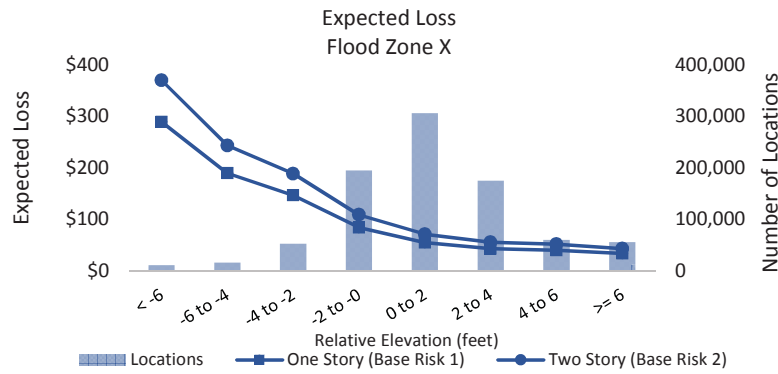
| | | One Story (Base Risk 1) | | | | Two Story (Base Risk 2) | | | |
Relative Elevation (feet)	Count	Average Loss	Average Premium	Target Premium	Premium Above/Below Target	Average Loss	Average Premium	Target Premium	Premium Above/Below Target
< -6	10,596	$289	$1,233	$525	$708	$369	$1,683	$672	$1,011
-6 to -4	15,420	189	1,224	343	881	243	1,670	441	1,229
-4 to -2	51,718	146	1,220	265	955	188	1,665	342	1,323
-2 to -0	194,605	84	1,217	152	1,065	108	1,661	197	1,464
0 to 2	305,702	54	1,217	99	1,118	70	1,661	128	1,532
2 to 4	174,179	43	1,220	78	1,143	55	1,665	100	1,564
4 to 6	59,206	40	1,228	72	1,156	51	1,676	93	1,583
>= 6	55,004	33	1,253	60	1,193	43	1,710	78	1,632
Total	866,430	$67	$1,221	$122	$1,099	$87	$1,666	$157	$1,509

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%

Milliman

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

Flood Zone AE

Expected Loss
Flood Zone AE

Average Premium Above/Below Target
Flood Zone AE
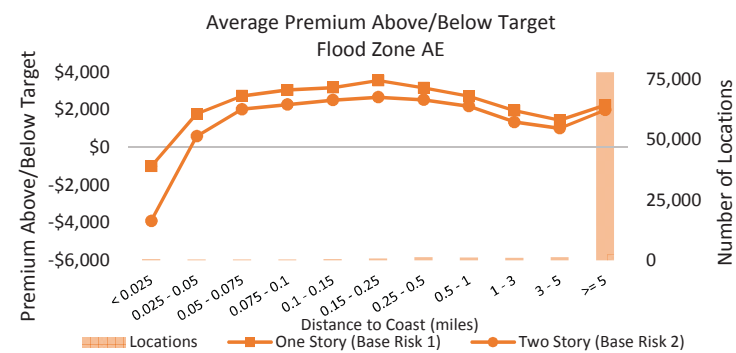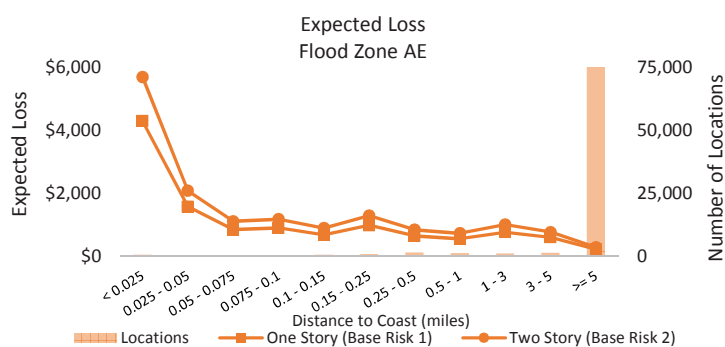
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |

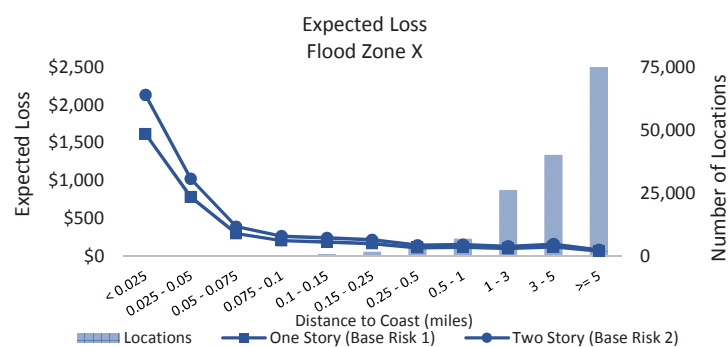| | | One Story (Base Risk 1) | | | | Two Story (Base Risk 2) | | | |
Distance to Coast (miles)	Count	Average Loss	Average Premium	Target Premium	Premium Above/Below Target	Average Loss	Average Premium	Target Premium	Premium Above/Below Target
< 0.025	459	$4,296	$6,798	$7,811	($1,013)	$5,693	$6,441	$10,351	($3,910)
0.025 - 0.05	311	1,570	4,614	2,855	1,760	2,074	4,346	3,771	575
0.05 - 0.075	307	835	4,233	1,518	2,715	1,099	4,011	1,999	2,012
0.075 - 0.1	251	888	4,642	1,614	3,028	1,168	4,387	2,125	2,263
0.1 - 0.15	460	670	4,379	1,219	3,160	881	4,100	1,601	2,498
0.15 - 0.25	749	970	5,304	1,763	3,541	1,280	4,973	2,327	2,646
0.25 - 0.5	1,297	631	4,294	1,148	3,146	829	4,026	1,508	2,518
0.5 - 1	1,050	548	3,691	997	2,694	718	3,477	1,305	2,172
1 - 3	946	752	3,302	1,366	1,936	995	3,142	1,810	1,332
3 - 5	1,169	586	2,493	1,066	1,427	756	2,374	1,375	999
>= 5	77,703	209	2,603	381	2,223	270	2,458	490	1,968
Total	84,702	$272	$2,725	$494	$2,230	$353	$2,572	$641	$1,931

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
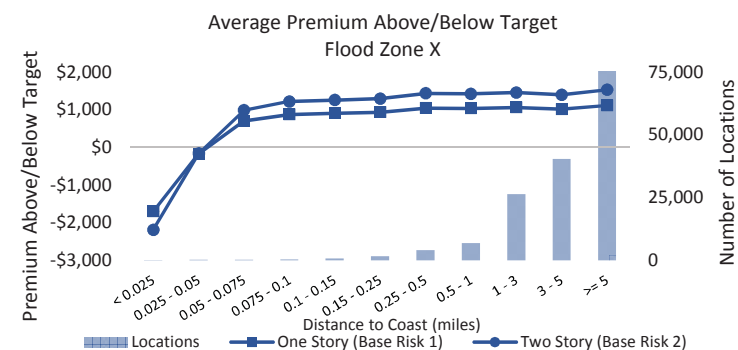Summary Statistics by Distance to Coast
Harris County, Texas

Flood Zone VE

Expected Loss
Flood Zone VE

Average Premium Above/Below Target
Flood Zone VE

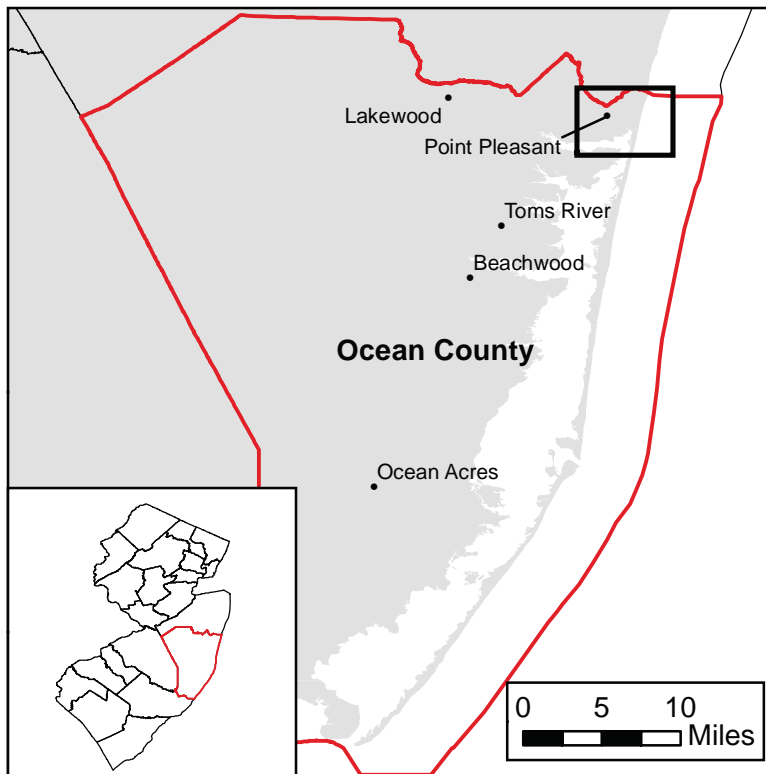|		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
			One Story (Base Risk 1)				Two Story (Base Risk 2)			
Distance to Coast (miles)	Count	Average Loss	Average Premium	Target Premium	Premium Above/Below Target	Average Loss	Average Premium	Target Premium	Premium Above/Below Target	
< 0.025	76	$3,893	$19,907	$7,722	$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								
0.5 - 1	0								
1 - 3	0								
3 - 5	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.

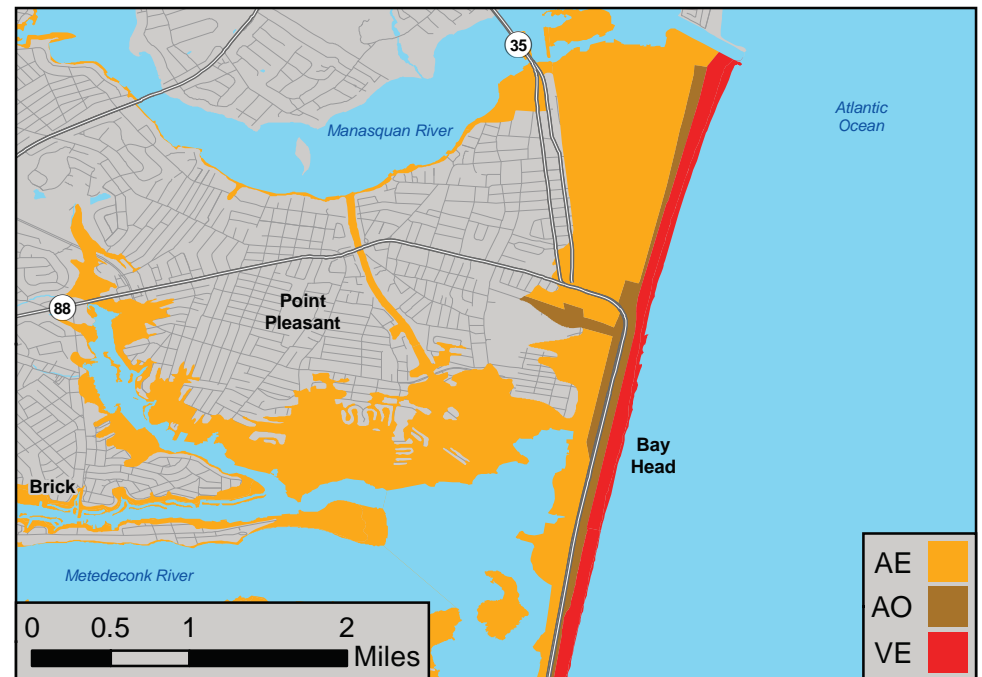3. Column (4) = (2) x (1 + contingency) / (1 - Expense), where contingency is 20% and expense is 39.5%

Milliman

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

Flood Zone X

Expected Loss
Flood Zone X

Average Premium Above/Below Target
Flood Zone X

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |

| | | One Story (Base Risk 1) | | | | Two Story (Base Risk 2) | | | |
Distance to Coast (miles)	Count	Average Loss	Average Premium	Target Premium	Premium Above/Below Target	Average Loss	Average Premium	Target Premium	Premium Above/Below Target
< 0.025	90	$1,616	$1,236	$2,939	($1,703)	$2,134	$1,686	$3,880	($2,194)
0.025 - 0.05	189	780	1,236	1,418	(182)	1,022	1,687	1,858	(171)
0.05 - 0.075	158	296	1,231	538	693	386	1,680	702	979
0.075 - 0.1	309	201	1,234	365	869	261	1,684	475	1,209
0.1 - 0.15	672	183	1,232	333	899	238	1,681	432	1,248
0.15 - 0.25	1,546	164	1,226	299	928	213	1,674	388	1,286
0.25 - 0.5	4,014	108	1,233	197	1,036	140	1,682	254	1,428
0.5 - 1	6,840	115	1,235	208	1,027	148	1,685	270	1,415
1 - 3	26,216	98	1,229	178	1,051	127	1,677	231	1,446
3 - 5	40,221	120	1,224	218	1,005	155	1,670	282	1,388
>= 5	786,175	62	1,221	113	1,108	80	1,666	145	1,520
Total	866,430	$67	$1,221	$122	$1,099	$87	$1,666	$157	$1,509

