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Nebraska School Facilities: Educational Adequacy of Class III School District Structures

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NEBRASKA SCHOOL FACILITIES: EDUCATIONAL ADEQUACY OF CLASS III SCHOOL DISTRICT STRUCTURES

by

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In 2009, a replication of the Pool study was conducted. This study, however, focused on the school systems classified as Class III districts. Nebraska has 252 Class III districts. Compared with Class II (21), Class IV (1), and Class V(1) districts, the Class III districts offer a wide array of school settings, from urban to extremely rural, and from the third largest school system in Nebraska to a single school district occupying a county in the western sandhills.

The survey responses were sorted and analyzed by five indices: Class, Quartile of Valuation per Pupil, Population Change Category of the 2008 county census, Original Date of Construction, and Instructional Type of Building. The answers submitted by the superintendents and building administrators were compared and analyzed against the responses tendered in 1993. The chi square test of independence and a log-linear analysis were utilized to determine if there were significant differences between the responses of the two generations of school administrators.

Significant differences were found between the opinions of the building administrators who participated in 1993 study and those who participated in the 2009 study. In 1993, 14% of building administrators perceived their facilities as over crowded.

In 2009, approximately 5% shared that perception. In 1993, 46% of building administrators held the perception that their facilities did not accommodate the use of technology. In 2009, 30% of building administrators had the same opinion. In 1993, 32% of the buildings were reported as air conditioned. In 2009, 94% of the buildings were reported as air conditioned.

Significant differences were also found between the opinions of superintendents who participated in the 1993 study and those who participated in the 2009 study. These differences where in the surveyed areas of delayed maintenance, restructuring efforts, facilities that inhibited the use of technology, and the fiscal capability of their district of meet facility needs without raising taxes. In 2009, superintendents reported that the levy limitations restricted attempts to maintain facilities.

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Introduction

Statement of the Problem

The call for school improvement and transformation of the nation's educational programs has led school leaders to closely examine the structures in which our students are taught. In many cases school superintendents have been faced with placing students and teachers in inadequate buildings due to age, lack of open access, flawed mechanical or structural systems, and overcrowding in some growth areas. To accentuate the problem, there has been a lack of fiscal resources to maintain or replace inadequate facilities in these school systems. (Pool, 1993).

The call for school improvement began in 1983 with the release of the national report A Nation at Risk (National Commission on Excellence in Education, 1983). This report criticized the public educational system in the United States and made five major recommendations for change: (a) a foundation in English, math, science, social studies, and computer science was needed; (b) rigorous standards must be developed; (c) more time must be devoted to learning the foundation courses; (d) higher educational standards for teachers with corresponding teacher salary raises are needed; and (e) adequate support from educators, elected officials, and citizens was required.

In 1991, President George H. W. Bush established America 2000: An Education Strategy (U.S. Department of Education, 1991). "America 2000" was a long-term national strategy designed to accomplish by the year 2000 the six national education goals articulated by the President and the state governors at the 1989 "Education Summit". The goals of this plan ranged from early childhood education, enhanced

graduation rates, mathematics and science excellence, to adult literacy. It was the expectation that schools be "world-class" by the year 2000. (Pool, 1993).

In 1994, President Bill Clinton signed into law the Goals 2000: Educate America Act. The Act codified in law the six original education goals concerning school readiness, school completion, student academic achievement, leadership in math and science, adult literacy, and safe and drug-free schools. It added two new goals encouraging teacher professional development and parental participation. Through the remaining years of the 1990's Goals 2000, while being amended throughout this time period, was the guiding light in education reform.

President George W. Bush's reauthorization of the Elementary and Secondary Education Act of 1965 (EASA), also known as the No Child Left Behind Act of 2001 (NCLB), provided broad changes encompassing many areas of public education in the United States. Central pieces of the Act included accountability, expansion of school choice, increased focus on reading skills, and greater flexibility for state and local authorities. (Terrell, 2002)

Purpose of the Study

In 1993, Dennis Pool conducted a study with the intention to create a baseline of data concerning the condition of Nebraska's public school facilities. His study also included an analysis of the inventory to determine what relationships existed between district class, comparative wealth, building age, and population growth, when compared to building administrators' perceptions of fiscal capacity for future funding of facilities, as well as physical and instructional qualities of their school districts' facilities. (Pool, 1993).

The purpose of this study was to acquire information about Nebraska's Class III school districts. Class III districts offer the widest range of diversity, ranging from metropolitan settings to single schools districts in a county. The data was collected from Nebraska's public school superintendents to make a comparison between the data collected in 1993 to the data collected in 2009. Using the updated data, an analysis was made among district class, comparative wealth, building age, and population growth, when compared to superintendents' perceptions of fiscal capacity for future funding of facilities.

However, inquiries about the impact of an action by the Nebraska legislature was included in this study that was not in existence when Pool created his facilities study – a limitation placed on both a district's ability to generate property tax revenue and expend those revenues.

Research Questions

1. What is the current status of Nebraska's Class III public school facilities and how do they compare with the results of 1993 Pool study? As with the Pool study, the following factors were considered: school district special building fund levies, bond indebtedness, facility age, safety, capacity, physical condition, internal environment, school type, use of portable facilities, and accommodation for the handicapped.
2. What are the relationships among current findings and the 1993 Pool study in the areas of district class, relative district wealth, relative bond indebtedness, building age, county population growth, and how public school superintendents perceived their district's needs for facility bond issues,

potential for success of a bond issue, delay of facility maintenance, and implementation of technology?

3. What are the relationships between current findings and the 1993 findings between relative district wealth, county population growth, and how school superintendents perceived their district's ability to fund facility need without raising the property tax levy?
4. How has the property tax limitation affected the capacity of Nebraska school districts to maintain their facilities?

Definition of Terms

The terms listed below are those commonly used throughout school facility and infrastructure literature. Common definitions provide for the consistency required in data reporting to achieve comparable results. For ease of reference, they are listed in alphabetical order.

Accessibility for the handicapped. A barrier-free environment where handicapped persons may take advantage of provided services. (Pool, 1993).

Addition to Existing Facilities. Additions to existing facilities may be necessary to relieve overcrowding; to meet federal, state, or local mandates, such as class size reduction measures; or to accommodate projected enrollment growth. The cost of additions usually includes the fixtures, major equipment, and furniture necessary to furnish them. (Crampton, F.E. & Thompson, D.C., 2002).

Asbestos. A soft, fibrous, incombustible material formerly used in many building materials; considered to be a health hazard if not properly contained. A mineral which

has been demonstrated to be a carcinogen, linked to lung cancer and other pulmonary diseases (Pool, 1993).

Bond issue. A referendum asking voter approval for the sale of bonds. (Pool, 1993).

Building fund. An account established in order to justify all applicable expenses associated with new construction activities, including the furnishing of a new building or an addition to an existing structure. The sale of bonds, the sale of property, and tax collections from a sinking find a.k.a. special building fund, are the primary source of income for this fund. (Pool, 1993).

Building fund levy rate. A special annual tax levy rate established to accumulate money in an account frequently called a sinking fund or a special building fund. This tax rate is established in advance of building expenditures through a special annual tax for a specified period of years. (Pool, 1993).

Deferred maintenance. The maintenance necessary to bring a school facility up to good condition; that is, the condition in which only routine maintenance is required. (Crampton, F.E. & Thompson, D.C., 2002).

Enrollment. A head count of student registered to attend a specific school on a specific day. (Pool, 1993).

Major improvements. Improvements to grounds, such as landscaping and paving. (Crampton, F.E. & Thompson, D.C., 2002).

New construction. The construction of a new facility includes the buildings; grounds (purchased, landscaping, and paving); and pictures, major equipment, and furniture necessary to furnish it. (Crampton, F.E. & Thompson, D.C., 2002).

Permanent attendance sites. A temporary re-locatable unit that can be moved to another site. (Pool, 1993).

Property tax. A tax levied against the owner of real or personal property. Real property is not readily movable and includes land, buildings, and improvements. Real property is classified as residential, industrial, agricultural, commercial, or vacant. Personal property is movable and consists of tangibles, such as machinery, livestock, automobiles, and crops, or intangibles, such as money, stocks, and bonds. (Pool, 1993).

Renovation. Renovation of an existing facility includes renovations for health, safety, and accessibility for the disabled. (Crampton, F.E. & Thompson, D.C., 2002).

Retrofitting. Applies to such areas as energy conservation (for example, installation of insulation or energy-efficient windows) and technology readiness (e.g., electrical wiring, phone lines, and fiber-optic cables). (Crampton, F.E. & Thompson, D.C., 2002).

School facility adequacy. The degree to which a school building meets the daily needs of curriculum programs, students, and staffs, as well as that building's perceived capacity for meeting the needs of a future curriculum, change either in the building's current physical state, or in its potential for future modifications. (Pool, 1993).

Tax limitation. An attempt to constrain the growth of spending, property tax rates, assessed valuation, or some combination thereof. (Knudsen, 2001).

Teaching station. A specific location associated with a learning area designed to provide a support system for instruction. (Pool, 1993).

Technology. An evolving process that enables the development of many products and procedures that will exert an influence on education. (Pool, 1993).

Delimitations and Limitations

Delimitations of the study:

1. The survey population was restricted to the 2009 membership roster of the Nebraska Council of School Administrators.
2. Survey instruments were designed to collect basic information required for the study while requiring a minimum of the respondent's time.

Limitations of the study:

1. The results of the study contain the inherent weaknesses of survey design.
2. Participating districts may have had different superintendents over the years.

Significance of the Study

The significance of this study was the updating and comparison of the basic demographics of Nebraska school facilities as presented in the 1993 Pool study to current demographics. Armed with this information, decision makers who hold sway over the educational system in Nebraska may be better enabled to understand the impacts of legislative decisions over the last ten to thirteen years and the ability of local school districts to maintain their facilities.

Chapter II

Review of the Literature

Introduction

The purpose of this chapter was to review selected literature and compare it to the literature reviewed by Dr. Dennis Pool in his dissertation Nebraska School Facilities: Educational Adequacy of Structures and Their Funding written in 1993. For ease of comparison, the categories that Pool used for his study were employed in this study. Those topics were delineated as follows: The implications of the transformation of schools to meet changing curriculum, internal environmental concerns, energy, equity of finance, finance methodologies for school facilities, and information needs for planning requirements.

Plans for the Future

In 1991, the leaders of the United States announced a plan to define the education system of the country in the year 2000. In this plan, America 2000: An Education Strategy, six broad goals were identified, ranging from school readiness for children to functional literacy of adult Americans (U.S. Department of Education, 1991 as cited in Pool, 1993). Those goals were supported by state governments, including Nebraska (Nebraska State Department of Education, 1992 as cited by Pool, 1993).

The No Child Left Behind Act of 2001 (NCLB) continued the emphasis established in the previous reauthorization of the Elementary and Secondary Education Act (1994) on holding all students to the same academic standards. The 2001 legislation built on the foundation laid by the 1994 reauthorization and expanded the federal role in public education by requiring stronger school accountability, more stringent

qualifications for teachers, and an emphasis on programs and strategies with demonstrated effectiveness. The legislation was focused on ensuring all students meet state standards by 2014 and that achievement gaps based on ethnicity, race, income, and language are closed. The provisions of the law were designed to ensure that all students made adequate yearly progress toward achieving "proficiency" on state standards within 12 years. (Reeves, 2003)

National School Situation

In 1989, Wolves at the Schoolhouse Door was published by the Education Writers Association (Lewis, as cited in Pool, 1993). The generally poor condition of the nation's school facilities was emphasized in this report. Some of these stark facts reported were: 25 percent of the nation's schools were inferior places to learn; 33 percent were only marginally adequate; and the remaining 42 percent were in good condition. Equity concerns, however, were obvious. Major concerns existed about the growing cost of facility maintenance and the increasing backlog of maintenance due to budgetary restrictions. During the 1970's and 1980's, a decline in student enrollment was mirrored by a decline in facility construction. At the present time, with increasing enrollments created by a more transient population and a new boom of births, the need for school facilities have become paramount. (Lewis, as cited in Pool, 1993).

For almost two decades, a chorus of education and government organizations has decried the disgraceful condition of America's schools. Concerned groups, such as the American Association of School Administrators, Council of Great City Schools, National School Boards Association, and Education Writers Association documented a shocking backlog of deferred maintenance in a series of studies published between 1983 to 1999.

The American Society of Civil Engineers report card on America's infrastructure affirmed this finding by giving school infrastructure a grade of D minus in 2001. (Crampton & Thompson, 2002). Much of the declining physical condition of schools can be committed to the local and district practice to deferring maintenance, often because of inadequate capital funds. Unfortunately, deferring maintenance may increase costs of the repairs. (Anderson, Augenblock, Myers, & O'Brien 1998).

The deteriorating condition of schools can be attributed to their age and to inadequate maintenance. According to the National Center for Education Statistics, in 1998 the average age of public schools in America was 42 years. Approximately 31% or pre-World War II brick fortresses, built a civic monuments to last 50 years or more. Often with some modernization, these buildings made excellent learning environments, CES contends. Older buildings are often easier to improve post construction. Basements allow access to a plumbing and wiring, not feasible in more modern buildings built on concrete slabs, and construction is generally of higher quality in older buildings. (American Association of School Administrators, 2004).

In 1995, The U.S. General Accounting Office estimated $112 billion was needed to address deferred maintenance, health and safety, and accessibility issues. Yet, even those estimates are incomplete because they do not capture the funding needed for new construction, additions, and renovations to accommodate increasing student enrollments and education reforms, such as class size reduction, that require additional space. (Crampton & Thompson, 2002).

In 1999, NCES, in Condition of America's Public School Facilities, estimated the cost to bring the school buildings into good condition at about $127 billion and reported

that 75% of schools needed to spend some money on repairs, renovations, and modernizations to put the buildings into good overall condition. An average amount per school for schools needing to spend money was about $2.2 million; with the average cost per student being $3,800. (National Center for Education Statistics, 2000).

In 2000, a report released by the National Education Association, *Modernizing Our Schools: What Will It Cost?,* put the school facilities improvement price tag at $322 billion – three times the 1995 GAO figure, and some 10 times what states currently spend on public school infrastructure. (American Association of School Administrators, 2004).

Implications for Planners

School facility planners must gather ideas, requirements, and educational philosophies from many areas. Early in the planning stage, the architect will examine the goals of the educators, create a friendly environment for the users, allow for the building to be an extension of the teacher, provide for a variety of experiences through treatment of space in a flexible manner, and develop a building plan that will facilitate a sense of community within its confines. (Christopher, as cited in Pool, 1993).

Most architects and facility planners recognize that classroom design affects how children learn. Understanding this relationship and translating it into the design of instructionally, high performance learning spaces is not an easy task. Limited budgets and a lack of understanding are often roadblocks to better student learning environments. (Richardson & Wheeler, 2003).

Districts will need a strategic approach to facilities provision. This means that in addition to outlining steps to accomplish over a specific time period, they will need to

develop criteria or principles that guide their decision about school space. The following six criteria offer an example:

1. Facilities should focus on student learning and achievement – Ideas about student learning and achievement should drive decisions about school space, rather than the other way around. School leaders, parents, and student who have promising ideas for increasing student learning should be encouraged to dream about eh ideal school space they need to achieve their goals.
2. Facilities should be flexible – The future requires flexible facilities – flexible in design, usage, and financing. Performance pressures, personalization, technology, changes in teacher supply, and demographic shifts all have the potential to drive new methods of instruction and assessment.
3. Facilities should be responsive – In the future, facilities supply needs to be more than just flexible; it also needs to be responsive to principals and teachers' needs and suggestions about the spaces in which they work.
4. Facilities trade-offs and choices should be transparent – If facilities supply is to be flexible and responsive, it is vital that it is credible too. Principals and teachers have to have the sense that the process for making facilities decisions is fair.
5. Facilities provisions should be driven by data – In order to be flexible, responsive, and open, a facilities plan for the future needs good information. Districts need information about the spaces they own, including data about their location, what condition they are in, and who is using them and for how long.
6. Facilities should be economically efficient – Efficiency is an important criterion for school facilities. In education, efficiency means focusing spending on

> productive activity, i.e. instruction. Through innovative partnerships and other arrangements, districts may be able to redirect resources away from inefficient facilities and toward instruction. (DeArmond, Taggart, & Hill, 2002).

Technology

Technology is no longer the dream of educators, but the reality of today. Educational planners' dreams of the future of technology have become, in a matter of years, reality. (Pool, 1993). Computers have become an indispensable learning tool for students. Nearly every school in the United States has computers connected to the Internet. Government figures for 2000 show that 98 % of public schools have Internet connections. (Kennedy, 2002). Learning must guide the use of technology. Integrating technology into a new school after the design phase fails to recognize the relationship among technology, the learning environment, and space design. To take advantage of the tools available to the teacher and the student, planners and designers must recognize that technology supports learning and is an integral part of the curriculum, not an afterthought. (Richardson & Wheeler, 2003).

Recent trends in computing support the role of wireless technology in the design of schools. Technology is seen as a tool that supports learning and is something personal for students that helps them to journey along their chosen learning paths. (Rogers, 2005). McKenzie (2001) reported that wireless networks that use mobile computers are preferable to the still-prevalent practice of putting desktop machines in each classroom. He asserted that there are many reasons why mobile computing is preferable for the classroom:

- Ease of movement. Laptops can be moved anywhere in the building and require no special furniture.
- Relaxed fit. Laptops are easier to accommodate within exis5ting classrooms because of their small size.
- Strategic deployment. Laptop computers can be deployed on rolling carts where and when they are needed most, creating one-to-one opportunities that traditional methods of wired computers do not provide.
- Flexibility. Laptops can be used within existing rooms and can be configured to fit the teacher's preferences and practices.
- Cleanliness. Clutter is eliminated when cables are eliminated.
- Low profile. Teachers and students can maintain critical eye contact when vision is not obstructed by bulky monitors.
- Convenience. Laptops are readily available and easily stored when not in use. There is minimal set up time and they can be started up quickly without the need to move to a computer with connectivity.
- Simplicity. Teachers and students can focus on learning, not on hardware.

Early Childhood Education

Early childhood education has received an increasing amount of attention in the last two decades in the United States and in other countries. There is now a strong consensus on the many benefits of preschool. Studies have shown that attending a high-quality preschool program not only increases children's readiness for kindergarten, but also causes positive long-term improvements in participants' school performance and social outcomes. (Sacks & Brown-Ruzzi, 2005).

Research has shown that well-functioning early childhood centers are not just scaled-down versions of elementary schools or simply open play spaces. Early childhood centers should address particular design issues to achieve a safe, enjoyable, and educational environment. (Butin, 2000).

There are four basic elements that must be addressed in the design of the early learning environment: Movement, Comfort, Competence, and Control. With the incorporation of these elements, the facility provides the child with the opportunity to participate in the learning process. The built environment is actually working, enabling the staff to facilitate the optimum learning experience for the child. (Johnson, 2006).

Barrier Free

Among United States children ages 6 to 14, one in eight has a disability. To give the 5 million students with disabilities the same access to facilities as others, schools are required to comply with the Americans with Disabilities Act (ADA). Schools not in compliance invite lawsuits and risk losing federal funding or accreditation. (Renner, 2006)

The U.S. Access Board's guidelines issued under the Americans with Disabilities Act (ADA) and the Architectural Barriers Act (ABA) have been completely updated and revised. The ADA Accessibility Guidelines (ADAAG) covers the construction and alteration of facilities in the private sector (places of public accommodation and commercial facilities) and the public sector (state and local government facilities). The accessibility guidelines issued under the ABA primarily address facilities in the federal sector and others designed, built, altered, or leased with federal funds. The guidelines under both laws have been combined into one rule entitled Americans with Disabilities

Act and Architectural Barriers Act Accessibility Guidelines that contains three parts: a scoping document for ADA facilities, a scoping document for ABA facilities, and a common set of technical criteria that the scoping sections will reference. As a result, the requirements for both ADA and ABA facilities will be made more consistent. The updated guidelines were published as a final rule in the Federal Register in July of 2004. On March 23rd the Access Board added supplementary information on its Americans with Disabilities Act (ADA) and the Architectural Barriers Act (ABA). (Whole Building Design Guide Accessible Committee Report, 2008).

New ADAAG includes entire new sections on residential and recreational facilities, kitchens, appliances, windows, vending machines, mail boxers, and exercise machines. Children's dimensions have been added for handrails, toilet rooms, drinking fountains, sinks, dining, and work surfaces. Additional sections are currently under development by the Access Board for public rights of way and other outdoor areas. (James, 2008).

Access to facilities and the general education curriculum should be based upon each school district's long-range plan pertaining to educational facilities. It is important that each school district's educational facilities plan considers the needs of students with disabilities when approving new construction and remodeling of existing structures. Districts' allocation of instructional space is intended to meet the needs of current and projected special education programs and services, including serving students with disabilities with typical peers. The allocation of space is designed to provide access to the general education curriculum. School boards are responsible for ensuring that students have access to all aspects of the school program. (Roettger & Alhamisi, 2007).

Energy Management

America's schools spend in excess of $6 billion each year on energy, more than on books and computers combined. In many school districts, energy costs are second only to salary expenditures. Yet the U.S. Department of Energy estimates that schools could save 25 percent of their energy costs, about $1.5 billion nationally, by installing energy-efficient and renewable energy technologies that are widely available, making improvements to operations and maintenance and insisting on better building design. (American Association of School Administrators, 2004).

Energy efficiency takes many forms, from using energy-efficient equipment to changing behavior to orienting a new building to take maximum advantage of the sun. Consider the following list of tips as you think about how to improve a school's energy use:

- Aim for comprehensive solutions, not just retrofitting individual pieces of equipment.
- Take a long-term, life-cycle view.
- If your renovation or new construction project requires an architect or engineer, hire one with experience not only in school design but in energy efficiency, sometimes called "green" or "sustainable" design.
- Involve the entire school community in developing an energy efficiency action plan.
- Explore alternative financing opportunities.
- Enlist the help of a third-party energy expert to be sure your plan and any contracts you may sign are sound.

- Consider buses that run on less polluting, less maintenance-intensive fuels such as compressed natural gas. (Glickman, 1999).

Environmental Hazards and Pupil Safety

Environmental hazards and individual safety have become common concerns for both the public and school management. The potential for students and teachers to be exposed to health hazards and safety risks cannot be over emphasized. Health-related issues of friable asbestos, airborne biological and chemical contaminants, radon gas, and lead contamination of drinking water are considered major environmental hazards in many schools. As a result, efforts to make these schoolhouses safe for children will be an expensive task. (Lewis, as cited in Pool, 1993).

Asbestos and lead may be found in older buildings, installed at the time when asbestos was known as a “miracle fiber” and used extensively in factories, schools, hospitals, and thousands of commercial and residential buildings across the United States, and when lead was a key ingredient in nearly all paint being used on both the interior and exterior of buildings. The only way to truly determine if building materials contain asbestos is through laboratory analysis with the aid of a special type of microscope. For this reason, facility managers who suspect the presence of asbestos-containing material should enlist the aid of an environmental consultant to determine if the material is asbestos prior to conducting renovation or demolition. Once asbestos is confirmed, a properly certified environmental contractor should be employed to properly remove and dispose of the materials. (Silicato, 2008).

Lead is a toxic metal that is harmful to human health when it is ingested or inhaled. Unlike most other contaminants, lead is stored in our bones, and can be released

over time into the bloodstream. Even small doses of lead can build up and become a significant health risk. (Environmental Protection Agency, 2005). Beginning April 2010, federal law will require contractors that are hired to perform renovation, repair, and painting projects in homes, child care facilities, and school built before 1978 that disturb lead-based paint to be certified and follow specific work practices to prevent lead contamination. (Environmental Protection Agency, 2008).

Drinking water is one possible source of lead exposure. Some drinking water pipes, taps, solder, and other plumbing components contain lead. Lead in the plumbing can leach into water, putting children at risk. Other possible sources of lead exposure include paint, dust, soil and dirt, and pottery. Drinking water is not usually a major source of lead but facilities that serve children should test their water to make sure it is safe. (Environmental Protection Agency, 2005).

Poor indoor air quality can cause a whole host of ills, both literally and figuratively. It significantly influences the occurrence of communicable respiratory illnesses, allergy and asthma symptoms, and sick building symptoms. It can also lead to absenteeism and reduced productivity in schools. Studies have shown that improving the indoor environment can lead to as much as a 20 percent improvement in worker productivity. Superior indoor air quality also contributes to a favorable learning environment for students and an overall sense of comfort, health, and well-being. (Matela, 2009).

From elementary school maintenance storage closets to high school chemistry laboratories, schools house a variety of chemicals. Many of these chemicals are hazardous and are used daily; however, in some cases, these chemicals have been unused

for decades. Ensuring that these chemicals are managed properly will help school administrators to safeguard the health and safety of student and school employees, avoid dispos4e expenses and society school closures associated with spills and emergency incidents, maintain a sense of trust between the district and the surrounding community, and prevent to the environment. (Environmental Protection Agency, 2006).

Impact of Property Tax Limitations

Beginning with California's passage of Proposition 13 in 1978, an increasing number of states have enacted measures that limit the ability of municipalities to tax their residents to pay for local services. In most cases, the political support for these tax limits comes from voters who are concerned about local officials' lack of responsiveness to the electorate. Voters fear that officials will impose taxes to pay for services whose cost exceeds their value to local residents. (Bradbury, Mayer, & Case, 2001).

Academic studies have found that in most cases, property tax limits have led not to shrinkage in the public sector but instead to a shift to other revenue sources, such as state aid and fees. In places where the caps have had an effect, however, the outcome has been negative. For example, evidence suggests that caps disproportionately affect lower-income communities. The implications are that tax and expenditure limits are most constraining on the ability of governments serving economically less prosperous and at-risk populations to meet public service needs. Some studies have found strong evidence that property tax caps lead to lower student test scores; they may also lead to higher dropout rates and a reduction in teacher preparedness. (Lyons and Lav, 2007).

One of the studies on property tax limitations was conducted by James Knudson, an economics professor at the University of Nebraska – Omaha. Knudsen, (2001) explains property tax limitations in the following:

> Limits on revenue or on both tax rates in assessed valuation are more likely to be binding than limits on only tax rates in assessed valuation. If only property tax rates are limited, the limit will likely be capitalized and property values, making the limit less effective. Likewise, if assessed valuation is limited, property tax rates can be increased to negate the effect of the limit.
>
> The other component that influences the effect of property tax limitations on school districts is the state response to shrinking school district revenues. If the property tax limitation is binding in state aid is not increased, school districts are certain to face tighter budgets than before the law. However, if the state increases funding it is possible that the effect of the property tax limitation will be muted.

The Equity Issues of Financing Public School Facilities

Responsibility for funding school facilities has traditionally fallen to the local constituency. The one-room schoolhouse was often constructed by the local community from donated materials. Even today, where union contracts allow, community members and district employees may band together to make minor improvements to school facilities. In spite of the years that have passed, the major financial responsibility for constructing and renovating school buildings and providing for other capital outlay needs rests with the local community. (Sielke, 1998).

This tradition has created a system of de facto economic determinism. Wealthy districts with high property values fund their schools at high levels with monies generated from what are often low property tax rates. On the other hand, districts with low or declining property values must make do with low levels of revenue generated from relatively high property tax rates. To counter this built-in inequity, most state legislatures have devised funding plans that guarantee all schools minimum funding on a per-pupil basis, thus providing each school with revenue for a basic level of education for all

students. However, these equalizing formula plans have not eliminated the large disparities in funding among schools. Districts are still free to add their property tax-generated revenues to the foundation amounts. (Ritchey, 2000).

Chapter III

Methodology

Introduction

As with Pool's 1993 dissertation, the intent of this study was to provide enough detailed information to aid decision makers in determining how to properly support facility needs of the state's public schools. The purpose of this study was to update the baseline information Pool presented in 1993 with a focus on Class III systems.

Population

The superintendents and principals of Nebraska's Class III schools were the intended population base of this study. Although this study focused on the Class III school districts, the same methods that Pool employed for his study were utilized in the execution of this study. The classification of Nebraska public school districts are determined and defined by State Statute 79-102 R.R.S. as follows:

Class I. Class I included any school district that maintains only elementary grades under the direction of a single school board.

Class II. Class II includes any school district embracing territory having a population of one thousand inhabitants or less that maintains both elementary and high school grades under the direction of a single school board.

Class III. Class III includes any school district embracing territory having a population of more than one thousand and less than one hundred fifty thousand inhabitants that maintains both elementary and high school grades under the direction of a single school board.

Class IV. Class IV includes any school district embracing territory having a population of one hundred thousand or more inhabitants with a city of the primary class within the territory of the district that maintains both elementary and high school grades under direction of a single school board.

Class V. Class V includes any school district embracing territory having a population of two hundred thousand or more inhabitants with a city of the metropolitan class within the territory of the district that maintains both elementary grades and high school grades and under the direction of a single school board.

Class VI. Class VI included any school district in the state that maintained only a high school, or a high school in grades 7 and 8 as provided in section 79-411, under the direction of a single school board.

In 1998, legislation was passed which allowed school districts to form a unified system. A unified system is two or more Class II or Class III school districts that participate in an inter-local agreement and was approved by a petition process through the State Committee for the Reorganization of School Districts. The first unified systems were operational in 1999 – 00. For statistical purposes, these unified systems were treated as a single school district. (Nebraska Education Directory, 2008).

In 2005 – 2006, a school district reorganization plan (known as LB 126) was effective on June 15, 2006, with the elementary-only school districts throughout the State merging into their corresponding local high school districts (known as ‘receiving districts’). The impact of this reorganization reduced the number of school districts in the State from 460 to 254. Under the terms of the reorganization plan, those districts which were merged into their local corresponding districts were deemed to be no longer in

existence. Class VI districts were also reclassified into a Class II or Class III district. (Nebraska Education Directory, 2008).

During the 1991- 1992 school year, they were 777 Class I through VI public school districts are Nebraska. The most recent data that the Nebraska Department of Education has concerning the number of Class II through Class V public school districts in Nebraska is from the 2007-08 school year. This most current data shows a total of 254 Class II through V public school districts in Nebraska. This is a decrease of 523 school districts since 1992. The numeric distribution of the schools among the classifications is illustrated in Table 1.

Table 1

Number of Nebraska Public School Districts by Class

Class	1991-92	2007-08
Class I	478	0
Class II	51	20
Class III	225	232
Class IV	1*	1*
Class V	1*	1*
Class VI	21	0
Total	777	254

* As with the 1993 study, the Lincoln Public Schools and the Omaha Public Schools are the only Nebraska Class IV and Class V school districts, respectively.

Research Design

The research design for this study was survey research. Surveys allow collection of data from a larger number of people than is generally possible when using a quad site-experimental or experimental design. However, unlike most qualitative research approaches that involve direct observation of behavior, surveys rely on individuals' self-reports of their knowledge, attitudes, or behaviors. Thus, the validity of the information is contingent upon the honesty of the respondent. (Mertens, 1998)

Gathering Data

Research data was compiled employing two survey forms that were developed using Survey Monkey ©, an online survey service. Through this program, respondents were able to submit their data via the Internet, which was automatically placed in a database. Building principals and superintendents were notified, with the assistance of the Nebraska Council of School Administrators, by e-mail. A three-week window, which began on August 24, 2009 and closed on September 11, 2009 was given to the respondents to submit their answers. Database entries were examined during the middle of the allotted time, with a reminder to participate sent via e-mail.

Instrumentation

The two survey questionnaires used by Pool were used for this particular study. The main reason for using the same questionnaires was to replicate the previous study as closely as possible. The questionnaires were posed to elicit school facility demographic information on school managements’ opinions regarding the administrators' respective facilities. Question responses were designed to obtain single numeric and yes or no

responses. In addition, the attendance center administrator instrument contained questions requesting a rating of facility adequacy and conditions. (Pool, 1993)

District Survey Instrument Description

The district survey instrument was designed by Pool to collect specific fiscal, demographic, and opinion information from the district level or central administration of the responding district. The instrument included 18 questions. The fiscal information sought for this study was in reference to the 2008 – 2009 school year. The current bonded indebtedness was also sought. Other questions pertain to delayed maintenance, limited programs due to facilities, technological advancements, meeting facility needs over the next ten years, and the number of permanent and portable sites, and the impact of the 1998 levy limitations.

Building Survey Instrument Description

The building survey instrument was designed by Pool to collect specific demographic and opinion information from the building level or central administrator who is knowledgeable about the specific attendance center. There were 53 possible responses in this instrument. Questions of this instrument pertained to grade levels taught, the date of construction of original building and additions, current enrollment, the adequacy of the building for the existing instructional program, the interior and exterior physical conditions of the building, air-conditioning, comfort levels, handicap accessibility, safety hazards, and future changes.

Data Analysis

This study was a replication of the study Pool conducted in 1993. The same method of analysis was employed that Pool used in 1993. A descriptive presentation of

the school district and building demographic information was made using frequency tables and cross-tabulations. Data were categorized by district class, quartile of relative wealth, county census population change category, and period of original facility construction. The data were further categorized into building classifications by instructional grade range. The variables were analyzed using the computer program SPSS, version 17. Cross-tabulations were used to demonstrate frequencies and central tendency.

Chapter IV

Presentation of the Data

Introduction

In 1992, Dennis Pool conducted a study about the condition of Nebraska school facilities. This study is a replication of Pool's study and is an attempt to offer updated information, where possible. As with the Pool study, two sets of data were gathered from Nebraska superintendents and principals regarding the individual building and district demographics. The same questionnaires that Pool employed were used for this study. In addition, three questions pertaining to the 1998 levy lid were placed before the superintendents for their consideration.

Since this study was a replication of the Pool study, I chose to follow Dr. Pool's method of data gathering and analysis as closely as I could. This study differs from Pool's in that this study focused on Class III school districts only. Out of approximately 225 superintendent requests, I received 94 responses. Out of approximately 500 principal requests, I had a return rate of approximately 83 participants. The vast majority of responding superintendents and building principals were from Class III school districts. Although there were a few answers from other classifications, there were not enough to make any type of generalizations about the adequacy of those buildings.

