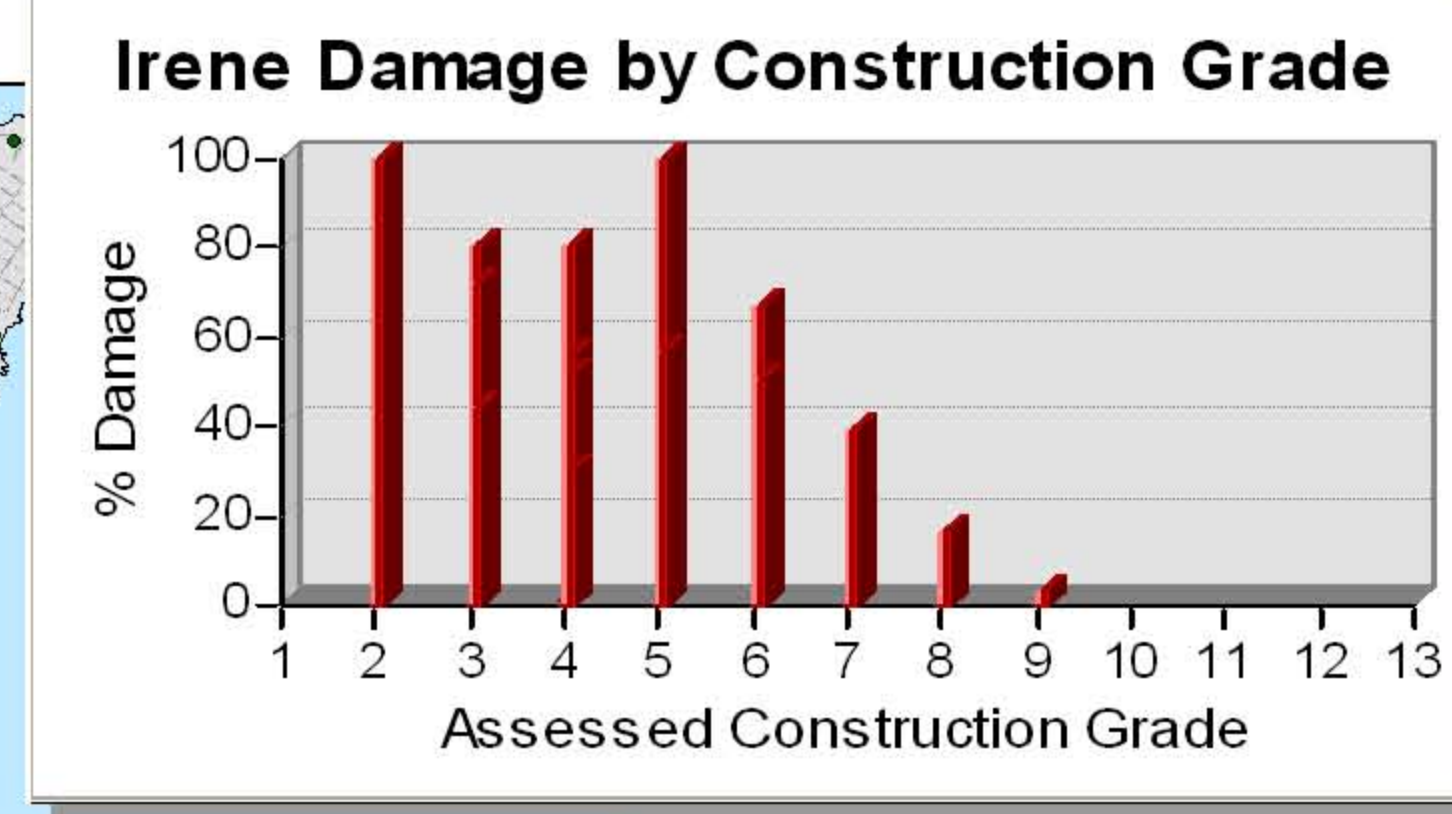