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%

Extent of Mapped Area

FEMA Flood Zones

Lakewood

Point Pleasant

Toms River

Beachwood

Ocean County

Ocean Acres

0   5   10
Miles

35

Manasquan River

Atlantic Ocean

Point Pleasant

88

Bay Head

Brick

Metedeconk River
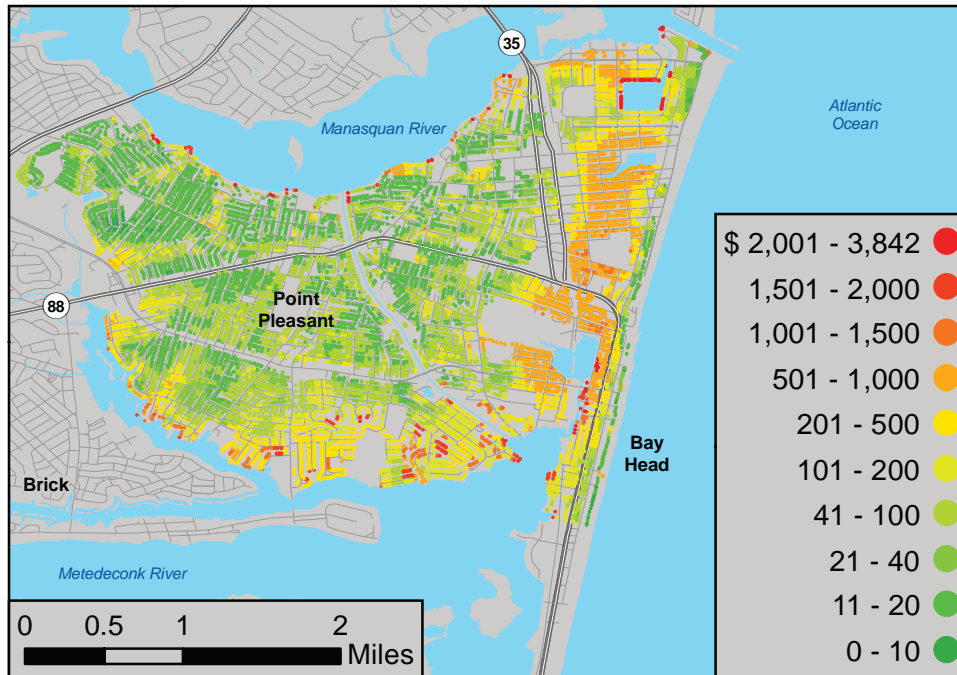
0   0.5   1   2   Miles

AE	
AO	
VE	

Note:

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

National Association of REALTORS®
Expected Losses
Ocean County, New Jersey
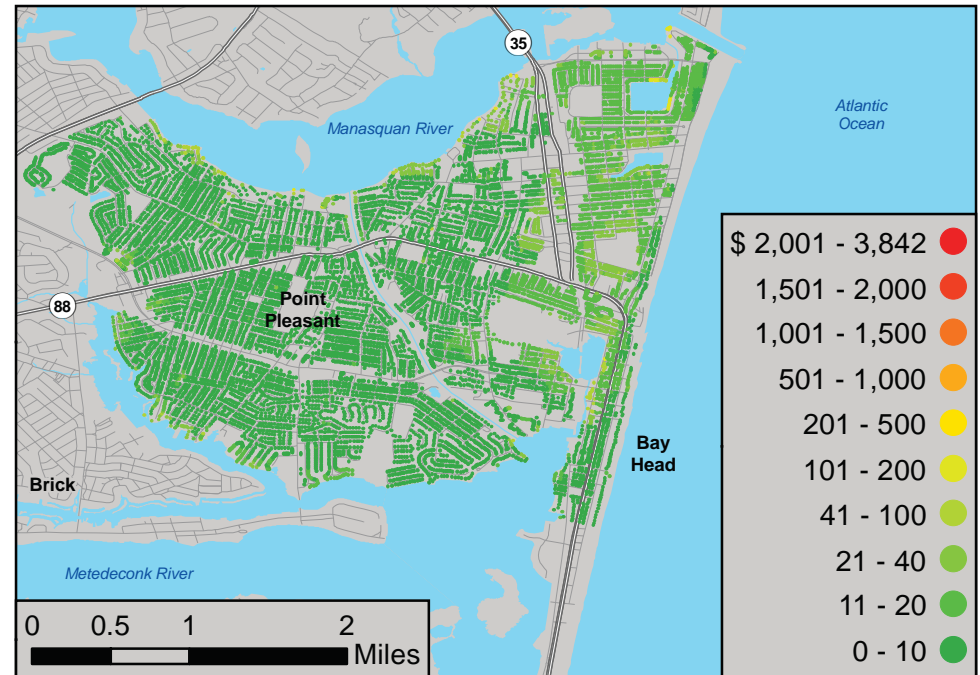
Not Elevated (Base Risk 1)

Elevated (Base Risk 2)

$ 2,001 - 3,842 ●
1,501 - 2,000 ●
1,001 - 1,500 ●
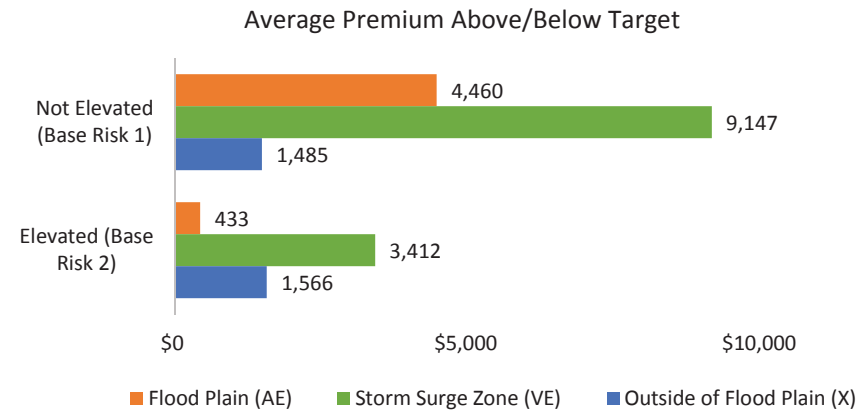501 - 1,000 ●
201 - 500 ●
101 - 200 ●
41 - 100 ●
21 - 40 ●
11 - 20 ●
0 - 10 ●

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

Milliman

Not Elevated (Base Risk 1)

Elevated (Base Risk 2)

Atlantic
Ocean

Manasquan River

Point
Pleasant

88

Bay
Head

Brick

Metedeconk River

$ 15,001 - 30,046	🔴
10,001 - 15,000	🔴
6,001 - 10,000	🟠
4,001 - 6,000	🟠
3,001 - 4,000	🟡
2,001 - 3,000	🟡
1,501 - 2,000	🟢
1,001 - 1,500	🟢
601 - 1,000	🟢
443 - 600	🟢

0   0.5   1   2
Miles

35

Atlantic
Ocean

Manasquan River

Point
Pleasant

88

Bay
Head

Brick

Metedeconk River

$ 15,001 - 30,046	🔴
10,001 - 15,000	🔴
6,001 - 10,000	🟠
4,001 - 6,000	🟠
3,001 - 4,000	🟡
2,001 - 3,000	🟡
1,501 - 2,000	🟢
1,001 - 1,500	🟢
601 - 1,000	🟢
443 - 600	🟢

0   0.5   1   2
Miles

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
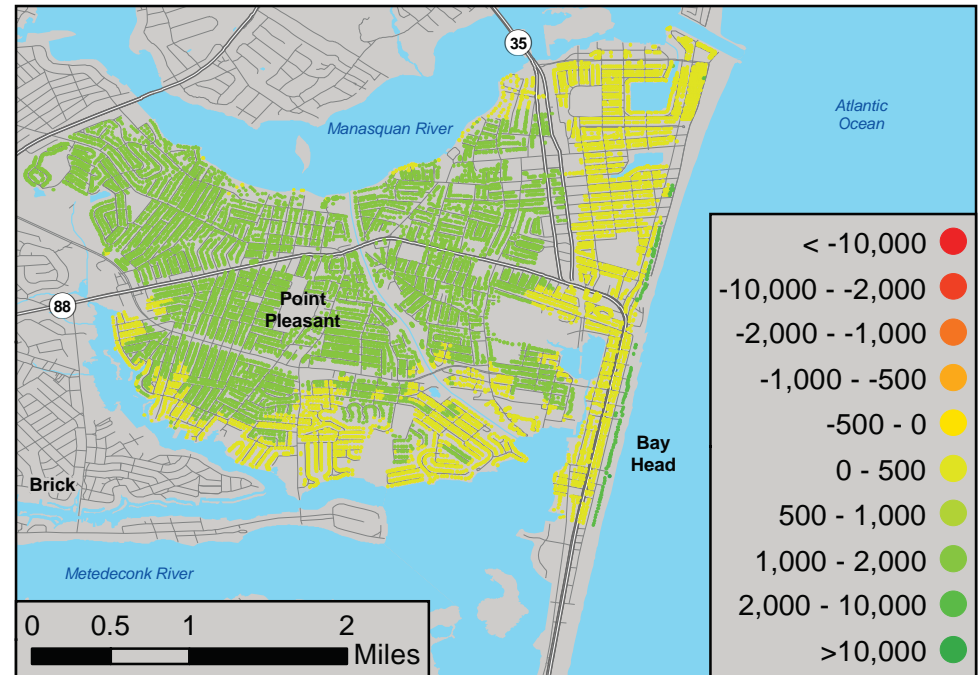
Not Elevated (Base Risk 1)

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
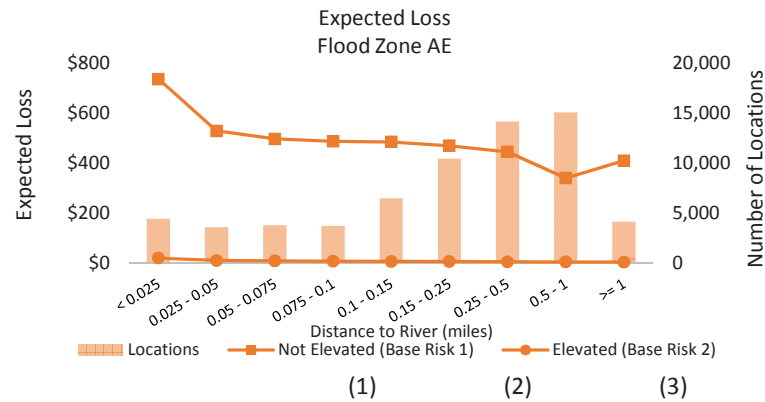Summary Statistics by Flood Zone
Ocean County, New Jersey

Average Premium Above/Below Target

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
			Not Elevated (Base Risk 1)				Elevated (Base Risk 2)		
Flood Zone (Note 1)	Count	Average Loss	Average Premium	Target Premium	Premium Above/Below Target	Average Loss	Average Premium	Target Premium	Premium Above/Below Target
Flood Plain (AE)	65,825	$456	$5,289	$829	$4,460	$7	$445	$13	$433
Storm Surge Zone (VE)	2,434	122	9,390	243	9,147	4	3,419	7	3,412
Outside of Flood Plain (X)	223,907	46	1,570	84	1,485	2	1,570	3	1,566
Total	292,166	$139	$2,473	$253	$2,219	$3	$1,332	$5	$1,326

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
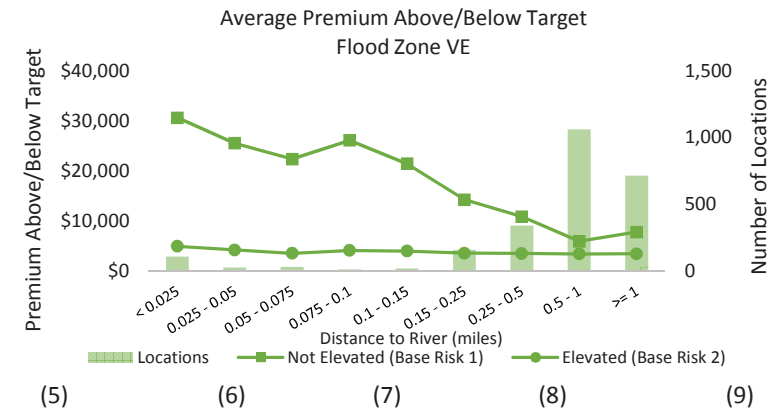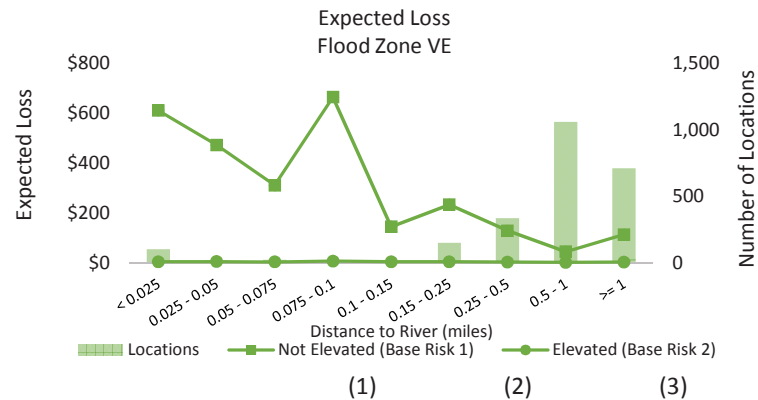Ocean County, New Jersey

Flood Zone AE

Expected Loss
Flood Zone AE

Average Premium Above/Below Target
Flood Zone AE

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

| | | Not Elevated (Base Risk 1) | | | | Elevated (Base Risk 2) | | | |
Distance to River (miles)	Count	Average Loss	Average Premium	Target Premium	Premium Above/Below Target	Average Loss	Average Premium	Target Premium	Premium Above/Below Target
< 0.025	4,421	$736	$5,562	$1,339	$4,223	$20	$449	$37	$412
0.025 - 0.05	3,608	529	4,768	961	3,807	10	443	18	425
0.05 - 0.075	3,798	496	4,628	903	3,725	9	443	16	427
0.075 - 0.1	3,717	487	4,607	885	3,722	8	443	14	429
0.1 - 0.15	6,461	484	4,673	880	3,792	7	443	12	431
0.15 - 0.25	10,447	469	4,786	853	3,933	6	444	11	433
0.25 - 0.5	14,154	445	5,381	809	4,571	5	446	9	437
0.5 - 1	15,085	340	5,859	619	5,240	5	445	9	437
>= 1	4,134	410	6,513	745	5,768	4	451	7	444
Total	65,825	$456	$5,289	$829	$4,460	$7	$445	$13	$433

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
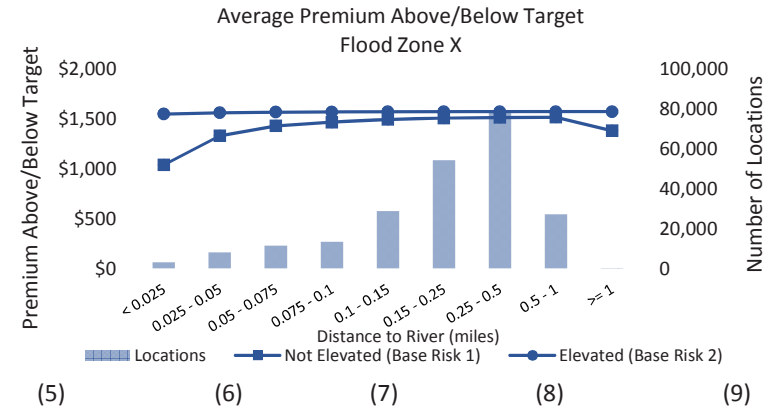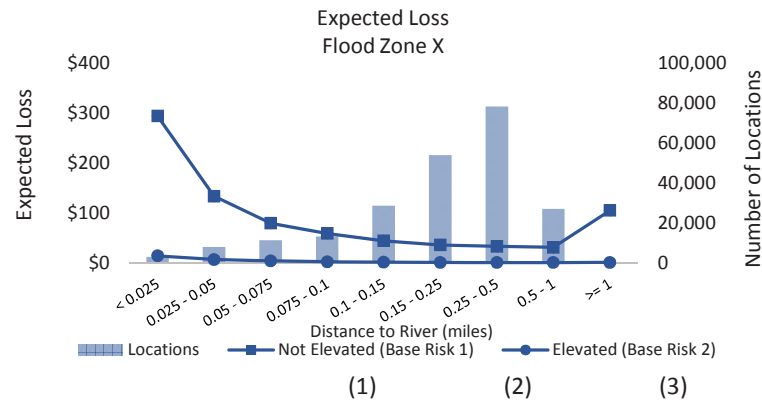Ocean County, New Jersey