Categorization of Building and District Responses into Facility Indexes

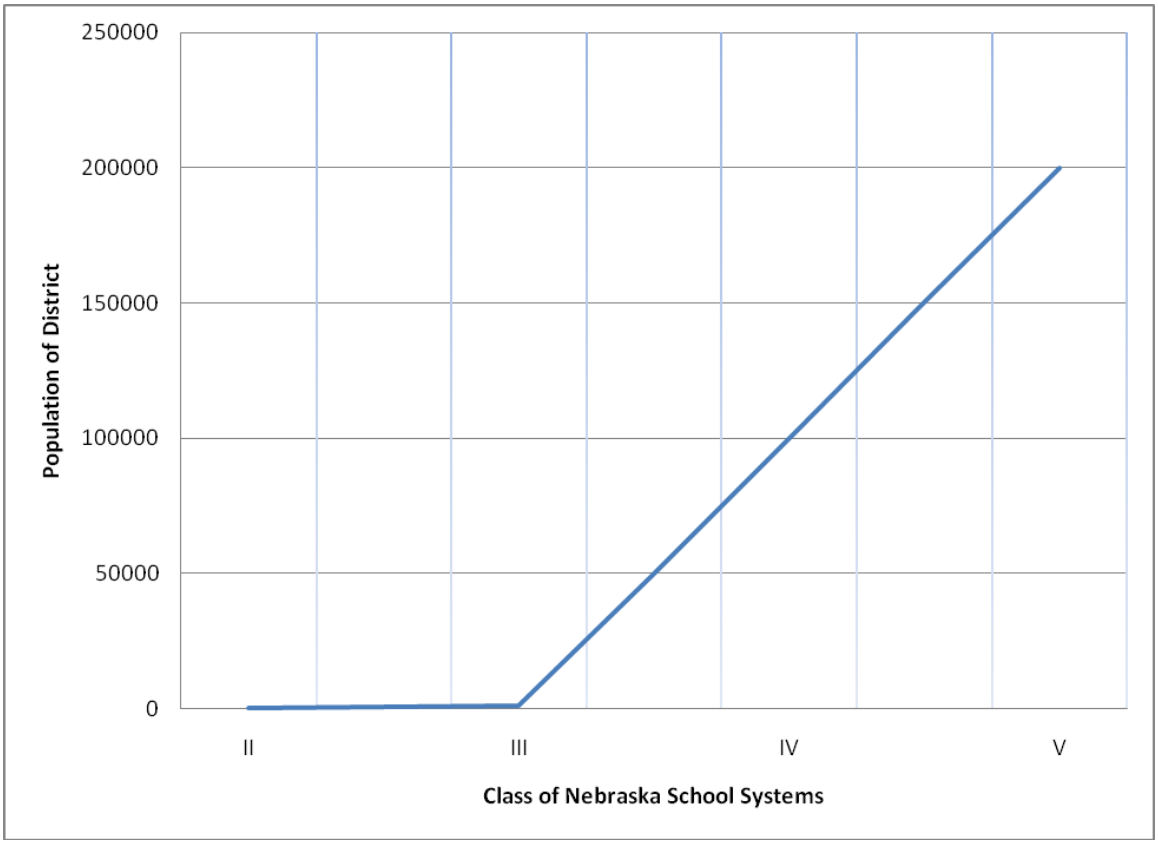
As with the Pool study, the following indices were chosen to group the responses of the building and district level administrators: relative district wealth as measured by reported property valuation divided by pupil average daily membership in 2007-2008 (the most current data available); the district's percentage of population change, as determined

by the county of the district's headquarters in the 2008 county population census as provided by the Population Service of the United States Census Bureau, released on March 19, 2009; and the era of the reported time period of original construction of the building or majority of the district's buildings; the instructional category of the building, as determined by the reported ranges of grades of instruction provided in each building. (Pool, 1993). Since this study was a replication of Pool's dissertation, the descriptions of the tables from his study were used in this study.

One factor to note about the class of Nebraska school districts is that while Class I and VI districts were in existence at the time of Pool's study, a law enacted on December 1, 2005 eliminated these two classes. Class I districts were elementary only districts consisting of Kindergarten through eighth grade. Class VI districts were high school only districts composed of grades nine through twelve.

Beginning with the 2005 – 2006 school year, all school systems in Nebraska were composed of grades PK – 12. The number of inhabitants served in each district determined the class of a school system. Class II districts have a population of 1,000 inhabitants or less. Class III districts have a population of more than 1,000 inhabitants and less than 100,000. Class IV districts have a population of more than 100,000 inhabitants and less than 200,000. Class V districts have a population of more than 200,000 inhabitants. Figure 1 provides a visual reference guide of the class structure of Nebraska schools.

Currently, Nebraska school districts have two mechanisms available to them to finance facility programs. The Special Building Fund has a maximum limit of 0.14 and, along with the General Fund, must stay beneath the state mandated levy limit of $1.05



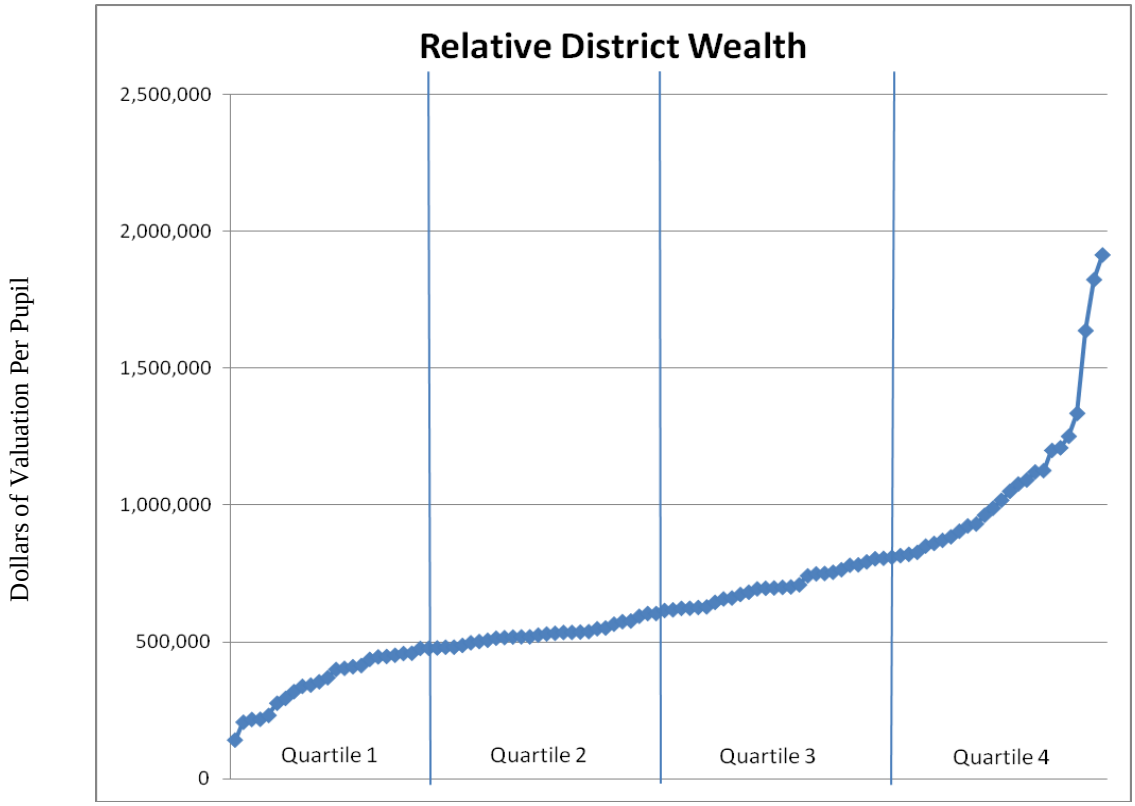
Class II = 1,000 inhabitants or less; Class III = 1,000 to 100,000 inhabitants;
Class IV = 100,000 to 200,000 inhabitants; Class V = 200,000 of more inhabitants.

Figure 1. Classes of Nebraska school districts by population.

per hundred dollars of assessed valuation, unless a simple majority of the voting patrons of the district approves a higher levy limit. Property tax is the main source of revenue for this fund. Other possibilities for funding facility programs are through bonds, which includes Qualified Zone Academy Bonds (QZAB) and Qualified School Construction Bonds (QSCB). Although bonds are not bound by the levy limit, revenue is provided through property taxes.

In Nebraska, the value of the property to which a school system had access varied greatly from district to district. The measure of the total dollars of property valuation

divided by the annual average daily membership (ADM) of a school district provided a common measure of relative wealth in the state. Because Nebraska school patrons were solely reliant upon this access to their district's property tax base for facility construction and repair, the relative wealth factor provided a good index to judge the ability within a district to pay for these projects. The category chosen to represent wealth was quartiles of total districts. The graph in Figure 2 demonstrates the dollars of valuation per pupil in the Nebraska school districts that reported via the survey. (Pool, 1993).



Quartile categories of Nebraska school districts when ranked by each district's total dollars of taxable property valuation divided by the numbers of pupils reported in average daily membership (ADM). Range of wealth per pupil by quartile: Quartile 1 = $140,000 to $477,065; Quartile 2 = $479,663 to $602,959; Quartile 3 = $614,058 to $803,162; Quartile 4 = $804,979 to $1,823,480.

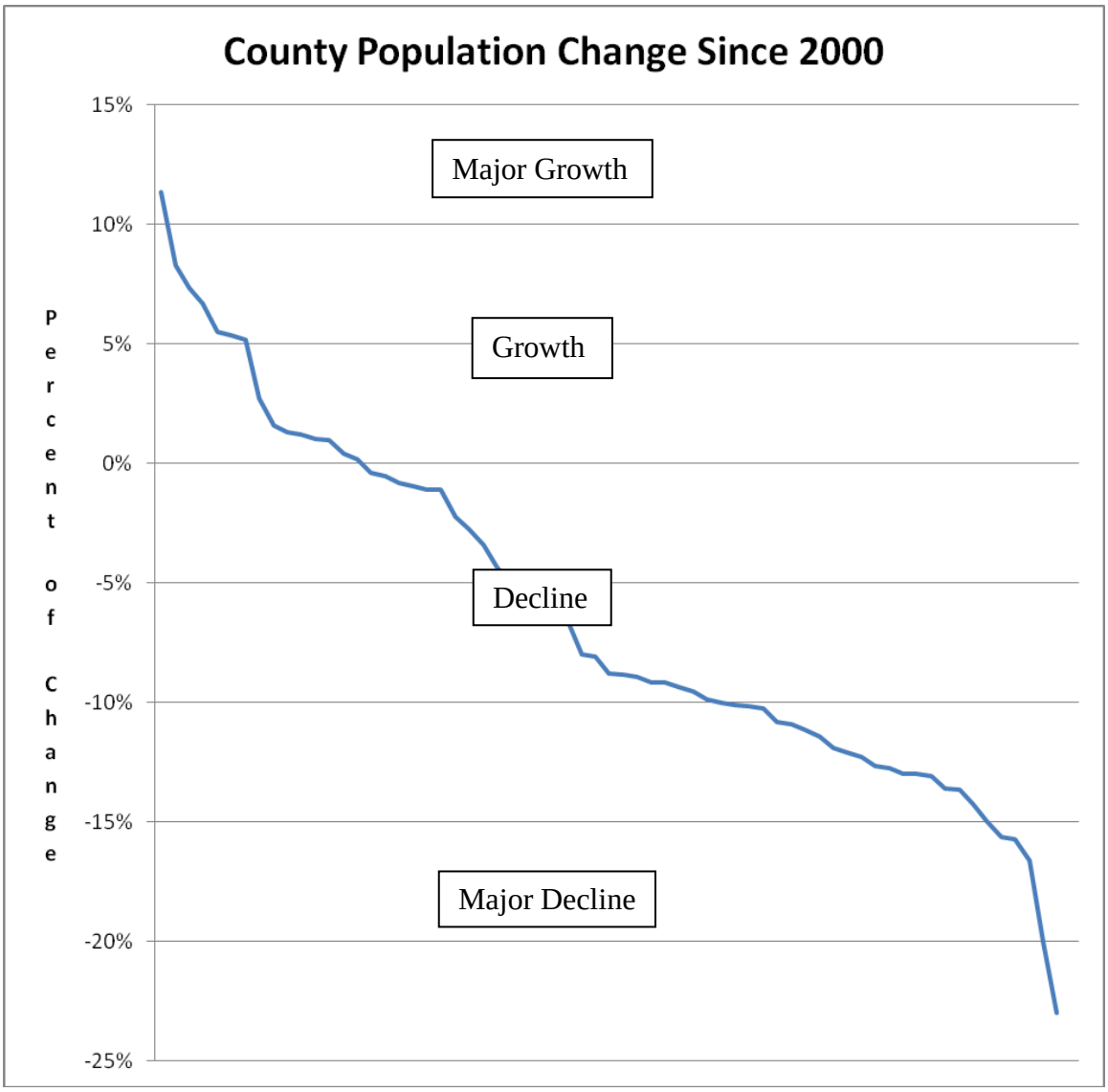
Figure 2. Relative district wealth.

The wealth of district showed a moderate increase in dollars of valuation per pupil, leveling off as the graph line passes through Quartile 2. In Quartile 3, the graph line again showed an increase in dollars of valuation per pupil except that the slope does not increase as much as in Quartile 1. In Quartile 4, the graph line showed a rapid increase in dollars of valuation per pupil with the points representing individual school district becoming more spread out along the line.

County population was established as one of the indices by which the data would be analyzed. Many school district boundaries cross county borders. In order to establish a home county, information found in the statistics section of the 2007 – 2008 Nebraska Department of Education Directory was employed. The directory information was then cross-referenced with the United State Census Bureau's 2009 Nebraska County Population Report. Population changes were determined by calculating the percentage of change between the 2000 census and the 2009 information of the home counties of the participating districts. The results may be found in Figure 3.

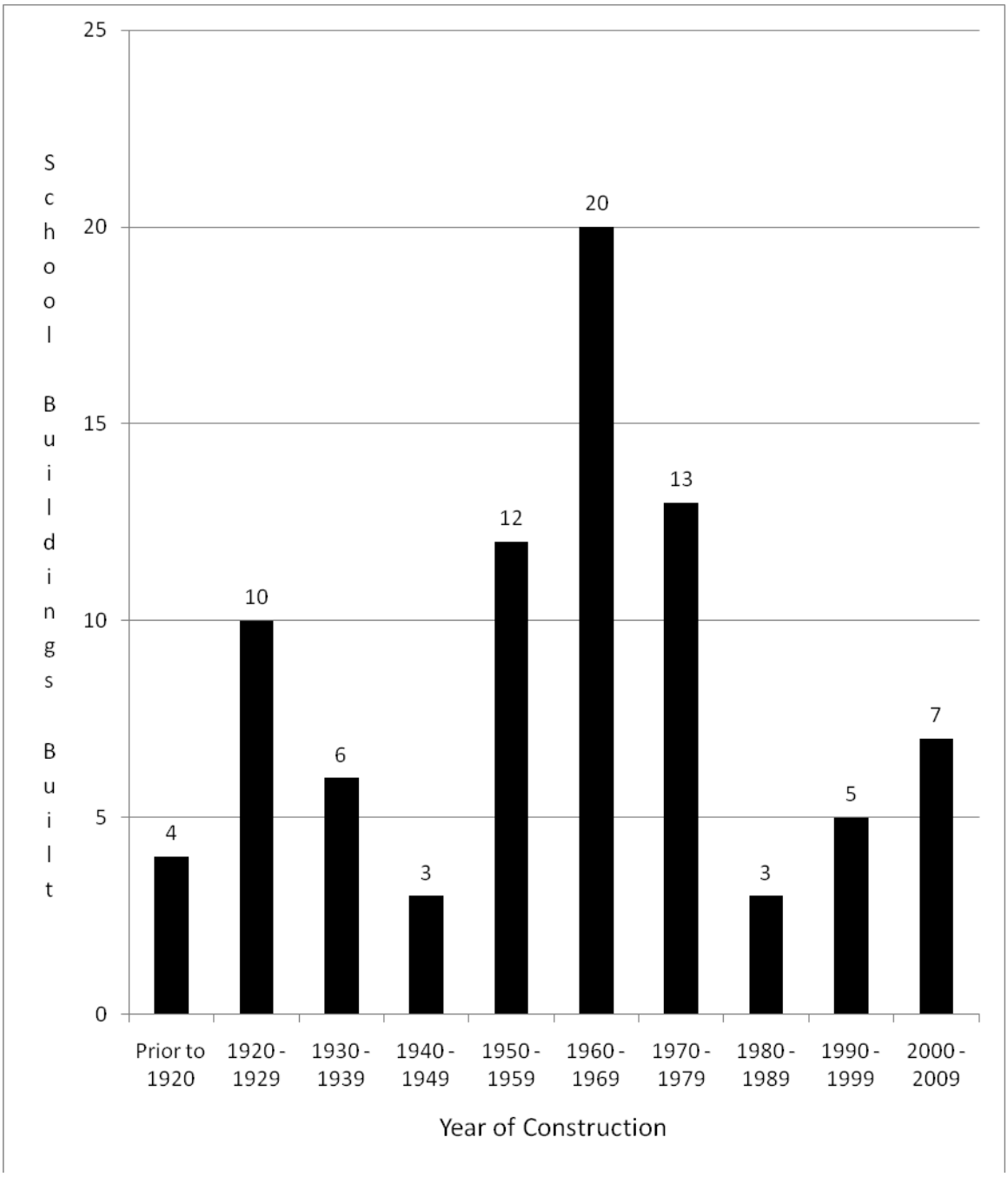
Of the 94 participating districts, 14 counties showed an increase in population. Two counties exhibited a stable population count and the data for the remaining counties revealed a decrease in population. Lancaster County reported the greatest increase of population since the 2000 census with an 11% growth rate. Garden County reported a decrease of 23%, the greatest loss of population since the 2000 census.

The age of a facility offers school management concerns when it comes to maintenance and instructional program planning. Building administrators knew the age of district buildings. The building administrators reported the information about the age of the facilities. The results are displayed in Figure 4.



Major Growth = A population increase of 10% or more from 2000 to 2008.
Growth = A population increase from 0.1% to 9% from 2000 to 2008.
Decline = A population decrease from 0% to -9% from 2000 to 2008.
Major Decline = A population decrease from -10% to -25% from 2000 to 2008.

Figure 3. County population changes as per the participating districts.



World War II and Prior = the majority of the district's facilities were reported built in one of the date ranges, prior to 1920, 1920 – 1929, or 1930 – 1939; Baby Boom Era = the majority of the district' facilities were reported built in one of the date ranges, 1940 – 1949, 1950 – 1959, 1960 - 1969, 1970 – 1979; and Recent = the majority of the district's facilities were reported built in one of the data ranges, 1980 – 1989, 1990 – 1999, or 2000 – 2009.

Figure 4. Numbers of participating school buildings built during specified time intervals.

The graph was divided into three categories similar to what Pool used in his original study. The WWII & Prior era was composed of buildings built prior to 1920 through 1939. The Baby Boom Era included the years from 1940 through 1979. The Recent category was comprised of the span of years 1980 through 2009.

Each of the three categories demonstrated a peak of the number of building projects with a decline in the number of projects as the era passed into a new category. The spikes that appear in the WW II & Prior and the Baby Boom Eras were not as prevalent in the years spanning 1980 through 2009. The chart demonstrated a more gradual increase in building projects.

Building principals were asked to describe the instructional range of their building. A frequency table was created from this information. The classifications were K-12, secondary, high school, junior high, middle school, and elementary. A K – 12 facility was described as a building that houses kindergarten through 12th grade. A secondary building was described as a building that housed grades 7 – 12. A high school was described as a building that housed grades 9 – 12 or grades 10 – 12. A junior high building was described as a building that housed grades 7 – 8 and in some cases grade 9. A middle school was described as a building that housed 5th grade as the youngest level and 8th grade as the highest level. An elementary building was described as a building that housed pre-kindergarten or kindergarten through 6th grade.

Numbers of Buildings and Districts Reported by Categories within Facility Indexes

Building Index Categories

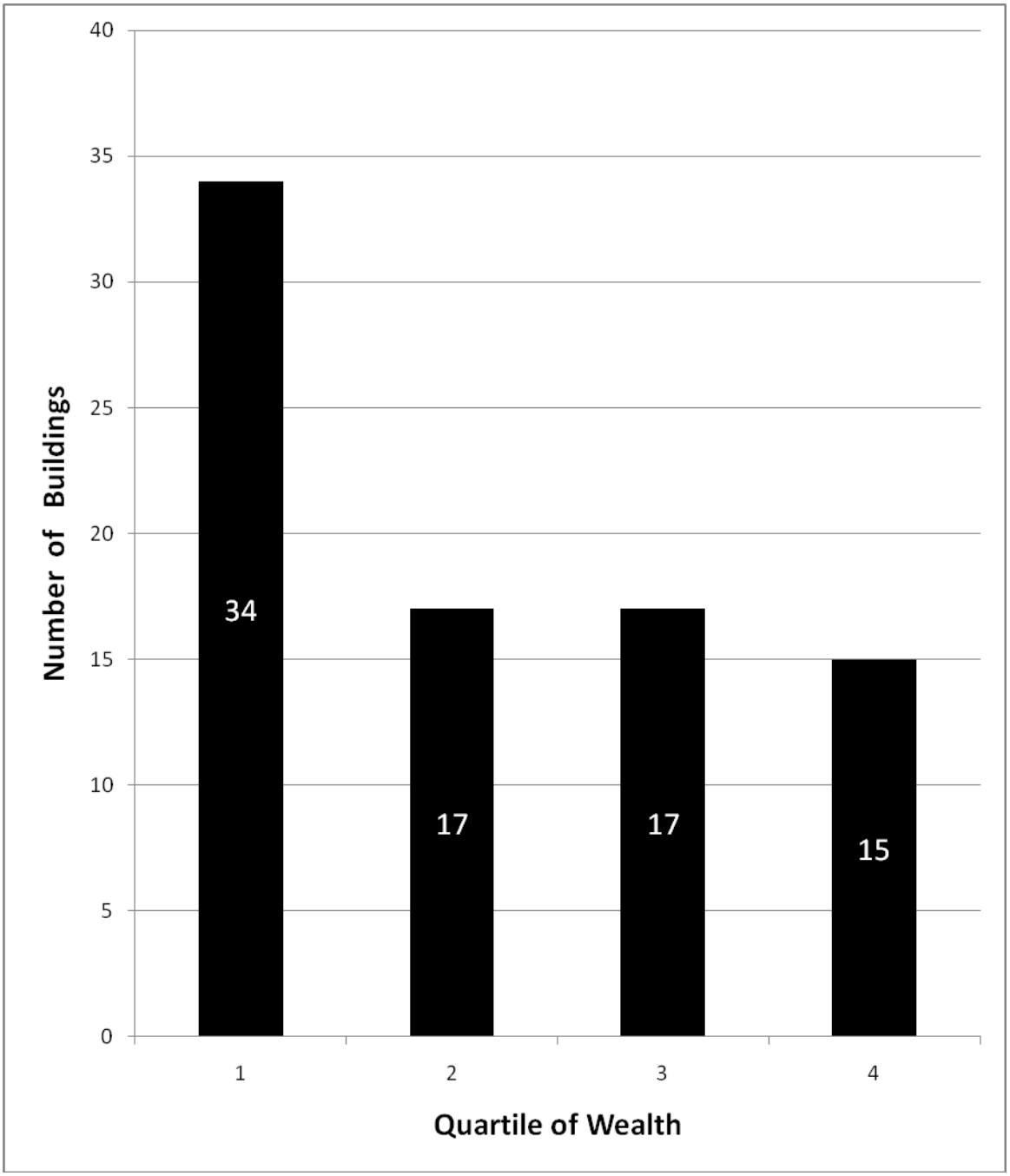
School building administrators returned 83 of the approximately 500 survey requests. As with Pool's study, indexes and categories were created to assist with the analysis of the data. Given that not all building principals within a district answered the survey, variations in numbers of buildings and districts were presented in this section.

The index of buildings by quartile of wealth placed each building of a participating district within the quartile of wealth for that district. The number of buildings in each quartile of wealth is illustrated in Figure 5. This figure demonstrated that the higher the total dollars of taxable property valuation, the fewer buildings appeared in that quartile.

The categorization process for the index for population change placed each building of each participating district into the percentage of population change category of the county in which its district headquarters was located. The district headquarters location was based on information taken from the Statistical Information section of the 2007 – 2008 Nebraska Education Directory.

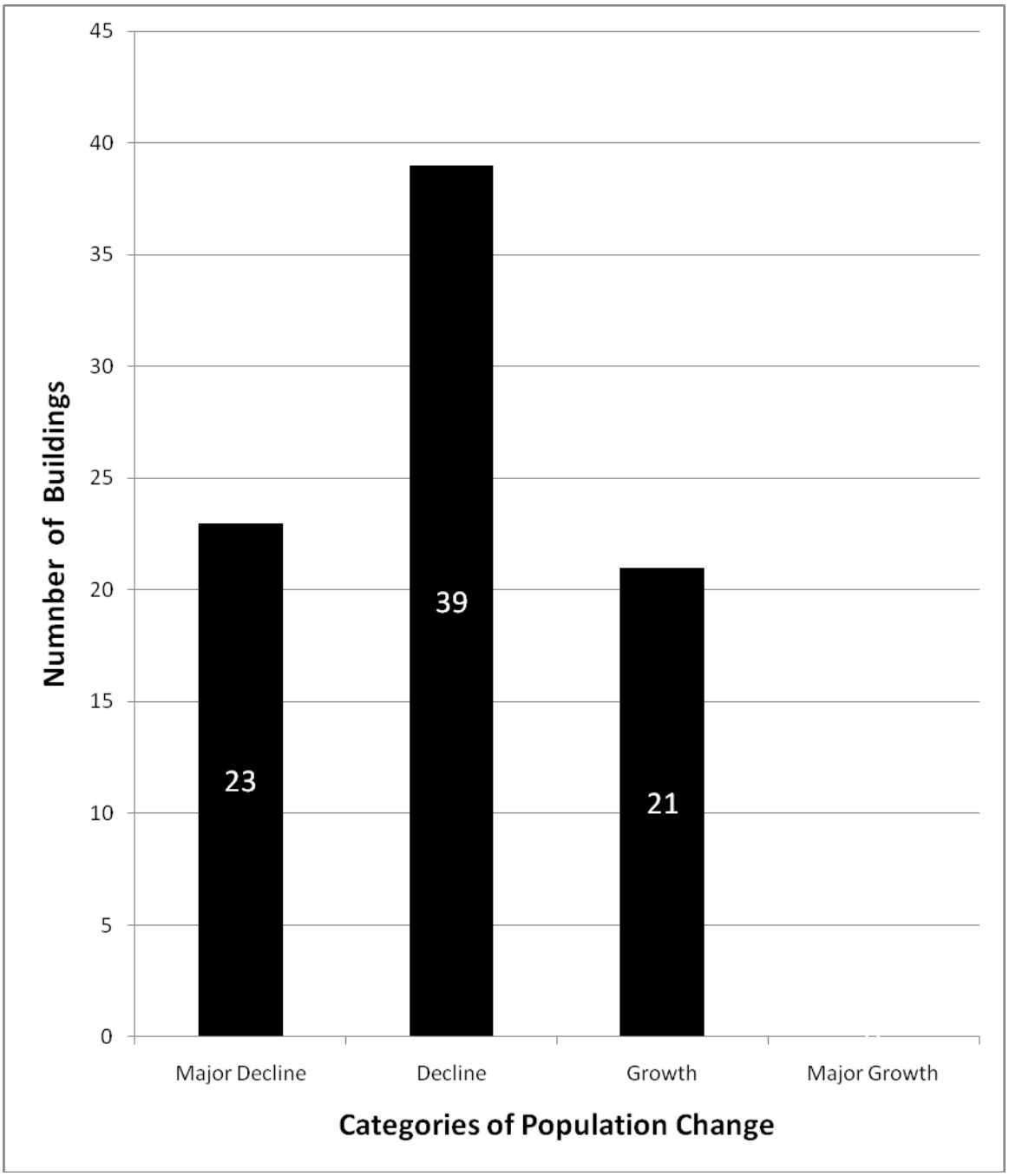
The information exhibited in Figure 6 shows that the greatest numbers of buildings of participating districts were placed in the Decline category. The Major Decline and Growth categories had approximately the same number of buildings, while the category Major Growth had the fewest number of buildings.

Respondents were asked to place the original date of their building's construction into one of ten categories. The periods of construction were blended into three categories



Quartile categories of Nebraska school districts when ranked by each district's total dollars of taxable property valuation divided by the numbers of pupils reported in average daily membership (ADM). Range of wealth per pupil by quartile: Quartile 1 = $140,000 to $477,065; Quartile 2 = $479,663 to $602,959; Quartile 3 = $614,058 to $803,162; Quartile 4 = $804,979 to $1,823,480.

Figure 5. Number of participating buildings by quartile dollars of valuation/pupil.



Major Decline = A population decrease from -10% to -25%
Decline = A population decrease from 0% to -9% from 2000 to 2009.
Growth = A population increase from 0.1% to 9% from 2000 to 2009.
Major Growth = A population increase of 10% or more from 2000 to 2009.

Figure 6. Participating buildings by 2008 county population census change

for this index “WW II & Prior”, “Baby Boom Era”, and “Recent”. The data presented in Figure 7 asserts that the majority of buildings participating in this study were erected during the Baby Boom Era, yet many of the buildings from the WW II & Prior era are still being employed to educate the students of those districts.

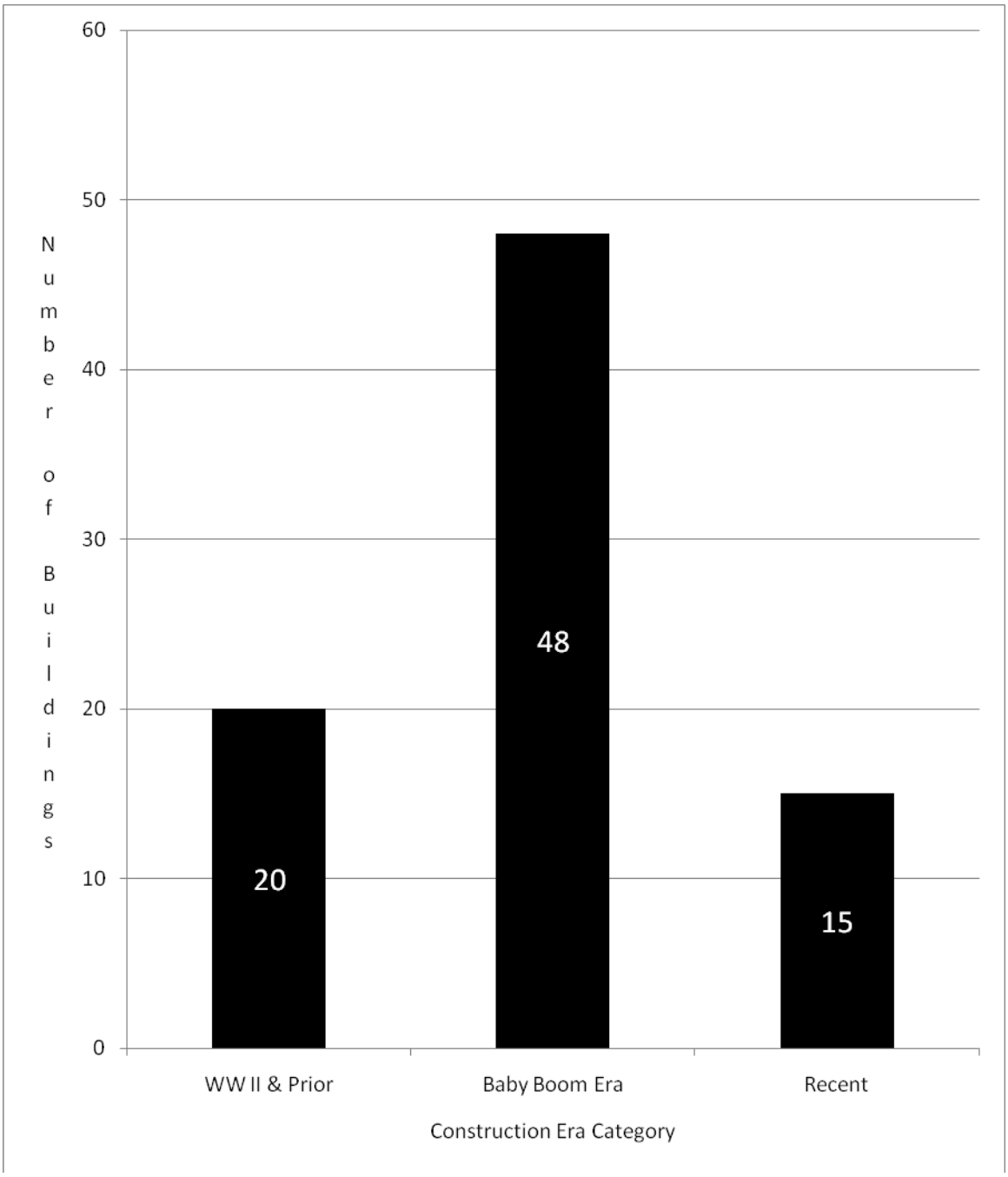
The building administrators were asked to report the grades of instruction that were currently provided in their buildings. Each building’s grade ranges were matched to an “Instructional Facility Type” according to the index formula. The results of this index are presented in Figure 8.

The highest numbers of Instructional Facility Type was in the elementary category. The second highest number of Instructional Facility Type was the secondary classification followed by k – 12 buildings and others. The buildings designated as Middle School had the fewest number reported.

