Acknowledgements

It was an unusual course of events that brought me to Blacksburg and Virginia Tech, but I am very thankful that I was able to pursue this research and degree. I would first like to thank the members of my committee, Dr. Samuel Easterling, Dr. Thomas Murray and my advisor, Dr. Raymond Plaut. Dr. Easterling supported me and my husband on a different journey before I even arrived at Virginia Tech, to which we are both very grateful. Dr. Easterling and Dr. Murray were instrumental in my decision to attend graduate school, and their teaching and advice are much appreciated. Special thanks go to Dr. Plaut, for being an excellent teacher and mentor, and for always being available to assist me in any way on my research and coursework as well. I would also like to mention that this research and my education were funded by the National Science Foundation, Grant No. CMS-0301084.

I would also like to thank my parents for their constant support throughout all of my educational experiences. My mother taught me the extremely important lesson of work before play, and my father helped guide me into a profession of “something practical.” I would not have made it this far without them.

Lastly, I must thank my husband, Craig. All structural engineers know that a good structure starts with a solid foundation. He is my foundation. I have leaned on him so many times, and he has always held me up. He is truly a rock.