Flood Zone VE
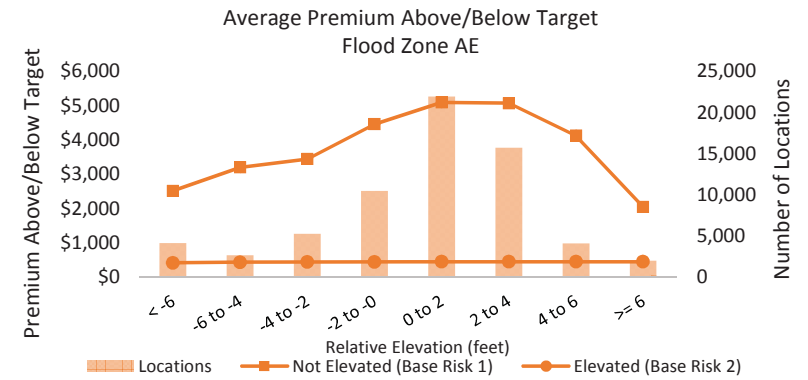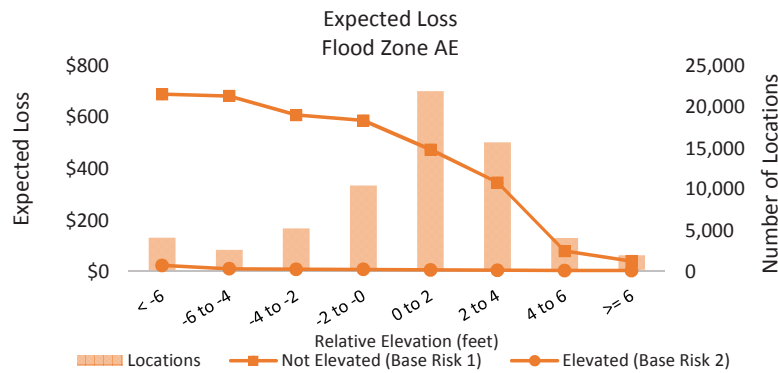

Expected Loss
Flood Zone VE

Average Premium Above/Below Target
Flood Zone VE

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Not Elevated (Base Risk 1)				Elevated (Base Risk 2)			
Distance to River (miles)	Count	Average Loss	Average Premium	Target Premium	Premium Above/Below Target	Average Loss	Average Premium	Target Premium	Premium Above/Below Target
< 0.025	104	$610	$31,718	$1,210	$30,508	$5	$4,847	$11	$4,836
0.025 - 0.05	22	473	26,374	937	25,436	6	4,105	12	4,094
0.05 - 0.075	26	311	22,885	618	22,268	5	3,419	9	3,410
0.075 - 0.1	8	664	27,322	1,316	26,006	8	4,030	15	4,015
0.1 - 0.15	16	146	21,643	289	21,354	5	3,894	11	3,883
0.15 - 0.25	153	234	14,601	463	14,138	5	3,469	10	3,459
0.25 - 0.5	336	130	10,998	257	10,740	4	3,393	8	3,386
0.5 - 1	1,059	46	5,925	91	5,834	3	3,307	6	3,301
>= 1	710	114	7,905	226	7,680	4	3,340	8	3,333
Total	2,434	$122	$9,390	$243	$9,147	$4	$3,419	$7	$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%

Milliman

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

Flood Zone X

Expected Loss
Flood Zone X

Average Premium Above/Below Target
Flood Zone X

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |

| | | Not Elevated (Base Risk 1) | | | | Elevated (Base Risk 2) | | |
| Distance to River | | Average | Average | Target | Premium Above/Below | Average | Average | Target | Premium Above/Below |
(miles)	Count	Loss	Premium	Premium	Target	Loss	Premium	Premium	Target
< 0.025	3,058	$294	$1,570	$534	$1,035	$14	$1,570	$26	$1,543
0.025 - 0.05	7,990	133	1,570	243	1,327	7	1,570	13	1,557
0.05 - 0.075	11,477	80	1,570	145	1,425	4	1,570	7	1,562
0.075 - 0.1	13,313	59	1,570	108	1,462	3	1,570	5	1,565
0.1 - 0.15	28,648	44	1,570	81	1,489	2	1,570	3	1,566
0.15 - 0.25	54,036	36	1,570	66	1,504	1	1,570	2	1,568
0.25 - 0.5	78,244	33	1,570	61	1,509	1	1,570	2	1,568
0.5 - 1	27,024	31	1,570	57	1,513	1	1,570	2	1,568
>= 1	117	105	1,570	192	1,378	1	1,570	2	1,567
Total	223,907	$46	$1,570	$84	$1,485	$2	$1,570	$3	$1,566

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

Expected Loss
Flood Zone AE

Average Premium Above/Below Target
Flood Zone AE

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

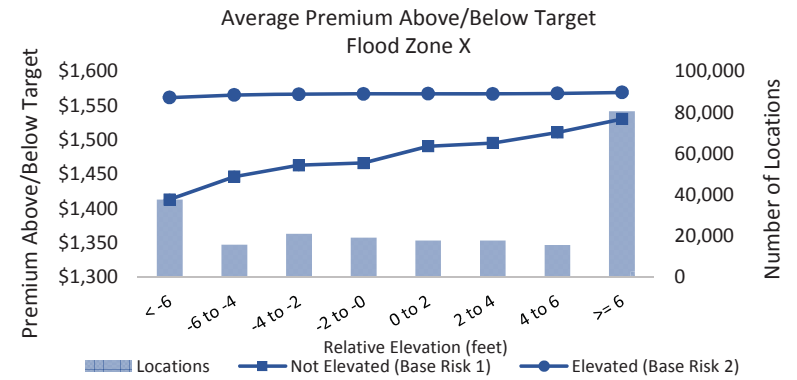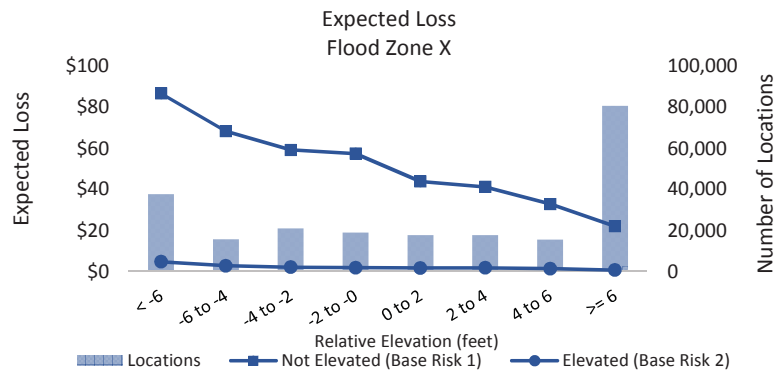|		Not Elevated (Base Risk 1)				Elevated (Base Risk 2)			
Relative Elevation (feet)	Count	Average Loss	Average Premium	Target Premium	Premium Above/Below Target	Average Loss	Average Premium	Target Premium	Premium Above/Below Target
< -6	4,097	$688	$3,755	$1,252	$2,503	$23	$446	$42	$405
-6 to -4	2,595	681	4,426	1,239	3,187	10	443	18	425
-4 to -2	5,232	607	4,536	1,104	3,432	8	443	15	428
-2 to -0	10,408	586	5,512	1,066	4,446	8	448	14	434
0 to 2	21,871	473	5,943	861	5,082	6	446	11	436
2 to 4	15,652	345	5,684	627	5,057	4	444	8	436
4 to 6	4,033	79	4,255	144	4,111	3	443	5	438
>= 6	1,937	40	2,107	73	2,035	3	443	6	437
Total	65,825	$456	$5,289	$829	$4,460	$7	$445	$13	$433

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
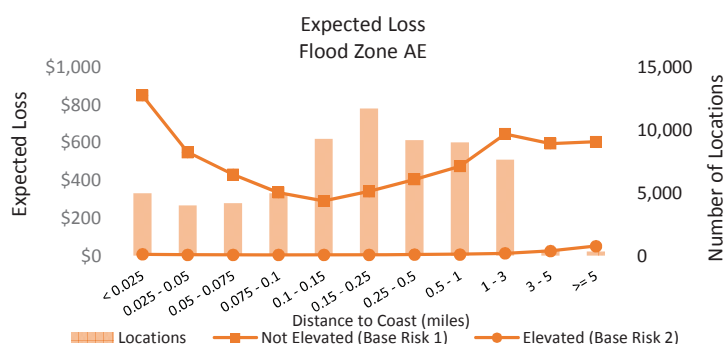

Expected Loss
Flood Zone VE

Average Premium Above/Below Target
Flood Zone VE

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Not Elevated (Base Risk 1)				Elevated (Base Risk 2)			
Relative Elevation (feet)	Count	Average Loss	Average Premium	Target Premium	Premium Above/Below Target	Average Loss	Average Premium	Target Premium	Premium Above/Below Target
< -6	0								
-6 to -4	0								
-4 to -2	3	$694	$22,980	$1,377	$21,603	$5	$3,902	$10	$3,892
-2 to -0	128	642	30,660	1,273	29,387	6	4,677	11	4,665
0 to 2	104	427	23,249	848	22,401	7	3,555	13	3,542
2 to 4	13	148	17,535	294	17,241	5	3,301	10	3,292
4 to 6	233	154	14,385	305	14,079	5	3,610	10	3,600
>= 6	1,953	67	6,587	134	6,453	3	3,307	6	3,301
Total	2,434	$122	$9,390	$243	$9,147	$4	$3,419	$7	$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%

Milliman

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

Flood Zone X

Expected Loss
Flood Zone X

Average Premium Above/Below Target
Flood Zone X

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

		Not Elevated (Base Risk 1)				Elevated (Base Risk 2)			
Relative Elevation (feet)	Count	Average Loss	Average Premium	Target Premium	Premium Above/Below Target	Average Loss	Average Premium	Target Premium	Premium Above/Below Target
< -6	37,494	$86	$1,570	$157	$1,413	$5	$1,570	$8	$1,561
-6 to -4	15,546	68	1,570	124	1,446	3	1,570	5	1,565
-4 to -2	20,908	59	1,570	107	1,462	2	1,570	4	1,566
-2 to -0	18,916	57	1,570	104	1,466	2	1,570	3	1,566
0 to 2	17,598	44	1,570	79	1,490	2	1,570	3	1,567
2 to 4	17,540	41	1,570	75	1,495	2	1,570	3	1,566
4 to 6	15,448	33	1,570	59	1,510	1	1,570	2	1,567
>= 6	80,457	22	1,570	40	1,530	1	1,570	1	1,569
Total	223,907	$46	$1,570	$84	$1,485	$2	$1,570	$3	$1,566

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
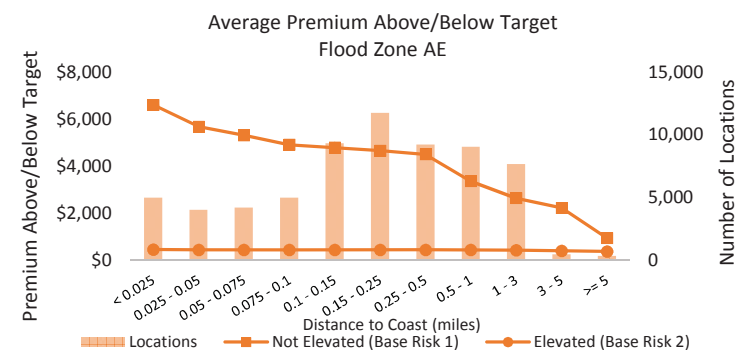Ocean County, New Jersey

Flood Zone AE

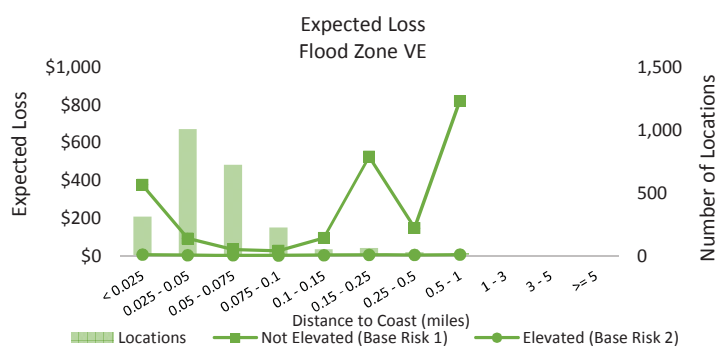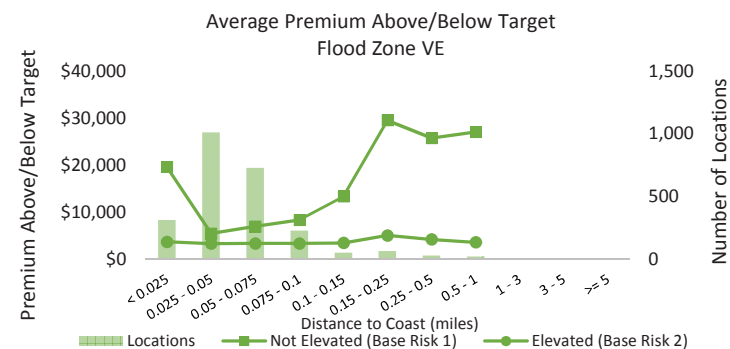|		Not Elevated (Base Risk 1)				Elevated (Base Risk 2)			
Distance to Coast (miles)	Count	Average Loss	Average Premium	Target Premium	Premium Above/Below Target	Average Loss	Average Premium	Target Premium	Premium Above/Below Target
< 0.025	4,967	$851	$8,133	$1,546	$6,587	$8	$463	$15	$449
0.025 - 0.05	4,011	549	6,663	998	5,666	6	446	10	436
0.05 - 0.075	4,176	430	6,075	782	5,293	5	444	9	435
0.075 - 0.1	4,970	335	5,504	609	4,895	4	444	8	436
0.1 - 0.15	9,312	291	5,303	529	4,774	4	443	8	435
0.15 - 0.25	11,710	341	5,261	620	4,641	5	443	9	434
0.25 - 0.5	9,204	405	5,224	736	4,488	7	444	12	432
0.5 - 1	9,029	474	4,206	862	3,344	7	443	13	430
1 - 3	7,640	646	3,800	1,175	2,625	13	444	23	421
3 - 5	468	595	3,292	1,082	2,210	26	443	47	396
>= 5	338	604	2,035	1,099	936	51	455	93	362
Total	65,825	$456	$5,289	$829	$4,460	$7	$445	$13	$433