District Index Categories

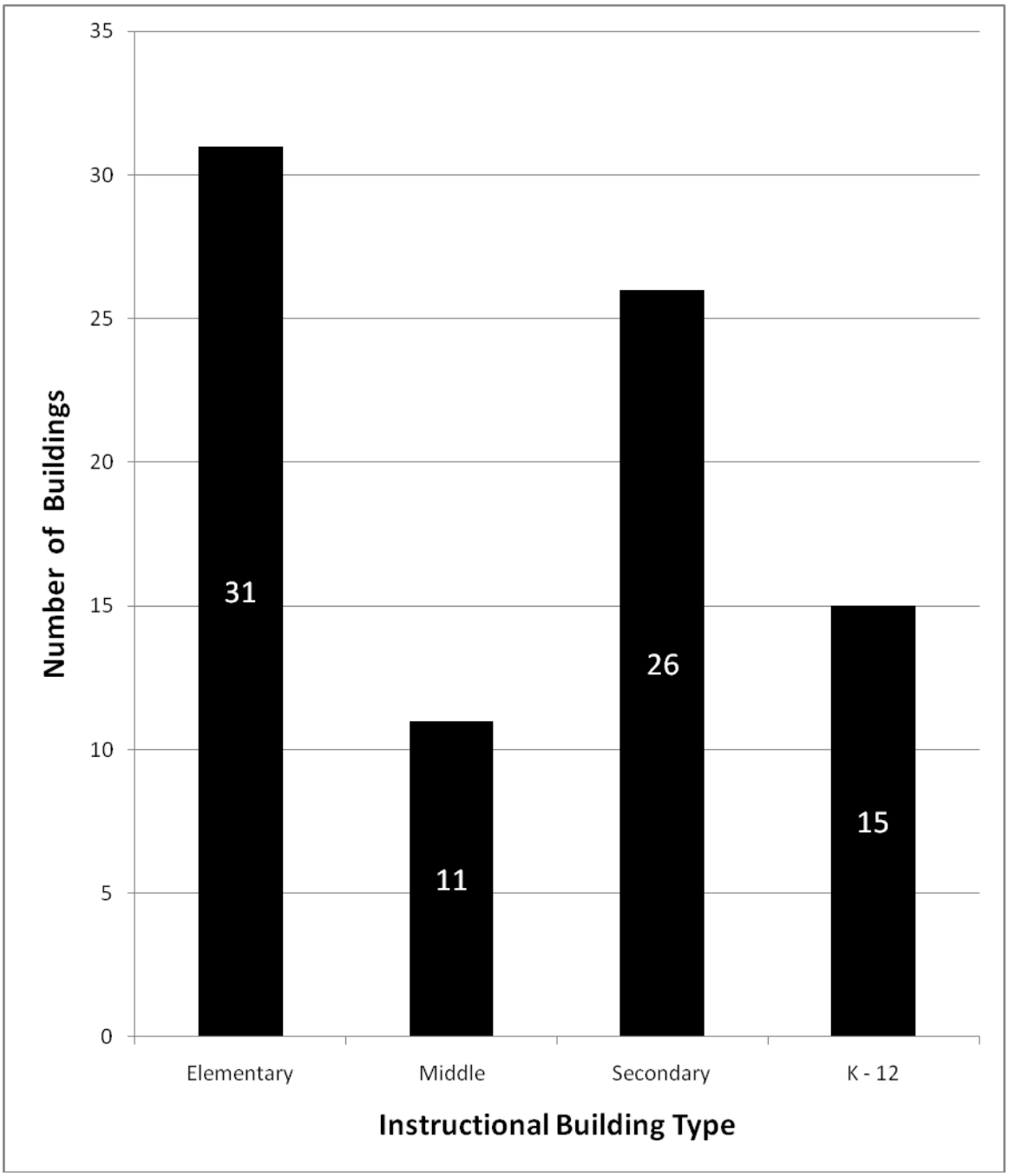
Of the approximately 225 requests for participation sent to Nebraska school superintendents, 94 returned their questionnaires. Superintendent responses and the corresponding data were matched to the previous indexes and categories developed for school buildings. As this is a replication of Pool’s 1993 study of Nebraska school facilities, the descriptions of the indexes are attributable to Dr. Pool.

The index of district, by quartile of wealth, placed each district within one quartile of wealth, determined by the dollars of property valuation divided by pupil Average Daily Membership (ADM). The results of the index of district by quartile wealth are displayed in Figure 9. With 94 districts participating in this study, Quartiles 1 and 2 had 24 districts. The other two Quartiles contained 23 districts each.



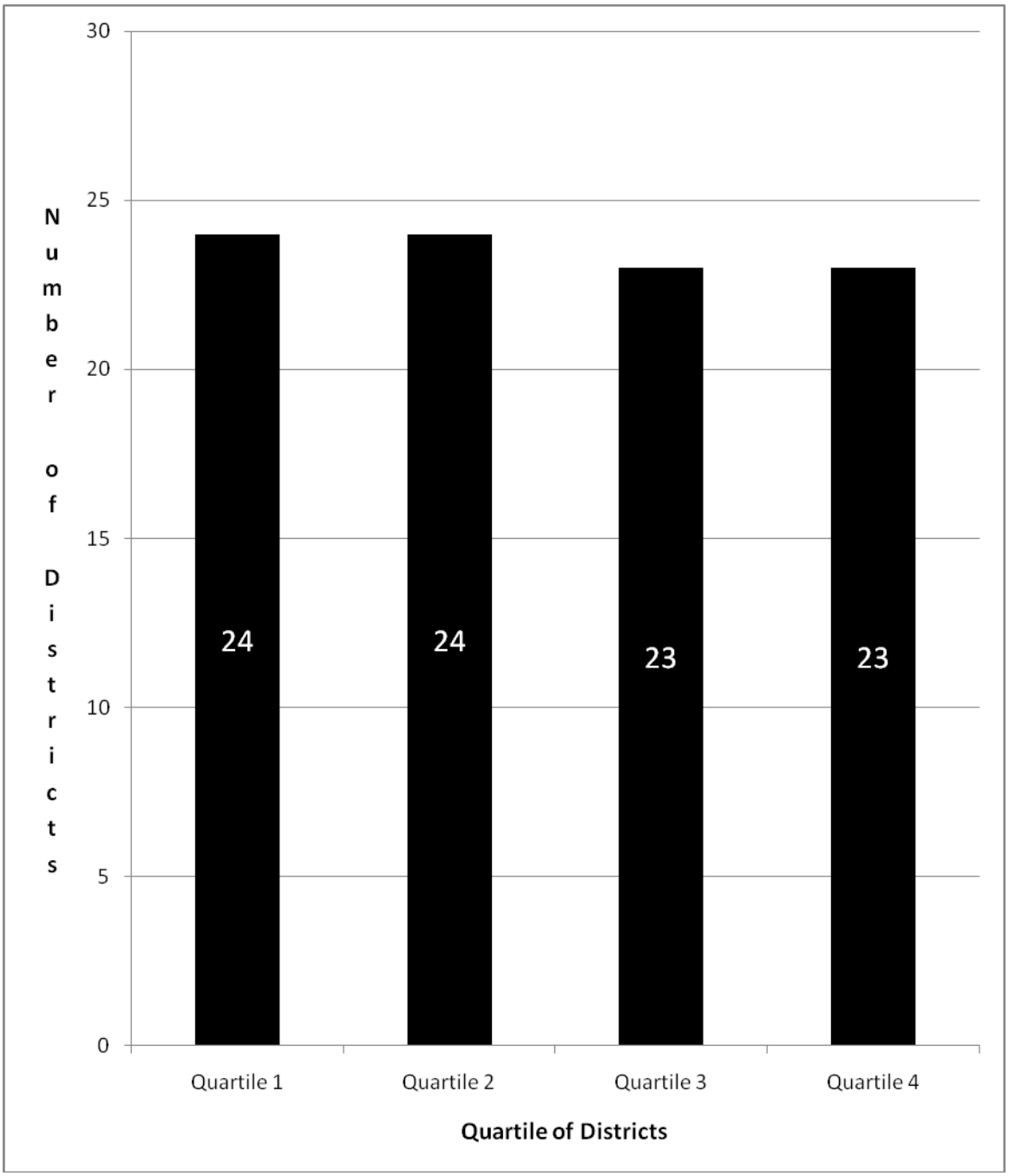
World War II and Prior = the majority of the district's facilities were reported built in one of the date ranges, prior to 1920, 1920 – 1929, or 1930 – 1939; Baby Boom Era = the majority of the district' facilities were reported built in one of the date ranges, 1940 – 1949, 1950 – 1959, 1960 - 1969, 1970 – 1979; and Recent = the majority of the district's facilities were reported built in one of the data ranges, 1980 – 1989, 1990 – 1999, or 2000 – 2009.

Figure 7. Number of participating buildings as per construction era.



Elementary = grade kindergarten through eight and at least one grade below grade five; middle = grades five through nine; secondary = grades seven through twelve and at least one grade above grade eight; K – 12 = grades kindergarten through twelve.

Figure 8. Number of participating buildings by instructional facility type.



Quartile categories of Nebraska school districts when ranked by each district's total dollars of taxable property valuation divided by the numbers of pupils reported in average daily membership (ADM). Range of wealth per pupil by quartile: Quartile 1 = $140,000 to $477,065; Quartile 2 = $479,663 to $602,959; Quartile 3 = $614,058 to $803,162; Quartile 4 = $804,979 to $1,823,480.

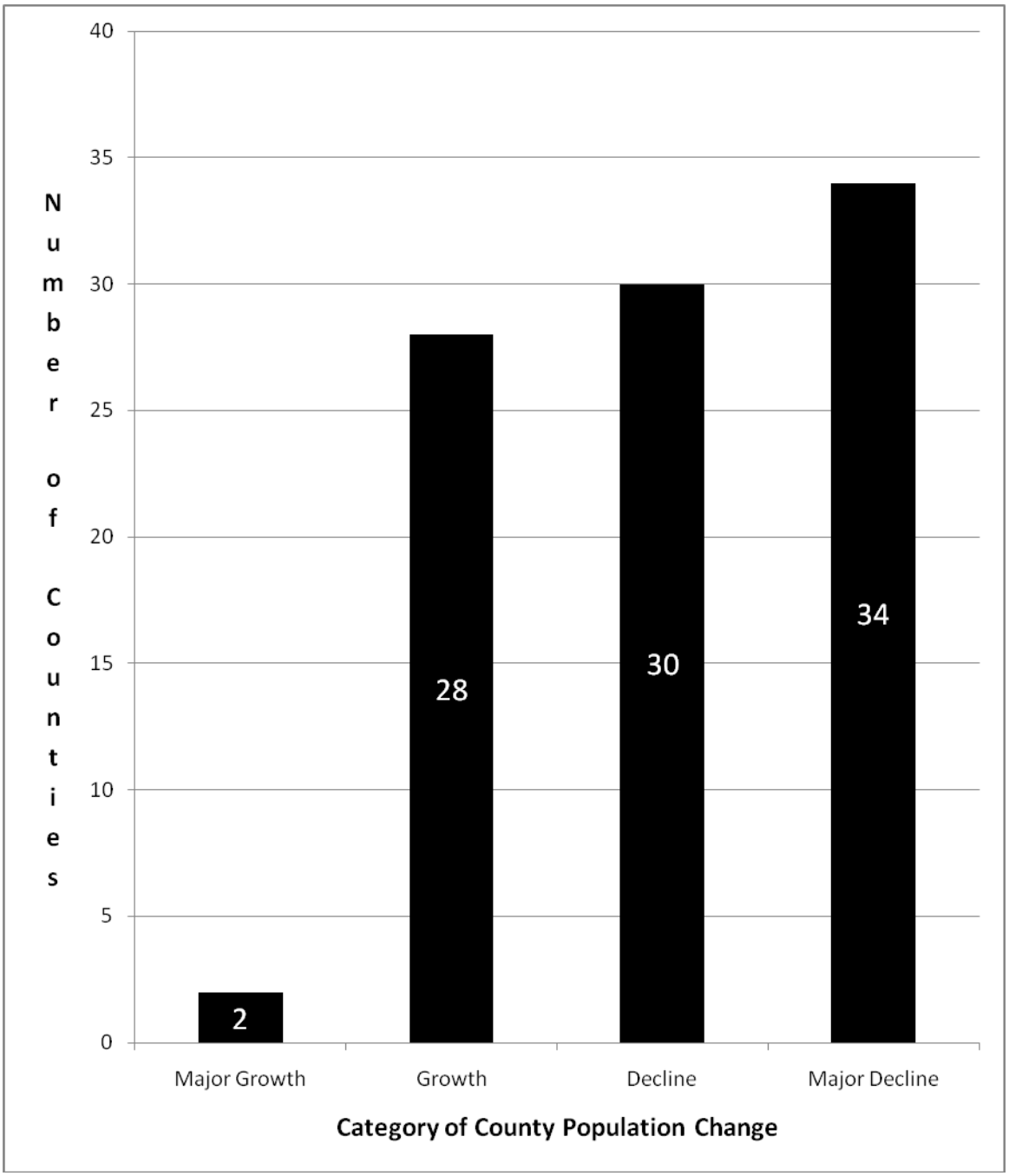
Figure 9. Number of participating districts by quartile of dollars of valuation/pupil.

The index for population change by district placed each district into the percentage of population change category of the county in which its district offices was located. The details of this index are exhibited in Figure 10.

The index for construction era was established by the use of the reported original construction date range of the individual buildings. The construction eras used in this index were the same as those of individual buildings: “WW II & Prior”, “Baby Boom Era”, and “Recent”. In districts where more than one building responded, the era in which the majority of those buildings responding were used to determined the construction era for the district. If a district had only one building respond, that building represented the construction era placement for that district. The number of buildings classified into each building construction era is shown in Figure 11.

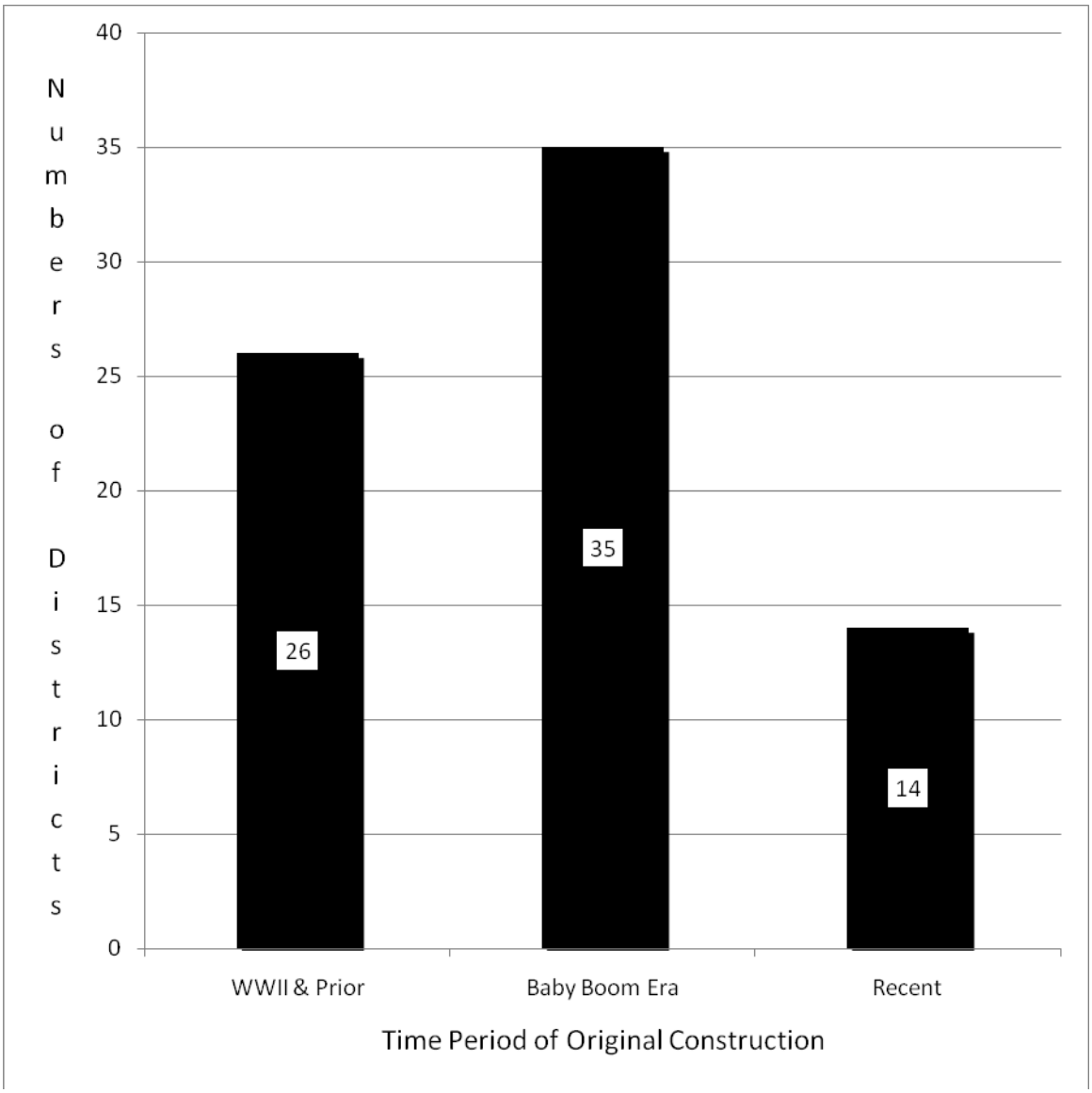
A Descriptive Analysis of Building Adequacy and Condition

Out of approximately 630 electronic requests to Nebraska building administrators, 83 responded. These responses were a representative sample of the school buildings in Classes III. As this study is a replication of the Pool study, the same questionnaire was used to gain the perceptions of building administrators about topics ranging from the instructional type of building (items 1 – 15), the date of construction of their building (items 21 – 30), the date of additions to the original building (items 31 – 40), the number of teaching stations in their respective building (item 41), current enrollment of the building (item 42), and whether they felt their building was over-capacity (item 43). The building administrator or superintendent (The reader is reminded that some districts are small enough where the superintendent also serves as a building principal) were asked to offer their opinion on



Major Decline = A population decrease from -10% to -25% from 2000 to 2008.
Decline = A population decrease from 0% to -9% from 2000 to 2008.
Growth = A population increase from 0.1% to 9% from 2000 to 2008.
Major Growth = A population increase of 10% or more from 2000 to 2008.

Figure 10. Numbers of participating districts by 2008 county population census change.



World War II and Prior = the majority of the district's facilities were reported built in one of the date ranges, prior to 1920, 1920 – 1929, or 1930 – 1939; Baby Boom Era = the majority of the district' facilities were reported built in one of the date ranges, 1940 – 1949, 1950 – 1959, 1960 - 1969, 1970 – 1979; and Recent = the majority of the district's facilities were reported built in one of the data ranges, 1980 – 1989, 1990 – 1999, or 2000 – 2009.

Figure 11. Number of participating districts by construction era of district buildings.

various issues about their building's adequacy for the existing instructional program and its physical condition (items 44 – 52).

As with Pool's study, grade of instruction offered in each building and the reported date of construction were used to develop two indexes in order to analyze both district and building responses.

Building Questionnaire Items 21 Through 30

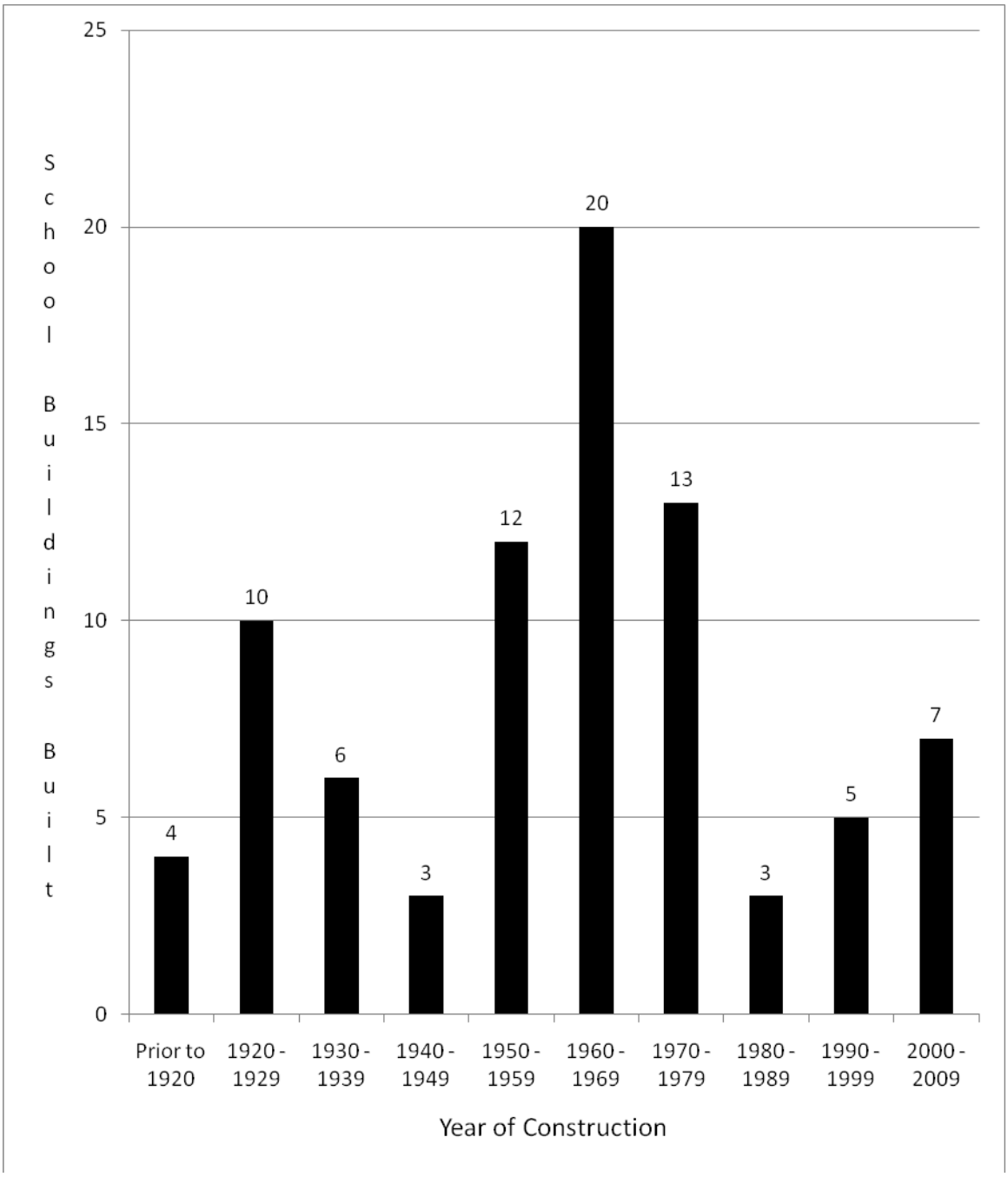
"Date of construction of original building" (check one category).

The reported date ranges of original construction of participating school facilities were used to make a generalization about the overall age in Nebraska school districts. Date ranges of original school building construction are presented in Figures 14 through 18.

As with the Pool study, these graphs demonstrate the numbers of the participating buildings constructed by date ranges of original construction in the four indexes, "Class of District", "Wealth", "County Population Change", and "Building Instructional Type".

The ten date ranges for the date of original construction were "Prior to 1920", "1920 – 1929", 1930 – 1939", "1940 – 1949", "1950 – 1959", "1960 – 1969", "1970 – 1979", "1980 – 1989", "1990 – 1999", and "2000 – 2009". Figure 12 displays the date of original construction collected from the participating districts.

The data collected for this figure demonstrates that, while there was a peak of construction during the "1920 – 1929"era, building projects subsided during the "1940 – 1949" era. The "1950 – 1959" through the "1970 – 1979" eras with the high point occurring sometime in the "1960 – 1969" era. With the advent of the "1980 – 1989" era



World War II and Prior = the majority of the district's facilities were reported built in one of the date ranges, prior to 1920, 1920 – 1929, or 1930 – 1939; Baby Boom Era = the majority of the district' facilities were reported built in one of the date ranges, 1940 – 1949, 1950 – 1959, 1960 - 1969, 1970 – 1979; and Recent = the majority of the district's facilities were reported built in one of the data ranges, 1980 – 1989, 1990 – 1999, or 2000 – 2009.

Figure 12. Number of participating school buildings built during specified time intervals.

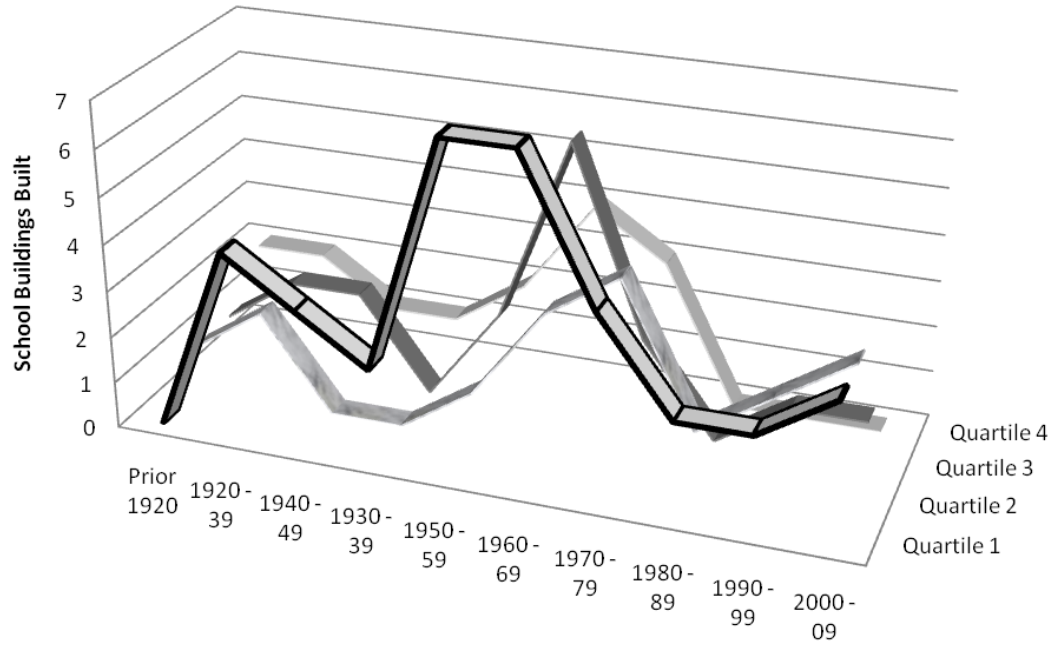
facility fabrication decreased from the previous era but showed moderate growth during the final two eras.

In the data index of “Class of District”, the date ranges of original construction of buildings of participating buildings were sorted into their respective class of the school district. At the time of the Pool study, Nebraska school districts were categorized into six classes based on the population of inhabitants in the district. During 2005, Class I and VI districts were legislated out of existence and were reclassified. These particular school districts became either Class II or III districts, based on the number of inhabitants in their district.

The index of “Quartiles of Valuation/Pupil” was determined by the dollars of property valuation per pupil for each district. The school districts were assigned to one of four equal quartiles numbered one through four. Each successive quartile represented increasing district property valuation per pupil.

Figure 13 exhibits the date of original construction of participating school buildings by “Quartile of Wealth”. The four quartiles have similar high and low points of new construction until the “1980 – 1989” era. At this point in time, Quartiles 1 and 2 school districts show an increase in school construction. Quartiles 3 and 4 school districts, the districts with the highest valuation per pupil show little, if any, increase in school construction beginning with the “1970 - 1979” time period.

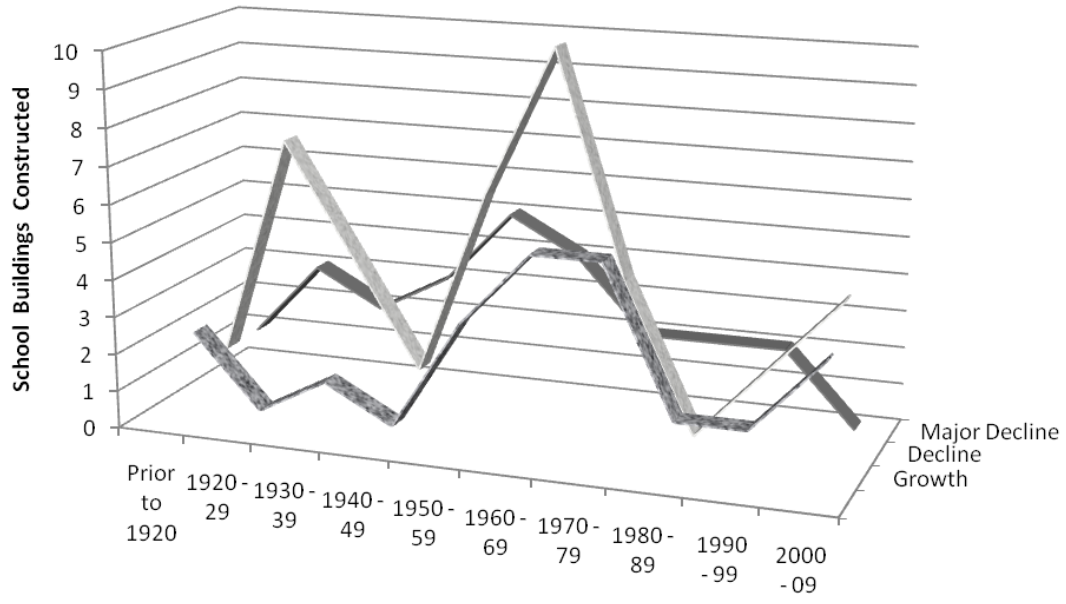
The index of “Population Change Category” was determined by the 2008 county population census change of participating buildings. The number of buildings constructed in each population change category is illustrated in Figure 14. This ribbon graph was generated by placing the numbers of buildings by reported dates of original construction



	Prior 1920	1920 - 39	1940 - 49	1930 - 39	1950 - 59	1960 - 69	1970 - 79	1980 - 89	1990 - 99	2000 - 09
Quartile 1	0	4	3	2	7	7	4	2	2	3
Quartile 2	1	2	0	0	1	3	4	1	2	3
Quartile 3	1	2	2	0	2	6	2	0	1	1
Quartile 4	2	2	1	1	2	4	3	0	0	0

Quartile categories of Nebraska school districts when ranked by each district's total dollars of taxable property valuation divided by the numbers of pupils reported in average daily membership (ADM). Range of wealth per pupil by quartile: Quartile 1 = $140,000 to $477,065; Quartile 2 = $479,663 to $602,959; Quartile 3 = $614,058 to $803,162; Quartile 4 = $804,979 to $1,823,480.

Figure 13. Number of participating school buildings built during specified time intervals as per quartile of wealth.



	Prior to 1920	1920 - 29	1930 - 39	1940 - 49	1950 - 59	1960 - 69	1970 - 79	1980 - 89	1990 - 99	2000 - 09
■										
Growth	2	0	1	0	3	5	5	1	1	3
Decline	1	7	4	1	6	10	4	0	2	4
Major Decline	1	3	2	3	5	4	2	2	2	0

Major Decline = A population decrease from -10% to -25% from 2000 to 2008.
Decline = A population decrease from 0% to -9% from 2000 to 2008.
Growth = A population increase from 0.1% to 9% from 2000 to 2008.
Major Growth = A population increase of 10% or more from 2000 to 2008.

Figure 14. Number of participating school buildings built during specified time intervals as per population change.

of the building into their respective county. The buildings were then indexed by the counties' population change category, "Major Growth", "Growth", "Decline", or "Major Decline".

Each of the quartiles displayed results that are similar to the previous graphs. The Class III districts from Figure 15 closely resembles the data for the Declining population category. The categories “Major Growth”, “Growth”, and “Decline” show some new construction growth from 1980 through 2009. The category “Major Decline” displays limited to no increase in new construction since 1980.

Building Questionnaire Items 5 Through 18

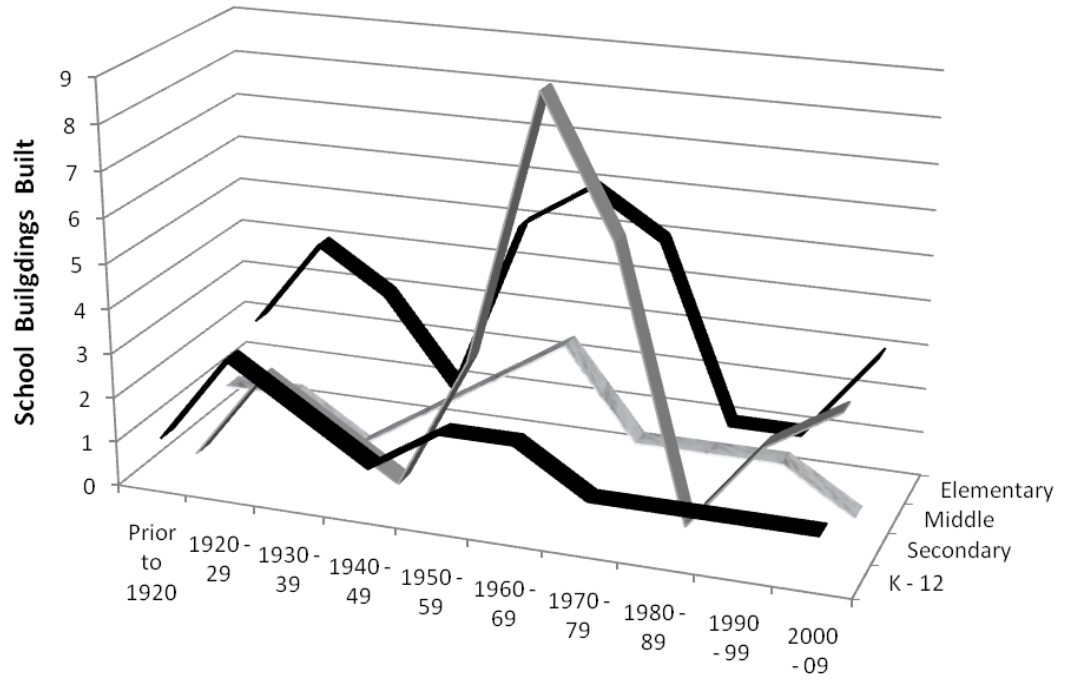
The index for facility instructional type was created to differentiate the numbers of buildings by the grade ranges of instruction offered in the facility. The formula used for the indexing of these buildings by grade ranges placed building in to five categories of facility instructional types. The instructional facility types were “Elementary”, “Middle”, “Secondary”, “K-12”, and “Other”. The building’s original construction date ranges were sorted into one of these five categories.

Figure 15 illustrates the instructional type of buildings according to its original construction date. Over the time span, elementary and secondary buildings have become the preferred instructional type building. K – 12 buildings, as demonstrated by the ribbon graph, have been a less favorable building over the time span of the graph.

Building Questionnaire Item 44

“Over Capacity?” (Yes/No)

Participating Class III building administrators were asked if they perceived their building as over capacity. Their answers were analyzed through a chi square Goodness-Of-Fit. The results were considered statistically significant at the $p < .05$ level. The results for question forty-four are displayed in Table 2.



	Prior to 1920	1920 - 29	1930 - 39	1940 - 49	1950 - 59	1960 - 69	1970 - 79	1980 - 89	1990 - 99	2000 - 09
K - 12	1	3	2	1	2	2	1	1	1	1
Secondary	0	2	1	0	3	9	6	0	2	3
Middle	1	1	0	1	2	3	1	1	1	0
Elementary	2	4	3	1	5	6	5	1	1	3

Elementary = grade kindergarten through eight and at least one grade below grade five; middle = grades five through nine; secondary = grades seven through twelve and at least one grade above grade eight; K – 12 = grades kindergarten through twelve.

Figure 15. Number of participating school buildings built during specified time intervals as per building type.