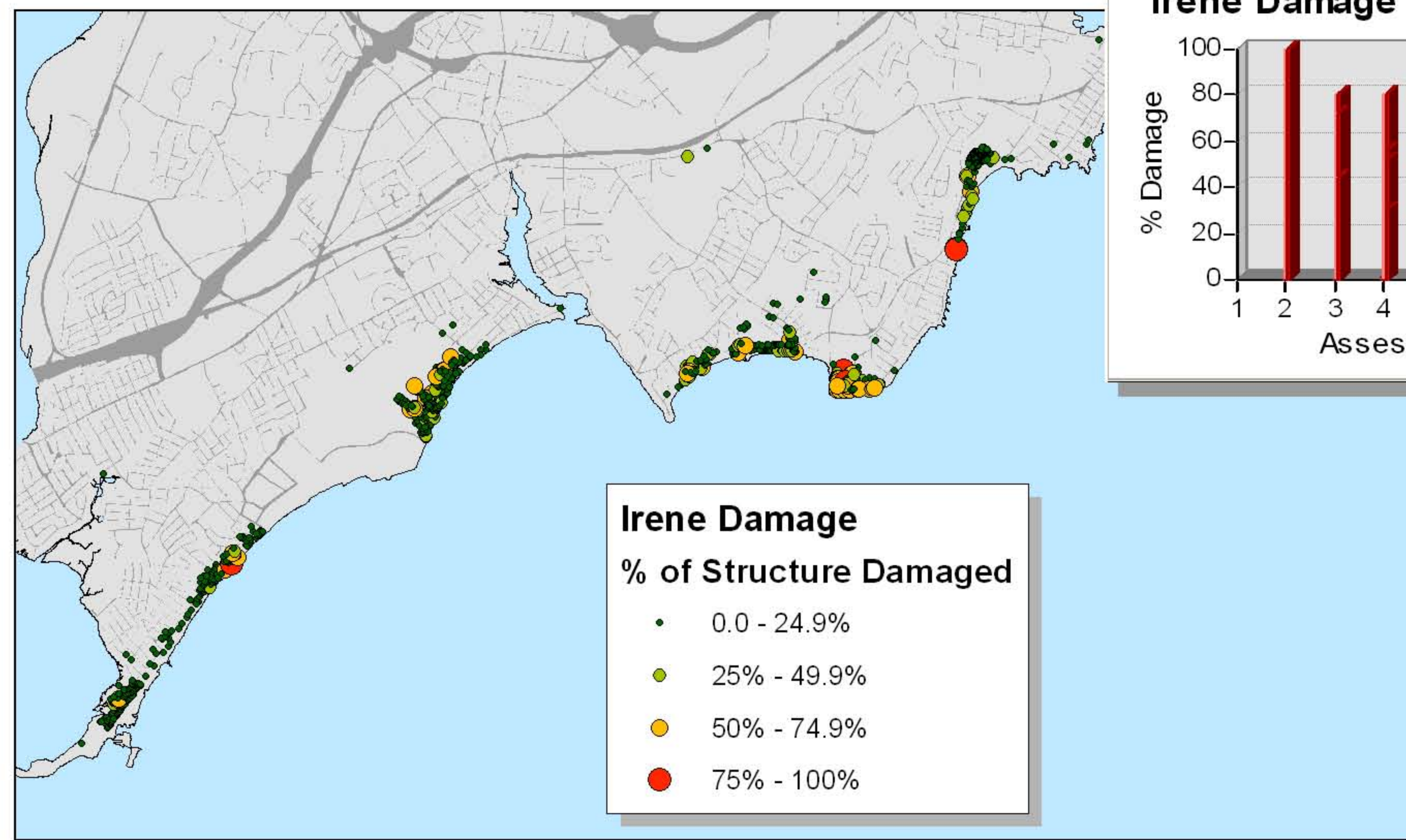