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%

Milliman

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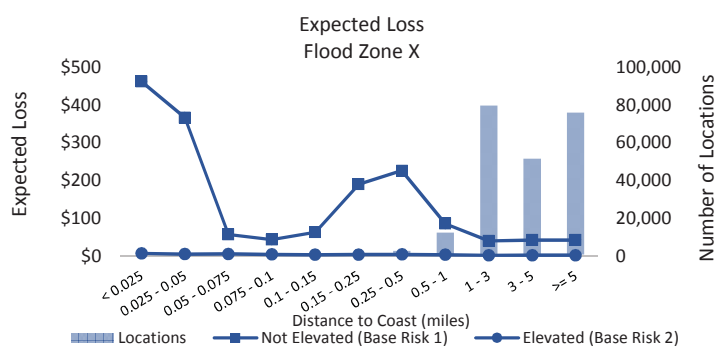Ocean County, New Jersey

Flood Zone VE

Expected Loss
Flood Zone VE

Average Premium Above/Below Target
Flood Zone VE

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

| | | Not Elevated (Base Risk 1) | | | | Elevated (Base Risk 2) | | | |
Distance to Coast (miles)	Count	Average Loss	Average Premium	Target Premium	Premium Above/Below Target	Average Loss	Average Premium	Target Premium	Premium Above/Below Target
< 0.025	311	$376	$20,248	$745	$19,503	$6	$3,673	$13	$3,660
0.025 - 0.05	1,009	92	5,618	182	5,437	4	3,305	7	3,298
0.05 - 0.075	725	33	6,997	66	6,931	3	3,320	6	3,314
0.075 - 0.1	226	27	8,344	53	8,291	2	3,337	4	3,333
0.1 - 0.15	51	95	13,442	188	13,255	3	3,417	6	3,411
0.15 - 0.25	63	526	30,471	1,043	29,429	5	5,035	10	5,025
0.25 - 0.5	29	148	25,961	293	25,668	4	4,182	8	4,174
0.5 - 1	20	821	28,601	1,629	26,972	6	3,578	11	3,566
1 - 3	0								
3 - 5	0								
>= 5	0								
Total	2,434	$122	$9,390	$243	$9,147	$4	$3,419	$7	$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
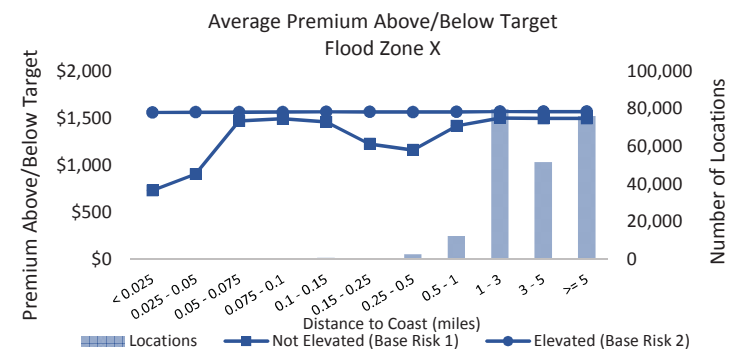Ocean County, New Jersey

Flood Zone X

Expected Loss
Flood Zone X

Average Premium Above/Below Target
Flood Zone X

(1)　(2)　(3)　(4)　(5)　(6)　(7)　(8)　(9)

| Distance to Coast | | Not Elevated (Base Risk 1) | | | | Elevated (Base Risk 2) | | | |
| | | Average | Average | Target | Premium Above/Below | Average | Average | Target | Premium Above/Below |
(miles)	Count	Loss	Premium	Premium	Target	Loss	Premium	Premium	Target
< 0.025	102	$463	$1,570	$841	$728	$7	$1,570	$12	$1,558
0.025 - 0.05	67	366	1,570	666	904	5	1,570	9	1,561
0.05 - 0.075	124	57	1,570	103	1,467	5	1,570	9	1,560
0.075 - 0.1	321	43	1,570	78	1,491	4	1,570	7	1,562
0.1 - 0.15	698	62	1,570	113	1,456	3	1,570	5	1,565
0.15 - 0.25	526	190	1,570	345	1,224	4	1,570	6	1,563
0.25 - 0.5	2,659	226	1,570	411	1,159	4	1,570	7	1,562
0.5 - 1	12,298	85	1,570	155	1,415	3	1,570	6	1,564
1 - 3	79,687	39	1,570	72	1,498	2	1,570	3	1,567
3 - 5	51,522	42	1,570	76	1,494	2	1,570	3	1,566
>= 5	75,903	42	1,570	76	1,493	2	1,570	3	1,566
Total	223,907	$46	$1,570	$84	$1,485	$2	$1,570	$3	$1,566

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%

Milliman

National Association of REALTORS®
Merced, California

Extent of Mapped Area
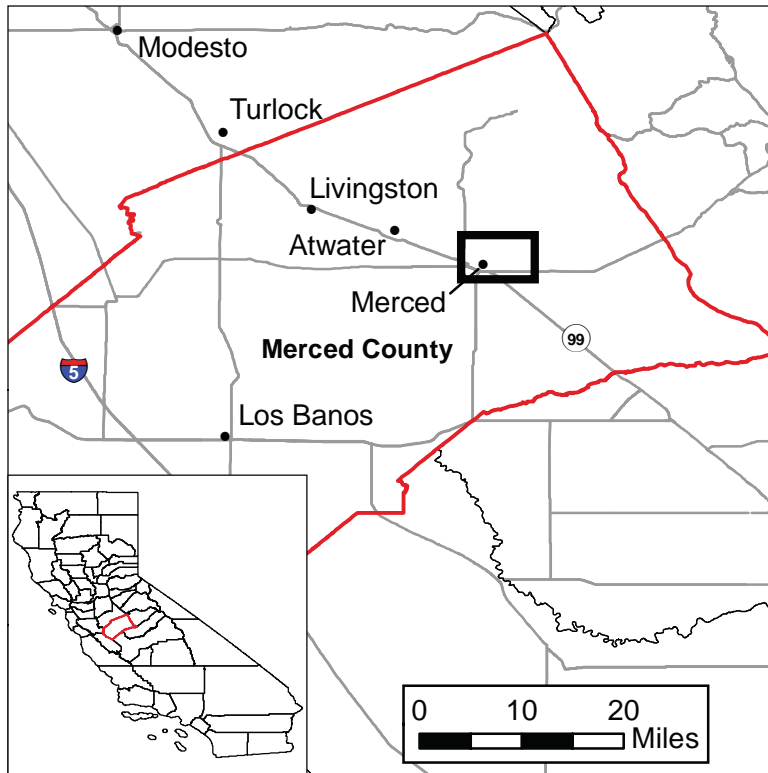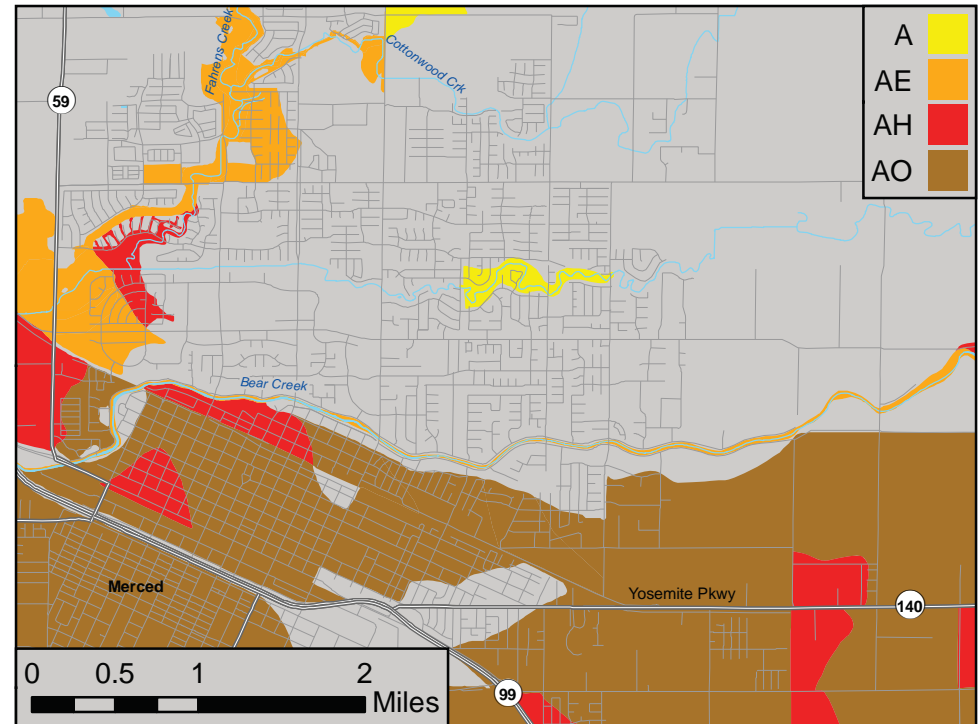
FEMA Flood Zones

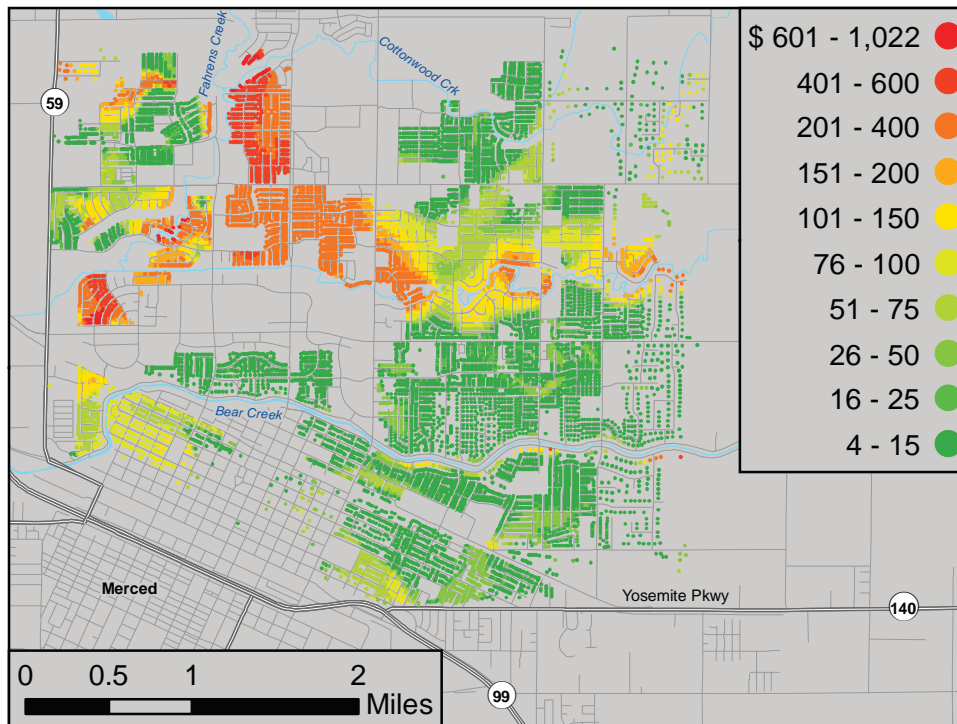|	
A	
AE	
AH	
AO	

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

National Association of REALTORS®
Expected Losses
Merced, California

One Story (Base Risk 1)
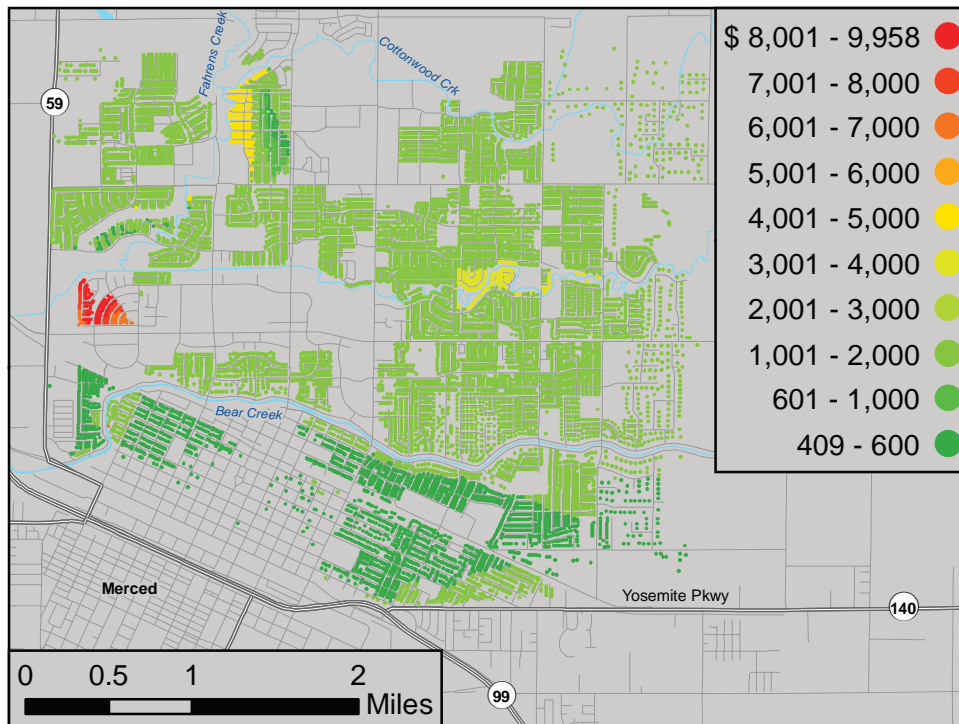
Two Story (Base Risk 2)