Table 2

Frequency of Over Capacity Buildings as Reported by Participating Building Administrators by Class of School District

District Class	Over Capacity Buildings				
	No	Percent	Yes	Percent	Total
III	79	95.1	4	4.9	83
Total	79	95.1	4	4.9	83

$\chi^2(1) = 67.771$, $p < .001$
Class II = 1,000 or less inhabitants.
Class III = 1,000 to 100,000 inhabitants.
Class IV = 100,000 to 250,000 inhabitants.
Class V = 250,000 or more inhabitants

95.2 percent of the building administrators who participated in the study determined that their building was not over capacity, while 4.8 percent of the building administrators did perceive their buildings as over capacity. The relationship between the perceptions of over capacity was statistically significant.

Table 3 demonstrates the question of over capacity by the index valuation per pupil. 95.2 percent of the participating building administrators did not perceive their building as over capacity, with 4.8 of the administrators claiming that they perceived their building was in a crowded state. The table shows that the administrators who perceived their buildings were over capacity where in the lowest quartile of valuation per pupil. While the find was not significant, the effect size was medium.

Table 4 illustrates the results of the data concerning the over capacity issue through the index population change. Approximately 95 percent of the building administrators did not perceive their building as over capacity, while approximately

Table 3

Frequency of Over Capacity Buildings as Reported by Participating Building Administrators by Quartile of Increasing Valuation per Pupil

Quartile of Valuation/Pupil	Over Capacity				
	No	Percent	Yes	Percent	Total
Quartile 1	30	88.2	4	11.8	34
Quartile 2	17	100	0	0	17
Quartile 3	17	100	0	0	17
Quartile 4	15	100	0	0	15
Total	79	95.2	4	4.8	83

$\chi^2(3) = 6.057$, $p = .109$; contingency coefficient = .261
effect size = .27
Quartile categories of Nebraska school districts when ranked by each district's total dollars of taxable property valuation divided by the numbers of pupils reported in average daily membership (ADM). Range of wealth per pupil by quartile: Quartile 1 = $140,000 to $477,065; Quartile 2 = $479,663 to $602,959; Quartile 3 = $614,058 to $803,162; Quartile 4 = $804,979 to $1,823,480.

5 percent did feel that their building were crowded. The findings for this index were not significant. The effect size was considered small.

The next index used to examine the perceptions of overcapacity was the relative age of the buildings. Table 5 presents the results of this examination. Many of the building administrators, despite the age of their structure, did not perceive their facility as over capacity. A few of the administrators whose buildings were constructed during the Baby Boom Era and before thought their structures were over capacity. The findings for Table 5 were not significant but the effect size was medium.

A high number of building administrators did not believe there facility was over crowded when examined against the index Instructional Type. This index divided the

Table 4

Frequency of Over Capacity Buildings as Reported by Participating Building Administrators by Percentage Categories of Count Population Change in the 2008 County Census

Population Change Category	Over Capacity				
	No	Percent	Yes	Percent	Total
Major Decline	17	100	0	0	17
Decline	42	93.3	3	6.7	45
Growth	20	95.2	1	4.8	21
Major Growth	0	0	0	0	0
Total	79	95.2	4	4.8	83

$\chi^2(3) = 1.196$, $p = .550$; contingency coefficient = .119
Major Growth = A population increase of 10% or more from 2000 to 2008.
Growth = A population increase from 0% to 10% from 2000 to 2008.
Decline = A population decrease from 0% to -10% from 2000 to 2008.
Major Decline = A population decrease from -10% to -25% from 2000 to 2008.

Table 5

Frequency of Over Capacity Buildings as Reported by Participating Building Administrators by Periods of Facility Construction by Construction Date Ranges

Periods of Facility Construction	Over Capacity Buildings				
	No	Percent	Yes	Percent	Total
WW II & Prior	20	87	3	13	23
Baby Boom Era	44	97.8	1	2.2	45
Recent	15	100	0	0	15
Total	79	95.2	4	4.8	83

$\chi^2(2) = 4.813$, $p = .090$; contingency coefficient = .241
World War II and Prior = the majority of the district's facilities were reported built in one of the date ranges, prior to 1920, 1920 – 1929, or 1930 – 1939; Baby Boom Era = the majority of the district' facilities were reported built in one of the date ranges, 1940 – 1949, 1950 – 1959, 1960 - 1969, 1970 – 1979; and Recent = the majority of the district's facilities were reported built in one of the data ranges, 1980 – 1989, 1990 – 1999, or 2000 – 2009.

responses into categories consisting of elementary, middle school, secondary, and K – 12 buildings. A small percentage of the building administrators whose buildings were not categorized as a K – 12 building did feel that their building was beyond capacity. The findings for this index were not significant and had a small effect size. The results are illustrated in Table 6.

Table 6

Frequency of Over Capacity Buildings as Reported by Participating Building Administrators as Determined by Instructional Grade Ranges

Building Category	Over Capacity				
	No	Percent	Yes	Percent	Total
Elementary	30	93.8	2	6.3	32
Middle	9	90	1	10.0	10
Secondary	25	96.2	1	3.8	26
K-12	15	100	0	0	15
Total	79	95.2	4	4.8	83

$\chi 2(3) = 1.541$, $p = .673$; contingency coefficient =.135
Elementary = grade kindergarten through eight and at least one grade below grade five; middle = grades five through nine; secondary = grades seven through twelve and at least one grade above grade eight; K – 12 = grades kindergarten through twelve.

Building Questionnaire - Question 45

"How would you rate the adequacy of your building for the existing instructional program?" (Poor, Adequate, Good)

Building administrators were asked to offer their opinions about the adequacy of their building in meeting the demands of the existing instructional program. Tables 7

through 12 analyze the responses of the participating administrators according to the five indexes.

Table 7 demonstrates the analysis of the building administrators' opinions about the adequacy of their buildings in meeting the needs of the current instructional program. The opinions were ranked as Poor, Adequate, or Good. Approximately 88 percent of the responding building administrators opined that their buildings were either adequate or good when questioned about the adequacy of their buildings to meet the existing instructional program. Slightly more than 12 percent of participating administrators rated their facility as poor. The Chi-Square Goodness-Of-Fit test found the results of this index to be significant.

Table 7

Ratings of Adequacy of Buildings for Existing Instructional Programs as Perceived by Participating Building Administrators by Class of School District

District Class	Ratings						Total
	Poor	Percent	Adequate	Percent	Good	Percent	
III	10	12.2	36	43.3	37	44.5	83
Total	10	12.2	36	43.3	37	44.5	83

$\chi^2(1) = 67.771$, $p < .001$
Class II = 1,000 or less inhabitants.
Class III = 1,000 to 100,000 inhabitants.
Class IV = 100,000 to 250,000 inhabitants.
Class V = 250,000 or more inhabitants

When the data pertaining to question 45 was examined by the valuation per pupil index (Table 8), the results were found to be not significant with a small effect size.

Table 8

Ratings of Adequacy of Buildings for Existing Instructional Programs as Perceived by Participating Building Administrators by Quartile of Increasing Valuation Per Pupil

Quartile of Valuation/Pupil	Ratings						Total
	Poor	Percent	Adequate	Percent	Good	Percent	
Quartile 1	6	17.6	14	41.2	14	41.2	34
Quartile 2	0	0	8	47.1	9	52.9	17
Quartile 3	3	17.6	6	35.3	8	47.1	17
Quartile 4	1	6.7	8	53.3	6	40	15
Total	10	12	36	43.4	37	44.6	83

$\chi^2(3) = 4.875$, $p = .560$; contingency coefficient = .236
Quartile categories of Nebraska school districts when ranked by each district's total dollars of taxable property valuation divided by the numbers of pupils reported in average daily membership (ADM). Range of wealth per pupil by quartile: Quartile 1 = $140,000 to $477,065; Quartile 2 = $479,663 to $602,959; Quartile 3 = $614,058 to $803,162; Quartile 4 = $804,979 to $1,823,480.

88 percent of the 83 responding building administrators declared their facilities to be either adequate or good. Twelve percent of the respondents found their buildings to be poor in handling the demands of the existing instructional program. Further examination of Table 8 shows that a poor rating was offered by 17.6% of the respondents in Quartiles 1 and 3.

Table 9 demonstrates the reaction of the participating administrators to question 45 according to the population change index. Forty-three percent of the building principals found there facilities to be at least passable for meeting the needs of the current instructional program. Forty-four percent of those in charge of buildings found their

Table 9

Ratings of Adequacy of Buildings for Existing Instructional Programs as Perceived by Participating Building Administrators by Percentage Categories of County Population Changes in the 2008 County Census

Population Change Category	Ratings						Total
	Poor	Percent	Adequate	Percent	Good	Percent	
Major Decline	1	5.9	8	47.1	8	47.1	17
Decline	9	20	19	42.2	17	37.8	45
Growth	0	0	9	42.9	12	57.1	21
Major Growth	0	0	0	0	0	0	0
Total	10	12	36	43.4	37	44.6	83

$\chi^2(3) = 6.731$, $p = .151$; contingency coefficient = .274
Major Growth = A population increase of 10% or more from 2000 to 2008.
Growth = A population increase from 0% to 10% from 2000 to 2008.
Decline = A population decrease from 0% to -10% from 2000 to 2008.
Major Decline = A population decrease from -10% to -25% from 2000 to 2008.

facilities to be good while 12 percent rated their buildings as poor. The chi square test did not find a level of significance with a moderate effect size when answers were tested against the population change index.

The results to Question 45 as per the Facility Construction Period index are exhibited in Table 10. The results of this index provided a level of significance with a large effect size. Administrators whose buildings were constructed during and previous to the Baby Boom Era stated that their facilities were adequate in meeting the needs to the existing instructional program. About 87 percent of the administrators with recently erected buildings claimed to have a good facility for meeting the needs of their instructional programs.

Table 10

Ratings of Adequacy of Buildings for Existing Instructional Program as Perceived by Participating Building Administrators by Periods of Facility Construction by Construction Date Ranges

Periods of Facility Construction	Ratings						Total
	Poor	Percent	Adequate	Percent	Good	Percent	
WW II & Prior	8	34.8	11	47.8	4	17.4	23
Baby Boom Era	2	4.4	23	51.1	20	44.4	45
Recent	0	0	2	13.3	13	86.7	15
Total	10	12	36	43.4	37	44.6	83

$\chi^2(2) = 27.455$, $p < .001$; contingency coefficient = .499
World War II and Prior = the majority of the district's facilities were reported built in one of the date ranges, prior to 1920, 1920 – 1929, or 1930 – 1939; Baby Boom Era = the majority of the district's facilities were reported built in one of the date ranges, 1940 – 1949, 1950 – 1959, 1960 - 1969, 1970 – 1979; and Recent = the majority of the district's facilities were reported built in one of the data ranges, 1980 – 1989, 1990 – 1999, or 2000 – 2009.

Adequacy of a building's ability to meet the demands of the instructional program was sorted into the index for building instructional category to determine if the responses were dissimilar for different types of buildings. Table 11 illustrates the outcomes of this index. There was not a level of significance for this table. The effect size was small. The majority of building administrators, when sorted into instructional types, opined that there buildings were at least adequate in meeting their instructional programs. K – 12 building supervisors had the highest percentage of responses for facilities rated as poor.

Building Questionnaire – Question 46

"How would you rate the interior's physical condition of your building, e.g. paint, flooring, equipment, lighting, etc.?" (Poor, Adequate, or Good)

Table 11

Ratings of Adequacy of Buildings for Existing Instructional Program as Perceived by Participating Building Administrators by Building Category as Determined by Instructional Grade Ranges

Building Category	Ratings						Total
	Poor	Percent	Adequate	Percent	Good	Percent	
Elementary	4	12.4	13	40.6	15	46.9	32
Middle	1	10	5	50	4	40	10
Secondary	2	7.7	13	50	11	42.3	26
K – 12	3	20	5	33.3	7	46.7	15
Total	10	12	36	43.4	37	44.6	83

$\chi^2(3) = 2.135$, $p = .907$; contingency coefficient = .158
Elementary = grade kindergarten through eight and at least one grade below grade five; middle = grades five through nine; secondary = grades seven through twelve and at least one grade above grade eight; K – 12 = grades kindergarten through twelve.

As pointed out in the review of literature, the interior of a school building has an impact on the learning environment. Administrators were asked to consider the interiors of their particular facility and offer their opinions on the quality of the inside of their buildings. These opinions were sorted into the five indexes for analysis.

Table 12 displays the analysis of the participating administrators by the Class index. Approximately 91% of the respondents classified the interior of their structures as either adequate or good. A majority of these participants rated the interiors of their buildings as good (56.7%). The chi square Goodness-Of-Fit test found a level of significance with the responses when analyzed by the Class index.

The results of the building administrators' responses to question 46 were sorted into the Valuation per Pupil index with the outcomes displayed in Table 13. In an overall

Table 12

Rating of Physical Condition of Building Interior as Perceived by Participating Building Administrators by Class of School District

District Class	Ratings						Total
	Poor	Percent	Adequate	Percent	Good	Percent	
III	7	8.4	29	34.9	47	56.7	83
Total	7	8.4	29	34.9	47	56.7	83

$\chi^2(1) = 29.012$, $p < .001$
Class II = 1,000 or less inhabitants.
Class III = 1,000 to 100,000 inhabitants.
Class IV = 100,000 to 250,000 inhabitants.
Class V = 250,000 or more inhabitants.

Table 13

Ratings of Physical Condition of Building Interior as Perceived by Participating Building Administrators by Quartile of Increasing Valuation Per Pupil

Quartile of Valuation/Pupil	Ratings						Total
	Poor	Percent	Adequate	Percent	Good	Percent	
Quartile 1	4	11.8	13	38.2	17	50	34
Quartile 2	0	0	4	23.5	13	76.5	17
Quartile 3	2	11.8	7	41.2	8	47.1	17
Quartile 4	1	6.7	5	33.3	9	60	15
Total	7	8.4	29	34.9	47	56.6	83

$\chi^2(3) = 4.851$, $p = .563$; contingency coefficient = .235
Quartile categories of Nebraska school districts when ranked by each district's total dollars of taxable property valuation divided by the numbers of pupils reported in average daily membership (ADM). Range of wealth per pupil by quartile: Quartile 1 = $140,000 to $477,065; Quartile 2 = $479,663 to $602,959; Quartile 3 = $614,058 to $803,162; Quartile 4 = $804,979 to $1,823,480.

analysis, the majority of the building supervisors declared the interiors of their facility as good (56.6%). The remaining administrators judged the interior of their structures as either Adequate (34.9%) or Poor (8.4%).

In reviewing each quartile, 76.5 percent of administrators who were placed in Quartile 2 rated their interiors as Good. Quartile 4 administrators reported the 60% of the interiors of their particular structures were rated as Good and approximately half of the administrators of Quartiles 1 and 3 ranked their interiors as Good. The results of Question 46 when analyzed through the Valuation per Pupil index were not found to be significant. The effect size was determined to be small.

The responses to Question 46 were sorted and analyzed according to the Population Change index. These results are displayed in Table 14. The results of this index were not found to be significant however the effect size was deemed as small.

Again, a majority of the building administrators participating in this study found the interiors of their structures to be either Adequate (34.9%) or Good (56.6%). When the data is examined by each category within the Population Change index, at the most 59 percent of each category rated their interior as Good. The majority of administrators rating their interior as Poor were found in the Decline category (13.3%).

The age of a building may affect the ability to maintain the interior of a structure. Table 15 illustrates the data when sorted and analyzed according to the age of the facility. A small percentage of the responding administrators reported the interiors of their buildings as Poor (8.4%). On the other hand, a great many of the administrators whose buildings were classified as a “Recent” structure reported their interiors as Good (93.3%). The findings demonstrated a level of significance with a large effect size.

Table 14

Rating of Physical Condition of Building Interior as Perceived by Participating Building Administrators by Percentage Categories of County Population Change in the 2008 County Census

Population Change Category	Ratings						Total
	Poor	Percent	Adequate	Percent	Good	Percent	
Major Decline	0	0	7	41.2	10	58.8	17
Decline	6	13.3	14	31.1	25	55.6	45
Growth	1	4.8	8	38.1	12	57.1	21
Major Growth	0	0	0	0	0	0	0
Total	7	8.4	29	34.9	47	56.6	83

$\chi^2(3) = .3.513$, $p = .476$; contingency coefficient = .202
Major Growth = A population increase of 10% or more from 2000 to 2008.
Growth = A population increase from 0% to 10% from 2000 to 2008.
Decline = A population decrease from 0% to -10% from 2000 to 2008.
Major Decline = A population decrease from -10% to -25% from 2000 to 2008.

Table 15

Rating of Physical Condition of Building Interior as Perceived by Participating Building Administrators by Periods of Facility Construction by Construction Date Range

Period of Facility Construction	Ratings						Total
	Poor	Percent	Adequate	Percent	Good	Percent	
WW II & Prior	5	21.7	11	47.8	7	30.4	23
Baby Boom Era	2	4.4	17	37.8	26	57.8	45
Recent	0	0	1	6.7	14	93.3	15
Total	7	8.4	29	34.9	47	56.6	83

$\chi^2(2) = 17.937$, $p = .001$; contingency coefficient = .422
World War II and Prior = the majority of the district's facilities were reported built in one of the date ranges, prior to 1920, 1920 – 1929, or 1930 – 1939; Baby Boom Era = the majority of the district's facilities were reported built in one of the date ranges, 1940 – 1949, 1950 – 1959, 1960 - 1969, 1970 – 1979; and Recent = the majority of the district's facilities were reported built in one of the data ranges, 1980 – 1989, 1990 – 1999, or 2000 – 2009.

The responses pertaining to the interior of school buildings were sorted in the Instructional Type index. The results of this analysis are presented in Table 16. The responses offered by building administrators were fairly consistent from building category to building category. The majority of the building administrators ranked their interiors as Good.

Table 16

Rating of Physical Condition of Building Interior as Perceived by Participating Building Administrators by Building Category as Determined by Instructional Grade Ranges

Building Category	Ratings						Total
	Poor	Percent	Adequate	Percent	Good	Percent	
Elementary	3	9.4	12	37.5	17	53.1	32
Middle	1	10	3	30	6	60	10
Secondary	1	3.8	10	38.5	15	57.7	26
K – 12	2	13.3	4	26.7	9	60	15
Total	7	8.4	29	34.9	47	56.6	83

$\chi^2(3) = 1.779$, $p = .939$; contingency coefficient = .145
Elementary = grade kindergarten through eight and at least one grade below grade five; middle = grades five through nine; secondary = grades seven through twelve and at least one grade above grade eight; K – 12 = grades kindergarten through twelve.

Building Questionnaire – Question 47

"Are the classrooms in this building air conditioned?" (Yes or No)

In 1993, when Pool conducted his study, as with now, the discussion of year-round schooling includes the topic of air-conditioned buildings. The high humidity levels

along with hot summer time temperatures found in the eastern two-thirds of Nebraska gives rise to the necessity for air-conditioned school buildings. This is not to say that temperatures in the western regions of Nebraska are not high during the summer months and, therefore, air conditioning would not be required. The humidity levels are not as consistently as high as they are in the eastern part of the state.

The building administrators of participating Class III school buildings reported whether their individual structure was air-conditioned or not. The results were sorted into the indices and analyzed.

When the results were analyzed by the Class index, 93.9% of participating building managers reported that their building was air-conditioned. Two buildings chose not to answer this question. The chi square Goodness-Of-Fit test found these responses to have a level of significance. The results, by Class, are displayed in Table 17.

Table 17

Frequency of Air-Conditioned Buildings as Reported by Participating Building Administrators by Class of School District

District Class	Air Conditioning				
	No	Percent	Yes	Percent	Total
III	5	6.1	76	93.9	81
Total	5	6.1	76	93.9	81

2 buildings did not answer this question
$\chi^2(1) = 62.235$, $p < .001$
Class II = 1,000 or less inhabitants.
Class III = 1,000 to 100,000 inhabitants.
Class IV = 100,000 to 250,000 inhabitants.
Class V = 250,000 or more inhabitants.

The building responses relating to air-conditioning were next sorted and analyzed by the wealth of a district. These results are displayed in Table 18. The individual responses of building with air-conditioning found in Quartile 1, the poorest districts (33), doubled the number buildings reporting air conditioning in Quartile 4, the wealthiest districts (15). 100 percent of the participating buildings in Quartiles 2 and 3 reported their structures as air-conditioned. Overall, 93.8% of the participating school buildings were reported as having air-conditioning. The reported proportional differences were found to be not significant and the effect size was considered moderate. Two buildings opted not to respond to this question.

Table 18

Frequency of Air-Conditioned Buildings as Reported by Participating Building Administrators by Quartile of Increasing Valuation Per Pupil

Quartile of Valuation /Pupil	Air Conditioning				
	No	Percent	Yes	Percent	Total
Quartile 1	4	12.1	29	87.9	33
Quartile 2	0	0	16	100	16
Quartile 3	0	0	17	100	17
Quartile 4	1	6.7	14	93.3	15
Total	5	6.2	76	93.8	81

2 districts did not respond
$\chi^2(3) = 4.193$, $p = .241$; contingency coefficient = .222
Quartile categories of Nebraska school districts when ranked by each district's total dollars of taxable property valuation divided by the numbers of pupils reported in average daily membership (ADM). Range of wealth per pupil by quartile: Quartile 1 = $140,000 to $477,065; Quartile 2 = $479,663 to $602,959; Quartile 3 = $614,058 to $803,162; Quartile 4 = $804,979 to $1,823,480.

The number of buildings reported as air-conditioned was sorted into the four categories “Population Change” to determine if there was any relationship to the growth or decline of population. The findings are displayed in Table 19. There was no significant relationship between the change in population and the number buildings reported as air-conditioned. The effect of the proportional relationship was considered small. The percentage of buildings reported as air-conditioned with a major decline of population was higher than the percentage of districts with a growth in population.

Table 19

Frequency of Air-Conditioned Buildings as Reported by Participating Building Administrators by Percentage Categories of County Population Change in the 2008 County Census

Population Change Category	Air Conditioning				
	No	Percent	Yes	Percent	Total
Major Decline	0	0	16	100	16
Decline	4	9.1	40	90.9	44
Growth	1	4.8	20	95.2	21
Major Growth	0	0	0	0	0
Total	5	6.2	76	93.8	81

2 districts did not respond
$\chi^2(3) = 1.772$, $p = .412$; contingency coefficient = .146
Major Growth = A population increase of 10% or more from 2000 to 2008.
Growth = A population increase from 0% to 10% from 2000 to 2008.
Decline = A population decrease from 0% to -10% from 2000 to 2008.
Major Decline = A population decrease from -10% to -25% from 2000 to 2008.

To examine the relationship of the age of a facility and whether it is air-conditioned or not, the responses were sorted and analyzed by the date of original construction and are illustrated in Table 20. 100% of the buildings built since 1980 were

Table 20

Frequency of Air-Conditioned Buildings as Reported by Participating Building Administrators by Periods of Facility Construction by Construction Date Ranges

Period of Facility Construction	Air Conditioning				
	No	Percent	Yes	Percent	Total
WW II & Prior	2	9.1	20	90.9	22
Baby Boom Era	3	6.8	41	93.2	44
Recent	0	0	15	100	15
Total	5	6.2	76	93.8	81

2 districts did not respond
$\chi^2(2) = 1.342$, $p = .511$; contingency coefficient = .128
World War II and Prior = the majority of the district's facilities were reported built in one of the date ranges, prior to 1920, 1920 – 1929, or 1930 – 1939; Baby Boom Era = the majority of the district' facilities were reported built in one of the date ranges, 1940 – 1949, 1950 – 1959, 1960 - 1969, 1970 – 1979; and Recent = the majority of the district's facilities were reported built in one of the data ranges, 1980 – 1989, 1990 – 1999, or 2000 – 2009.

reported as air-conditioned. Approximately 93% of the buildings constructed during the Baby Boom and WW II and Prior Eras were reported by building management as having air-conditioning. The findings of this index were not found to be significant. The effect of the proportional relationship was considered small.

The fifth index, Building Instructional Type, was employed to sort and analyze the data with the results presented in Table 21. The percentage of structures reporting air conditioning was consistent between Elementary (93.3), Secondary (92.3), and K -12 (93.3) buildings. Middle school building reported 100 of this category's facilities as air-conditioned. The proportional relationship was not significant; the effect of the relationship was small.

Table 21

Frequency of Air-Conditioned Buildings as Reported by Participating Building Administrators by Building Category as Determined by Instructional Grade Ranges

Building Category	Air Conditioning				
	No	Percent	Yes	Percent	Total
Elementary	2	6.7	28	93.3	30
Middle	0	0	10	100	10
Secondary	2	7.7	24	92.3	26
K – 12	1	6.7	14	93.3	15
Total	5	6.2	76	93.8	81

2 districts did not respond
$\chi^2(3) = .780$, $p = .854$; contingency coefficient = .098
Elementary = grade kindergarten through eight and at least one grade below grade five; middle = grades five through nine; secondary = grades seven through twelve and at least one grade above grade eight; K – 12 = grades kindergarten through twelve.

Building Questionnaire – Question 48

"Are the classrooms in this building consistently comfortable (not too warm, old, drafty, stuffy, etc.)?" (Yes or No).

Classrooms that are consistently comfortable enhance the instructional and learning efforts of both teachers and students. A wide variety of temperatures outside the confines of the walls of the school building require climate control systems that are capable of providing comfortable environments for both students and staff. Even with a high quality system, the classrooms may not be consistently comfortable for the occupants.

As shown in Table 22, the building administrator responses were analyzed within the Class index in relationship to the classrooms being consistently comfortable.

Table 22

Frequency of Buildings with Consistently Comfortable Classrooms as Reported by Participating Building Administrators by Class of School District

District Class	Comfortable Classrooms				
	No	Percent	Yes	Percent	Total
III	27	32.5	56	67.5	83
Total	27	32.5	56	67.5	83

$\chi^2(1) = 10.133$, $p = .001$
Class II = 1,000 or less inhabitants.
Class III = 1,000 to 100,000 inhabitants.
Class IV = 100,000 to 250,000 inhabitants.
Class V = 250,000 or more inhabitants.

Approximately two-thirds of the participating building supervisors opined that their classrooms were consistently comfortable (67.5%). A Chi-Square Goodness-Of-Fit test found a significant relationship between those reporting consistently comfortable classrooms and those who did not report the same.

The inquiry into the consistency of comfortable classrooms was next sorted and analyzed by the wealth of a district. The findings are featured in Table 23. Buildings separated into Quartile 2 had the highest percentage of buildings (94.1%) reported a consistent comfort level. Quartiles 1 and 3 buildings showed a 60/40 split in reporting a consistent comfort level in classrooms. The wealthiest schools in Quartile 4 reported that two-thirds of their buildings maintained a steady classroom comfort level. There was not a significant level in the relationship of buildings reporting consistently comfort or not in the classrooms. The effect of this finding was reported to be moderate.

Table 23

Frequency of Buildings with Consistently Comfortable Classrooms as Reported by Participating Building Administrators by Quartile of Increasing Valuation Per Pupil

Quartile of Valuation /Pupil	Comfortable Classrooms				
	No	Percent	Yes	Percent	Total
Quartile 1	14	41.2	20	58.8	34
Quartile 2	1	5.9	16	94.1	17
Quartile 3	7	41.2	10	58.8	17
Quartile 4	5	33.3	10	66.7	15
Total	27	32.5	56	67.5	83

$\chi^2(3) = 7.242$, $p = .065$; contingency coefficient = .283
Quartile categories of Nebraska school districts when ranked by each district's total dollars of taxable property valuation divided by the numbers of pupils reported in average daily membership (ADM). Range of wealth per pupil by quartile: Quartile 1 = $140,000 to $477,065; Quartile 2 = $479,663 to $602,959; Quartile 3 = $614,058 to $803,162; Quartile 4 = $804,979 to $1,823,480.

To determine if population change affected the response of building administrators when considering the consistently of comfort in classrooms, the data were sorted into the index of Population Change. Table 24 highlights the findings of this inquiry.

A higher percentage of facilities in counties with a major decline in population count reported consistently comfortable classrooms (76.5%). Approximately two-thirds of building in the Decline and Growth categories noted consistently comfortable classrooms. Of the building administrators that reported an unfavorable consistency of comfort, the buildings in the Growth category had the highest percentage (38.1%) of buildings in that stratum. The proportional relationship for this index did not show any significance. The effect size was deemed small.

Table 24

Frequency of Buildings with Consistently Comfortable Classrooms as Reported by Participating Building Administrators by Percentage Categories of County Population Change in the 2008 County Census

Population Change Category	Comfortable Classrooms				
	No	Percent	Yes	Percent	Total
Major Decline	4	23.5	13	76.5	17
Decline	15	33.3	30	66.7	45
Growth	8	38.1	13	61.9	21
Major Growth	0	0	0	0	0
Total	27	32.5	56	67.5	83

$\chi^2(3) = .937$, $p = .626$; contingency coefficient = .106
Major Growth = A population increase of 10% or more from 2000 to 2008.
Growth = A population increase from 0% to 10% from 2000 to 2008.
Decline = A population decrease from 0% to -10% from 2000 to 2008.
Major Decline = A population decrease from -10% to -25% from 2000 to 2008.

The age of a building may or may not have a positive impact on a dependable level of comfort in classrooms. The responses to Question 48 were examined against the original date of construction index and are shown in Table 25. The most recent buildings reported the lowest percentage (13.3) of classrooms not being consistently comfortable. Two-thirds of the Baby Boom Era structures reported a dependable level of comfort in their classrooms with the oldest buildings stating that approximately half of that category was consistently comfortable. The Chi-Square test did not find a level of significance in the relationship of responses and the effect was found to be small.

Finally, the responses to the question about a dependable level of comfort in classrooms was sorted and analyzed according to the Instructional Type of building.

Table 25

Frequency of Buildings with Consistently Comfortable Classrooms as Reported by Participating Building Administrators by Periods of Construction by Construction Date Ranges

Period of Facility Construction	Comfortable Classrooms				
	No	Percent	Yes	Percent	Total
WW II & Prior	10	43.5	13	56.5	23
Baby Boom Era	15	33.3	30	66.7	45
Recent	2	13.3	13	86.7	15
Total	27	32.5	56	67.5	83

$\chi^2(2) = 3.788$, $p = .150$; contingency coefficient = .209
World War II and Prior = the majority of the district's facilities were reported built in one of the date ranges, prior to 1920, 1920 – 1929, or 1930 – 1939; Baby Boom Era = the majority of the district's facilities were reported built in one of the date ranges, 1940 – 1949, 1950 – 1959, 1960 - 1969, 1970 – 1979; and Recent = the majority of the district's facilities were reported built in one of the data ranges, 1980 – 1989, 1990 – 1999, or 2000 – 2009.

Elementary, Middle, and K – 12 buildings reported that approximately 70% of their structures offered a common level of comfortable classrooms to their staff and students. Secondary buildings reported a higher percentage of their classrooms (38.5%) as not being consistently comfortable. The proportional relationship of categories of Instructional Type and the numbers of buildings that had consistently comfortable classrooms were not significant. The effect size of the relationship between these categories was considered small.

Table 26

Frequency of Buildings with Consistently Comfortable Classrooms as Reported by Participating Building Administrators by Building Category as Determined by Instructional Grade Ranges

Building Category	Comfortable Classrooms				
	No	Percent	Yes	Percent	Total
Elementary	10	31.3	22	68.8	32
Middle	3	30	7	70	10
Secondary	10	38.5	16	61.5	26
K – 12	4	26.7	11	73.3	15
Total	27	32.5	56	67.5	83

$\chi^2(3) = .705$, $p = .872$; contingency coefficient = .092
Elementary = grade kindergarten through eight and at least one grade below grade five; middle = grades five through nine; secondary = grades seven through twelve and at least one grade above grade eight; K – 12 = grades kindergarten through twelve.

Building Questionnaire – Question 49

"Do your teaching stations accommodate changing technologies – computers, data access, closed circuit TV, sufficient electrical outlets, sufficient power, etc?" (Yes or No).

In his 1993 study, Pool stated that instructional programs increasingly called for the use of the new electronic technologies as listed above. The same may be applied to the instructional programs of 2009 and into the future. Building administrators offered their opinions about the capability of the classrooms in their respective building to meet the demand of current technologies. These opinions were sorted and categorized according to the indices of this study.

Table 27 reflects the attitudes of participating Class III building administrators towards the capability of classrooms to accommodate the use of technology. Approximately 70% of the building administrators claimed that the teacher stations in their respective buildings could accommodate the use of technology. The Chi-Square Goodness-Of-Fit test results provided a significant difference in the relationship between the buildings that accommodate the use of technology and those that do not.

Table 27

Frequency of Buildings That Accommodated the Use of Technology as Reported by Participating Building Administrators by Class of School District

District Class	Accommodated Technology Use				
	No	Percent	Yes	Percent	Total
III	25	30.3	58	69.7	83
Total	25	30.3	58	69.7	83

$\chi^2(1) = 13.120$, $p < .001$
Class II = 1,000 or less inhabitants.
Class III = 1,000 to 100,000 inhabitants.
Class IV = 100,000 to 250,000 inhabitants.
Class V = 250,000 or more inhabitants.

The next index, valuation per pupil, measures whether the wealth of a district has any impact on a building's capability to accommodate the use of technology. Eighty percent of building administrators of the wealthiest districts, Quartile 4, opined that their buildings were accommodating the use of technology. Building administrators from Quartile 2 claimed that their buildings, too, accommodated the use of technology (82.4%). Principals from Quartiles 1 (38.2%) and 3 (35.3%) had the highest percentage

of buildings that did not accommodate the use of technology. The Chi-Square test did not find a level of significance with a small effect size. The results are displayed in Table 28.

Table 28

Frequency of Buildings That Accommodated the Use of Technology as Reported by Participating Building Administrators by Quartile of Increasing Valuation Per Pupil

Quartile of Valuation /Pupil	Technology				
	No	Percent	Yes	Percent	Total
Quartile 1	13	38.2	21	61.8	34
Quartile 2	3	17.6	14	82.4	17
Quartile 3	6	35.3	11	64.7	17
Quartile 4	3	20	12	80	15
Total	25	30.1	58	69.9	83

$\chi^2(3) = 3.266$, $p = .352$; contingency coefficient = .195
Quartile categories of Nebraska school districts when ranked by each district's total dollars of taxable property valuation divided by the numbers of pupils reported in average daily membership (ADM). Range of wealth per pupil by quartile: Quartile 1 = $140,000 to $477,065; Quartile 2 = $479,663 to $602,959; Quartile 3 = $614,058 to $803,162; Quartile 4 = $804,979 to $1,823,480.