How Does Construction Grade Relate to Storm Damage?



Grade 4 Damage



Grade 5 Damage



Grade 6 Damage



After storms Irene and Sandy FEMA required that homes in hard hit areas receive Substantial Damage Estimates. Milford employees from the Building Inspection and Planning and Zoning departments, trained and equipped with FEMA software, inspected over 900 buildings and quantified damages to 730 structures in terms of dollars as well as a percentage of the value of the home or garage that was damaged. These assessments are used to determine whether homes require elevation and play an important role in pursuing grants and insurance payouts.

When working on the City of Milford's Hazard Mitigation Plan it was required that city conduct a fiscal risk analysis to determine the effects of another storm on our residents. One method was to analyze what happened during the last two major storms. By looking at the results of the Substantial Damage Estimates and adding in data from the Assessor's database it was found that almost every single home that incurred more than 25% damage had similar construction grade.

Grade assignment is the attempt by the assessor to recognize differences in quality of construction. Construction grade is determined by taking a composite view of the types and quality of building materials used, the level of workmanship and the individuality of the design in the home. While improvements over time may introduce varying construction elements, it is a general practice for builders to use consistent materials to complement existing elements in the home. The higher the quality rating is for a structure, the higher the construction grade becomes. To provide a visual aid on construction grade, images of homes in Milford and their construction grades are provided below:

Grade 2



Grade 5



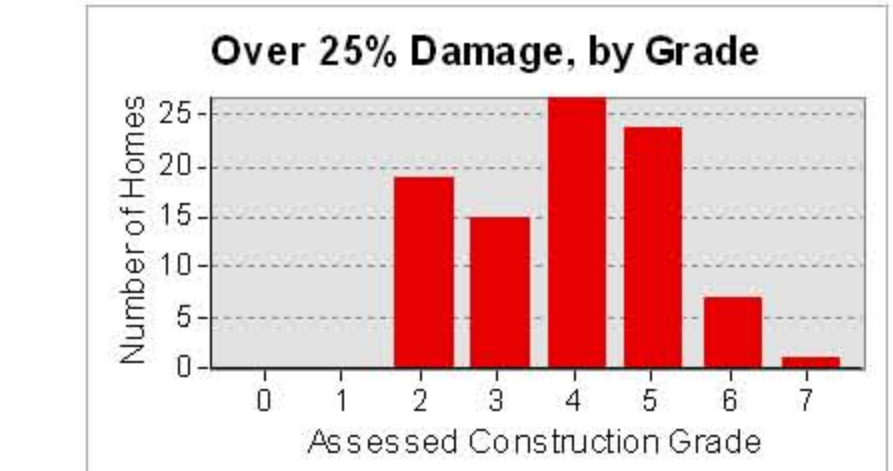
Grade 10



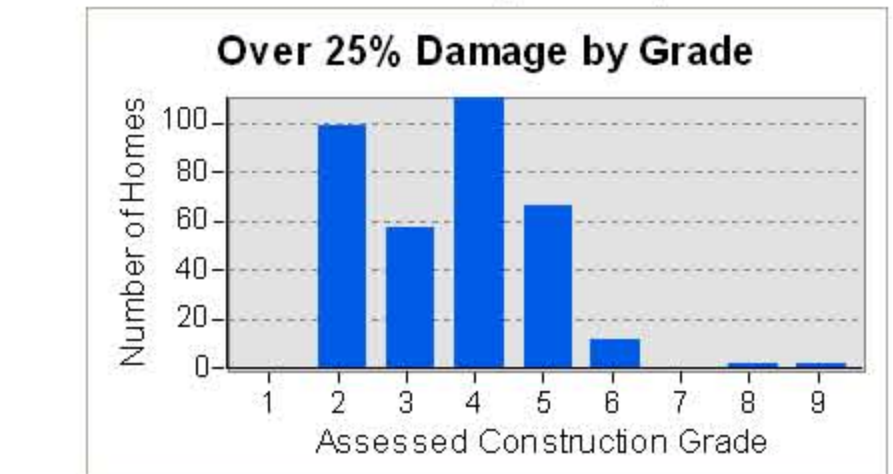
Grade 15



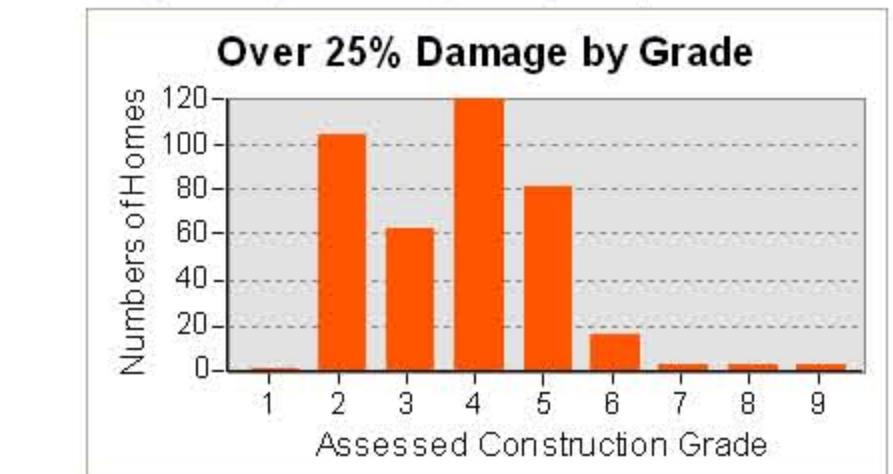
Post Irene 147 homes were found to be damaged. Of those, 102 incurred more than 25% damage. The result of the GIS analysis found that the majority of homes damaged more than 25% during Irene were assigned a grade between 2 and 5.