$ 601 - 1,022	●
401 - 600	●
201 - 400	●
151 - 200	●
101 - 150	●
76 - 100	●
51 - 75	●
26 - 50	●
16 - 25	●
4 - 15	●

Fahrens Creek
Cottonwood Crk
Bear Creek
Merced
Yosemite Pkwy
59
140
99

0   0.5   1   2   Miles

$ 601 - 1,022	●
401 - 600	●
201 - 400	●
151 - 200	●
101 - 150	●
76 - 100	●
51 - 75	●
26 - 50	●
16 - 25	●
4 - 15	●

Fahrens Creek
Cottonwood Crk
Bear Creek
Merced
Yosemite Pkwy
59
140
99

0   0.5   1   2   Miles
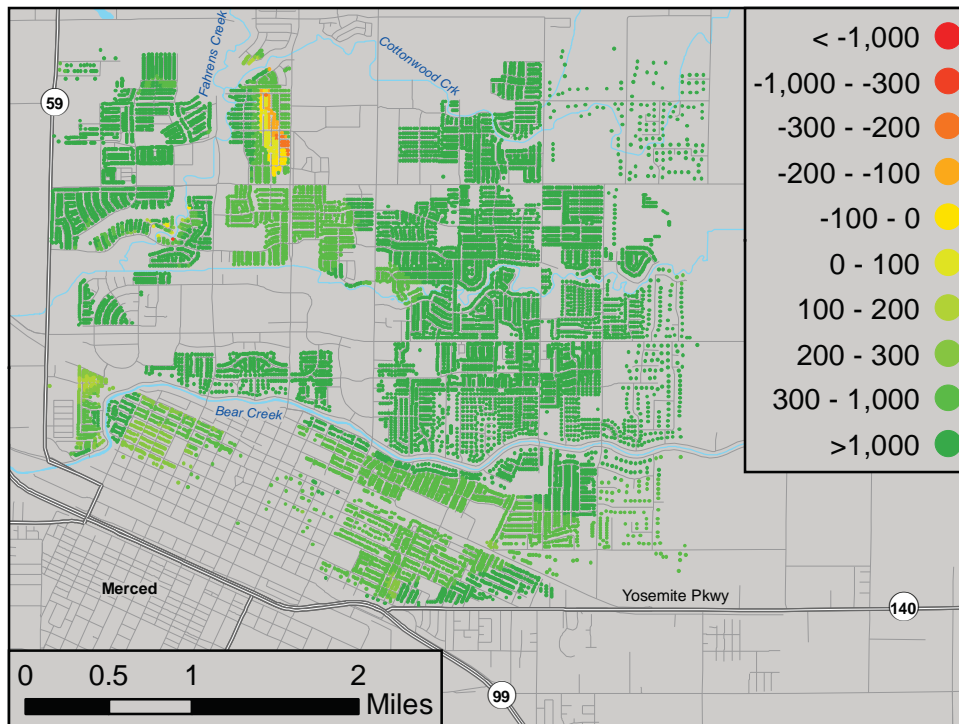
Notes:
1. Base Risk 1: 1-Story, $150k Coverage A, Frame, 1995
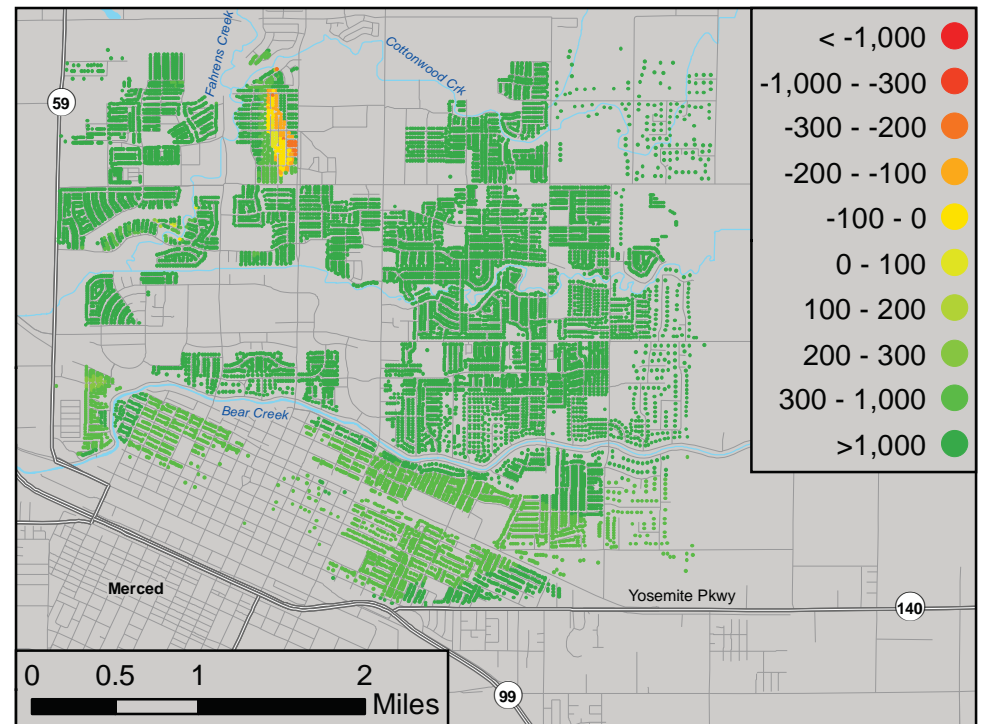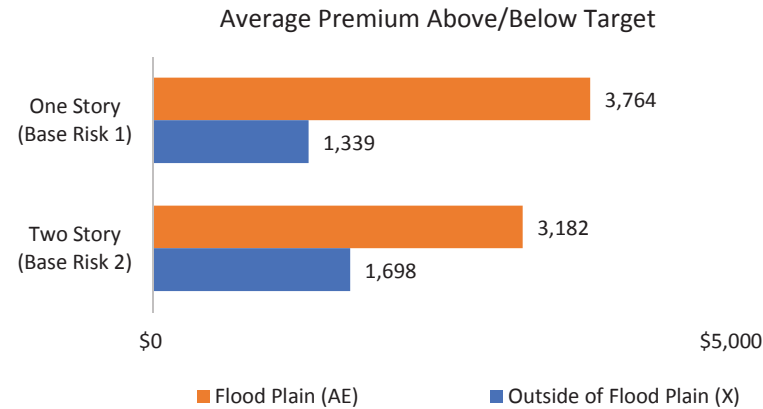2. Base Risk 2: 2-Story, $250k Coverage A, Frame, 1995

One Story (Base Risk 1)

Two Story (Base Risk 2)

$ 8,001 - 9,958	🔴
7,001 - 8,000	🔴
6,001 - 7,000	🟠
5,001 - 6,000	🟠
4,001 - 5,000	🟡
3,001 - 4,000	🟡
2,001 - 3,000	🟢
1,001 - 2,000	🟢
601 - 1,000	🟢
409 - 600	🟢

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

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
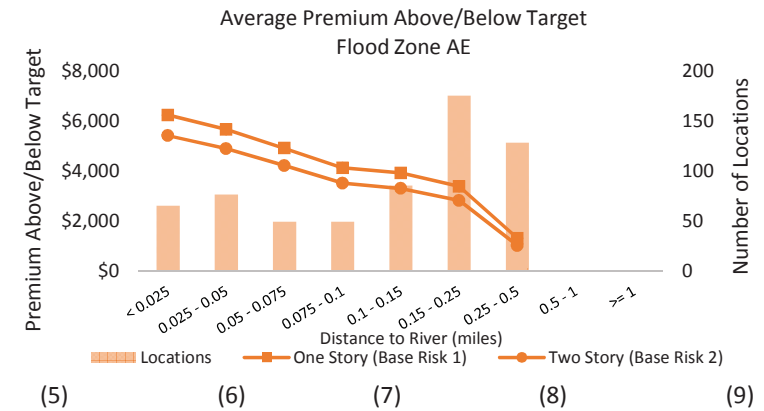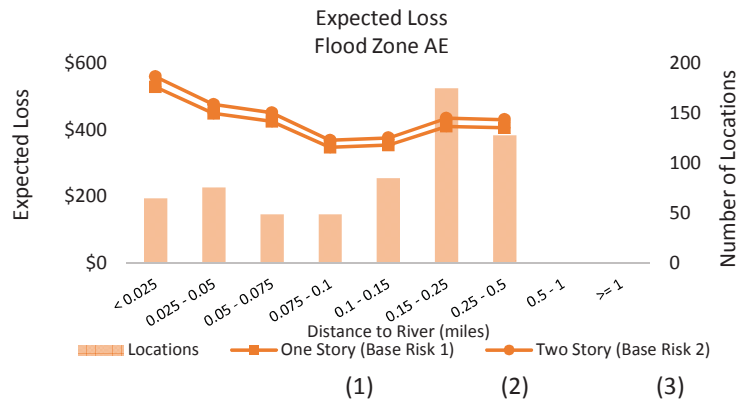Summary Statistics by Flood Zone
Merced County, California

Average Premium Above/Below Target

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		One Story (Base Risk 1)				Two Story (Base Risk 2)			
Flood Zone (Note 1)	Count	Average Loss	Average Premium	Target Premium	Premium Above/Below Target	Average Loss	Average Premium	Target Premium	Premium Above/Below Target
Flood Plain (AE)	627	$415	$4,519	$755	$3,764	$440	$3,982	$800	$3,182
Outside of Flood Plain (X)	41,293	60	1,449	110	1,339	64	1,814	117	1,698
Total	41,920	$66	$1,495	$119	$1,375	$70	$1,847	$127	$1,720

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
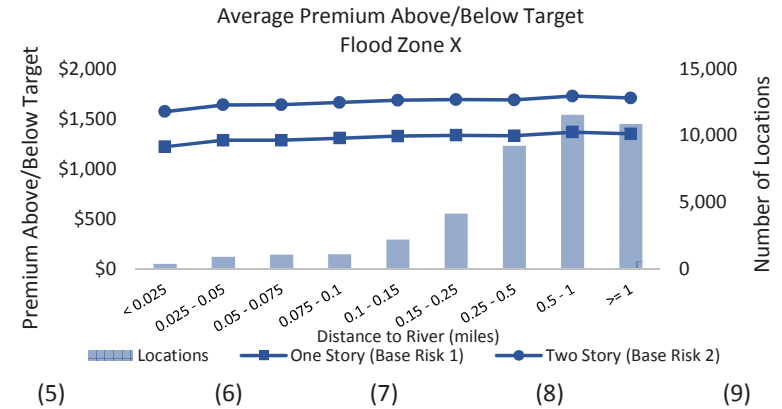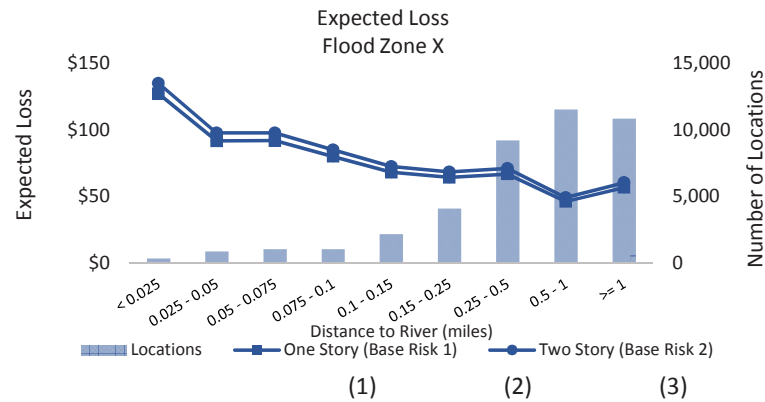Merced County, California

Flood Zone AE

Expected Loss
Flood Zone AE

Average Premium Above/Below Target
Flood Zone AE

		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
			One Story (Base Risk 1)				Two Story (Base Risk 2)			
Distance to River (miles)	Count	Average Loss	Average Premium	Target Premium	Premium Above/Below Target	Average Loss	Average Premium	Target Premium	Premium Above/Below Target
< 0.025	65	$529	$7,183	$961	$6,222	$559	$6,412	$1,017	$5,396
0.025 - 0.05	76	450	6,463	817	5,645	476	5,741	866	4,875
0.05 - 0.075	49	425	5,668	774	4,894	451	5,014	820	4,194
0.075 - 0.1	49	347	4,739	632	4,107	369	4,159	670	3,489
0.1 - 0.15	85	354	4,550	644	3,906	376	3,966	683	3,283
0.15 - 0.25	175	410	4,108	746	3,362	435	3,592	791	2,802
0.25 - 0.5	128	406	2,028	738	1,289	431	1,782	783	999
0.5 - 1	0								
>= 1	0								
Total	627	$415	$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%

Milliman

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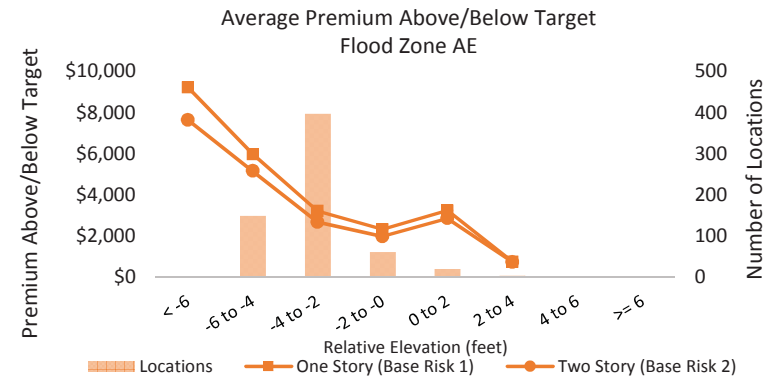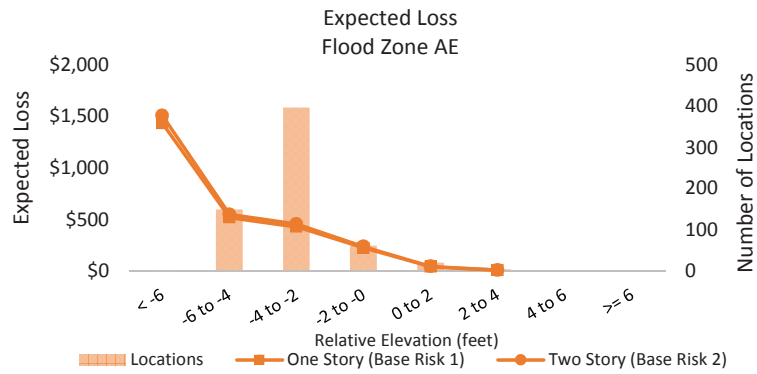Summary Statistics by Distance to River
Merced County, California