When a school district is affected by a decline in student population concerns are raised about a district's ability to maintain areas like technology. To study this concern, the responses of administrators were sorted and analyzed according to the index Population Change. Each building was placed in a category by the population change of the county of the reporting district. The building administrators' opinions are displayed in Table 29.

Table 29

Frequency of Buildings that Accommodated the Use of Technology as Reported by Participating Building Administrators by Percentage Categories of County Population Change in the 2008 County Census

Population Change Category	Technology				
	No	Percent	Yes	Percent	Total
Major Decline	3	17.6	14	82.4	17
Decline	17	37.8	28	62.2	45
Growth	5	23.8	16	76.2	21
Major Growth	0	0	0	0	0
Total	25	30.1	58	69.9	83

$\chi^2(3) = 2.908$, $p = .234$; contingency coefficient = .184
Major Growth = A population increase of 10% or more from 2000 to 2008.
Growth = A population increase from 0% to 10% from 2000 to 2008.
Decline = A population decrease from 0% to -10% from 2000 to 2008.
Major Decline = A population decrease from -10% to -25% from 2000 to 2008.

Building principals in the Major Decline category reported a high percentage of their buildings (82.5%) accommodated the use of technology. Despite suffering the greatest loss of population, this category reported the highest percentage of buildings that accommodated technology. None of the population categories reported less than sixty percent of their buildings as accommodating the use of technology. The proportional relationship of this index was not found significant. The effect of the relationship was small.

Age of a building may have an effect on a building's ability to accommodate technology. Building administrators had opinions about their building's ability to

accommodate the use of technology. These opinions were sorted and analyzed in the date or original construction index. Table 30 displays the results.

Table 30

Frequency of Buildings That Accommodated the Use of Technology as Reported by Participating Building Administrators by Periods of Construction by Construction Date Ranges

Period of Facility Construction	Accommodate Technology Use				
	No	Percent	Yes	Percent	Total
WW II & Prior	11	47.8	12	52.2	23
Baby Boom Era	12	26.7	33	73.3	45
Recent	2	13.3	13	86.7	15
Total	25	30.1	58	69.9	83

$\chi^2(2) = 5.689$, $p = .058$; contingency coefficient = .253
World War II and Prior = the majority of the district's facilities were reported built in one of the date ranges, prior to 1920, 1920 – 1929, or 1930 – 1939; Baby Boom Era = the majority of the district' facilities were reported built in one of the date ranges, 1940 – 1949, 1950 – 1959, 1960 - 1969, 1970 – 1979; and Recent = the majority of the district's facilities were reported built in one of the data ranges, 1980 – 1989, 1990 – 1999, or 2000 – 2009.

Buildings erected during the Baby Boon Era and newer had a wider spread between the buildings that were deemed as accommodating the use of technology and those that were not. Building administrators, whose buildings were constructed during the WW II and Prior time period, offered almost a 50 – 50 split (Yes – 52.2%; No – 47.8%) whether their facility could accommodate the use of technology. The effect of the proportional relationship was deemed moderate.

The use of technology was variegated across all instructional levels. Responses to this question were sorted into the index Building Category. Table 31 demonstrates that the Elementary principals judged that 60% of their structures accommodated the use of technology. Building management of the three remaining categories offered a fairly consistent consensus that their buildings accommodated the use of technology, Middle (80%), Secondary (76.9%), and K – 12 (73.3%). There was no level of significance in relationship of the answers offered. The effect of this relationship was rated as moderate.

Table 31

Frequency of Buildings That Accommodated the Use of Technology as Reported by Participating Building Administrators by Building Category as Determined by Instructional Grade Ranges

Building Category	Accommodate Use of Technology				
	No	Percent	Yes	Percent	Total
Elementary	13	40.6	19	59.4	32
Middle	2	20	8	80	10
Secondary	6	23.1	20	76.9	26
K – 12	4	26.7	11	73.3	15
Total	25	30.1	58	69.9	83

$\chi^2(3) = 2.862$, $p = .413$; contingency coefficient = .183
Elementary = grade kindergarten through eight and at least one grade below grade five; middle = grades five through nine; secondary = grades seven through twelve and at least one grade above grade eight; K – 12 = grades kindergarten through twelve.

Building Questionnaire – Question 50

"Is this building completely accessible for handicapped persons?" (Yes or No).

In 1993, when Pool conducted his survey study, all public schools were required to have plans to provide access to or be accessible to handicapped individuals for instructional programs. It has been approximately 18 years since that time. In order to see how well schools have addressed this mandate, the opinions of the Class III building administrators were sorted into each of the descriptive indices.

In order to review the responses of the Class III building administrators, the Chi-Square Goodness-Of-Fit test was employed. The majority of the Class III building administrators stated that their facilities were completely handicap accessible (75.9%). There was a significant proportional relationship between those claiming complete accessibility and those who did not.

The cost of new construction, or to update a building to meet the requirements of ADA can be an additional strain to any district's financial situation. To determine the numbers of buildings that were reported as handicapped accessible by quartile of wealth the replies of the participating administrators were sorted into the index "Quartile of Valuation per Pupil". The results of this analysis are presented in Table 32.

The percentage of administrators from the Quartiles 1, 2, and 4 were consistent with how many of their building were not completely handicapped accessible, hovering around 30%. Quartile 2 buildings reported almost 100% of complete accessibility (94.1%). The effect size of the results when analyzed through this index was small. No level of significance was determined.

Table 32

Frequency of Buildings Completely Accessible to Handicapped Persons as Reported by Participating Building Administrators by Class of School District

District Class	Complete Accessibility				
	No	Percent	Yes	Percent	Total
III	20	24.1	63	75.9	83
Total	20	24.1	63	75.9	83

$\chi^2(1) = 22.277$, $p < .001$
Class II = 1,000 or less inhabitants.
Class III = 1,000 to 100,000 inhabitants.
Class IV = 100,000 to 250,000 inhabitants.
Class V = 250,000 or more inhabitants.

To determine if there was a level of significance in handicapped accessible buildings among different categories of population change, the data were sorted into the Population Change index. The Major Decline (88.2%) and Growth (85.7%) categories reported fairly similar percentages of buildings that were completely handicapped accessible. The Decline category was divided by two thirds of the buildings reporting favorably (66.7%) and one third of the buildings unfavorably (33.3%). A medium effect of the proportional relationship was reported.

The age of a building can complicate the district's ability to meet the demands of this mandate. Building administrators had opinions about their structures being completely handicapped accessible and were sorted for analysis into the original date of construction index. Table 33 presents the data for your consideration.

Table 33

Frequency of Buildings Completely Accessible to Handicapped Persons as Reported by Participating Building Administrators by Quartile of Increasing Valuation Per Pupil

District Class	Accessible to Handicapped				
	No	Percent	Yes	Percent	Total
Quartile 1	10	29.4	24	70.6	34
Quartile 2	1	5.9	16	94.1	17
Quartile 3	5	29.4	12	70.6	17
Quartile 4	4	26.7	11	73.3	15
Total	20	24.1	63	75.9	83

$\chi^2(3) = 3.926$, $p = .270$; contingency coefficient = .213
Quartile categories of Nebraska school districts when ranked by each district's total dollars of taxable property valuation divided by the numbers of pupils reported in average daily membership (ADM). Range of wealth per pupil by quartile: Quartile 1 = $140,000 to $477,065; Quartile 2 = $479,663 to $602,959; Quartile 3 = $614,058 to $803,162; Quartile 4 = $804,979 to $1,823,480.

Facilities erected during the WW II and Prior category had a lower percentage of buildings completely handicapped accessible than did structures built during the Baby Boom and Recent categories. All buildings constructed after 1980 were deemed completely handicapped accessible by building management. The proportional relationship of this category was found to be significant. The effect of this relationship was large.

The access for handicapped persons to instructional programs was required for all types of school buildings. The answers of the Class III building administrators were sorted according to the Building Category index. Elementary, Middle, and Secondary school buildings reported approximately 80% were completely handicapped accessible. The percentage of K – 12 structures not completely accessible of handicapped individuals

was double of the each of the other categories. The significance level was unfounded with the effect of that relationship considered small. These results are presented in Table 34.

Table 34

Frequency of Buildings Completely Accessible to Handicapped Persons as Reported by Participating Building Administrators by Percentage Categories of County Population Change in the 2008 County Census

Population Change Category	Accessible to Handicapped				
	No	Percent	Yes	Percent	Total
Major Decline	2	11.8	15	88.2	17
Decline	15	33.3	30	66.7	45
Growth	3	14.3	18	85.7	21
Major Growth	0	0	0	0	0
Total	20	24.1	63	75.9	83

$\chi^2(3) = 4.618$, $p = .099$; contingency coefficient = .230
Major Growth = A population increase of 10% or more from 2000 to 2008.
Growth = A population increase from 0% to 10% from 2000 to 2008.
Decline = A population decrease from 0% to -10% from 2000 to 2008.
Major Decline = A population decrease from -10% to -25% from 2000 to 2008.

Building Questionnaire – Question 51

"Is this building generally free of safety hazards?" (Yes or No).

Maintaining a building that is free of safety hazards for staff members and students is a continuing concern for building management. Radon gases, lead in the water, and asbestos are just a few of the hazards that must be dealt with by principals. The responses of participating administrators were sorted and analyzed according to the

five indices to determine what reported differences existed in various categories of school buildings.

Table 35

Frequency of Buildings Completely Accessible to Handicapped Persons as Reported by Participating Building Administrators by Periods of Construction by Construction Date Ranges

Period of Facility Construction	Completely Accessible to Handicapped				
	No	Percent	Yes	Percent	Total
WW II & Prior	11	47.8	12	52.2	23
Baby Boom Era	9	20	36	80	45
Recent	0	0	15	100	15
Total	20	24.1	63	75.9	83

$\chi^2(2) = 12.256$, $p = .002$; contingency coefficient = .359
World War II and Prior = the majority of the district's facilities were reported built in one of the date ranges, prior to 1920, 1920 – 1929, or 1930 – 1939; Baby Boom Era = the majority of the district' facilities were reported built in one of the date ranges, 1940 – 1949, 1950 – 1959, 1960 - 1969, 1970 – 1979; and Recent = the majority of the district's facilities were reported built in one of the data ranges, 1980 – 1989, 1990 – 1999, or 2000 – 2009.

The responses of participating Class III building administrators were first sorted into the Class index. This index examines the proportional relationship between building reported as being free of safety hazards and those that continue to deal with these hazards. Ninety percent of the participating school building administrators reported that their facilities were generally free from safety hazards. The proportional relationship was found to be significant.

Table 36

Frequency of Buildings Completely Accessible to Handicapped Persons as Reported by Participating Building Administrators by Building Category as Determined by Instructional Grade Ranges

Building Category	Completely Accessible to Handicapped				
	No	Percent	Yes	Percent	Total
Elementary	7	21.9	25	78.1	32
Middle	2	20	8	80	10
Secondary	5	19.2	21	80.8	26
K – 12	6	40	9	60	15
Total	20	24.1	63	75.9	83

$\chi^2(3) = 2.589$, $p = .459$; contingency coefficient = .174
Elementary = grade kindergarten through eight and at least one grade below grade five; middle = grades five through nine; secondary = grades seven through twelve and at least one grade above grade eight; K – 12 = grades kindergarten through twelve.

Table 37

Frequency of Buildings Completely Free from Safety Hazards as Reported by Participating Building Administrators by Class of School District

District Class	Free From Safety Hazards				
	No	Percent	Yes	Percent	Total
III	8	9.6	75	90.4	83
Total	8	9.6	75	90.4	83

$\chi^2(1) = 54.084$, $p < .001$
Class II = 1,000 or less inhabitants.
Class III = 1,000 to 100,000 inhabitants.
Class IV = 100,000 to 250,000 inhabitants.
Class V = 250,000 or more inhabitants.

To determine if there were proportional differences in building administrators responses concerning freedom from safety hazards, the responses were sorted by the index Quartile of Valuation per Pupil. The results of the analysis are presented in Table 38. Three of the four quartiles reported their buildings in the lower to mid ninety percent range of being free from safety hazards. Buildings in Quartile 3 reported 82.4% of their structure as being free from safety hazards. The effect size of the relationships reported in this index was considered small.

Table 38

Frequency of Buildings Completely Free from Safety Hazards as Reported by Participating Building Administrators by Quartile of Increasing Valuation Per Pupil

Quartile of Valuation/Pupil	Free From Safety Hazards				
	No	Percent	Yes	Percent	Total
Quartile 1	3	8.8	31	91.2	34
Quartile 2	1	5.9	16	94.1	17
Quartile 3	3	17.6	14	82.4	17
Quartile 4	1	6.7	14	93.3	15
Total	8	9.6	75	90.4	83

$\chi^2(3) = 1.705$, $p = .636$; contingency coefficient = .142
Quartile categories of Nebraska school districts when ranked by each district's total dollars of taxable property valuation divided by the number of pupils reported in average daily membership (ADM). Range of wealth per pupil by quartile: Quartile 1 = $140,000 to $477,065; Quartile 2 = $479,663 to $602,959; Quartile 3 = $614,058 to $803,162; Quartile 4 = $804,979 to $1,823,480.

The differences in administrator's responses to freedom from safety hazards were evaluated by Population Change Category. Although the proportional relationship was not significant the effect size was considered very low. Ninety percent of the buildings

overall claimed to be free from safety hazards. Building administrators from the Decline and Growth classifications reported the highest percentage of buildings not free from safety hazards, 11.1% and 9.5% respectively. These results are presented in Table 39.

Table 39

Frequency of Buildings Completely Free from Safety Hazards as Reported by Participating Building Administrators by Percentage Categories of County Population Change in the 2008 County Census

Population Change Category	Free From Safety Hazards				
	No	Percent	Yes	Percent	Total
Major Decline	1	5.9	16	94.1	17
Decline	5	11.1	40	88.9	45
Growth	2	9.5	19	90.5	21
Major Growth	0	0	0	0	0
Total	8	9.6	75	90.4	83

$\chi^2(3) = .388$, $p = .824$; contingency coefficient = .068
Major Growth = A population increase of 10% or more from 2000 to 2008.
Growth = A population increase from 0% to 10% from 2000 to 2008.
Decline = A population decrease from 0% to -10% from 2000 to 2008.
Major Decline = A population decrease from -10% to -25% from 2000 to 2008.

The age of a building can offer building leaders various challenges when keeping the facility free from safety hazards. To determine if there was a significance in the responses of the participating administrators, the data was sorted into the Period of Facility Construction index and displayed in Table 40. Buildings constructed during and after the Baby Boom Era reported approximately 95% were free from safety hazards. The older buildings, those built during WW II and Prior, expressed that 78% were free from

Table 40

Frequency of Buildings Completely Free From Safety Hazards as Reported by Participating Building Administrators by Periods of Construction by Construction Date Ranges

Period of Facility Construction	Completely Free From Safety Hazards				
	No	Percent	Yes	Percent	Total
WW II & Prior	5	21.7	18	78.3	23
Baby Boom Era	2	4.4	43	95.6	45
Recent	1	6.7	14	93.3	15
Total	8	9.6	75	90.4	83

$\chi^2(2) = 5.413$, $p = .067$; contingency coefficient = .247
World War II and Prior = the majority of the district's facilities were reported built in one of the date ranges, prior to 1920, 1920 – 1929, or 1930 – 1939; Baby Boom Era = the majority of the district' facilities were reported built in one of the date ranges, 1940 – 1949, 1950 – 1959, 1960 - 1969, 1970 – 1979; and Recent = the majority of the district's facilities were reported built in one of the data ranges, 1980 – 1989, 1990 – 1999, or 2000 – 2009.

safety hazards. The effect of the proportional relationships was ascertained to be moderate.

Schools serve students of a wide range of ages. To determine if an age group was more exposed to safety hazards than another group, the responses of the administrators who participated in this survey were sorted according to the Building Category index. The results are shown in Table 41.

All middle school administrators reported that their particular facility was free from safety hazards. Approximately ninety percent of the remaining classifications reported their structure as free from safety hazards – Elementary (90.6%), Secondary

Table 41

Frequency of Buildings Completely Free from Safety Hazards as Reported by Participating Building Administrators by Building Category as Determined by Instructional Grade Ranges

Building Category	Completely Free From Safety Hazards				
	No	Percent	Yes	Percent	Total
Elementary	3	9.4	29	90.6	32
Middle	0	0	10	100	10
Secondary	3	11.5	23	88.5	26
K – 12	2	13.3	13	86.7	15
Total	8	9.6	75	90.4	83

$\chi^2(3) = 1.412$, $p = .703$; contingency coefficient = .129
Elementary = grade kindergarten through eight and at least one grade below grade five; middle = grades five through nine; secondary = grades seven through twelve and at least one grade above grade eight; K – 12 = grades kindergarten through twelve.

(88.5%), and K – 12 (86.7%). The effect of the relationship was small with no level of significance.

Building Questionnaire – Question 52

"Does this building inhibit or prevent the changes you would like to make in educational programming?" (Yes or No).

School buildings should offer options for their administrators in order to meet the changing needs of their staff and students. To determine if there was a difference in the way administrators perceived the ability of their facility to accommodate changes in instructional programs, the responses to question 52 were sorted by the five building indices.

Table 42 displays the responses of participating building administrators when sorted into the Class index. Fifty-four percent of the principals opined that their building did not inhibit their need for flexibility. The Chi-Square Goodness-Of-Fit test ascertained a level of significance between administrators who felt their building did not inhibit change for instructional programs and those administrators who felt the facility they supervised did inhibit changes.

Table 42

Frequency of Buildings That Inhibited Changes in Instructional Programs Reported by Participating Building Administrators by Class of School District

District Class	Inhibited Changes in Instructional Programs				
	No	Percent	Yes	Percent	Total
III	45	54.2	38	45.8	83
Total	45	54.2	38	45.8	83

$\chi^2(1) = .590$, $p = .442$
Class II = 1,000 or less inhabitants.
Class III = 1,000 to 100,000 inhabitants.
Class IV = 100,000 to 250,000 inhabitants.
Class V = 250,000 or more inhabitants.

To examine the differences in administrator's opinions regarding buildings as inhibiting change in school districts with different levels of wealth, the replies were sorted into the index for school district wealth. The results of the data for school district wealth are presented in Table 43. Buildings in Quartile 3 were judged to be the least inhibiting for change to instructional programs. Buildings offering less flexibility in the

Table 43

Frequency of Buildings That Inhibited Changes in Instructional Programs Reported by Participating Building Administrators by Quartile of Increasing Valuation Per Pupil

Quartile of Valuation /Pupil	Inhibited Changes in Instructional Programs				
	No	Percent	Yes	Percent	Total
Quartile 1	16	47.1	18	52.9	34
Quartile 2	10	58.8	7	41.2	17
Quartile 3	12	70.6	5	29.4	17
Quartile 4	7	46.7	8	53.3	15
Total	45	54.2	28	45.8	83

$\chi^2(3) = 3.027$, $p = .387$; contingency coefficient = .188
Quartile categories of Nebraska school districts when ranked by each district's total dollars of taxable property valuation divided by the number of pupils reported in average daily membership (ADM). Range of wealth per pupil by quartile: Quartile 1 = $140,000 to $477,065; Quartile 2 = $479,663 to $602,959; Quartile 3 = $614,058 to $803,162; Quartile 4 = $804,979 to $1,823,480.

poorest and wealthiest quartiles were deemed by their administrators at a higher percentage rate than building supervisors in the other two quartiles. There was no level of significance when the responses were analyzed in this index. The effect of the proportional relationship was small.

Changes in population can be a reason for changes in instructional programs to be inhibited. To determine if there was a significant difference in Population Change Categories administrators responses where sorted by the county population change index. Administrators whose buildings where classified as being in a county with either a Decline (51.1%) or Major Decline (52.9%) of population status were split nearly 50 – 50 when judging their facilities as inhibiting to changes. Sixty-two percent of the buildings in counties with population growth were not considered as a hindrance to change in the

instructional programs. The proportional relationship between responses was not considered significant. The effect of the relationship was small.

School buildings constructed in different time periods offer various challenges. Approaches by school facility planners change as the methodologies of instruction change. Without the efforts by patrons of a school district to keep their facilities up-to-date, attempts by administration and staff to meet changing needs of the students could go unmet. To determine if there was a significant difference in the assessments of building management when categories of original construction were considered, these responses were sorted into the Periods of Facility Construction index. Table 45 displays the outcome.

Table 44

Frequency of Buildings That Inhibited Changes in Instructional Programs Reported by Participating Building Administrators by Percentage Categories of County Population Change in the 2008 County Census

Population Change Category	Inhibited Changes in Instructional Programs				
	No	Percent	Yes	Percent	Total
Major Decline	9	52.9	8	47.1	17
Decline	23	51.1	22	48.9	45
Growth	13	61.9	8	38.1	21
Major Growth	0	0	0	0	0
Total	45	54.2	38	45.8	83

$\chi^2(3) = .686$, $p = .710$; contingency coefficient = .091
Major Growth = A population increase of 10% or more from 2000 to 2008.
Growth = A population increase from 0% to 10% from 2000 to 2008.
Decline = A population decrease from 0% to -10% from 2000 to 2008.
Major Decline = A population decrease from -10% to -25% from 2000 to 2008.

Table 45

Frequency of Buildings That Inhibited Changes in Instructional Programs Reported by Participating Building Administrators by Periods of Construction by Construction Date Ranges

Period of Facility Construction	Inhibited Changes in Instructional Programs				
	No	Percent	Yes	Percent	Total
WW II & Prior	7	30.4	16	69.6	23
Baby Boom Era	27	60	18	40	45
Recent	11	73.3	4	26.7	15
Total	45	54.2	38	45.8	83

$\chi^2(2) = 8.055$, $p = .018$; contingency coefficient = .297
World War II and Prior = the majority of the district's facilities were reported built in one of the date ranges, prior to 1920, 1920 – 1929, or 1930 – 1939; Baby Boom Era = the majority of the district's facilities were reported built in one of the date ranges, 1940 – 1949, 1950 – 1959, 1960 - 1969, 1970 – 1979; and Recent = the majority of the district's facilities were reported built in one of the data ranges, 1980 – 1989, 1990 – 1999, or 2000 – 2009.

Seventy percent of the administrators in charge of the oldest buildings, those built during WW II and before, claimed that their facility was an inhibiting factor to changes to the instructional programs offered by staff. On the other hand, 75% of the administrators of buildings constructed since 1980 did not share the same opinion of their facility. Building supervisors of buildings fabricated during the Baby Boom Era showed a percentage split of 60 – 40 with the majority stating that their building did not inhibit changes. The results of this index proved to have a significant level of difference. The effect of the relationship was moderate.

Administrators of various instructional types offered their opinions about whether or not they deemed their facility as inhibiting to changes. The responses to question 52 were sorted into the Building Category index with the results illustrated in Table 46.

Table 46

Frequency of Buildings That Inhibited Changes in Instructional Programs Reported by Participating Building Administrators by Building Category as Determined by Instructional Grade Ranges

Building Category	Inhibited Changes in Instructional Programs				
	No	Percent	Yes	Percent	Total
Elementary	18	56.3	14	43.8	32
Middle	4	40	6	60	10
Secondary	15	57.7	11	42.3	26
K – 12	8	53.3	7	46.7	15
Total	45	54.2	38	45.8	83

$\chi^2(3) = .999$, $p = .802$; contingency coefficient = .109
Elementary = grade kindergarten through eight and at least one grade below grade five; middle = grades five through nine; secondary = grades seven through twelve and at least one grade above grade eight; K – 12 = grades kindergarten through twelve.

Middle school administrators offered a lesser view of their building that inhibited changes in instructional programming (60%). Approximately 55% of the administrators in the remaining classifications were comfortable with their building's adaptability to changes. The effect of the proportional relationship between the responses was considered small.

Summary

As this study was a replication of Pool's 1993 facility study, the descriptive analyses of the building level questionnaire responses by the indexes "Class", "Quartile of Valuation per Pupil", "Population Change Category", "Periods of Facility Construction", and "Building Category" were likewise presented in this section. Each different index was used to describe the numbers of buildings constructed during each of

the time periods of original construction of Nebraska's school facilities and responses from administrators for each of the nine major questions on the building survey instrument.

When applicable, administrator responses to each question were analyzed for proportional differences by the use of chi square. Responses sorted by the "Class" index were subjected to the chi square Goodness-Of-Fit test. The effect size of these differences was assessed by the calculating a contingency coefficient for each chi square. The descriptive results and the analysis of the results were individually presented and discussed.

Superintendents' Assessment of Their Districts' Instructional Facilities' Condition and Limitations

The reader is reminded that this study is a replication of a study conducted by Dr. Dennis Pool in 1993. Many of the narratives used to describe the purpose of the tables are attributable to Pool.

Superintendents from 94 Class III Nebraska school districts responded to the Nebraska Public Schools Facility Superintendent Questionnaire and were a representative sample of Class III superintendents. The responses on the questionnaire collected the current levy fund (Question 4), bond debt (Question 5), opinions regarding necessity of a facility bond referendum (Question 6), anticipation of the success of the referendum (Question 7), and the projected year of the referendum (Question 8). Other survey items (Questions 9, 10, 11, 12, 14, and 15) requested the opinions of the district superintendents regarding overall conditions and limitations of their districts' facilities. Question 13 asked

the opinions of the superintendents regarding their districts' fiscal capability to meet facility needs without raising tax rates.

The final questions asked the opinions of the superintendents as regards the 1998 levy and expenditure restrictions. Question 16 asks if the levy restrictions had restricted the district's ability to keep pace the maintenance and upkeep of the facilities. Question 17 asks if the district prioritized their facility needs differently. The final question asks if facility maintenance became less of a priority since the passage of the 1998 levy and expenditure restrictions. These questions were not included in Pool's 1993 study for obvious reasons.

The analysis of responses to survey items 9 through 15, excluding question 13, are presented in this section. Questions relating to facility finance and necessity for a bond referendum issue are discussed in the next section. In the final section, the questions pertaining to the levy and expenditure restrictions will be analyzed and discussed.

The superintendent's responses regarding overall district facility condition and limitations were sorted into the indices described in the previous section: "Class of District", "Quartile of Valuation per Pupil", and "Population Change Category". The Periods of Facility Construction were not included in this section for the following reason: Not all of the administrators from the same district, whether at the building or district level, responded to this survey. The amount of administrators that did respond from the same district was very small and, therefore, did not provide a viable population sample.

Superintendent Questionnaire – Question 9

"Have you delayed maintenance on your facilities within the past five years because of budget constraints?" (Yes or No).

Class III superintendents had opinions about delaying maintenance on their facilities within the past five years because of budget constraints. These responses were sorted into the Class index. The analyses of the responses are illustrated in Table 47. As with the Class index in the previous section, only the Class index analyses for the remaining sections were run against the chi square Goodness-Of-Fit test.

Table 47

Frequency of Delayed Maintenance During the Past Five Years (2005 - 2009) by Class of School District

District Class	Delayed Maintenance During Past Five Years				
	No	Percent	Yes	Percent	Total
III	43	45.7	51	54.3	94
Total	43	45.7	51	54.3	94

$\chi^2(1) = .681$, $p = .409$
Class II = 1,000 or less inhabitants.
Class III = 1,000 to 100,000 inhabitants.
Class IV = 100,000 to 250,000 inhabitants.
Class V = 250,000 or more inhabitants

Fifty-four percent of participating superintendents delayed maintenance projects for their facilities due to budget constraints. The proportional relationship of the findings was not found to be significant.

Facility maintenance requires continuous financial support. To determine if there was a proportional relationship between the responses of superintendents of districts that

had access to more dollars of valuation per pupil, the response were sorted in the index Quartile of Valuation/Pupil. Table 48 presents the findings. Quartile 4 districts, being the wealthiest, had the highest percentage of responses affirming delayed maintenance to facilities over the past five years. Fifty percent of the superintendents from the other quartiles claimed to have delayed maintenance to their districts facilities over the past five years. The proportional relationship was not found to be significant. The effect size was ascertained as small.

Table 48

Frequency of Delayed Maintenance During the Past Five Years (2005 - 2009) by Quartile of Increasing Valuation Per Pupil

Quartile of Valuation /Pupil	Delayed Maintenance During Past Five Years				
	No	Percent	Yes	Percent	Total
Quartile 1	12	50	12	50	24
Quartile 2	11	45.8	13	54.2	24
Quartile 3	11	47.8	12	52.2	23
Quartile 4	9	39.1	14	60.9	23
Total	43	45.7	51	54.3	94

$\chi^2(3) = .621$, $p = .892$; contingency coefficient = .081
Quartile categories of Nebraska school districts when ranked by each district's total dollars of taxable property valuation divided by the number of pupils reported in average daily membership (ADM). Range of wealth per pupil by quartile: Quartile 1 = $140,000 to $477,065; Quartile 2 = $479,663 to $602,959; Quartile 3 = $614,058 to $803,162; Quartile 4 = $804,979 to $1,823,480.

Table 49

Frequency of Delayed Maintenance During the Past Five Years (2005 - 2009) by Percentage Categories of County Population Change in the 2008 County Census

Population Change Category	Delayed Maintenance During Past Five Years				
	No	Percent	Yes	Percent	Total
Major Decline	8	29.6	19	70.4	27
Decline	17	44.7	21	55.3	38
Growth	17	63	10	37	27
Major Growth	1	50	1	50	2
Total	43	45.7	51	54.3	94

$\chi^2(3) = 6.081$, $p = .108$; contingency coefficient = .246
Major Growth = A population increase of 10% or more from 2000 to 2008.
Growth = A population increase from 0% to 10% from 2000 to 2008.
Decline = A population decrease from 0% to -10% from 2000 to 2008.
Major Decline = A population decrease from -10% to -25% from 2000 to 2008.

Population changes within a school district's boundaries can be a major concern to a district superintendent and affects the budget because of the diminishing amount of state aid received base on student population. Superintendents responded to this question and their responses were sorted into the Population Change Category index. Superintendents from counties with a major decline of population had the highest percent of delayed maintenance (70%). The highest percent of superintendents who did not delay maintenance due to population changes were located in counties that had seen growth since 2000. The two districts in the major growth category stated that they either delayed or proceeded with maintenance to their facilities. While there was no significant relationship in this index, the effect of the relationship was moderate.

Superintendent Questionnaire – Question 10

"Do your present facilities limit your response to the current call for restructuring or the installation of new instructional programs you believe desirable?" (Yes or No).

A similar question was posed to building principals in the last section. School facilities, in order to meet the demands of the instructional program, may require updating. To analyze if superintendents considered their facilities as limiting the opportunities to restructure or install new educational programs and if there were differences between responses in different categories, these results were sorted into the three analysis indices.

Table 50 displays the results when the opinions of superintendents concerning their perceptions about the limitations of their facilities were sorted and analyzed by the Class index. Fifty-one percent of the superintendents perceived their facilities as limiting the restructuring of instructional programs in their particular district. Although the percentage of the responses was nearly equal, the application of the chi square Goodness-Of-Fit found a level of significance when sorted by the Class index.

The next index used to analyze superintendents' opinions about the limiting factors of their facilities when attempting to restructure the instructional program was Quartile of Valuation per Pupil. The results displayed in Table 51 demonstrates that the higher the wealth of a district, the lower the perception of the superintendent about the limitations of their facilities. The percentage of Quartile 4 superintendents who did not perceive their facilities as limiting almost matched the percentage of Quartile 1 superintendents who did perceive their structures as limiting. There was no level of significance found in this index and the effect size was considered small.

Table 50

Number of Superintendents Who Perceived Facilities Limited Restructuring of Instructional Programs by Class of School District

District Class	Limited Restructuring of Instructional Programs				
	No	Percent	Yes	Percent	Total
III	46	48.9	48	51.1	94
Total	46	48.9	48	51.1	94

$\chi^2(1) = .043$, $p = .837$
Class II = 1,000 or less inhabitants.
Class III = 1,000 to 100,000 inhabitants.
Class IV = 100,000 to 250,000 inhabitants.
Class V = 250,000 or more inhabitants

Table 51

Number of Superintendents Who Perceived Facilities Limited Restructuring of Instructional Programs by Quartile of Increasing Valuation Per Pupil

Quartile of Valuation /Pupil	Limited Restructuring of Instructional Programs				
	No	Percent	Yes	Percent	Total
Quartile 1	9	37.5	15	62.5	24
Quartile 2	10	41.7	14	58.3	24
Quartile 3	13	56.5	10	43.5	23
Quartile 4	14	60.9	9	39.1	23
Total	46	48.9	48	51.1	94

$\chi^2(3) = 3.604$, $p = .308$; contingency coefficient = .192
Quartile categories of Nebraska school districts when ranked by each district's total dollars of taxable property valuation divided by the number of pupils reported in average daily membership (ADM). Range of wealth per pupil by quartile: Quartile 1 = $140,000 to $477,065; Quartile 2 = $479,663 to $602,959; Quartile 3 = $614,058 to $803,162; Quartile 4 = $804,979 to $1,823,480.

The responses of Superintendents to question 10 were then sorted into the Population Change Category index. This index provided a nearly 50 – 50 split between superintendents who perceived their facilities as limiting the restructure of instructional programs in their districts and those with a different perception. The differences from this analysis were not considered significant.

Table 52

Number of Superintendents Who Perceived Facilities Limited Restructuring of Instructional Programs by Percentage Categories of County Population Change in the 2008 County Census

Population Change Category	Limited Restructuring of Instructional Programs				
	No	Percent	Yes	Percent	Total
Major Decline	13	48.1	14	51.9	27
Decline	19	50	19	50	38
Growth	13	48.1	14	51.9	27
Major Growth	1	50	1	50	2
Total	46	48.9	48	51.1	94

$\chi^2(3) = .032$, $p = .999$; contingency coefficient = .018
Major Growth = A population increase of 10% or more from 2000 to 2008.
Growth = A population increase from 0% to 10% from 2000 to 2008.
Decline = A population decrease from 0% to -10% from 2000 to 2008.
Major Decline = A population decrease from -10% to -25% from 2000 to 2008.

Superintendent Questionnaire – Question 11

"Do your present facilities inhibit your full use of technological advancements?" (Yes or No).

In his 1993 study, Pool stated that instructional programs increasingly called for the use of the new electronic technologies. The same may be applied to the instructional programs of 2009 and into the future. District superintendents offered their opinions about the capability of the facilities in their respective districts to meet the demand of current technologies. Their opinions were sorted and categorized according to the indices of this study.

Table 53 reflects the attitudes of participating Class III superintendents towards the capability of facilities to accommodate the use of technology. Approximately 56% of the superintendents claimed that the facilities in their respective districts could accommodate the use of technology. The Chi-Square Goodness-Of-Fit test results did not provide a significant difference in the relationship between the district facilities that accommodate the use of technology and those that did not.