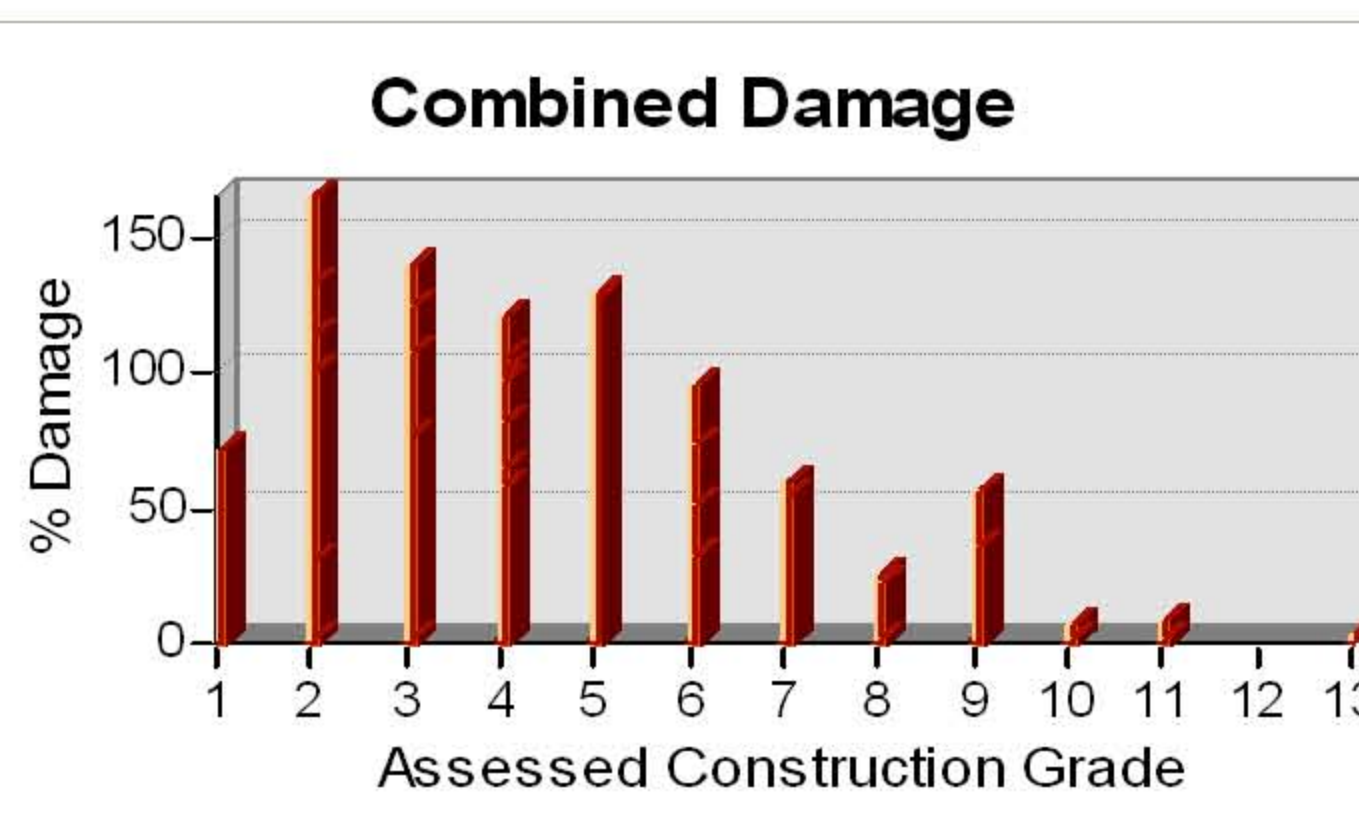
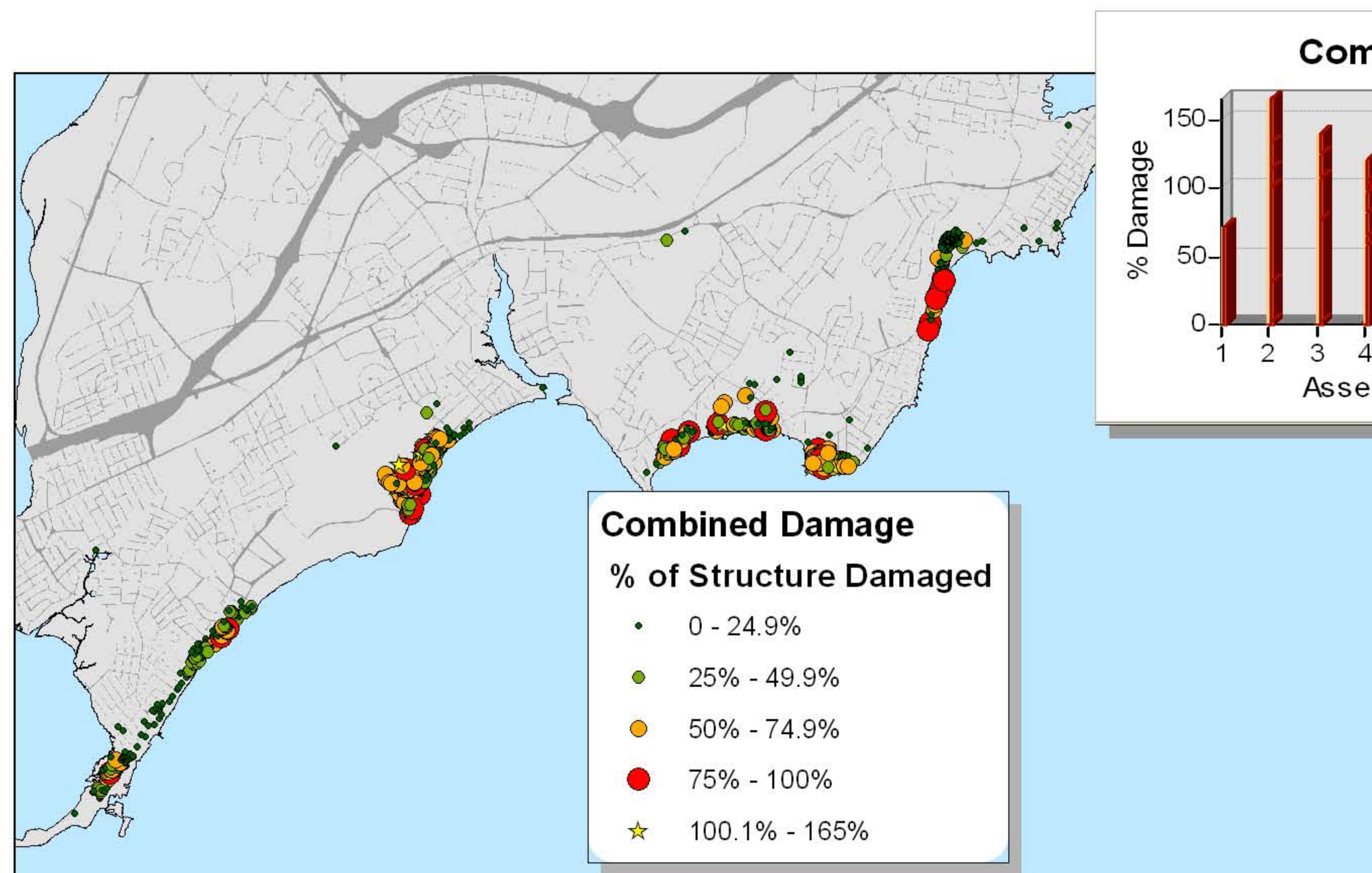
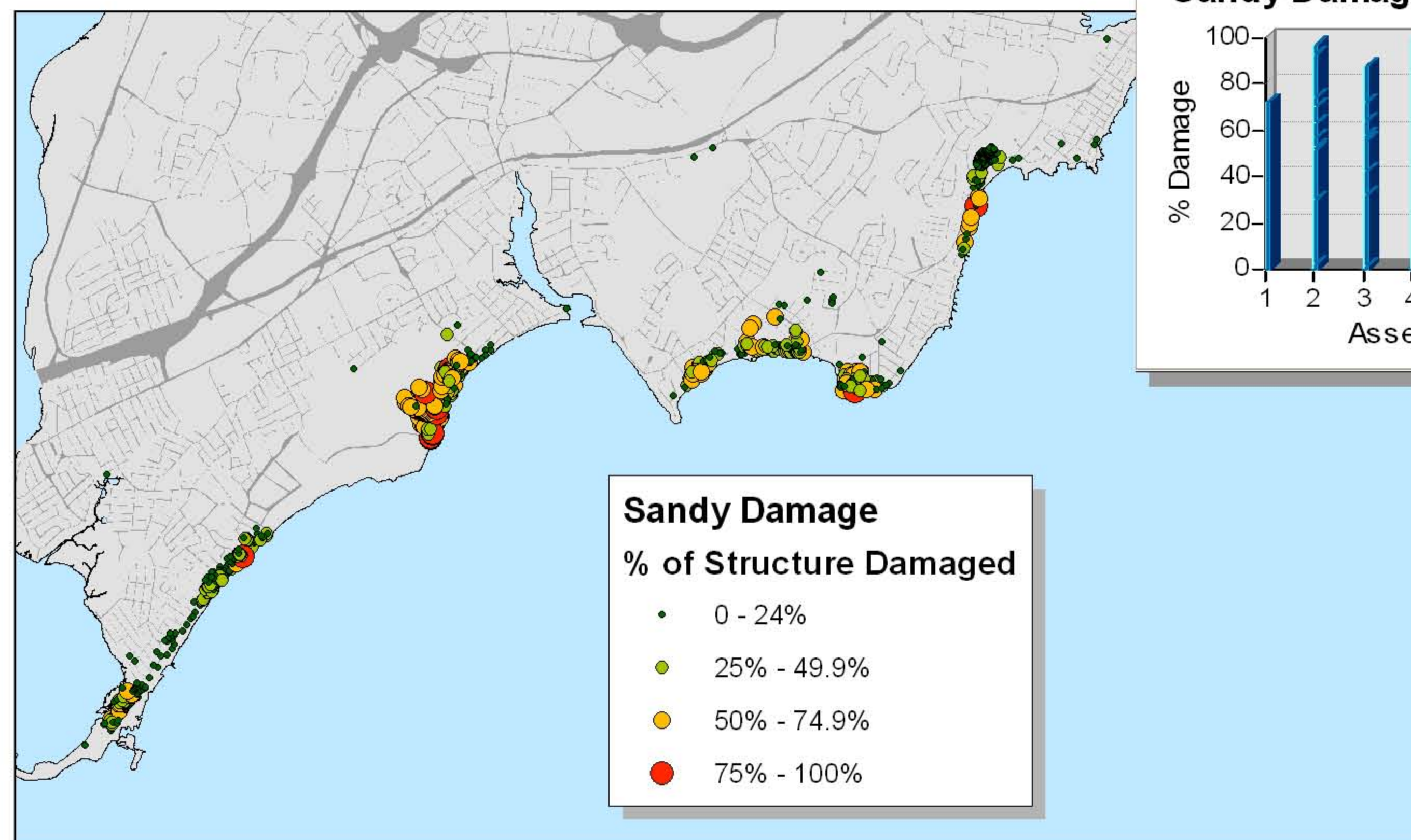
After Sandy, 677 homes were damaged. Of those 354 incurred more than 25% damage. Aside of a few outliers, the construction grade distribution shows a very similar pattern



Between the 2 storms 730 were damaged, 402 of which were damaged over 25% and just as previously seen, the patterns are similar.



The consistency among the patterns provide good evidence that homes graded 6 or less are most susceptible to damage from tropical storms.



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