Flood Zone X

Expected Loss
Flood Zone X

Average Premium Above/Below Target
Flood Zone X

(1) (2) (3) (4) (5) (6) (7) (8) (9)

		One Story (Base Risk 1)				Two Story (Base Risk 2)			
Distance to River (miles)	Count	Average Loss	Average Premium	Target Premium	Premium Above/Below Target	Average Loss	Average Premium	Target Premium	Premium Above/Below Target
< 0.025	369	$127	$1,449	$231	$1,218	$135	$1,814	$245	$1,569
0.025 - 0.05	896	92	1,449	167	1,282	98	1,814	178	1,637
0.05 - 0.075	1,060	92	1,449	167	1,282	98	1,814	177	1,637
0.075 - 0.1	1,068	80	1,449	145	1,303	85	1,814	155	1,660
0.1 - 0.15	2,185	68	1,449	124	1,325	72	1,814	132	1,683
0.15 - 0.25	4,116	64	1,449	117	1,332	68	1,814	124	1,690
0.25 - 0.5	9,210	67	1,449	122	1,327	71	1,814	129	1,685
0.5 - 1	11,537	46	1,449	84	1,365	49	1,814	89	1,725
>= 1	10,852	57	1,449	103	1,346	60	1,814	110	1,705
Total	41,293	$60	$1,449	$110	$1,339	$64	$1,814	$117	$1,698

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%

Milliman

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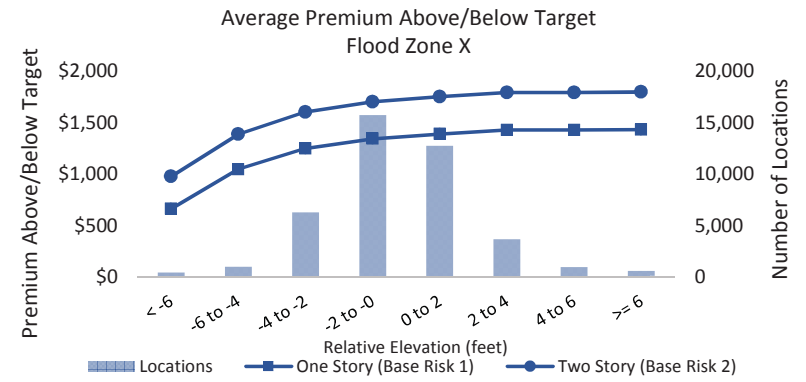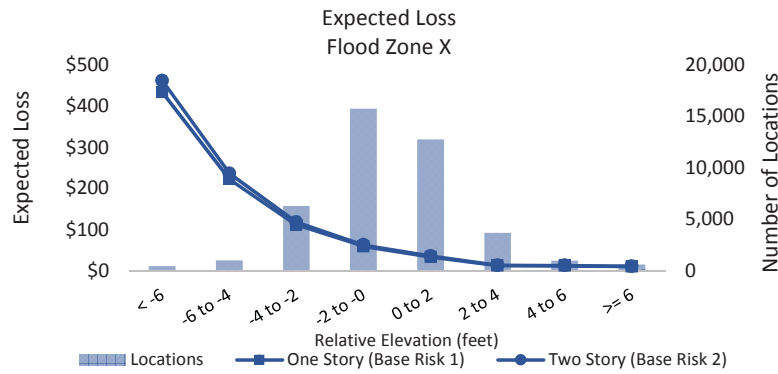Summary Statistics by Relative Elevation
Merced County, California

Flood Zone AE

Expected Loss
Flood Zone AE

Average Premium Above/Below Target
Flood Zone AE

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

| | | One Story (Base Risk 1) | | | | Two Story (Base Risk 2) | | | |
Relative Elevation (feet)	Count	Average Loss	Average Premium	Target Premium	Premium Above/Below Target	Average Loss	Average Premium	Target Premium	Premium Above/Below Target
< -6	1	$1,432	$11,813	$2,603	$9,211	$1,507	$10,353	$2,740	$7,613
-6 to -4	148	515	6,898	937	5,961	545	6,133	992	5,141
-4 to -2	396	426	3,973	775	3,199	452	3,479	821	2,658
-2 to -0	60	219	2,705	398	2,307	232	2,385	423	1,962
0 to 2	19	38	3,286	68	3,218	40	2,916	73	2,843
2 to 4	3	4	740	8	732	5	725	8	717
4 to 6	0								
>= 6	0								
Total	627	$415	$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%

Milliman

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

Flood Zone X

Expected Loss
Flood Zone X

Average Premium Above/Below Target
Flood Zone X

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

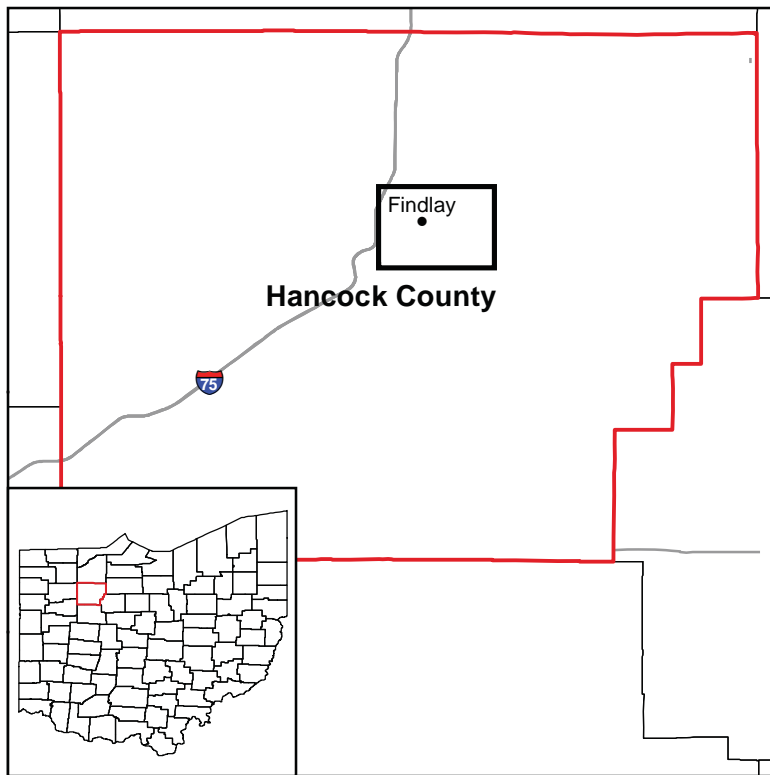| | | One Story (Base Risk 1) | | | | Two Story (Base Risk 2) | | |
| Relative Elevation | | Average | Average | Target | Premium Above/Below | Average | Average | Target | Premium Above/Below |
(feet)	Count	Loss	Premium	Premium	Target	Loss	Premium	Premium	Target
< -6	416	$433	$1,449	$788	$661	$461	$1,814	$839	$975
-6 to -4	968	222	1,449	404	1,045	236	1,814	428	1,386
-4 to -2	6,273	111	1,449	201	1,248	117	1,814	214	1,601
-2 to -0	15,706	58	1,449	106	1,343	62	1,814	113	1,701
0 to 2	12,722	33	1,449	60	1,389	35	1,814	64	1,750
2 to 4	3,654	12	1,449	22	1,427	13	1,814	23	1,791
4 to 6	963	12	1,449	21	1,428	12	1,814	22	1,792
>= 6	591	10	1,449	18	1,431	10	1,814	19	1,796
Total	41,293	$60	$1,449	$110	$1,339	$64	$1,814	$117	$1,698

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.

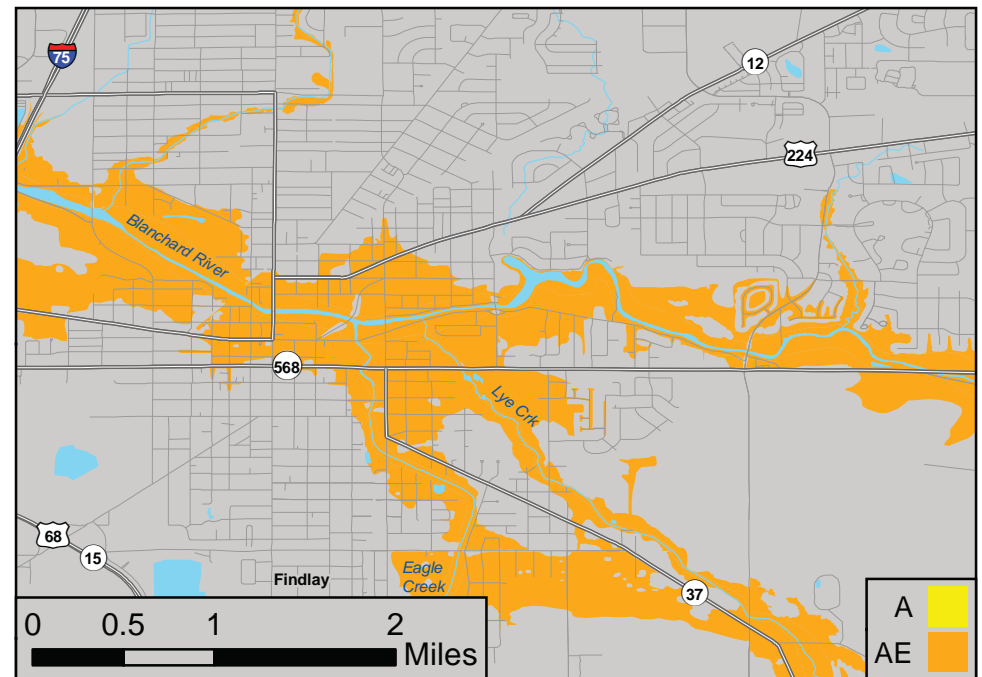3. Column (4) = (2) x (1 + contingency) / (1 - Expense), where contingency is 10% and expense is 39.5%

Milliman

Extent of Mapped Area

Findlay

Hancock County

FEMA Flood Zones

Blanchard River

Lye Crk

Findlay

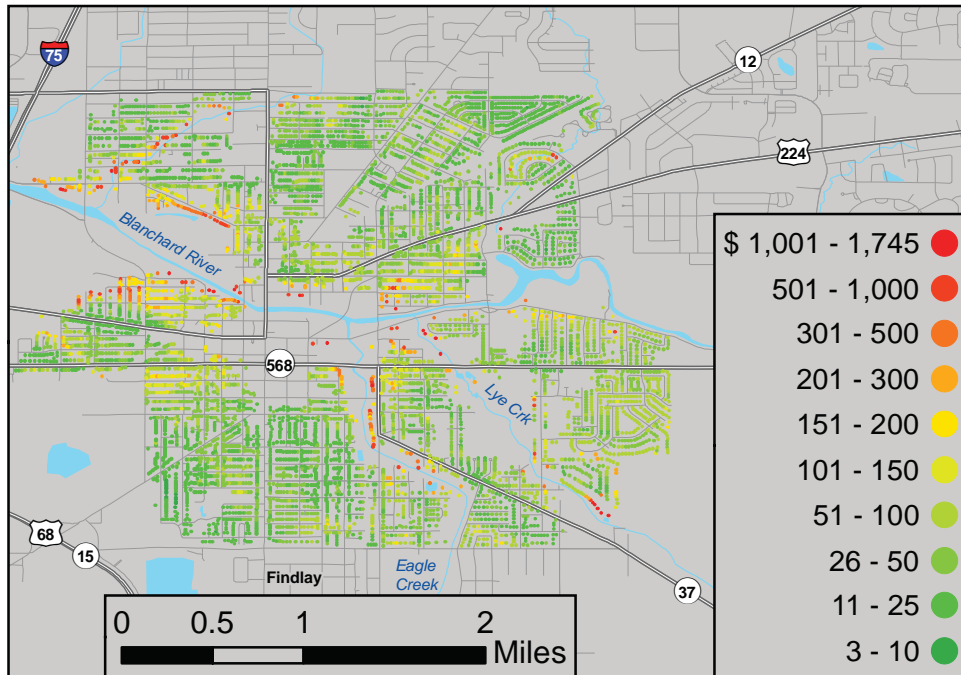Eagle Creek

| 0 | 0.5 | 1 | 2 | Miles |

A
AE

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

National Association of REALTORS®
Expected Losses
Hancock County, Ohio
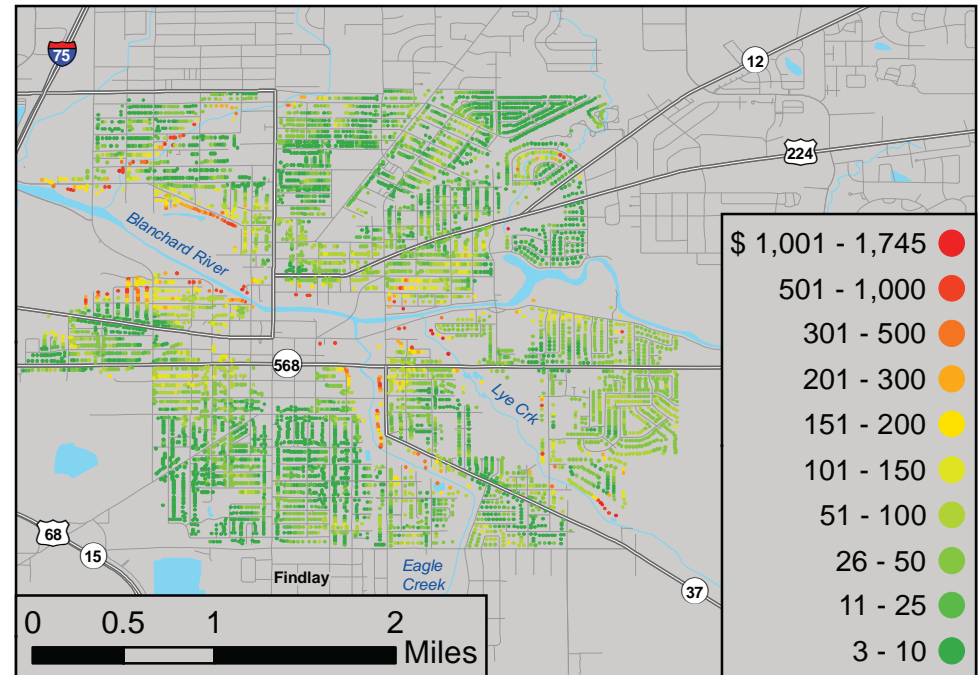
Basement (Base Risk 1)