Table 53

Number of Superintendents Who Perceived Facilities Inhibited the Use of Technology by Class of School District

District Class	Facilities Inhibited Use of Technology				
	No	Percent	Yes	Percent	Total
III	53	56.4	41	43.6	94
Total	53	56.4	41	43.6	94

$\chi^2(1) = 1.532$, $p = .216$
Class II = 1,000 or less inhabitants.
Class III = 1,000 to 100,000 inhabitants.
Class IV = 100,000 to 250,000 inhabitants.
Class V = 250,000 or more inhabitants

The next index, valuation per pupil, measured whether the wealth of a district had any impact on a district's capability to accommodate the use of technology. Seventy percent of superintendents of the wealthiest districts, Quartile 4, opined that their buildings were accommodating the use of technology. However, district supervisors from Quartile 2 claimed that their structures inhibited the use of technology (54.2%). District CEO's from Quartile 1 split on whether their facilities inhibited the use of technology. The Chi-Square test did not find a level of significance with a small effect size. The results are displayed in Table 54.

Table 54

Frequency of Superintendents Who Perceived Facilities Inhibited the Use of Technology by Quartile of Increasing Valuations Per Pupil

Quartile of Valuation /Pupil	Facilities Inhibited Use of Technology				
	No	Percent	Yes	Percent	Total
Quartile 1	12	50	12	50	24
Quartile 2	11	45.8	13	54.2	24
Quartile 3	14	60.9	9	39.1	23
Quartile 4	16	69.3	7	30.4	23
Total	53	56.4	41	43.6	94

$\chi^2(3) = 3.297$, $p = .348$; contingency coefficient = .184
Quartile categories of Class III school districts when ranked by each district's total dollars of taxable property valuation divided by the number of pupils reported in average daily membership (ADM). Range of wealth per pupil by quartile: Quartile 1 = $140,000 to $477,065; Quartile 2 = $479,663 to $602,959; Quartile 3 = $614,058 to $803,162; Quartile 4 = $804,979 to $1,823,480.

When school districts are affected by a decline in student population concerns are raised about a district's ability to maintain areas like technology. To study this concern,

the responses of superintendents were sorted and analyzed according to the index Population Change. Each superintendent's response was placed in a category by the population change of the county of the reporting district. Their opinions are displayed in Table 55.

Table 55

Frequency of Superintendents Who Perceived Facilities Inhibited the Use of Technology by Percentage Categories of County Population Change in the 2008 County Census

Population Change Category	Facilities Inhibited Use of Technology				
	No	Percent	Yes	Percent	Total
Major Decline	15	55.6	12	44.4	27
Decline	21	55.3	17	44.7	38
Growth	15	55.6	12	44.4	27
Major Growth	2	100	0	0	2
Total	53	56.4	41	43.6	94

$\chi^2(3) = 1.582$, $p = .664$; contingency coefficient = .129
Major Growth = A population increase of 10% or more from 2000 to 2008.
Growth = A population increase from 0% to 10% from 2000 to 2008.
Decline = A population decrease from 0% to -10% from 2000 to 2008.
Major Decline = A population decrease from -10% to -25% from 2000 to 2008.

Superintendents in all categories of Population Change stated that the buildings of their respective districts did not inhibit the use of technology. There was no level of significance found in this index. The effect of the relationship was small.

Superintendent Questionnaire – Question 12

"Has the attention to asbestos removal, radon checks, handicapped accessibility, or other required work prevented or delayed desired remodeling, maintenance, or new construction?" (Yes or No).

Maintaining buildings that are free of safety hazards for staff members and students is a continuing concern for district administrators. Complying with federal and state mandates that regulate safety checks, accessibility to handicapped individuals and asbestos abatement can be costly. To ascertain if there were differences in categories of school districts whose superintendents reported their districts' attention to these mandated projects preventing remodeling or new construction, the superintendents' responses were sorted into the indices of this study for analysis.

In order to review the answers of the participating Class III superintendents, the Chi-Square Goodness-Of-Fit test was employed. The majority of the Class III superintendents stated that attention to radon, asbestos, and ADA mandates did not prevent their district from addressing other facility concerns. There was a level of significance when responses were analyzed by the Class index. The results of this analysis are presented in Table 56.

To determine if attention to required safety checks delayed other maintenance projects in the superintendents' opinions, when the wealth of a district was examined, responses were sorted into the Quartile of Valuation per Pupil index. The superintendents of the wealthiest districts had a higher percentage of responses (56.5%) that claimed that attention to radon, asbestos, and ADA requirements did delay other maintenance projects.

Table 56

Number of Superintendents Who Reported Attention to Radon, Asbestos, and ADA Prevented Remodeling by Class of School District

District Class	Delayed Maintenance				
	No	Percent	Yes	Percent	Total
III	57	60.6	37	39.4	94
Total	57	60.6	37	39.4	94

$\chi^2(1) = 4.255$, $p = .039$
Class II = 1,000 or less inhabitants.
Class III = 1,000 to 100,000 inhabitants.
Class IV = 100,000 to 250,000 inhabitants.
Class V = 250,000 or more inhabitants

Approximately two-thirds of the superintendents in the other wealth categories opined that attention to the aforementioned safety checks did not delay other maintenance projects. The effect size of the responses was small with no level of significance found. The results of this index are displayed in Table 57.

The next index, Population Change Category, was used to ascertain if there was a significant level of difference in superintendents' opinions about safety requirements delaying other maintenance projects in their districts. Superintendents from each of the population classifications reported that the attention paid to mandated safety requirements did not delay other maintenance projects. Forty-five percent of the superintendents whose counties registered a major decline or decline in population opined that projects were delayed. One-third of the district CEO's from the Growth category made the same claim. The findings did not establish a significant difference in responses, but the effect of the relationship was considered small.

Table 57

Number of Superintendents Who Reported Attention to Radon, Asbestos, and ADA Prevented Remodeling by Quartile of Increasing Valuation Per Pupil

Quartile of Valuation /Pupil	Delayed Maintenance				
	No	Percent	Yes	Percent	Total
Quartile 1	16	66.7	8	33.3	24
Quartile 2	16	66.7	8	33.3	24
Quartile 3	15	65.2	8	34.8	23
Quartile 4	10	43.5	13	56.5	23
Total	57	60.6	37	39.4	94

$\chi^2(3) = 3.770$, $p = .287$; contingency coefficient = .196
Quartile categories of Nebraska school districts when ranked by each district's total dollars of taxable property valuation divided by the number of pupils reported in average daily membership (ADM). Range of wealth per pupil by quartile: Quartile 1 = $140,000 to $477,065; Quartile 2 = $479,663 to $602,959; Quartile 3 = $614,058 to $803,162; Quartile 4 = $804,979 to $1,823,480.

Table 58

Number of Superintendents Who Reported Attention to Radon, Asbestos, and ADA Prevented Remodeling by Percentage Categories of County Population Change in the 2008 County Census

Population Change Category	Delayed Maintenance				
	No	Percent	Yes	Percent	Total
Major Decline	15	55.6	12	44.4	27
Decline	22	57.9	16	42.1	38
Growth	18	66.7	9	33.3	27
Major Growth	2	100	0	0	2
Total	57	60.6	37	39.4	94

$\chi^2(3) = 2.121$, $p = .548$; contingency coefficient = .149
Major Growth = A population increase of 10% or more from 2000 to 2008.
Growth = A population increase from 0% to 10% from 2000 to 2008.
Decline = A population decrease from 0% to -10% from 2000 to 2008.
Major Decline = A population decrease from -10% to -25% from 2000 to 2008.

Superintendent Questionnaire – Question 15

"In this district, indicate the number attendance sites which are: …" (Permanent Sites or Portable Sites).

Portable buildings have been considered as a reasonable option for school districts when faced with overcrowded conditions, rapid population growth, or when a facility has to undergo long-term repair or does not meet safety or accessibility regulations. In order to verify if there was a difference between categories of school using this type of instructional facility, the superintendents' responses to question 15 were sorted into the four indices for analysis.

The Class III classification of Nebraska schools contains a wide variety of district sizes. For instance, many of the districts in the Omaha metropolitan area are considered Class III districts. The Omaha Public School District is the state's only Class V district. On the end of the size scale a school located in the western panhandle may be deemed a Class III school as well. In order to determine is the was a significant difference in responses related to question 15, the answers offered by Class III superintendents were sorted into the Class index. Eighty-four percent of the superintendents responding to this inquiry stated that their districts do not utilize portable facilities. The proportional relationship between the answer provided by the superintendents was significant.

The proportional differences of the numbers of districts reported as using portable facilities by Quartile of Valuation per Pupil were not significant. At least 75% of the reporting districts did not utilize portable facilities. The effect of this significance was small. Class III districts with the lowest dollars of valuation per pupil claimed the highest

percent of portable facilities in use (25%). The data for this index is illustrated in Table 60.

The next index used to analyze the responses to question 15 was the Population Change Category. Responses were sorted into this index and then analyzed with a chi square test. The proportional difference was not found to be significant with a small effect size. The districts located in counties with growth, decline, and major decline each demonstrated little use of portable facilities. The results are displayed in Table 61.

Table 59

Frequency of the Utilization of Portable Facilities by Class of District

District Class	Utilization of Portable Facilities				
	No	Percent	Yes	Percent	Total
III	79	84	15	16	94
Total	79	84	15	16	94

$\chi^2(1) = 43.574$, $p < .001$
Class II = 1,000 or less inhabitants.
Class III = 1,000 to 100,000 inhabitants.
Class IV = 100,000 to 250,000 inhabitants.
Class V = 250,000 or more inhabitants

Table 60

Frequency of the Utilization of Portable Facilities by Quartile of Increasing Valuation Per Pupil

Quartile of Valuation /Pupil	Utilization of Portable Facilities				
	No	Percent	Yes	Percent	Total
Quartile 1	18	75	6	25	24
Quartile 2	20	83.3	4	16.7	24
Quartile 3	21	91.3	2	8.7	23
Quartile 4	20	87	3	13	23
Total	79	84	15	16	94

$\chi^2(3) = 2.522$, $p = .471$; contingency coefficient = .162
Quartile categories of Nebraska school districts when ranked by each district's total dollars of taxable property valuation divided by the number of pupils reported in average daily membership (ADM). Range of wealth per pupil by quartile: Quartile 1 = $140,000 to $477,065; Quartile 2 = $479,663 to $602,959; Quartile 3 = $614,058 to $803,162; Quartile 4 = $804,979 to $1,823,480.

Table 61

Frequency of the Utilization of Portable Facilities by Percentage Categories of County Population Change in the 2008 County Census

Population Change Category	Utilization of Portable Facilities				
	No	Percent	Yes	Percent	Total
Major Decline	23	85.2	4	14.8	27
Decline	31	81.6	7	18.4	38
Growth	23	85.2	4	14.8	27
Major Growth	2	100	0	0	2
Total	79	84	15	16	94

$\chi^2(3) = .604$, $p = .895$; contingency coefficient = .080
Major Growth = A population increase of 10% or more from 2000 to 2008.
Growth = A population increase from 0% to 10% from 2000 to 2008.
Decline = A population decrease from 0% to -10% from 2000 to 2008.
Major Decline = A population decrease from -10% to -25% from 2000 to 2008.

Summary

This section analyzed and discussed the non-fiscal questions of the superintendent's questionnaire. The opinions of the participating chief administrators of Nebraska school districts were sorted into the "Class", "Quartile of Valuation per Pupil", and "Population Change Category" indices. The superintendents' responses were analyzed for proportional differences using the chi square. The chi square Goodness-Of-Fit test was used for analyzing the Class index. The effect size of these differences was determined by calculating a contingency coefficient for each chi square. The descriptive analysis and significant results were presented and discussed for each question.

Analysis of Superintendents' Assessment of Their Districts' Fiscal Capacity to Meet Current and Future Facility Needs

Nebraska school districts rely on property taxes to fund updates to existing facilities or to create new buildings. A district may levy against the property valuation to place money in the special building fund or to pay off a bond debt that was approved by the patrons of the district. This reliance on property taxes, given that property taxes also support other section of a district's total budget, has been a concern for many district officials throughout the state. To provide for a consistent analysis of responses, the information collected on the survey instrument was used to describe the fiscal condition of participating Nebraska Class III school districts in relationship to the same indices used to describe previous facility data.

Participating Class III superintendents were requested to provide information concerning their special building fund levy (Question 4), if the district had bond debt and, if so, the amount of the debt (Question 5), the consideration of a bond issue (Question 6),

their perception of the success of a bond issue (Question 7), and the impending need of a bond issue (Question 8). This section concludes with an analysis and discussion of a district's fiscal capacity to meet facility need over the next ten years (Question 13).

Superintendent Questionnaire – Question 4

"If you maintain a current special building fund, what is the levy rate for that purpose in your 2008 – 2009 budget?" (levy rate).

This item was a dual question asking for an indication of the existence of a special building fund levy and, if there was a levy, the rate of that levy. In Nebraska, the assessment of a special building or bond fund levy upon the property tax base of the district was permitted by law. The approval of the special building or bond fund by the board of education or by a vote of the patrons of the school district provided for funds to be set aside for special or future building projects. Because of contrasts in the valuation of the property within the boundaries of the school district, the same levy rate in two districts generated two different amounts of revenue to be set aside for the districts' building projects.

In order to ascertain if there was a difference in responses of superintendents who reported employing a special building fund or not, the responses were sorted into the Class index for analysis. Of the participating Class III school superintendents who offered a response to question 4, 75% of the superintendents reported the use of a special building fund levy. The chi square Goodness-Of-Fit test demonstrated a significant difference in relation to the responses of Class III superintendents. The data is presented in Table 62.

Table 62

Number and Percent of Nebraska School Districts Using a Building Fund Levy During the 2008 - 2009 School Year by District Class

District Class	Employing Special Building Fund Levy				
	No	Percent	Yes	Percent	Total
III	23	24.5	71	75.5	94
Total	23	24.5	71	75.5	94

$\chi^2(1) = 24.511$, $p < .001$
Class II = 1,000 or less inhabitants.
Class III = 1,000 to 100,000 inhabitants.
Class IV = 100,000 to 250,000 inhabitants.
Class V = 250,000 or more inhabitants

The responses of participating superintendents were sorted into the Quartile of Valuation per Pupil index to examine if a significant difference existed based on the wealth of a district. The tabulation of responses by quartile of wealth are found in Table 63. At least two-thirds of the superintendents in the four quartiles report the use of the special building fund levy to address facility needs. The highest percent of a single quartile (83.3%) was noted in Quartile 2. The wealthiest districts, or Quartile 4, had the highest percent of districts that were not using the special building fund levy at the time of this study. The chi square test concluded that a level of significance did not exist. The effect of the relationship was small.

The Population Change Category was the final index into which responses to question 4 were sorted . Approximately 75% of the superintendents responding whose districts were classified as Major Decline, Decline, or Growth of population reported the

Table 63

Number and Percent of Nebraska School Districts Using a Building Fund Levy During the 2008 - 2009 School Year by Quartile of Increasing Valuation Per Pupil

Quartile of Valuation /Pupil	Employing Special Building Fund Levy				
	No	Percent	Yes	Percent	Total
Quartile 1	8	33.3	16	66.7	24
Quartile 2	3	12.5	21	87.5	24
Quartile 3	5	21.7	18	78.3	23
Quartile 4	7	30.4	16	69.6	23
Total	23	24.5	71	75.5	94

$\chi^2(3) = 3.416$, $p = .332$; contingency coefficient = .187
Quartile categories of Nebraska school districts when ranked by each district's total dollars of taxable property valuation divided by the number of pupils reported in average daily membership (ADM). Range of wealth per pupil by quartile: Quartile 1 = $140,000 to $477,065; Quartile 2 = $479,663 to $602,959; Quartile 3 = $614,058 to $803,162; Quartile 4 = $804,979 to $1,823,480.

usage of the special building fund levy. The two superintendents represented in the Major Growth category were split, with one reporting the use of the building levy while the other reported that this levy was not in use at this time. There was a small effect in the relationship of responses. The results of this index are displayed in Table 64.

The second part of question 4 was to examine both the dissimilarity of the reported special building fund levies between the predetermined categories of school districts and the variation of the special building fund levies assessed within these categories. Tables were created to illustrate the frequency of the superintendents who reported using a levy, along with the mean, maximum, minimum, and the median reported special building fund levy for each district category within the descriptive index.

Table 64

Number and Percent of Nebraska School Districts Using a Building Fund Levy During the 2008 - 2009 School Year by Percentage Categories of County Population Change in the 2008 County Census

Population Change Category	Employing Special Building Fund Levy				
	No	Percent	Yes	Percent	Total
Major Decline	6	22.2	21	77.8	27
Decline	8	21.1	30	78.9	38
Growth	8	29.6	19	70.3	27
Major Growth	1	50	1	50	2
Total	23	24.5	71	75.5	94

$\chi^2(3) = 1.408$, $p = .704$; contingency coefficient = .121
Major Growth = A population increase of 10% or more from 2000 to 2008.
Growth = A population increase from 0% to 10% from 2000 to 2008.
Decline = A population decrease from 0% to -10% from 2000 to 2008.
Major Decline = A population decrease from -10% to -25% from 2000 to 2008.

Table 65 illustrates the central tendencies of the special building fund as reported by the participating superintendents. Seventy-one of the ninety-four superintendents reported utilizing the special building fund levy. The average levy for the Class III districts was $0.0396. The median levy reported was $0.0344.

Table 66 displays the central tendencies of the special building fund levy when sorted by Quartile of Increasing Valuation per Pupil. Besides the levy reported in Quartile 1, the average levy rate increased as the wealth of the district increased. However, the frequency of use decreased as district wealth increased.

Table 65

Central Tendency of Building Fund Levies During the 2008 - 2009 School Year by Class of District

District Class	Frequency	Mean	Maximum	Minimum	Median
III	71	0.0396	0.1317	0.0060	0.0344

Class II = 1,000 or less inhabitants.
Class III = 1,000 to 100,000 inhabitants.
Class IV = 100,000 to 250,000 inhabitants.
Class V = 250,000 or more inhabitants

Table 66

Central Tendency of Building Fund Levies During the 2008 - 2009 School Year by Quartile of Increasing Valuation Per Pupil

Quartile of Valuation /Pupil	Frequency	Mean	Maximum	Minimum	Median
Quartile 1	16	0.0496	0.1317	0.0060	0.0422
Quartile 2	21	0.0333	0.0974	0.0061	0.0320
Quartile 3	18	0.0383	0.978	0.0098	0.0314
Quartile 4	16	0.0394	0.0855	0.0067	0.0349

Quartile categories of Nebraska school districts when ranked by each district's total dollars of taxable property valuation divided by the number of pupils reported in average daily membership (ADM). Range of wealth per pupil by quartile: Quartile 1 = $140,000 to $477,065; Quartile 2 = $479,663 to $602,959; Quartile 3 = $614,058 to $803,162; Quartile 4 = $804,979 to $1,823,480.

Table 67 presents the central tendencies of the special building fund levy when sorted by the Population Change classification. Besides the levy rate reported by the lone district in the Major Growth category, the average rate for the remaining population classes increase as population increased. The Growth category reported the highest levy rate of $0.1317 while the lowest rate ($0.006) was reported in the Decline category. The

Table 67

Central Tendency of Building Fund Levies During the 2008 - 2009 School Year by Percentage Categories of County Population Change in the 2008 County Census

Population Change Category	Frequency	Mean	Maximum	Minimum	Median
Major Decline	21	0.0333	0.0617	0.0068	0.0353
Decline	30	0.0375	0.0978	0.006	0.031
Growth	19	0.0513	0.1317	0.0088	0.0451
Major Growth	1	0.0130	0.0130	0.0130	0.0130

Major Growth = A population increase of 10% or more from 2000 to 2008.
Growth = A population increase from .01% to 9% from 2000 to 2008.
Decline = A population decrease from 0% to -9% from 2000 to 2008.
Major Decline = A population decrease from -10% to -25% from 2000 to 2008.

districts experiencing a declining population base reported the highest number of school systems utilizing the special building fund levy.

Superintendent Questionnaire – Question 5

"What is your bonded indebtedness?" (dollars of bond debt).

Class III superintendents were asked to report their district's current bond debt. The analysis of this question parallels that of question 4. The existence of a bond debt amount was used to create an indicator that was used for the analysis of districts with bond debt by descriptive indices. The reported bond debt was used to calculate the central tendency of amounts of bond debt and presented by categories of districts within each index category.

Class III superintendents who participated in this study offered their responses to question 5. In order to ascertain if the was a significant difference between responses the chi square Goodness-Of-Fit was employed to make this determination. The results of the

test, shown in Table 68, were not significant. Sixty percent of the responding superintendents stated their district had bond debt. The remaining 40% of districts claimed to be free of bond debt.

Table 68

Number and Percent of School Districts Reporting a Bond Debt During the 2008 - 2009 School Year by Class of District

District Class	Bond Debt				
	No	Percent	Yes	Percent	Total
III	38	40.4	56	59.6	94
Total	38	40.4	56	59.6	94

$\chi^2(1) = 3.447$, $p = .063$
Class II = 1,000 or less inhabitants.
Class III = 1,000 to 100,000 inhabitants.
Class IV = 100,000 to 250,000 inhabitants.
Class V = 250,000 or more inhabitants

Next, the superintendents who reported bond debt were sorted into the Quartile of Valuation per Pupil index. The results of this analysis are illustrated in Table 69. The two quartiles with the lowest dollars of valuation reported the highest percentage of districts with bond debt. In comparison, the two wealthiest quartiles reported the highest percentage of districts free from bond debt. The effect of the proportional relationship was considered moderate with no significant difference revealed.

To determine if a significant difference existed between responses of superintendents who reported bond debt, answers were sorted into the Population Change Category index. A significant difference was found after analysis. School systems located

Table 69

Number and Percent of School Districts Reporting a Bond Debt During the 2008 -2009 School Year by Quartile of Increasing Valuation Per Pupil

Quartile of Valuation /Pupil	Bond Debt				
	No	Percent	Yes	Percent	Total
Quartile 1	8	33.3	16	66.7	24
Quartile 2	7	29.2	17	70.8	24
Quartile 3	12	52.2	11	47.8	23
Quartile 4	11	47.8	12	52.2	23
Total	38	40.4	56	59.6	94

$\chi^2(3) = 3.606$, $p = .307$; contingency coefficient = .192
Quartile categories of Nebraska school districts when ranked by each district's total dollars of taxable property valuation divided by the number of pupils reported in average daily membership (ADM). Range of wealth per pupil by quartile: Quartile 1 = $140,000 to $477,065; Quartile 2 = $479,663 to $602,959; Quartile 3 = $614,058 to $803,162; Quartile 4 = $804,979 to $1,823,480.

in counties with a decreasing population base reported that fifty percent of those districts were free from bond debt. Districts whose counties had shown growth (81.5%) and major growth (100%) reported a higher percentage of districts having bond debt. The data are presented in Table 70.

The second portion of the analysis of question 5 addressed the central tendency of the amounts of bond indebtedness. To conduct the analysis the data were sorted into the categories of the study's descriptive indices.

Of the participating Class III superintendents, fifty-six reported bond debt. Table 68 reviews the central tendency of the reported amounts of debt. The average amount of bond debt for the reporting districts was 7.40 million dollars. The median was reported

Table 70

Number and Percent of School Districts Reporting a Bond Debt During the 2008 - 2009 School Year by Percentage Categories of County Population Change in the 2008 County Census

Population Change Category	Bond Debt				
	No	Percent	Yes	Percent	Total
Major Decline	13	48.1	14	51.9	27
Decline	20	52.6	18	47.4	38
Growth	5	18.5	22	81.5	27
Major Growth	0	0	2	100	2
Total	38	40.4	56	59.6	94

$\chi^2(3) = 9.757$, $p = .021$; contingency coefficient = .307
Major Growth = A population increase of 10% or more from 2000 to 2008.
Growth = A population increase from 0% to 10% from 2000 to 2008.
Decline = A population decrease from 0% to -10% from 2000 to 2008.
Major Decline = A population decrease from -10% to -25% from 2000 to 2008.

at2.78 million dollars. The highest amount of bond debt amounted to approximately 57 million dollars with the lowest amount reported to be $700,000 dollars. Table 71 displays the results of the Class index analysis.

Table 71

Central Tendency of Bond Debt During the 2008 - 2009 School Year by Class of District

District Class*	Frequency	Mean	Maximum	Minimum	Median
III	56	7.40	57.38	0.07	2.78

* reported in millions of dollars
Class II = 1,000 or less inhabitants.
Class III = 1,000 to 100,000 inhabitants.
Class IV = 100,000 to 250,000 inhabitants.
Class V = 250,000 or more inhabitants

Table 72 displays the central tendencies of superintendents reporting bond debt when sorted by the Quartile of Valuation per Pupil index. The quartile with the fewest dollars per valuation had the highest reported level of debt (57.38 million). The mean for Quartile 1 was 18.21 million dollars. Districts with bond debt within Quartile 4 reported the lowest average of bond debt, with the maximum debt recorded (6.5 million).

Table 72

Central Tendency of Bond Debt During the 2008 - 2009 School Year by Quartile of Increasing Valuation Per Pupil

Quartile of Valuation /Pupil*	Frequency	Mean	Maximum	Minimum	Median
Quartile 1	16	18.21	57.38	0.64	7.36
Quartile 2	17	3.98	18.33	0.28	3.20
Quartile 3	11	2.92	8.97	0.19	2.04
Quartile 4	12	1.95	6.50	0.07	1.21

* reported in millions of dollars
Quartile categories of Nebraska school districts when ranked by each district's total dollars of taxable property valuation divided by the number of pupils reported in average daily membership (ADM). Range of wealth per pupil by quartile: Quartile 1 = $140,000 to $477,065; Quartile 2 = $479,663 to $602,959; Quartile 3 = $614,058 to $803,162; Quartile 4 = $804,979 to $1,823,480.

Participating Class III districts reporting bond debt were categorized according to Population Change. These figures are presented in Table 73. Districts who were located in counties with a major decline of population expressed the lowest average of debt (1.35 million). Districts located in counties showing growth displayed the highest averages of debt. As the population of the county increased, the median of the reported bond debt increased, as well.

Table 73

Central Tendency of Bond Debt During the 2008 - 2009 School Year by Percentage Categories of County Population Change in the 2008 County Census

Population Change Category*	Frequency	Mean	Maximum	Minimum	Median
Major Decline	16	1.35	6.50	0.07	0.94
Decline	16	3.58	8.00	0.59	2.92
Growth	22	14.46	57.38	0.67	4.85
Major Growth	2	8.68	13.46	3.90	8.68

* reported in millions of dollars
Major Growth = A population increase of 10% or more from 2000 to 2008.
Growth = A population increase from 0% to 10% from 2000 to 2008.
Decline = A population decrease from 0% to -10% from 2000 to 2008.
Major Decline = A population decrease from -10% to -25% from 2000 to 2008.

Superintendent Questionnaire – Question 6

"Do you anticipate the necessity of a bond issue?" (Yes or No).

The superintendents' responses to this survey question were used to categorize the school districts in which a construction project was anticipated. This response also established that the fiscal requirement to fund this facility project would be through a building bond approved by a referendum vote of the district's registered voters. These responses were analyzed and reported by organizing them into the different descriptive indices and categories used in this study.

The responses of Class III superintendents' were sorted into the Class index for analysis. Table 74 presents the results of such analysis. The chi square Goodness-Of-Fit test found that the difference between responses was significant. Approximately 71% of the participating superintendents anticipated a bond issue in the offing.

Table 74

Number and Percent of Superintendents Who Anticipated a Bond Issue by Class of District

District Class	Anticipated Bond Issue				
	No	Percent	Yes	Percent	Total
III	67	71.2	27	28.9	94
Total	67	71.2	27	28.9	94

$\chi^2(1) = 17.021$, $p < .001$
Class II = 1,000 or less inhabitants.
Class III = 1,000 to 100,000 inhabitants.
Class IV = 100,000 to 250,000 inhabitants.
Class V = 250,000 or more inhabitants

The wealth of a district was the next used to sort and analyze the responses of Class III superintendents about the need for a bond issue. The replies were placed into the Quartile of Valuation per Pupil index. The proportional relationship of the responses was determined to be significant; the effect of the relationship was moderate. At least 80% of the superintendent in the upper wealth quartiles did not anticipate the need for a bond issue. In contrast, 42% of superintendents in the lower quartiles of wealth anticipated the necessity of bond referendum. The results are displayed in Table 75.

The final index to examine the responses of participating superintendents to question 6 was the Population Change Category. The responses of the superintendents were placed into the various population categories and analyzed. A significant difference was found in the relationship between the answers. The effect of this relationship was considered large. Although the majority of superintendents did not anticipate the need for

Table 75

Number and Percent of Superintendents Who Anticipated a Bond Issue by Quartile of Increasing Valuation Per Pupil

Quartile of Valuation /Pupil	Anticipated Bond Issue				
	No	Percent	Yes	Percent	Total
Quartile 1	14	58.3	10	41.7	24
Quartile 2	14	58.3	10	41.7	24
Quartile 3	19	82.6	4	17.4	23
Quartile 4	20	87	3	13	23
Total	67	71.3	27	28.7	94

$\chi^2(3) = 8.132$, $p = .043$; contingency coefficient = .282
Quartile categories of Nebraska school districts when ranked by each district's total dollars of taxable property valuation divided by the number of pupils reported in average daily membership (ADM). Range of wealth per pupil by quartile: Quartile 1 = $140,000 to $477,065; Quartile 2 = $479,663 to $602,959; Quartile 3 = $614,058 to $803,162; Quartile 4 = $804,979 to $1,823,480.

a bond issue, the number of superintendents who did anticipate a bond issue rose as the population of the counties increased. These results are demonstrated in Table 76.

Superintendent Questionnaire – Question 7

"If yes, do you feel this anticipated bond issue would be successful?" (Yes or No).

The superintendents' replies to question 7 were used to further categorize the superintendents' opinions regarding their school district's anticipated construction project. Responses were used to establish a degree of optimism for successful approval of the building bond referendum by a district's registered voters. These responses were analyzed and reported by organizing them into the different indices and categories used in this study.

Table 76

Number and Percent of Superintendents Who Anticipated a Bond Issue by Percentage Categories of County Population Change in the 2008 County Census

Population Change Category	Anticipated Bond Issue				
	No	Percent	Yes	Percent	Total
Major Decline	23	85.2	4	14.8	27
Decline	28	73.7	10	26.3	38
Growth	16	59.3	11	40.7	27
Major Growth	0	0	2	100	2
Total	67	71.3	27	28.7	94

$\chi^2(3) = 9.526$, $p = .023$; contingency coefficient = .303
Major Growth = A population increase of 10% or more from 2000 to 2008.
Growth = A population increase from 0% to 10% from 2000 to 2008.
Decline = A population decrease from 0% to -10% from 2000 to 2008.
Major Decline = A population decrease from -10% to -25% from 2000 to 2008.

The responses of the Class III superintendents to question 7 were sorted into the Class index. Out of the 94 superintendents who opted to participate in this study, 26 noted that their school system would need to place a bond referendum before the registered voters of their district. The results are illustrated in Table 77. The replies were analyzed with the chi square Goodness-Of-Fit test. Seventy-three percent of the respondents predicted a successful bond referendum when presented to the registered voters of their districts. There was a significant difference in the proportional relationship.

Table 78 displays the results of the responses of the chief executives when sorted and analyzed into the Quartile of Valuation per Pupil. Of the 26 superintendents who anticipated a bond issue, ten were from districts with the fewest dollars of valuation per

Table 77

Frequency of Predicted Success by Superintendents Who Anticipated a Bond Issue by Class of District

District Class	Success of Bond Issue				
	No	Percent	Yes	Percent	Total
III	7	27	19	73	26
Total	7	27	19	73	26

$\chi^2(1) = 5.538$, $p = .019$
Class II = 1,000 or less inhabitants.
Class III = 1,000 to 100,000 inhabitants.
Class IV = 100,000 to 250,000 inhabitants.
Class V = 250,000 or more inhabitants

Table 78

Frequency of Predicted Success by Superintendents Who Anticipated a Bond Issue by Quartile of Increasing Valuation Per Pupil

Quartile of Valuation /Pupil	Success of Bond Issue				
	No	Percent	Yes	Percent	Total
Quartile 1	2	20	8	80	10
Quartile 2	4	44.4	5	55.6	9
Quartile 3	0	0	4	100	4
Quartile 4	1	33.3	2	66.7	3
Total	7	26.9	19	73.1	26

$\chi^2(3) = 3.184$, $p = .364$; contingency coefficient = .330
Quartile categories of Nebraska school districts when ranked by each district's total dollars of taxable property valuation divided by the number of pupils reported in average daily membership (ADM). Range of wealth per pupil by quartile: Quartile 1 = $140,000 to $477,065; Quartile 2 = $479,663 to $602,959; Quartile 3 = $614,058 to $803,162; Quartile 4 = $804,979 to $1,823,480.

pupil. Eighty percent of the Quartile 1 district superintendents predicted a successful bond referendum when placed before the registered voters for their consideration. Overall, approximately 75% of district superintendents predicted success with a bond issue. The effect of this relationship was large, but there was no level of significance.

The Population Change Category was the final index into which the superintendents' replies were sorted and evaluated. The superintendents whose districts were located in counties that had registered a decline or major decline in population predicted that at least two-thirds of the school systems would have a successful bond election. The chi square test did not reveal a significant difference in responses though the effect size was moderate. The results of this index are displayed in Table 79.

Table 79

Frequency of Predicted Success by Superintendents Who Anticipated a Bond Issue by Percentage Categories of County Population Change in the 2008 County Census

Population Change Category	Success of Bond Issue				
	No	Percent	Yes	Percent	Total
Major Decline	1	25	3	75	4
Decline	3	33.3	6	66.7	9
Growth	3	27.3	8	72.7	11
Major Growth	0	0	2	100	2
Total	7	26.9	19	73.1	26

$\chi^2(3) = .933$, $p = .817$; contingency coefficient = .186
Major Growth = A population increase of 10% or more from 2000 to 2008.
Growth = A population increase from 0% to 10% from 2000 to 2008.
Decline = A population decrease from 0% to -10% from 2000 to 2008.
Major Decline = A population decrease from -10% to -25% from 2000 to 2008.

Superintendent Questionnaire – Question 8

"If yes, in what year would you expect it (the bond referendum) to occur? (Year).