No Basement (Base Risk 2)

Legend:
- $ 1,001 - 1,745 (red)
- 501 - 1,000 (red)
- 301 - 500 (orange)
- 201 - 300 (orange)
- 151 - 200 (yellow)
- 101 - 150 (yellow)
- 51 - 100 (light green)
- 26 - 50 (green)
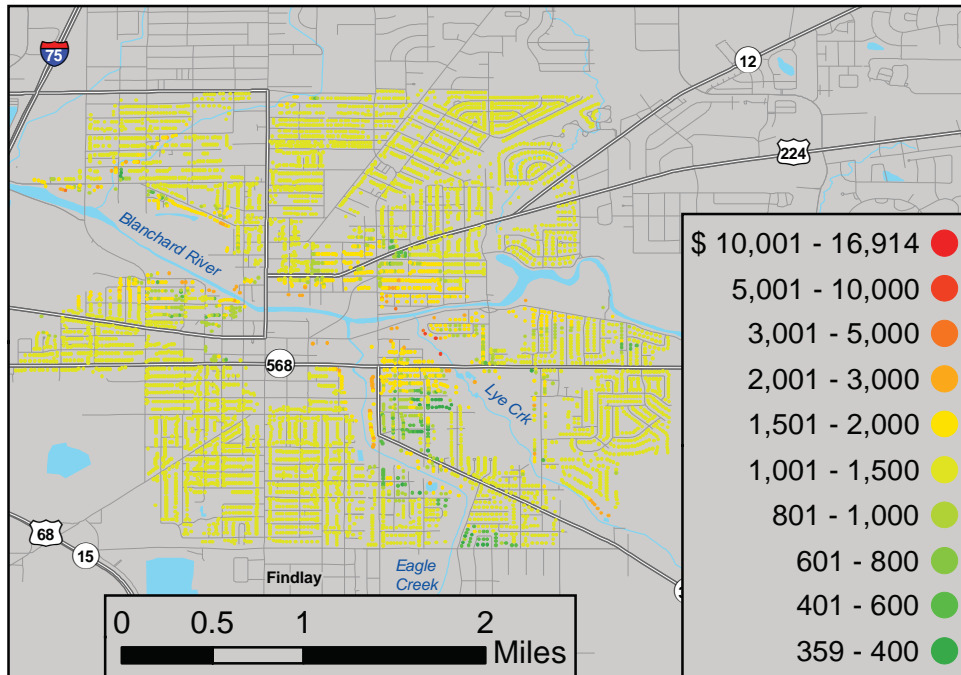- 11 - 25 (green)
- 3 - 10 (dark green)

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)

	Basement (Base Risk 1)	No Basement (Base Risk 2)
$ 10,001 - 16,914	🔴	🔴
5,001 - 10,000	🔴	🔴
3,001 - 5,000	🟠	🟠
2,001 - 3,000	🟠	🟠
1,501 - 2,000	🟡	🟡
1,001 - 1,500	🟡	🟡
801 - 1,000	🟢	🟢
601 - 800	🟢	🟢
401 - 600	🟢	🟢
359 - 400	🟢	🟢

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

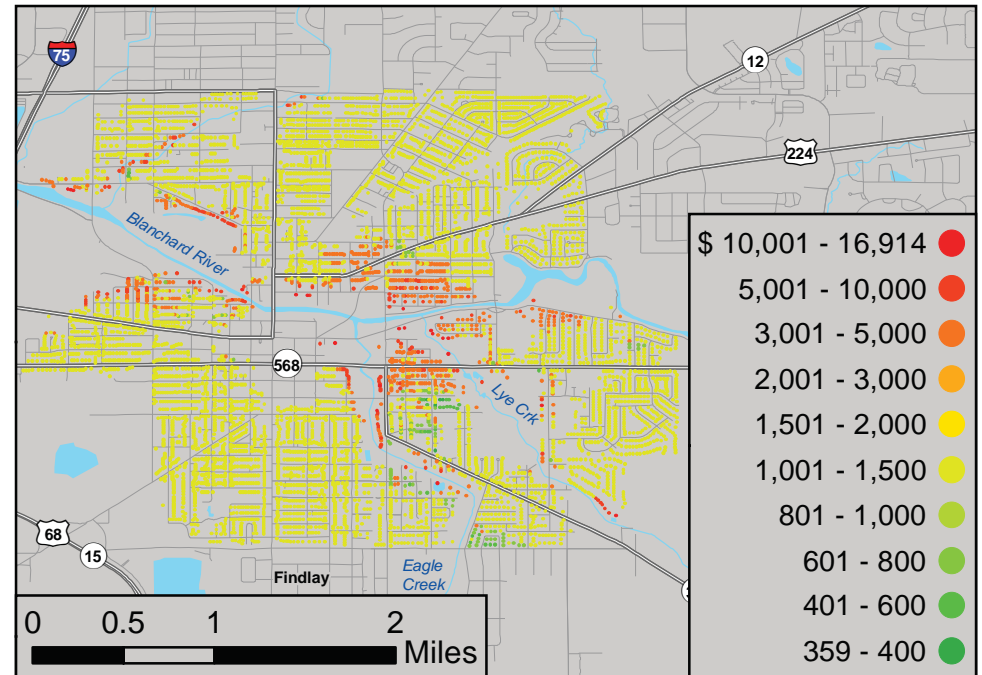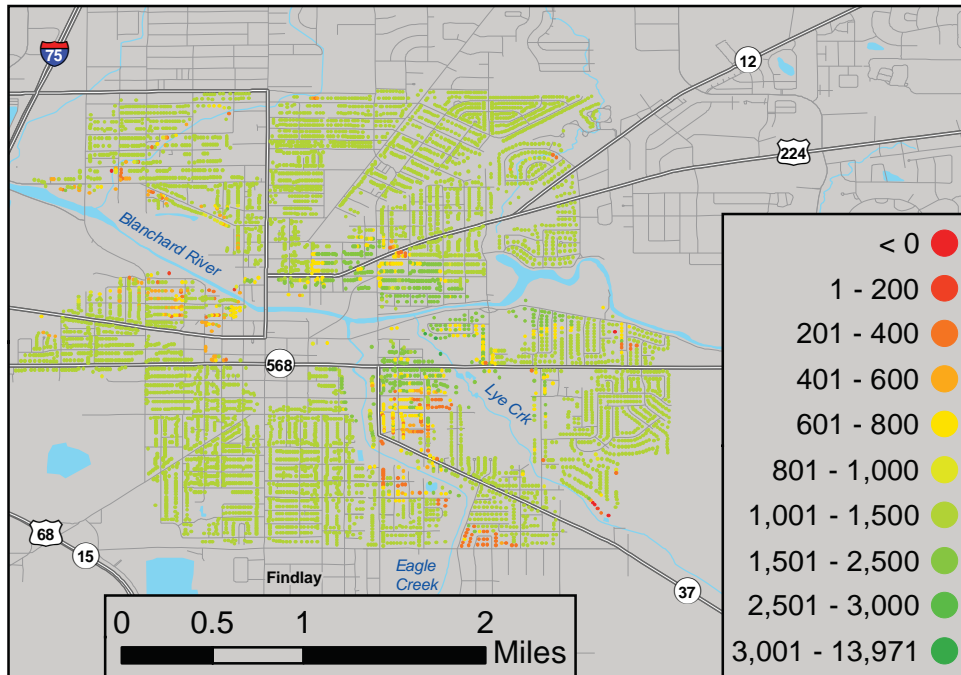**Basement (Base Risk 1)**

No Basement (Base Risk 2)

Legend
< 0 🔴
1 - 200 🔴
201 - 400 🟠
401 - 600 🟠
601 - 800 🟡
801 - 1,000 🟡
1,001 - 1,500 🟢
1,501 - 2,500 🟢
2,501 - 3,000 🟢
3,001 - 13,971 🟢

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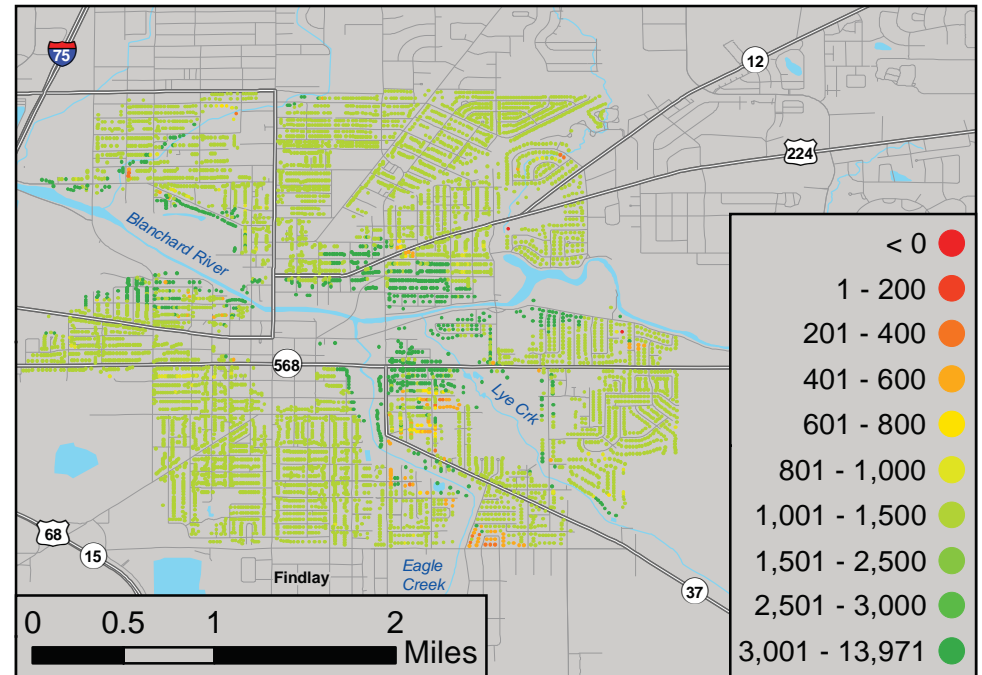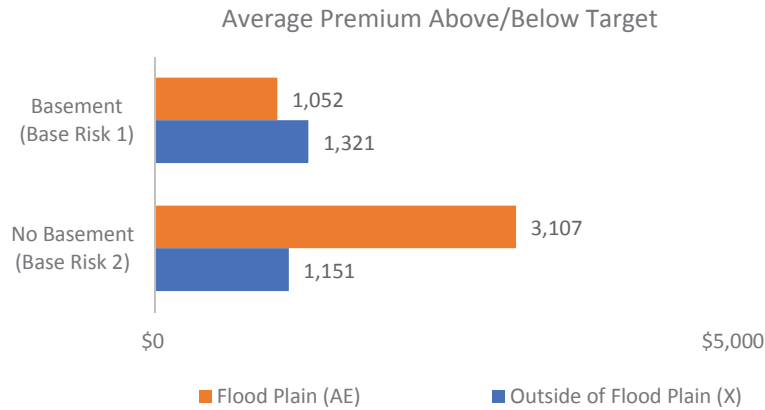2. Base Risk 2: 1-Story, $100k Coverage A, Frame, 1995, No Basement

Milliman

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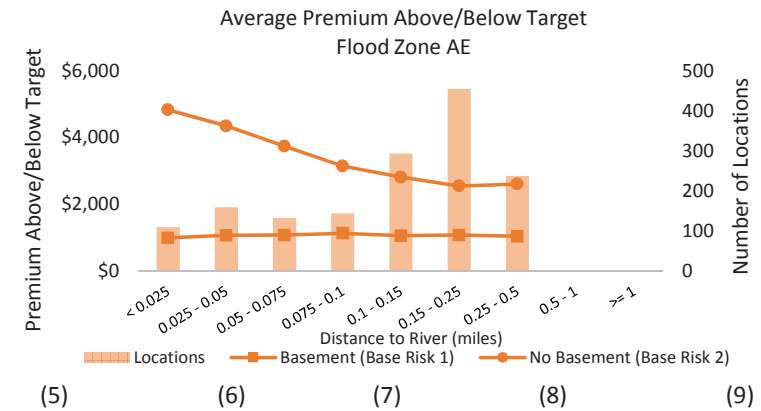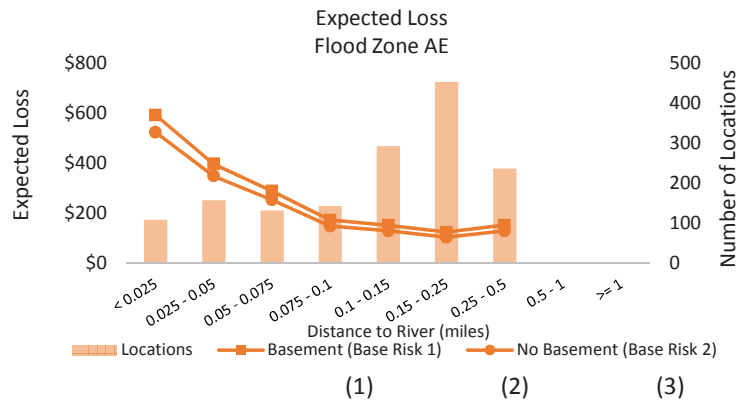Summary Statistics by Flood Zone
Hancock County, Ohio

Average Premium Above/Below Target

Basement (Base Risk 1): 1,052 (Flood Plain AE), 1,321 (Outside of Flood Plain X)

No Basement (Base Risk 2): 3,107 (Flood Plain AE), 1,151 (Outside of Flood Plain X)

$0 … $5,000

■ Flood Plain (AE)   ■ Outside of Flood Plain (X)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Basement (Base Risk 1)				No Basement (Base Risk 2)			
Flood Zone (Note 1)	Count	Average Loss	Average Premium	Target Premium	Premium Above/Below Target	Average Loss	Average Premium	Target Premium	Premium Above/Below Target
Flood Plain (AE)	1,526	$214	$1,442	$390	$1,052	$185	$3,444	$337	$3,107
Outside of Flood Plain (X)	21,997	38	1,390	70	1,321	32	1,208	57	1,151
Total	23,523	$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
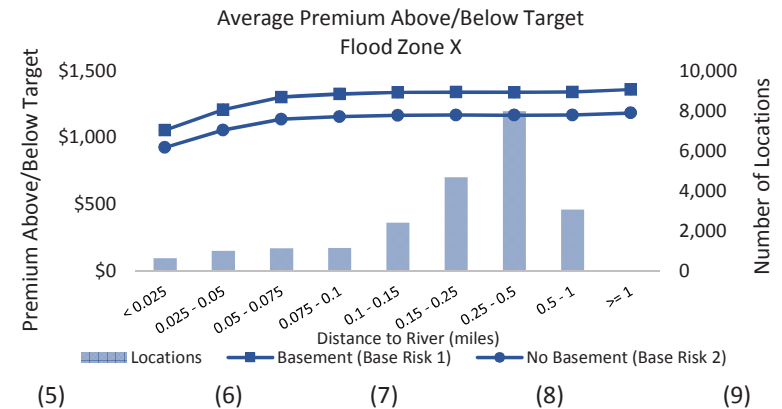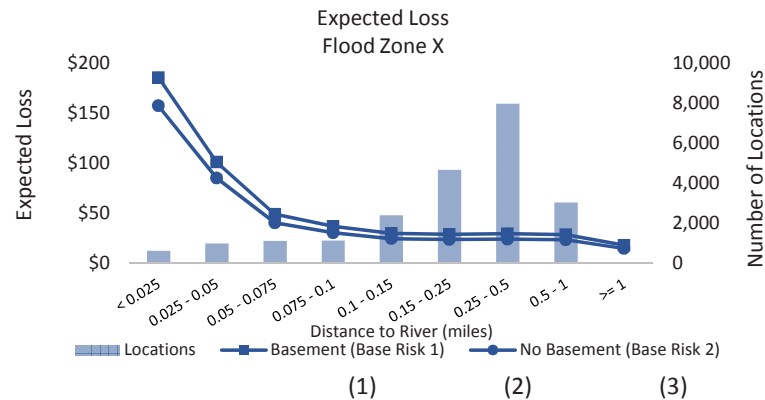Summary Statistics by Distance to River
Hancock County, Ohio

Flood Zone AE

Expected Loss
Flood Zone AE

Average Premium Above/Below Target
Flood Zone AE

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Basement (Base Risk 1)				No Basement (Base Risk 2)			
Distance to River (miles)	Count	Average Loss	Average Premium	Target Premium	Premium Above/Below Target	Average Loss	Average Premium	Target Premium	Premium Above/Below Target
< 0.025	109	$592	$2,054	$1,076	$977	$524	$5,774	$952	$4,822
0.025 - 0.05	158	397	1,774	723	1,051	349	4,973	634	4,339
0.05 - 0.075	132	289	1,588	525	1,063	253	4,191	461	3,731
0.075 - 0.1	143	173	1,435	315	1,120	148	3,409	269	3,140
0.1 - 0.15	293	152	1,324	276	1,048	130	3,041	236	2,805
0.15 - 0.25	454	124	1,289	226	1,064	104	2,726	188	2,537
0.25 - 0.5	237	153	1,301	278	1,023	130	2,832	236	2,596
0.5 - 1	0								
>= 1	0								
Total	1,526	$214	$1,442	$390	$1,052	$185	$3,444	$337	$3,107

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%

Milliman

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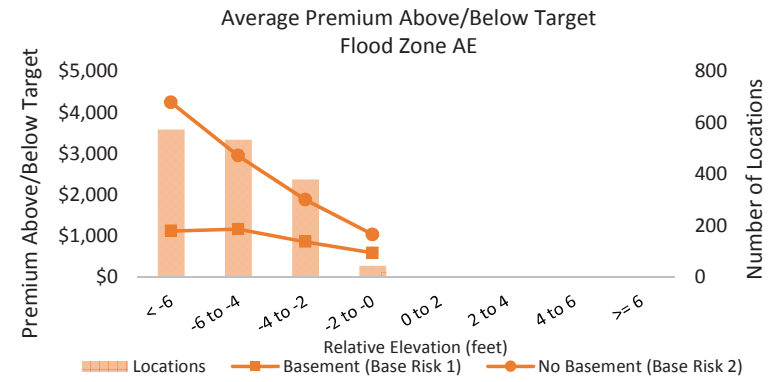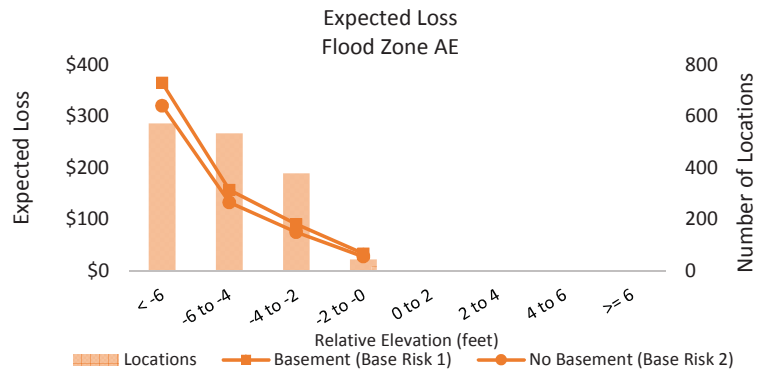Summary Statistics by Distance to River
Hancock County, Ohio

Flood Zone X

Expected Loss
Flood Zone X

Average Premium Above/Below Target
Flood Zone X

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

| | | Basement (Base Risk 1) | | | | No Basement (Base Risk 2) | | | |
Distance to River (miles)	Count	Average Loss	Average Premium	Target Premium	Premium Above/Below Target	Average Loss	Average Premium	Target Premium	Premium Above/Below Target
< 0.025	631	$186	$1,390	$337	$1,053	$157	$1,208	$286	$923
0.025 - 0.05	987	101	1,390	184	1,206	85	1,208	155	1,054
0.05 - 0.075	1,123	49	1,390	89	1,301	40	1,208	73	1,135
0.075 - 0.1	1,132	37	1,390	67	1,323	30	1,208	55	1,153
0.1 - 0.15	2,400	30	1,390	54	1,336	24	1,208	44	1,164
0.15 - 0.25	4,676	29	1,390	52	1,338	24	1,208	43	1,165
0.25 - 0.5	7,978	29	1,390	53	1,337	24	1,208	44	1,165
0.5 - 1	3,048	29	1,390	52	1,338	23	1,208	42	1,166
>= 1	22	18	1,390	33	1,357	15	1,208	27	1,182
Total	21,997	$38	$1,390	$70	$1,321	$32	$1,208	$57	$1,151

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%

Milliman

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

Flood Zone AE

Expected Loss
Flood Zone AE

Average Premium Above/Below Target
Flood Zone AE

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Basement (Base Risk 1)				No Basement (Base Risk 2)			
Relative Elevation (feet)	Count	Average Loss	Average Premium	Target Premium	Premium Above/Below Target	Average Loss	Average Premium	Target Premium	Premium Above/Below Target
< -6	572	$364	$1,781	$663	$1,119	$320	$4,815	$582	$4,234
-6 to -4	533	156	1,442	284	1,158	132	3,183	240	2,943
-4 to -2	378	90	1,018	164	855	74	2,005	135	1,870
-2 to -0	43	33	645	59	586	27	1,079	49	1,030
0 to 2	0								
2 to 4	0								
4 to 6	0								
>= 6	0								
Total	1,526	$214	$1,442	$390	$1,052	$185	$3,444	$337	$3,107

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%

Milliman

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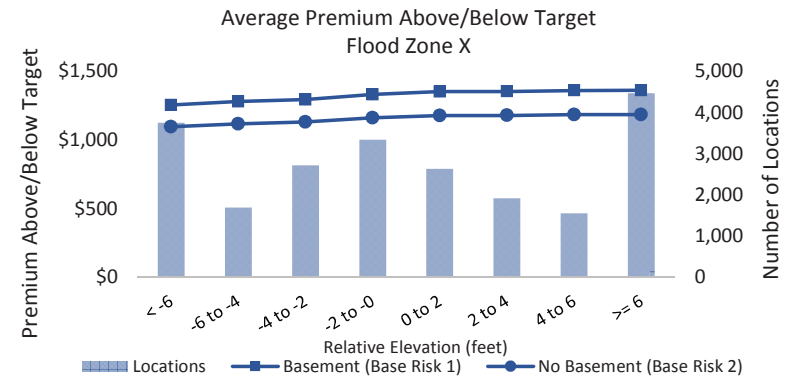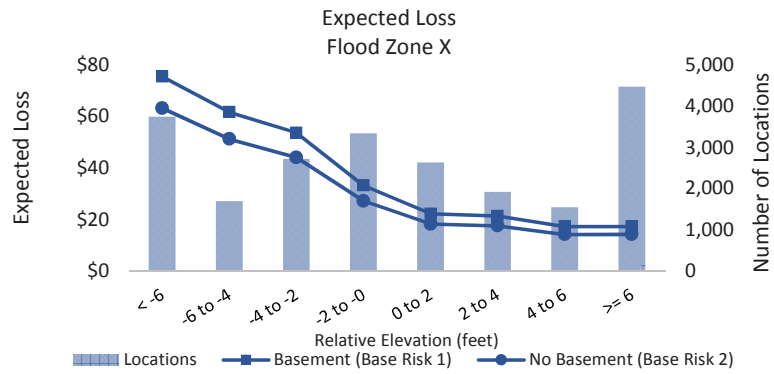Summary Statistics by Relative Elevation
Hancock County, Ohio

Flood Zone X

Expected Loss
Flood Zone X

Average Premium Above/Below Target
Flood Zone X

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

| | | Basement (Base Risk 1) | | | | No Basement (Base Risk 2) | | | |
Relative Elevation (feet)	Count	Average Loss	Average Premium	Target Premium	Premium Above/Below Target	Average Loss	Average Premium	Target Premium	Premium Above/Below Target
< -6	3,738	$75	$1,390	$137	$1,253	$63	$1,208	$115	$1,094
-6 to -4	1,686	62	1,390	112	1,278	51	1,208	93	1,116
-4 to -2	2,709	54	1,390	97	1,293	44	1,208	80	1,129
-2 to -0	3,332	33	1,390	60	1,330	27	1,208	49	1,159
0 to 2	2,622	22	1,390	40	1,350	18	1,208	33	1,176
2 to 4	1,908	21	1,390	39	1,352	17	1,208	32	1,177
4 to 6	1,539	17	1,390	31	1,359	14	1,208	26	1,183
>= 6	4,463	17	1,390	31	1,359	14	1,208	25	1,183
Total	21,997	$38	$1,390	$70	$1,321	$32	$1,208	$57	$1,151

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.

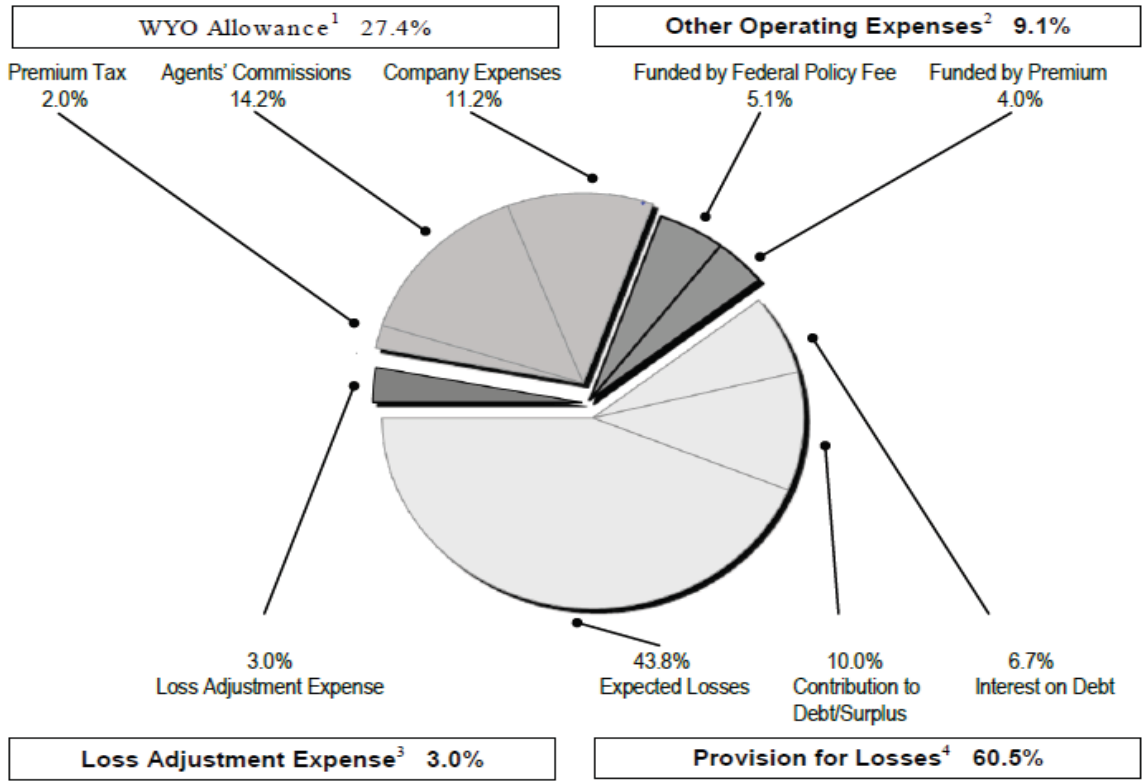3. Column (4) = (2) x (1 + contingency) / (1 - Expense), where contingency is 10% and expense is 39.5%

Milliman

National Association of Realtors
Expense Comparison

Expenses	(1) NFIP (Notes 1,2) Non-Storm Surge Zone	(2) Storm Surge Zone	(3) State Farm Homeowners (Note 3) Florida	(4) California	(5) New Jersey	(6) Ohio	(7) Texas	(8) Average
Profit	0.0%	0.0%	12.0%	10.0%	11.0%	6.0%	20.0%	11.8%
Contingency (Note 2)	5.5%	10.1%	0.0%	2.0%	2.0%	2.0%	0.0%	1.2%
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% = 60.5% * 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-129165789, Ohio: SFMA-129500618, Texas: SFMA-129745412.
   For State Farm, contingency is included with profit in Florida and Texas.

National Association of Realtors
NFIP Expenses

WYO Allowance[1] 27.4%			Other Operating Expenses[2] 9.1%	
Premium Tax 2.0%	Agents' Commissions 14.2%	Company Expenses 11.2%	Funded by Federal Policy Fee 5.1%	Funded by Premium 4.0%

3.0% Loss Adjustment Expense	43.8% Expected Losses	10.0% Contribution to Debt/Surplus	6.7% Interest on Debt

Loss Adjustment Expense[3] 3.0%	Provision for Losses[4] 60.5%

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.