Superintendents' responses to survey question 8 were used to clarify further the opinion regarding the future school bond referendum. The superintendents were asked to provide the year of the anticipated bond issue. These responses were interpreted as the degree of urgency for the bond issue. The closer the year to the 2008 – 2009 school year the more urgent the perceived need for the bond referendum. The reported dates were categorized according to the formula: the time category was Immediate if the reported years were 2008 – 2009; Imminent if the reported years were 2010 – 2014; and Future if the reported years were 2015 and beyond. Only the responses from superintendents in districts in which a bond issue had previously been anticipated were categorized.

The responses of the superintendents who had anticipated a bond issue were sorted into the Class index and analyzed by the chi square Goodness-Of-Fit test for a level of significance. Twenty-eight percent of the responding superintendents expressed an immediate need for a bond issue. Ten district leaders (47.6%) disclosed that placing a bond referendum before the voters was imminent and 23.8 of the superintendents felt that a bond issue was at least five years away. The results of this index are displayed in Table 80.

The responses concerning the urgency of an anticipated bond issue were sorted into the index Quartile of Valuation per Pupil to ascertain if significant differences existed for district in increasing quartiles of relative wealth. Seventy-five percent of the Quartile 3 superintendents felt that the need for a bond issue was immediate while the

Table 80

Urgency for Presentation of Bond Issue as Perceived by Superintendents of Districts Anticipating Bond Issues by Time Reference Categories and Class of District

District Class	Immediate*	Percent	Imminent*	Percent	Future*	Percent
III	6	28.6	10	47.6	5	23.8

Class II = 1,000 or less inhabitants.
Class III = 1,000 to 100,000 inhabitants.
Class IV = 100,000 to 250,000 inhabitants.
Class V = 250,000 or more inhabitants
* Immediate = a bond issue was anticipated in the years 2008 - 2009; Imminent = a bond issue was anticipated in the years 2010 - 2014; and Future = a bond issue was anticipated in the year 2015 and beyond.

same percentage of Quartile 1 district leaders thought that a bond referendum was imminent. Table 81 illustrates the results of this index.

Table 81

Urgency for Presentation of Bond Issue as Perceived by Nebraska Superintendents of Districts Anticipating Bond Issues by Time Categories and Quartile of Increasing Valuation Per Pupil

Quartile of Valuation /Pupil	Time Category					
	Immediate*	Percent	Imminent*	Percent	Future*	Percent
Quartile 1	0	0	6	75	2	25
Quartile 2	2	28.6	2	28.6	3	42.9
Quartile 3	3	75	1	25	0	0
Quartile 4	1	50	1	50	0	0
Total	6	28.6	10	47.6	5	23.8

Quartile categories of Nebraska school districts when ranked by each district's total dollars of taxable property valuation divided by the number of pupils reported in average daily membership (ADM). Range of wealth per pupil by quartile: Quartile 1 = $140,000 to $477,065; Quartile 2 = $479,663 to $602,959; Quartile 3 = $614,058 to $803,162; Quartile 4 = $804,979 to $1,823,480.
*Immediate = a bond issues was anticipated in the years 2008-2009; Imminent = a bond issue was anticipated in the years 2010 - 2014; Future = a bond issue was anticipated in the years 2015 and beyond.

To determine if the urgency for the presentation of a bond issue before the voters of a district based on changes in population, superintendents' responses were sorted into the Population Change Category. Half of the districts with a major population decline either perceived an immediate need while the others perceived that the urgency was not as strong. A higher percentage of superintendents in the three other population categories perceived the need for a bond issue should take place within five years. The results of this categorization are presented in Table 82.

Table 82

Urgency for Presentation of Bond Issues as Perceived by Nebraska Superintendents of Districts Anticipating Bond Issues by Time Categories and Percentage Categories of County Population Change in the 2008 County Census

Population Change Category	Time Category					
	Immediate*	Percent	Imminent*	Percent	Future*	Percent
Major Decline	2	50	0	0	2	50
Decline	1	14.3	5	71.4	1	14.3
Growth	2	25	4	50	2	25
Major Growth	1	50	1	50	0	0
Total	6	28.6	10	47.6	5	23.8

Major Growth = A population increase of 10% or more from 2000 to 2008.
Growth = A population increase from 0% to 10% from 2000 to 2008.
Decline = A population decrease from 0% to -10% from 2000 to 2008.
Major Decline = A population decrease from -10% to -25% from 2000 to 2008.
*Immediate = a bond issue was anticipated in the years 2008 - 2009; Imminent = a bond issue was anticipated in the years 2010 - 2014; Future = a bond issue was anticipated in the years 2015 and beyond.

Superintendent Questionnaire – Question 13

"Do you consider your district fiscally capable of meeting your facility needs over the next ten years without raising the property tax levy rate?" (Yes or No).

A considerable amount of monetary support is required to construct new buildings or update existing structure to comply with the safety and accessibility requirements from both the federal and state levels. The decision makers and administrators of school systems rely upon the revenues from their district's property taxes. Class III superintendents were asked for their opinions regarding their districts' fiscal capability to fulfill these demands without raising the property tax rate. In order for there to be no property tax increase, one or both of the following taxing situations need to be present. First, a special building fund levy capable to meet future facility needs would have to be in place. Second, new bonds would need to be issued at the time when the existing bonds retire.

As with previous responses of superintendents, they were sorted into the three descriptive indices of this study to determine if a significant level of difference existed.

Table 83 displays the results of the index Class. Superintendents had opinions about the capability of their districts to meet facility needs without raising property taxes. These responses were placed into the Class index and analyzed. Seventy percent of participating Class III district leaders did not perceive their districts as capable of meeting the structural needs without raising property taxes. There was a significant difference in this index.

The wealth of a district was the next index used to sort and analyze the responses of Class III superintendents' perception of their districts' capability to meet facility needs

Table 83

Frequency of Fiscal Capability Perceived by Superintendents to Meet Facility Needs by Class of District

District Class	Capability to Meet Facility Needs				
	No	Percent	Yes	Percent	Total
III	65	69.1	29	30.9	94
Total	65	69.1	29	30.9	94

$\chi^2(1) = 13.787$, $p < .001$
Class II = 1,000 or less inhabitants.
Class III = 1,000 to 100,000 inhabitants.
Class IV = 100,000 to 250,000 inhabitants.
Class V = 250,000 or more inhabitants

over the next ten years without raising the property tax levy. District administrator from the poorest school systems offered the highest percentage (45.8%) of positive responses while superintendents in Quartile 2 offered the highest percentage (79.2%) of negative responses. Approximately seventy percent of superintendents from Quartiles 3 and 4 did not perceived their districts as fiscally capable of meeting facility needs over the next ten years without raising the property tax levy. No significant level of difference was ascertained. The effect of the proportional relationship was moderate. The results are shown in Table 84.

Finally, the responses regarding the fiscal capability of a district to meet the demands of its structures over the next ten years without raising the property tax levy were sorted into the Population Change Category index. When alterations to the population was considered, districts with the highest rate of decline had the lowest percentage (22.2%) of superintendents who felt that their district had the fiscal capability

Table 84

Frequency of Fiscal Capability Perceived by Superintendents to Meet Facility Needs by Quartile of Increasing Valuation Per Pupil

Quartile of Valuation /Pupil	Capability to Meet Facility Needs				
	No	Percent	Yes	Percent	Total
Quartile 1	13	54.2	11	45.8	24
Quartile 2	19	79.2	5	20.8	24
Quartile 3	17	73.9	6	26.1	23
Quartile 4	16	69.6	7	30.4	23
Total	65	69.1	29	30.9	94

$\chi^2(3) = 3.901$, $p = .272$; contingency coefficient = .200
Quartile categories of Nebraska school districts when ranked by each district's total dollars of taxable property valuation divided by the number of pupils reported in average daily membership (ADM). Range of wealth per pupil by quartile: Quartile 1 = $140,000 to $477,065; Quartile 2 = $479,663 to $602,959; Quartile 3 = $614,058 to $803,162; Quartile 4 = $804,979 to $1,823,480.

to meet the demands of their facilities over the next ten years without raising the property tax levy. In contrast, districts with a moderate population growth rate had the lowest percentage (63%) of superintendents who had the opposite perception. The chi square test did not reveal a significant level of difference; however, the effect size was small. The results are illustrated in Table 85.

Summary

The descriptive analysis of the fiscal portion of the superintendents' questionnaire was presented in this section. The responses of district leaders were evaluated and presented by the indices for Class, Quartile of Valuation per Pupil, and Population Change Category. Each index was used to describe the fiscal condition of participating

Table 85

Frequency of Fiscal Capability Perceived by Superintendents to Meet Facility Needs by Percentage of Categories of County Population Change in the 2008 County Census

Population Change Category	Fiscal Capability to Meet Facility Needs				
	No	Percent	Yes	Percent	Total
Major Decline	21	77.8	6	22.2	27
Decline	25	65.8	13	34.2	38
Growth	17	63	10	37	27
Major Growth	2	100	0	0	2
Total	65	69.1	29	30.9	94

$\chi^2(3) = 2.520$, $p = .472$; contingency coefficient = .162
Major Growth = A population increase of 10% or more from 2000 to 2008.
Growth = A population increase from 0% to 10% from 2000 to 2008.
Decline = A population decrease from 0% to -10% from 2000 to 2008.
Major Decline = A population decrease from -10% to -25% from 2000 to 2008.

Class III school structures through the responses from district superintendents for each of the six fiscal survey questions. Inquiries were made about the existence and rate of a district building fund levy, existence and amounts of a district bond debt, and the superintendent's opinion regarding the anticipation of success, optimism for success, and urgency of a bond referendum. The last question evaluated was the superintendents' perceptions of their district's financial capability to meet future facility needs without raising taxes.

In order to maintain compatibility with the analysis conducted in the previous sections, superintendents' replies to each question were evaluated for proportional differences by the use of the chi square. The chi square Goodness-Of-Fit was used to examine the Class index. The effect size of these differences was determined by

calculating a contingency coefficient for each chi square. The descriptive analysis were presented and discussed for each question.

Superintendents' Perceptions of The Effects of The 1998 Levy Limitations On Their District's Fiscal Capability to Maintain Their Facilities

In 1998, the Nebraska legislature enacted a law that limited a school district's ability to draw in revenue from property taxes. In addition, the law placed a limit on what a district could spend to operate its instructional program and maintain its school buildings. The law also allowed a school system to put a referendum before the registered voters of the district seeking their permission to supersede the levy limit by a determined amount for a period of up to five years. At the end of the term of the override, the voting public would once again decide if the district could invalidate the levy limit for another term up to five years.

In order to determine if superintendents perceived the 1998 levy limit as a hindrance to their ability to maintain their facilities and operate their instructional program, their responses were sorted into the three indices used in previous sections. To determine if there was a significant difference in answers, they were analyzed using the chi square Goodness-Of-Fit for responses in the Class index and the chi square for response sorted into the Quartile of Valuation per Pupil index and the Population Change Category index.

Superintendent Questionnaire – Question 16

"Has the levy restraints passed in 1998 hindered your district ability to keep pace with the maintenance and upkeep needs of your district?" (Yes or No).

Class III superintendents had opinions about the levy restraints affecting their district's ability to keep pace with the maintenance and upkeep needs of their facilities. In order to determine if there was a significant difference in responses the replies of participating district administrators were sorted in the Class of District index. This index was analyzed using the chi square Goodness-Of-Fit test with the results displayed in Table 86. Approximately 62% of the participating Class III superintendents opined that the levy lid was a hindrance to the maintenance and upkeep of their district's facilities. There was a level of significance in the proportional relationship of responses.

Table 86

Frequency of Superintendents Who Perceived The 1998 Levy Restraints As A Hindrance To Their Distract To Keep Pace With the Maintenance And Upkeep of Their Facilities By Class of District

District Class	Levy Restraints as Hindrance				
	No	Percent	Yes	Percent	Total
III	36	38.3	58	61.7	94
Total	36	38.3	58	61.7	94

$\chi^2(1) = 5.149$, $p = .023$
Class II = 1,000 or less inhabitants.
Class III = 1,000 to 100,000 inhabitants.
Class IV = 100,000 to 250,000 inhabitants.
Class V = 250,000 or more inhabitants

The wealth of a district was the next index used to sort and analyze the responses of Class III superintendents' perceptions about the levy restraints affecting their district's ability to keep pace with the maintenance and upkeep needs of their facilities. In an

overall review of the data, 62% of all participating superintendents perceived that the levy restrictions hindered their district's ability to provide for the needs of their school buildings. Two thirds of the superintendents whose school systems had the fewest dollars of valuation reported that the levy lid posed a hindrance while 48% of the Quartile 4 district chiefs did not reciprocate the same perception. The chi square test did not find a significant difference; the effect of the relationship was small. The results are presented in Table 87.

Table 87

Frequency of Superintendents Who Perceived The 1998 Levy Restraints As A Hindrance To Their Distract To Keep Pace With the Maintenance And Upkeep of Their Facilities By Quartile of Increasing Valuation Per Pupil

Quartile of Valuation /Pupil	Levy Restraints as Hindrance				
	No	Percent	Yes	Percent	Total
Quartile 1	8	33.3	16	66.7	24
Quartile 2	9	37.5	15	62.5	24
Quartile 3	8	34.8	15	65.2	23
Quartile 4	11	47.8	12	52.2	23
Total	36	38.3	58	61.7	94

$\chi^2(3) = 1.261$, $p = .738$; contingency coefficient = .115
Quartile categories of Nebraska school districts when ranked by each district's total dollars of taxable property valuation divided by the number of pupils reported in average daily membership (ADM). Range of wealth per pupil by quartile: Quartile 1 = $140,000 to $477,065; Quartile 2 = $479,663 to $602,959; Quartile 3 = $614,058 to $803,162; Quartile 4 = $804,979 to $1,823,480.

With a decline in student population, the amount of state aid a district receives becomes less. Over time, the continual loss of state aid combined with the effects of the

levy lid may influence a district's ability to support the needs of the school system's structures. To ascertain if there was a difference in the proportion of responses due to alterations in the population, the replies offered by superintendents were sorted into the Population Change Category. The results of the analysis are shown in Table 88. Superintendents whose districts had the greatest loss of population had the highest percentage of responses that indicated that the levy lid was a hindrance. No less than half of the superintendents sorted into the remaining population categories perceived the levy restraints as restricting their district's ability to maintain their facilities. There was no significance difference in this index indicated. The effect size was deemed as small.

Table 88

Frequency of Superintendents Who Perceived The 1998 Levy Restraints As A Hindrance To Their Distract To Keep Pace With the Maintenance And Upkeep of Their Facilities By Percentage Categories of Count Population Change in the 2008 County Census

Population Change Category	Levy Restraints as Hindrance				
	No	Percent	Yes	Percent	Total
Major Decline	7	25.9	20	74.1	27
Decline	16	42.1	22	57.9	38
Growth	12	44.4	15	55.6	27
Major Growth	1	50	1	50	2
Total	36	38.3	58	61.7	94

$\chi^2(3) = 2.530$, $p = .470$; contingency coefficient = .162
Major Growth = A population increase of 10% or more from 2000 to 2008.
Growth = A population increase from 0% to 10% from 2000 to 2008.
Decline = A population decrease from 0% to -10% from 2000 to 2008.
Major Decline = A population decrease from -10% to -25% from 2000 to 2008.

Superintendent Questionnaire – Question 17

"Do you prioritize your district's needs differently because of the 1998 levy restrictions?" (Yes or No).

When the school budget becomes tight because of shrinking revenue streams, district decision makers and administrators may prioritize the needs of the district differently, particularly in the arena of facility care. To establish whether a significant difference existed in the responses of the superintendents in relation to question 17, the answers were sorted according to the indices of this study and analyzed.

Class of District was the first index into which the responses of district chief administrators were sorted. Class III superintendents' replies to question 17 showed that slightly more than two-thirds of participating superintendents perceived the levy lid to be a hindrance to proper facility care. The difference was significant. The results may be found in Table 89.

Table 89

Frequency of Superintendents Who Perceived To Prioritize Facility Needs Differently Because of the 1998 Levy Restrictions By Class of District

District Class	Levy Restraints as Hindrance				
	No	Percent	Yes	Percent	Total
III	30	31.2	64	68.8	94
Total	30	31.2	64	68.8	94

$\chi^2(1) = 12.298$, $p < .001$
Class II = 1,000 or less inhabitants.
Class III = 1,000 to 100,000 inhabitants.
Class IV = 100,000 to 250,000 inhabitants.
Class V = 250,000 or more inhabitants

The increasing wealth of a district may alter the perceptions of a superintendent in relation to maintain properly the structure of their school district. The opinions offered by superintendents were sorted into the Quartile of Valuation per Pupil to examine if wealth did change the perception significantly. Table 90 demonstrates those perceptions.

Superintendents whose districts were deemed to have fewer valuation dollars had the highest percentage (41.7%) of responses that did not view the levy restrictions as a hindrance to keeping up with facility needs. In relation, the superintendents sorted into Quartile 3 had the highest percentage (78.3%) of those who did perceive the levy lid as restricting the ability of their districts to maintain their buildings. This index had a moderate effect size but there was no significant difference detected.

Table 90

Frequency of Superintendents Who Perceived To Prioritize Facility Needs Differently Because of the 1998 Levy Restrictions By Quartile of Increasing Valuation Per Pupil

Quartile of Valuation /Pupil	Prioritize Differently				
	No	Percent	Yes	Percent	Total
Quartile 1	10	41.7	14	58.3	24
Quartile 2	6	25	18	75	24
Quartile 3	5	21.7	18	78.3	23
Quartile 4	9	39.1	14	60.9	23
Total	30	31.9	64	68.1	94

$\chi^2(3) = 3.226$, $p = .358$; contingency coefficient = .182
Quartile categories of Nebraska school districts when ranked by each district's total dollars of taxable property valuation divided by the number of pupils reported in average daily membership (ADM). Range of wealth per pupil by quartile: Quartile 1 = $140,000 to $477,065; Quartile 2 = $479,663 to $602,959; Quartile 3 = $614,058 to $803,162; Quartile 4 = $804,979 to $1,823,480.

The final index, Population Change Category, was utilized to determine if any significant difference existed between responses when alterations to population were considered. District leaders whose counties had seen either a decline or major decline of inhabitants had the highest percentage (71.1% to 81.5%) of perceptions about the levy restraints as hindering the proper upkeep of their structures. The perceptions of superintendents from the Growth and Major Growth categories split evenly in their perceptions of the levy lid. The difference was not significant; however, the effect size was moderate. The results are shown in Table 91.

Superintendent Questionnaire – Question 18

"Has facility maintenance become less important since the passage of the 1998 levy restrictions?" (Yes or No).

Table 91

Frequency of Superintendents Who Perceived To Prioritize Facility Needs Differently Because of the 1998 Levy Restrictions By Quartile of Increasing Valuation Per Pupil By Percentage Categories of Count Population Change in the 2008 County Census

Population Change Category	Prioritize Differently				
	No	Percent	Yes	Percent	Total
Major Decline	5	18.5	22	81.5	27
Decline	11	28.9	27	71.1	38
Growth	13	48.1	14	51.9	27
Major Growth	1	50	1	50	2
Total	30	31.9	64	68.1	94

$\chi^2(3) = 5.959$, $p = .114$; contingency coefficient = .244
Major Growth = A population increase of 10% or more from 2000 to 2008.
Growth = A population increase from 0% to 10% from 2000 to 2008.
Decline = A population decrease from 0% to -10% from 2000 to 2008.
Major Decline = A population decrease from -10% to -25% from 2000 to 2008.

This question was designed as a follow up to question 17. As stated before, restricted budgets require rethinking the priorities of the district. Student considerations are always at the top of the list, but staff and students also need well-kept buildings to enhance the learning environment. The participating Class III superintendents offered their opinions to question 18. These responses were sorted into the descriptive indices of this study for analysis and discussion.

The analysis of the superintendents' responses by Class of district is presented in Table 92. Twenty-three percent of participating superintendents opined that the maintenance of their facilities became less of a priority with the passage of the 1998 levy lid. The difference was found to be significant when examined with the chi square Goodness-Of-Fit test.

Table 92

Frequency of Superintendents Who Perceived That Facility Maintenance Had Become Less Important Since The Passage of The 1998 Levy Restrictions By Class of District

District Class	Facility Maintenance Less Important				
	No	Percent	Yes	Percent	Total
III	73	77.7	21	22.3	94
Total	73	77.7	21	22.3	94

$\chi^2(1) = 28.766$, $p < .001$
Class II = 1,000 or less inhabitants.
Class III = 1,000 to 100,000 inhabitants.
Class IV = 100,000 to 250,000 inhabitants.
Class V = 250,000 or more inhabitants

To determine if there was a significant difference when district wealth was a factor, the responses tendered by chief administrators were sorted into the Quartile of

Valuation per Pupil. Ninety-two percent of administrators of Quartile 1 did not perceive facility maintenance as less important because of the levy lid. Superintendents classified into Quartile 4 had the highest percentage (30.4%) of those who lessened the importance of facility maintenance since the passage of the levy lids in 1998. The proportional relationship was not significant. Table 93 displays the results.

Finally, the index of population change was employed to determine if a significant difference existed between responses of superintendents when population shifts were a factor. These results are displayed in Table 91. No less than 75% of the participating superintendents in each of the population change categories perceived facility maintenance any less important since the enactment of the 1998 levy restrictions.

Table 93

Frequency of Superintendents Who Perceived That Facility Maintenance Had Become Less Important Since The Passage of The 1998 Levy Restrictions By Quartile of Increasing Valuation Per Pupil

Quartile of Valuation /Pupil	Facility Maintenance Less Important				
	No	Percent	Yes	Percent	Total
Quartile 1	22	91.7	2	8.3	24
Quartile 2	18	75	6	25	24
Quartile 3	17	73.9	6	26.1	23
Quartile 4	16	69.6	7	30.4	23
Total	73	77.7	21	22.3	94

$\chi^2(3) = 3.867$, $p = .276$; contingency coefficient = .199
Quartile categories of Nebraska school districts when ranked by each district's total dollars of taxable property valuation divided by the number of pupils reported in average daily membership (ADM). Range of wealth per pupil by quartile: Quartile 1 = $140,000 to $477,065; Quartile 2 = $479,663 to $602,959; Quartile 3 = $614,058 to $803,162; Quartile 4 = $804,979 to $1,823,480.

The effect of the results was small and there was no significant difference determined. The results are presented in Table 94.

Table 94

Frequency of Superintendents Who Perceived That Facility Maintenance Had Become Less Important Since The Passage of The 1998 Levy Restrictions By Percentage Categories of Count Population Change in the 2008 County Census

Population Change Category	Facility Maintenance Less Important				
	No	Percent	Yes	Percent	Total
Major Decline	21	77.8	6	22.2	27
Decline	29	76.3	9	23.7	38
Growth	21	77.8	6	22.2	27
Major Growth	2	100	0	0	2
Total	73	77.7	21	22.3	94

$\chi^2(3) = .615$, $p = .893$; contingency coefficient = .081
Effect Size = small
Major Growth = A population increase of 10% or more from 2000 to 2008.
Growth = A population increase from 0% to 10% from 2000 to 2008.
Decline = A population decrease from 0% to -10% from 2000 to 2008.
Major Decline = A population decrease from -10% to -25% from 2000 to 2008.

Summary

The descriptive analysis of the effects of the 1998 levy lid of the superintendent questionnaire was presented in this section. The replies were analyzed and presented by the indices for Class, Quartile of Valuation per Pupil, and Population Change Category. Each index was used to describe the perceptions of Nebraska Class III superintendents about the impact on decision making where facilities are concerned.

In order to maintain compatibility with the analysis conducted in the previous sections, superintendents' replies to each question were evaluated for proportional differences by the use of the chi square. The chi square Goodness-Of-Fit was used to examine the Class index. The effect size of these differences was determined by calculating a contingency coefficient for each chi square. The descriptive analysis were presented and discussed for each question.

Chapter V

Comparisons and Conclusions

The data collected the "Nebraska Class III School Facilities Survey Questionnaire" during the late August – early September of 2009 were presented in the previous chapter. The collection method employed by this researcher was with Survey Monkey©, an online survey service. The material collected was descriptive of the individual buildings and overall condition of the school system's facilities. Additionally, the superintendents of Class III school districts reported information about the fiscal circumstances pertaining to the maintenance and construction of new buildings. In this chapter, comparisons between selected information from the 1993 and 2009 studies and conclusions will be presented to the reader.

Methodology of Comparisons

In order to make reasonable comparisons between Pool's 1993 findings and the conclusions of this study, the Class III data accumulated in 1993 was segregated into a spreadsheet program and then analyzed in the same fashion as the 2009 data. In making the comparisons between the two data strains, analysis tools from two web sites were employed that calculated the chi square for the Class tables, http://faculty.vassar.edu/lowry/newcs.html, and http://faculty.vassar.edu/lowry/abc.html, for the remaining tables, which calculated a log-liner analysis. The following explanation of the log-linear analysis was provided by the web site:

> Log-linear analysis is a version of chi-square analysis in which the relevant values are calculated by way of weighted natural logarithms. The first advantage of this procedure is that it is easier to program in the case of a complex 3-way contingency table, since it allows all chi-square values to be derived through simple addition and subtraction of various combinations of the weighted logarithms. The second advantage is that the chi-square values thus derived are

> linear, which allows for analyses that are more complex not readily available through the conventional chi-square computational procedure. When a chi-square value is calculated by the log- linear method, it is typically designated as G^2 as an indication of its computational origin. Since G^2 is distributed approximately as chi-square, its associated probability under the null hypothesis can be estimated through reference to the appropriate sampling distribution of chi-square, as defined by its degrees of freedom. Values of G^2 will usually be quite close to the corresponding values of chi-square that would be calculated using the conventional procedure.

Building Data Comparisons

The first set of comparisons to be made was with the data provided by participating building administrators from the two eras. The data presented does not entail the entire spectrum of provided answers from both eras but, rather, information that was deemed more pertinent to the study by the author.

Perceptions of Over Capacity

Building managers from both eras offered their perceptions of over-crowding in their buildings. The present day group of building supervisors had a higher percentage (95.2%) who did not perceive their building as over capacity in comparison to their counterparts from 1993 (85.5%). There was a significant difference in the proportional relationship between the responses of both generations. The results are displayed in Table 95.

When categorized by quartile of valuation per pupil, the 2009 administrators in Quartiles 2, 3, and 4 did not perceive their building as overcrowded (100%) in comparison to the 1993 administrative group. However, administrators in the poorest districts from both generations offered the highest percentage as being crowded. (20.9%, 1993; 11.8%, 2009). Over all, the 2009 administrators did not feel that their buildings

Table 95

Comparison of 2009 Responses to 1993 Responses of Building Administrators' Perception of Over Crowding In Their Building By Class of District

Class III	Over Capacity				
	No	Percent	Yes	Percent	Total
1993	530	85.5	90	14.5	620
2009	79	95.2	4	4.8	83

$\chi^2(1) = 5.94$, $p = .0148$
Class II = 1,000 or less inhabitants.
Class III = 1,000 to 100,000 inhabitants.
Class IV = 100,000 to 250,000 inhabitants.
Class V = 250,000 or more inhabitants

were as crowded as their 1993 counterparts were. The outcome of this category is presented in Table 96. The difference was significant.

To determine if there was a significant difference between responses from 1993 building administrators and present day building administrators when population change was considered, the responses were sorted and categorized into the Population Change Category index. The 2009 administrators whose districts had encountered the greatest drop in county population did not regard any of their buildings as over capacity. Administrators from counties that had seen a growth in population in both eras had the widest disparity of buildings considered as over capacity. (73.8%, 1993; 95.2%, 2009). The difference was deemed significant. The results are illustrated in Table 97.

Consideration of the responses between the 1993 and 2009 administrators was next examined in the Period of Facility Construction index. The results, depicted in Table 98, demonstrate that the current administrators of Class III buildings did not believe that

Table 96

Comparison of 2009 Responses to 1993 Responses of Building Administrators' Perception of Over Crowding In Their Building By Quartile of Valuation Per Pupil

Quartile of Valuation /Pupil	Over Capacity				
	No	Percent	Yes	Percent	Total
1993					
Quartile 1	235	79l.1	62	20.9	297
Quartile 2	18	87.4	17	12.6	135
Quartile 3	120	92.3	10	7.7	130
Quartile 4	57	98.3	1	1.7	58
2009					
Quartile 1	30	88.2	4	11.8	34
Quartile 2	17	100	0	0	17
Quartile 3	17	100	0	0	17
Quartile 4	15	100	0	0	15

$G^2 = 46.7$, $p < .001$

Quartile categories of Nebraska school districts when ranked by each district's total dollars of taxable property valuation divided by the number of pupils reported in average daily membership (ADM). Range of wealth per pupil by quartile: Quartile 1 = $140,000 to $477,065; Quartile 2 = $479,663 to $602,959; Quartile 3 = $614,058 to $803,162; Quartile 4 = $804,979 to $1,823,480.

Table 97

Comparison of 2009 Responses to 1993 Responses of Building Administrators Perception of Over Crowding In Their Building By Percentage Categories of County Population Change in the 2008 County Census

Population Change Category	Over Capacity				
	No	Percent	Yes	Percent	Total
1993					
Major Decline	178	93.2	13	6.8	191
Decline	209	87.8	29	23.7	238
Growth	107	73.8	38	26.2	145
Major Growth	36	78.3	10	21.7	46
2009					
Major Decline	17	100	0	0	17
Decline	42	93.3	3	6.7	45
Growth	20	95.2	1	4.8	21
Major Growth	0	0	0	0	0

$G^2 = 55.42$, $p < .001$
Major Growth = A population increase of 10% or more.
Growth = A population increase from 0.1% to 9%
Decline = A population decrease from 0% to -9%.
Major Decline = A population decrease from -10% to -25%.

Table 98

Comparison of 2009 Responses to 1993 Responses of Building Administrators Perception of Over Crowding In Their Building By Construction Date Ranges

Period of Facility Construction	Over Capacity				
	No	Percent	Yes	Percent	Total
1993					
WW II & Prior	197	80.4	48	19.6	245
Baby Boom Era	302	89.3	36	10.7	338
Recent	31	83.8	6	16.2	37
2009					
WW II & Prior	20	87	3	13	23
Baby Boom Era	44	98	1	2	45
Recent	15	100	0	0	15

$G^2 = 35.06$, $p < .001$
World War II and Prior = the majority of the district's facilities were reported built in one of the date ranges, prior to 1920, 1920 – 1929, or 1930 – 1939; Baby Boom Era = the majority of the district' facilities were reported built in one of the date ranges, 1940 – 1949, 1950 – 1959, 1960 - 1969, 1970 – 1979; and Recent = the majority of the district's facilities were reported built in one of the data ranges, 1980 – 1989, 1990 – 1999, or 2000 – 2009.

their buildings were as overcrowded as the building administrators did in 1993, despite the age of the facility. The differences were considered significant.

The final index for comparison of responses between the two generations of building administrators was the Building Type Index. The 2009 administrators in each the of the facility classifications had a higher percentage of responses claiming that their buildings were not overcrowded when compared to the answers submitted by the 1993 administrative group. Facility managers of K – 12 buildings in either generation had the highest percentage of buildings not considered as crowded. (93.4%, 1993; 100%, 2009).

There was a significant level of difference. Table 99 presents the outcome of this comparison.

Table 99

Comparison of 2009 Responses to 1993 Responses of Building Administrators Perception of Over Crowding In Their Building By Instructional Grade Ranges

Building Category	Over Capacity				
	No	Percent	Yes	Percent	Total
1993					
Elementary	263	80.7	63	19.3	326
Middle	48	81.4	11	18.6	59
Secondary	134	93.12	10	6.9	144
K – 12	85	93.4	6	6.6	91
2009					
Elementary	30	93.8	2	6.2	32
Middle	9	90	1	10	10
Secondary	25	96.2	1	3.8	26
K – 12	15	100	0	0	15

$G^2 = 35.36$, $p < .001$
Elementary = grade kindergarten through eight and at least one grade below grade five; middle = grades five through nine; secondary = grades seven through twelve and at least one grade above grade eight; K – 12 = grades kindergarten through twelve.

Adequacy of Their Building for Instructional Programs

Building administrators were asked to provide their opinion about their respective building's adequacy for the current instructional program. The ratings offered for their consideration were Poor, Adequate, and Good. The findings of this comparison are presented in Table 100.

Table 100

Comparison of 2009 Responses to 1993 Responses of Building Administrators Perception of The Adequacy of Their Building for Instructional Program By Class of District

Class III	Adequate For Instructional Program					
	Poor	Percent	Adequate	Percent	Good	Percent
1993	117	19.3	208	34.4	280	46.3
2009	10	12.1	36	43.4	37	44.5

$\chi^2(1) = 3.81$, $p = .1488$
Class II = 1,000 or less inhabitants.
Class III = 1,000 to 100,000 inhabitants.
Class IV = 100,000 to 250,000 inhabitants.
Class V = 250,000 or more inhabitants

Both generations of building administrators opined that their respective buildings were 'Good' when determining the adequacy of their building (46.3%, 1993; 44.5%, 2009) for the current instructional program. The lowest percentage of building administrators (19.3%, 1993; 12.1%, 2009) ranked their buildings as poor. There was no significant difference found between the relationships of answers.

Both generations of building administrators were asked to ponder whether their facility was adequate for the current instructional program. These responses were sorted and analyzed in the Quartile of Valuation per Pupil index. The ratings of both groups were similar however, the administrators in Quartile 3 had the widest percentage range when rating there facility as adequate. Twenty percent of the past administrators rated their facility as adequate while present day Quartile 3 building administrators rated 35% of their structures as adequate. The differences were not significant. The results are shown in Table 101.

Table 101

Comparison of 2009 Responses to 1993 Responses of Building Administrators Perception of The Adequacy of Their Building for Instructional Program By Quartile of Valuation per Pupil

Quartile of Valuation /Pupil	Adequate For Instructional Program					
	Poor	Percent	Adequate	Percent	Good	Percent
1993						
Quartile 1	63	21.4	101	34.4	130	44.2
Quartile 2	21	15.9	51	38.6	60	45.5
Quartile 3	24	21.6	22	19.8	65	58.6
Quartile 4	9	15.8	23	40.4	25	43.8
2009						
Quartile 1	6	17.6	14	41.2	14	41.2
Quartile 2	0	0	8	47.1	9	52.9
Quartile 3	3	17.6	6	35.3	8	47.1
Quartile 4	1	6.6	8	53.3	6	40.1

$G^2 = 22.98$, $p = .1499$
Quartile categories of Nebraska school districts when ranked by each district's total dollars of taxable property valuation divided by the number of pupils reported in average daily membership (ADM). Range of wealth per pupil by quartile: Quartile 1 = $140,000 to $477,065; Quartile 2 = $479,663 to $602,959; Quartile 3 = $614,058 to $803,162; Quartile 4 = $804,979 to $1,823,480.

The next index examined was Population Change. The reader should note that from the pool of respondents in the 2009 study, none were placed in the Major Growth classification. This may have skewed the results of this table. There was a level of significance in relationship to the proportion of answers. Table 102 displays the results of the Population Change index.

Table 102

Comparison of 2009 Responses to 1993 Responses of Building Administrators Perception of the Adequacy of Their Building for Instructional Program By Population Change

Population Change Category	Rating					
	Poor	Percent	Adequate	Percent	Good	Percent
1993						
Major Decline	40	21.6	65	35.1	80	43.3
Decline	48	21	90	39.3	91	39.7
Growth	23	15.9	37	25.5	85	58.6
Major Growth	6	13	16	34.8	24	52.2
2009						
Major Decline	1	6	8	47	8	47
Decline	9	20	19	42.2	17	37.8
Growth	0	0	9	42.9	12	57.1
Major Growth	0	0	0	0	0	0

$G^2 = 47.46$, $p < .001$
Major Growth = A population increase of 10% or more.
Growth = A population increase from 0.1% to 9%.
Decline = A population decrease from 0% to -9%.
Major Decline = A population decrease from -10% or more.

When the age of the building was considered whether it was adequate for the current instructional program, the level of difference was significant. Table 103 demonstrates that structures erected in the Recent date range considered either adequate or good by both generations of administrators. Current building administrators whose facilities where built during the Baby Boom Era had a higher percentage of adequate ratings (51.2%) than did their 1993 counterparts (32.6%).

Table 103

Comparison of 2009 Responses to 1993 Responses of Building Administrators Perception of The Adequacy of Their Building for Instructional Program By Date of Construction

Period of Facility Construction	Adequate For Instruction					
	Poor	Percent	Adequate	Percent	Good	Percent
1993						
WW II & Prior	85	35.4	97	40.4	58	24.2
Baby Boom Era	32	9.7	108	32.6	191	57.7
Recent	0	0	3	8.8	31	91.2
2009						
WW II & Prior	8	34.8	11	47.8	4	17.4
Baby Boom Era	2	4.4	23	51.2	20	44.4
Recent	0	0	2	13.3	13	86.7

$G^2 = 167.74$, $p < .001$
World War II and Prior = the majority of the district's facilities were reported built in one of the date ranges, prior to 1920, 1920 – 1929, or 1930 – 1939; Baby Boom Era = the majority of the district' facilities were reported built in one of the date ranges, 1940 – 1949, 1950 – 1959, 1960 - 1969, 1970 – 1979; and Recent = the majority of the district's facilities were reported built in one of the data ranges, 1980 – 1989, 1990 – 1999, or 2000 – 2009.

Building Type is the final index to analyze the adequacy of the facility for the current instructional program. In reviewing the comparison data, the responses from participating administrators were similar except for the Adequate ratings doled out by Secondary principals. The comparison between this area offered the widest difference of opinion. Building principals from 1993 rated 31% of their buildings as adequate for the current instructional program. Half of the Secondary building managers from the present day study rated their structures as adequate for the current instructional program. The

level of difference was not considered significant. Table 104 holds the results of this index.

Table 104

Comparison of 2009 Responses to 1993 Responses of Building Administrators Perception of The Adequacy of Their Building for Instructional Program By Instructional Grade Ranges

Building Category	Adequate for Instructional Program					
	Poor	Percent	Adequate	Percent	Good	Percent
1993						
Elementary	68	21.2	108	33.6	145	45.2
Middle	9	15.2	25	42.4	25	42.4
Secondary	24	17	44	31.2	73	51.8
K – 12	16	19	31	36.9	37	44.1
2009						
Elementary	4	12.5	13	40.6	15	46.9
Middle	1	10	5	50	4	40
Secondary	2	7.7	13	50	11	42.3
K – 12	2	14.3	5	35.7	7	50

$G^2 = 16.72$, $p = .4735$
Elementary = grade kindergarten through eight and at least one grade below grade five; middle = grades five through nine; secondary = grades seven through twelve and at least one grade above grade eight; K – 12 = grades kindergarten through twelve.

Buildings That Accommodate the Use of Technology

In a head-to-head analysis of the responses of the 1993 group of building administrators and the 2009 cohort of building administrators concerning a school

structure accommodating the use of technology, the level of difference was significant. In 1993, only 54% of Class III building leaders considered their structure as accommodating to the use of technology. Seventy percent of the 2009 administrators opined that their buildings accommodated the use of technology. The results are presented in Table 105.

Table 105

Comparison of 2009 Responses to 1993 Responses of Frequency of Buildings That Accommodated the Use of Technology as Reported by Participating Building Administrators by Class

Class III	Accommodated Use of Technology				
	No	Percent	Yes	Percent	Total
1993	285	45.9	335	54.1	620
2009	25	30.1	58	69.9	83

$\chi^2(1) = 7.406$, $p = .006$
Class II = 1,000 or less inhabitants.
Class III = 1,000 to 100,000 inhabitants.
Class IV = 100,000 to 250,000 inhabitants.
Class V = 250,000 or more inhabitants

District Wealth was the next index to examine the building principals' perceptions about the facility accommodating the use of technology. Building principals from the districts within the two lower tiers of valuation per pupil had the widest variance of opinions about their structures accommodating the use of technology. Only 43% of the 1993 Quartile 1 administrators viewed their buildings as accommodating to technology. The 2009 administrative group raised this perception to 62%. The percentage of Quartile 2 administrators from 1993 who perceived their facility accommodated the use of

technology was 62%. The 2009 building leaders had a higher percentage of buildings that accommodated that use of technology (82.4%). The level of difference was significant. Table 106 shows the comparison results.

Table 106

Comparison of 2009 Responses to 1993 Responses of Frequency of Buildings That Accommodated the Use of Technology as Reported by Participating Building Administrators by Quartile of Valuation per Pupil

Quartile of Valuation /Pupil	Accommodated Use of Technology				
	No	Percent	Yes	Percent	Total
1993					
Quartile 1	170	57.2	127	42.8	297
Quartile 2	51	37.8	84	62.2	135
Quartile 3	47	36.2	83	63.8	130
Quartile 4	17	29.3	41	70.7	58
2009					
Quartile 1	13	38.2	21	61.8	34
Quartile 2	3	17.6	14	82.4	17
Quartile 3	6	35.3	11	64.7	17
Quartile 4	3	20	12	80	15

$G^2 = 47.18$, $p < .001$
Quartile categories of Nebraska school districts when ranked by each district's total dollars of taxable property valuation divided by the number of pupils reported in average daily membership (ADM). Range of wealth per pupil by quartile: Quartile 1 = $140,000 to $477,065; Quartile 2 = $479,663 to $602,959; Quartile 3 = $614,058 to $803,162; Quartile 4 = $804,979 to $1,823,480.

Building administrators from both generations offered their opinion about accommodation of technology. To examine whether changes in population had an effect when comparing the responses of the eras of principals, the answers were sorted into the Population Change Category index. As demonstrated in Table 104, the level of difference was significant. The 1993 cohort had a higher all around percentage of buildings that did not accommodate the use of technology. Sixteen years later, this perception changed as fewer building principals claimed that their school structure did not accommodate the use of technology.

The age of a structure may inhibit the use of technology within a building. To determine if there was a difference in the responses offered by two differing generations of building principals, the answers to this inquiry were sorted according to the categories in the Period of Facility Construction index. The 2009 cohort of building administrators recognized that more of their structures were accommodating to the use of technology. The results of the Period of Facility Construction index are presented in Table 108. The level of difference was significant.

The type of a school building, whether it is an elementary, secondary, or K – 12 facility, may have an impact on the structure's ability to accommodate the use of technology. Table 109 presents the findings when responses from participating building administrators were sorted according to the Building Type Category. Again, as with the previous indices focusing on technology, the present day administrators found a higher percentage of their buildings to be accommodating to the use of technology than did their counterparts from 1993. The level of difference between the responses of the two generations was significant.

Table 107

Comparison of 2009 Responses to 1993 Responses of Frequency of Buildings That Accommodated the Use of Technology as Reported by Participating Building Administrators by Change of Population

Population Change Category	Accommodated Use of Technology				
	No	Percent	Yes	Percent	Total
1993					
Major Decline	85	44.5	106	55.5	191
Decline	108	45.4	130	54.6	238
Growth	78	53.8	67	46.2	145
Major Growth	14	30.4	32	69.6	46
2009					
Major Decline	3	17.6	14	82.4	17
Decline	17	37.8	28	62.2	45
Growth	5	23.8	16	76.2	21
Major Growth	0	0	0	0	0

$G^2 = 37.88$, $p < .001$
Major Growth = A population increase of 10% or more.
Growth = A population increase from 0.1% to 9%.
Decline = A population decrease from 0% to -9%.
Major Decline = A population decrease from -10% or more.

Table 108

Comparison of 2009 Responses to 1993 Responses of Frequency of Buildings That Accommodated the Use of Technology as Reported by Participating Building Administrators by Date of Construction

Period of Facility Construction	Accommodated Use of Technology				
	No	Percent	Yes	Percent	Total
1993					
WW II & Prior	144	58.8	101	41.2	245
Baby Boom Era	130	38.9	208	62.1	335
Recent	11	29.7	26	70.3	37
2009					
WW II & Prior	11	47.8	12	52.2	23
Baby Boom Era	12	26.7	33	73.3	45
Recent	2	13.3	13	86.7	15

$G^2 = 55.28$, $p < .001$
World War II and Prior = the majority of the district's facilities were reported built in one of the date ranges, prior to 1920, 1920 – 1929, or 1930 – 1939; Baby Boom Era = the majority of the district' facilities were reported built in one of the date ranges, 1940 – 1949, 1950 – 1959, 1960 - 1969, 1970 – 1979; and Recent = the majority of the district's facilities were reported built in one of the data ranges, 1980 – 1989, 1990 – 1999, or 2000 – 2009.

Table 109

Comparison of 2009 Responses to 1993 Responses of Frequency of Buildings That Accommodated the Use of Technology as Reported by Participating Building Administrators by Grade Level Range

Building Category	Accommodated Use of Technology				
	No	Percent	Yes	Percent	Total
1993					
Elementary	161	49.4	165	50.6	326
Middle	30	50.8	29	49.2	59
Secondary	54	37.5	90	62.5	144
K – 12	40	44	51	56	91
2009					
Elementary	13	40.6	19	59.4	32
Middle	2	20	8	80	10
Secondary	6	23.1	20	76.9	26
K – 12	4	26.7	11	73.3	15

$G^2 = 24.08$, $p < .007$
Elementary = grade kindergarten through eight and at least one grade below grade five; middle = grades five through nine; secondary = grades seven through twelve and at least one grade above grade eight; K – 12 = grades kindergarten through twelve.

The following comparisons will be made by Class only. These comparisons will include whether or not buildings are air-conditioned, have consistently comfortable classrooms, are completely handicap accessible, are completely free of safety hazards, and whether or not buildings prevent changes to the instructional program. Principals were also asked to rate the interior of their structures.

Building administrators reported whether their school facility was air-conditioned or not. In 1993, 68% of the building administrators of Class III districts reported that their

buildings were not air-conditioned. In comparison, the 2009 administrators reported that 94% of their buildings were air-conditioned. The level of difference was significant. The results are shown in Table 110.

Table 110

Comparison of 2009 Responses to 1993 Responses of Building Administrators Who Reported Their Building As Air Conditioned By Class

Class III	Air Conditioned			
	No	Percent	Yes	Percent
1993	423	68.2	197	31.8
2009	5	6.2	76	93.8

$\chi^2(1) = 116.01$, $p < .001$
Class II = 1,000 or less inhabitants.
Class III = 1,000 to 100,000 inhabitants.
Class IV = 100,000 to 250,000 inhabitants.
Class V = 250,000 or more inhabitants

Building administrators from the 1993 study and the 2009 study tendered responses about the level of consistent comfort in the classrooms of their facilities. Table 111 demonstrates that both generations of administrators reported their classrooms to be consistently comfortable. The 2009 administrators reported a higher percentage of consistently comfortable rooms (67.5%) than did the building leaders from 1993 (56.8%). There difference was not significant.

The next table compared the responses of principals as to whether their buildings were completely accessible by the handicapped. In 1993, the administrators reported to Pool that 52.9 percent of the facilities were not completely handicap accessible. The

Table 111

Comparison of 2009 Responses to 1993 Responses of Building Administrators Who Reported Consistently Comfortable Classrooms By Class

Class III	Consistently Comfortable Classrooms			
	No	Percent	Yes	Percent
1993	268	43.2	352	56.8
2009	27	32.5	56	67.5

$\chi^2(1) = 30.44$, $p = .064$
Class II = 1,000 or less inhabitants.
Class III = 1,000 to 100,000 inhabitants.
Class IV = 100,000 to 250,000 inhabitants.
Class V = 250,000 or more inhabitants

percentage of buildings that were reported as completely handicap accessible in 2009 was 75.9%. The proportional difference between the two age groups was significant. The results are portrayed in Table 112.

Table 112

Comparison of 2009 Responses to 1993 Responses of Building Administrators Who Reported Buildings Completely Handicap Accessible By Class

Class III	Completely Handicap Accessible			
	No	Percent	Yes	Percent
1993	328	52.9	292	47.1
2009	20	24.1	63	75.9

$\chi^2(1) = 24.3$, $p < .001$
Class II = 1,000 or less inhabitants.
Class III = 1,000 to 100,000 inhabitants.
Class IV = 100,000 to 250,000 inhabitants.
Class V = 250,000 or more inhabitants

The safety of staff and students is an ongoing concern to building administrators. Table 113 demonstrates the responses of facility managers when inquired about the safety of their structure. Principals from both studies indicated that a high percentage (app. 90%) of their buildings were free from safety hazards. The difference was not significant.

Table 113

Comparison of 2009 Responses to 1993 Responses of Building Administrators Who Reported Buildings Completely Free From Safety Hazards By Class

Class III	Safe from Hazards			
	No	Percent	Yes	Percent
1993	71	11.5	549	88.5
2009	8	9.6	75	90.4

$\chi^2(1) = .24, p < .624$
Class II = 1,000 or less inhabitants.
Class III = 1,000 to 100,000 inhabitants.
Class IV = 100,000 to 250,000 inhabitants.
Class V = 250,000 or more inhabitants

With the passing of time, changes to the instructional program may become necessary. Slightly more than half (54%) of the administrators from both study groups disclosed that their buildings did not inhibit changes to the instructional program. There was no level of significance indicated. The results are illustrated in Table 114.

The comparison of the rating of the interior of buildings as either Poor, Adequate, or Good. Administrators offered their opinions as regards that interior of their respective school facility. Approximately 60% of the administrators from the study groups opined that the interior of their buildings were good. Only about 10% of the participants claimed that the interior of their facility was poor. The difference was not significant.

Table 114

Comparison of 2009 Responses to 1993 Responses of Building Administrators Who Reported Buildings Prevented Changes to Instructional Programs By Class

Class III	Prevent Changes			
	No	Percent	Yes	Percent
1993	331	53.4	289	46.6
2009	45	54.2	38	45.8

$\chi^2(1) = .02$, $p = .887$
Class II = 1,000 or less inhabitants.
Class III = 1,000 to 100,000 inhabitants.
Class IV = 100,000 to 250,000 inhabitants.
Class V = 250,000 or more inhabitants

Table 115

Comparison of 2009 Responses to 1993 Responses of Building Administrators Perceptions of the Interior of Their Buildings By Class

District Class	Rating					
	Poor	Percent	Adequate	Percent	Good	Percent
1993	67	11.1	175	29	361	59.9
2009	7	8.4	29	34.9	47	56.7

$\chi^2(1) = 1.47$, $p = .479$
Class II = 1,000 or less inhabitants.
Class III = 1,000 to 100,000 inhabitants.
Class IV = 100,000 to 250,000 inhabitants.
Class V = 250,000 or more inhabitants

District Comparisons

Superintendents offered their perceptions about delayed maintenance, technology integration, and remodeling or restructuring to meet the demands of changing educational programs. They also reported about the use of special building fund levies and the district's bond debt. To determined if differences existed between the participants of Pool's 1993 facility study and the 2009 study group, responses were sorted into indices by Class, Quartile of Valuation per Pupil and Population Change.

Superintendents of both study groups were asked if they had delayed maintenance over the past five years. In 1993, the participating Class III superintendents reported that 54.2% of the group had not delayed maintenance over the past five years. In comparison, 54.3% of the modern day superintendent group did report delaying maintenance over the last five years. The difference between the groups' responses was not deemed significant. The results are shown in Table 116.

Table 116

Comparison of 2009 Responses to 1993 Responses of Superintendents Who Reported Delayed Maintenance Over Last Five Years By Class

Class III	Delayed Maintenance			
	No	Percent	Yes	Percent
1993	122	54.2	103	45.8
2009	43	45.7	51	54.3

$\chi^2(1) = 1.91$, $p = .167$
Class II = 1,000 or less inhabitants.
Class III = 1,000 to 100,000 inhabitants.
Class IV = 100,000 to 250,000 inhabitants.
Class V = 250,000 or more inhabitants

Wealth of a district was another index used to determine if superintendents delayed the maintenance of their system's facilities. Superintendents of the districts with the highest valuation per pupil reported the highest percentage (75.9%) of delay-free maintenance, but the roles were reversed in 2009. Superintendents of the same quartile reported in 2009 that they had delayed maintenance over the past five years (60.9%). However, the level of difference was not significant. The results of the wealth index are presented in Table 117.

Table 117

Comparison of 2009 Responses to 1993 Responses of Superintendents Who Reported Delayed Maintenance By Quartile of Valuation per Pupil

Quartile of Valuation /Pupil	Delayed Maintenance			
	No	Percent	Yes	Percent
1993				
Quartile 1	32	45.1	39	54.9
Quartile 2	36	56.3	28	43.7
Quartile 3	32	52.5	29	47.5
Quartile 4	22	75.9	7	24.1
2009				
Quartile 1	12	50	12	50
Quartile 2	11	45.8	13	54.2
Quartile 3	11	47.8	12	52.2
Quartile 4	9	39.1	14	60.9

$G^2 = 17.22$, $p = .07$

Quartile categories of Nebraska school districts when ranked by each district's total dollars of taxable property valuation divided by the number of pupils reported in average daily membership (ADM). Range of wealth per pupil by quartile: Quartile 1 = $140,000 to $477,065; Quartile 2 = $479,663 to $602,959; Quartile 3 = $614,058 to $803,162; Quartile 4 = $804,979 to $1,823,480.

The next index for determining differences between the 1993 study group and the group of 2009 was Population Change. Districts located in counties classified as Major Growth reported the highest percentage of non-delayed maintenance work on their facilities (75%, 1993; 100%, 2009). The superintendents whose districts where in the remaining population change categories reported a higher percentage of delay-free maintenance work in 2009 than did the groups of 1993. There was a significant level of difference when population change was considered as a factor. The outcomes are depicted in Table 118.

Table 118

Comparison of 2009 Responses to 1993 Responses of Superintendents Who Reported Delayed Maintenance By Population Changes

Population Change Category	Delayed Maintenance			
	No	Percent	Yes	Percent
1993				
Major Decline	56	59.6	38	40.4
Decline	43	47.3	48	52.7
Growth	17	53.1	15	46.9
Major Growth	6	75	2	25
2009				
Major Decline	21	77.8	6	22.2
Decline	29	76.3	9	23.7
Growth	21	77.8	6	22.2
Major Growth	2	100	0	0

$G^2 = 23.04$, $p = .01$
Major Growth = A population increase of 10% or more from 2000 to 2008.
Growth = A population increase from 0% to 10% from 2000 to 2008.
Decline = A population decrease from 0% to -10% from 2000 to 2008.
Major Decline = A population decrease from -10% to -25% from 2000 to 2008.

The next subject for comparison study was the superintendents' opinions about the facilities of the school system limiting the restructuring of instructional programs. Table 119 displays the outcome of the Class index. The percent of those who did not perceive a limit to restructuring was greater in 1993 than it was in 2009. Sixty-five percent of the superintendents perceived the restructuring of the instructional program as hindered by the district's facilities. In 2009, that percentage dropped to 51%. There was a significant difference within the Class index.

Table 119

Comparison of the 2009 Responses to the 1993 Responses of The Number of Superintendents Who Perceived Facilities Limited Restructuring of Instructional Programs by Class

Class III	Limited Restructuring			
	No	Percent	Yes	Percent
1993	78	34.7	147	65.3
2009	46	48.9	48	51.1

$\chi^2(1) = 5.68$, $p = .017$
Class II = 1,000 or less inhabitants.
Class III = 1,000 to 100,000 inhabitants.
Class IV = 100,000 to 250,000 inhabitants.

When the wealth of a district was used as a determinant to the perception of facilities impeding the restructuring of the instructional program, superintendents of the wealthier districts reported their district's facilities did limit the restructuring of the instructional program in the 2009 study. The superintendents of those same quartiles did

not report a perception of hindrance to the restructuring of the instructional program in 1993. As demonstrated in Table 120, the level of differences was significant.

Table 120

Comparison of the 2009 Responses to the 1993 Responses of The Number of Superintendents Who Perceived Facilities Limited Restructuring of Instructional Programs By Quartile of Increasing Valuation Per Pupil

Quartile of Valuation /Pupil	Limited Restructuring			
	No	Percent	Yes	Percent
1993				
Quartile 1	19	26.8	52	73.2
Quartile 2	23	35.9	41	64.1
Quartile 3	25	41	36	59
Quartile 4	11	37.9	18	62.1
2009				
Quartile 1	9	37.5	15	63.5
Quartile 2	10	41.7	14	58.3
Quartile 3	13	56.5	10	43.5
Quartile 4	14	60.1	9	39.9

$G^2 = 18.80$, $p = .043$
Quartile categories of Nebraska school districts when ranked by each district's total dollars of taxable property valuation divided by the number of pupils reported in average daily membership (ADM). Range of wealth per pupil by quartile: Quartile 1 = $140,000 to $477,065; Quartile 2 = $479,663 to $602,959; Quartile 3 = $614,058 to $803,162; Quartile 4 = $804,979 to $1,823,480.

The Population Change index was next used to compare perceptions of limited restructuring to the instructional program. The population change categories of Decline and Growth each reported the highest percent of superintendents who perceived their

structures limited the restructuring of the instructional program in 1993. In 2009, the responses split approximately 50 -50 in all population categories. The difference was significant. The results are presented in Table 121.

Table 121

Comparison of the 2009 Responses to the 1993 Responses of The Number of Superintendents Who Perceived Facilities Limited Restructuring of Instructional Programs By Population Change.

Population Change Category	Limited Restructuring			
	No	Percent	Yes	Percent
1993				
Major Decline	40	42.6	54	57.3
Decline	26	28.6	65	71.4
Growth	9	28.1	23	71.9
Major Growth	3	37.5	5	63.5
2009				
Major Decline	13	48.1	14	51.9
Decline	19	50	19	50
Growth	13	48.1	14	51.9
Major Growth	1	50	1	50

$G^2 = 20.92$, $p = .022$
Major Growth = A population increase of 10% or more.
Growth = A population increase from 0.1% to 9%.
Decline = A population decrease from 0% to -9%.
Major Decline = A population decrease from -10% or more.

The next comparisons to be presented pertain to the use of technology in district buildings. The responses of district leaders were sorted into the three descriptive indices of this study. The first index utilized is Class.

In 1993, superintendents of Class III school systems reported that 65% of the districts had buildings that inhibited the use of technology. In contrast, the cohort of superintendents reported sixteen years later that only 44% of the districts had buildings that inhibited the use of technology. The level of difference was significant. The results may be found in Table 122.

Table 122

Comparison of the 2009 Responses to The 1993 Responses of The Number of Superintendents Who Perceived Facilities Inhibited the Use of Technology by Class

Class III	Inhibited Use of Technology			
	No	Percent	Yes	Percent
1993	79	35.1	146	64.9
2009	53	56.4	41	43.6

$\chi^2(1) = 12.37$, $p < .001$
Class II = 1,000 or less inhabitants.
Class III = 1,000 to 100,000 inhabitants.
Class IV = 100,000 to 250,000 inhabitants.
Class V = 250,000 or more inhabitants

The comparison of the index Quartile of Valuation per Pupil exhibited that the perceptions of contemporary superintendents about the structures of their system as limiting the use of technology was lower than the superintendents who participated in the 1993 study. Opinions about the limitations on technology remained consistent over time

with district leaders of Quartile 2. However, the differences were not significant. The outcome is exhibited in Table 123.

Table 123

Comparison of the 2009 Responses to The 1993 Responses of The Number of Superintendents Who Perceived Facilities Inhibited the Use of Technology By Quartile of Increasing Valuation Per Pupil

Quartile of Valuation /Pupil	Inhibited Use of Technology			
	No	Percent	Yes	Percent
1993				
Quartile 1	21	29.6	50	70.4
Quartile 2	27	42.9	37	57.1
Quartile 3	22	36.1	39	63.9
Quartile 4	9	31	20	69
2009				
Quartile 1	12	50	12	50
Quartile 2	11	45.8	13	54.2
Quartile 3	14	60.9	9	39.1
Quartile 4	16	69.6	7	30.4

$G^2 = 24.48$, $p = .408$
Quartile categories of Nebraska school districts when ranked by each district's total dollars of taxable property valuation divided by the number of pupils reported in average daily membership (ADM). Range of wealth per pupil by quartile: Quartile 1 = $140,000 to $477,065; Quartile 2 = $479,663 to $602,959; Quartile 3 = $614,058 to $803,162; Quartile 4 = $804,979 to $1,823,480.

Table 124 presented the results of the Population Change index. In 1993, the majority of district leaders of the four population categories all held the belief that the buildings did inhibit the use of technology. In 2009, the superintendents did not have the

Table 124

Comparison of the 2009 Responses to The 1993 Responses of The Number of Superintendents Who Perceived Facilities Inhibited the Use of Technology By Population Change

Population Change Category	Inhibited Use of Technology			
	No	Percent	Yes	Percent
1993				
Major Decline	38	40.4	56	59.6
Decline	25	27.5	66	72.5
Growth	13	40.6	19	59.4
Major Growth	3	37.5	5	62.5
2009				
Major Decline	15	55.6	12	44.4
Decline	21	55.3	17	44.7
Growth	15	55.6	12	44.4
Major Growth	2	100	0	0

$G^2 = 29.16$, $p = .001$
Major Growth = A population increase of 10% or more.
Growth = A population increase from 0.1% to 9%.
Decline = A population decrease from 0% to -9%.
Major Decline = A population decrease from -10% or more.

same perceptions. The majority of the current study did not perceive their facilities as a hindrance to the use of technology. The difference level was significant.

In Nebraska, law permitted the assessment of a special building or bond fund levy upon the property tax base of the district. The approval of the special building or bond fund by the board of education or by a vote of the patrons of the school district provided for funds to be set aside for special or future building projects. Because of contrasts in the

valuation of the property within the boundaries of the school district, the same levy rate in two districts generated two different amounts of revenue to be set aside for the districts' building projects.

To ascertain if there was a difference between the responses tendered by the 1993 cohort group and the present day superintendents, their answers were sorted into the Class index. Upon examination of the responses, it was found that both generations of district leaders reported the same percentage of districts using the special building fund (73%). There was no significant difference found. The results are illustrated in Table 125.

Table 125

Comparison of 2009 Responses To 1993 Responses of the Number and Percent of Nebraska School Districts Using a Special Building Fund Levy By Class

Class III	Use of Special Building Fund Levy				
	No	Percent	Yes	Percent	Total
1993	60	26.7	165	73.3	225
2009	25	26.6	69	73.4	94

$\chi^2(1) = 0$, $p = 1.0$
Class II = 1,000 or less inhabitants.
Class III = 1,000 to 100,000 inhabitants.
Class IV = 100,000 to 250,000 inhabitants.
Class V = 250,000 or more inhabitants

The next index to examine for significant differences between the two eras of study participants was the Wealth index. Depending on which quartile the reporting district was categorized into, the deviation of the reported use of the special building fund varied. The 2009 mid-range quartiles reported a slightly higher percentage of usage of the

special building fund levy than did the 1993 mid-range quartiles. The poorest districts, those in Quartile 1, had a lower percentage of districts using the special building fund levy in 2009 than in 1993. The reverse was true for Quartile 4 districts. The difference was not significant. Table 126 shows the results of the Wealth index.

Table 126

Comparison of The 2009 Responses To The 1993 Responses of the Number and Percent of Nebraska School Districts Using a Special Building Fund Levy By Quartile of Valuation per Pupil

Quartile of Valuation /Pupil	Use of Special Building Fund			
	No	Percent	Yes	Percent
1993				
Quartile 1	15	21.1	56	78.9
Quartile 2	14	22.2	49	77.8
Quartile 3	17	27.9	44	72.1
Quartile 4	13	44.8	16	55.2
2009				
Quartile 1	8	33.3	16	66.7
Quartile 2	4	16.7	20	83.3
Quartile 3	5	21.7	18	78.3
Quartile 4	8	34.8	15	65.2

$G^2 = 15.16$, $p = .126$
Quartile categories of Nebraska school districts when ranked by each district's total dollars of taxable property valuation divided by the number of pupils reported in average daily membership (ADM). Range of wealth per pupil by quartile: Quartile 1 = $140,000 to $477,065; Quartile 2 = $479,663 to $602,959; Quartile 3 = $614,058 to $803,162; Quartile 4 = $804,979 to $1,823,480.

The comparison between the 1993 and 2009 participants was next made employing the Population Change index. Class III districts that experienced a major growth of population in 1993, reported that 87.5% of those school systems were using a special building fund levy. However, sixteen years later, the same population category reported that only 50% of the districts were utilizing a special building fund levy. The Growth category also reported a decrease in the amount of districts exercising the special building fund levy between the 1993 and 2009 study participants. The decrease was not as severe as the major growth districts. Despite the reported differences, they were not deemed significant. Table 127 presents the results.

Superintendents from both the 1993 and 2009 facilities study did report utilizing a special building fund levy. Table 128 presents the comparison of the central tendencies of the special building fund levy for the two eras. The reader is reminded that the modern day superintendents are required by law to maintain a levy no higher than a $1.05 per hundred dollars of valuation, which includes the general fund and special building fund levies. The registered voters of the district may allow the school system to supersede the limitation by a majority vote.

The average special building fund levy of the participating districts in 1993 was $0.0669. In 2009, the average levy was $0.0396. The median of the reported 1993 levies was $0.055 while the median in 2009 was calculated to be $0.0344.

Table 129 displays the central tendencies of the special building fund levy as determined by increasing valuation per pupil. While the 2009 average was lower than the 1993 average, the greatest difference appears between the districts of Quartile 1. In 1993,

Table 127

Comparison of The 2009 Responses To The 1993 Responses of the Number and Percent of Nebraska School Districts Using a Special Building Fund Levy By Population Change

Population Change Category	Use of Special Building Fund Levy			
	No	Percent	Yes	Percent
1993				
Major Decline	29	30.8	65	69.2
Decline	25	27.5	66	72.5
Growth	5	15.6	27	84.4
Major Growth	1	12.5	7	87.5
2009				
Major Decline	7	25.9	20	74.1
Decline	10	26.3	28	73.7
Growth	7	25.9	20	74.1
Major Growth	1	50	1	50

$G^2 = 15.12$, $p = .128$
Major Growth = A population increase of 10% or more.
Growth = A population increase from 0.1% to 9%.
Decline = A population decrease from 0% to -9%.
Major Decline = A population decrease from -10% or more.

Table 128

Comparisons of 2009 Responses to 1993 Responses of The Central Tendency of Special Building Fund Levies By Class

District Class	Frequency	Mean	Maximum	Minimum	Median
1993	165	0.0669	0.2654	0.0075	0.0550
2009	71	0.0396	0.1317	0.0060	0.0344

Class II = 1,000 or less inhabitants.
Class III = 1,000 to 100,000 inhabitants.
Class IV = 100,000 to 250,000 inhabitants.
Class V = 250,000 or more inhabitants

Table 129

Comparisons of 2009 Responses to 1993 Responses of The Central Tendency of Special Building Fund Levies By Quartile of Increasing Valuation Per Pupil

District Class	Frequency	Mean	Maximum	Minimum	Median
1993					
Quartile 1	56	0.0864	0.1810	0.0105	0.0868
Quartile 2	49	0.0584	0.2654	0.1400	0.0140
Quartile 3	44	0.0559	0.1400	0.0117	0.0487
Quartile 4	16	0.0429	0.1400	0.0124	0.0323
2009					
Quartile 1	16	0.0496	0.1317	0.0060	0.0422
Quartile 2	21	0.0333	0.0974	0.0061	0.0320
Quartile 3	18	0.0383	0.978	0.0098	0.0314
Quartile 4	16	0.0394	0.0855	0.0067	0.0349

Quartile categories of Nebraska school districts when ranked by each district's total dollars of taxable property valuation divided by the number of pupils reported in average daily membership (ADM). Range of wealth per pupil by quartile: Quartile 1 = $140,000 to $477,065; Quartile 2 = $479,663 to $602,959; Quartile 3 = $614,058 to $803,162; Quartile 4 = $804,979 to $1,823,480.

the district with the fewest valuation dollars had an average levy of $0.0864. The 2009 average for Quartile 1 districts was 0.0496.

Table 130 illustrates the central tendencies of the special building fund levy by the population change index. Again, the results demonstrate that the levy average, maximum and minimum levies, and the median were all higher in 1993 than they were in 2009. The median levy of the districts with the greatest population growth was $0.1238. In 2009, districts with the greatest population growth reported a median levy of $0.0130.

Table 130

Comparisons of 2009 Responses to 1993 Responses of The Central Tendency of Special Building Fund Levies By Population Change

Population Change Category	Frequency	Mean	Maximum	Minimum	Median
1993					
Major Decline	65	0.0587	0.2654	0.0075	0.0461
Decline	66	0.0661	0.181	0.0076	0.0531
Growth	27	0.0734	0.1531	0.0157	0.0687
Major Growth	7	0.0981	0.1399	0.0211	0.1238
2009					
Major Decline	21	0.0333	0.0617	0.0068	0.0353
Decline	30	0.0375	0.0978	0.006	0.031
Growth	19	0.0513	0.1317	.0088	0.0451
Major Growth	1	0.0130	0.0130	0.0130	0.0130

Major Growth = A population increase of 10% or more.
Growth = A population increase from .01% to 9%.
Decline = A population decrease from 0% to -9%.
Major Decline = A population decrease from -10% or more.

Bond debt reported by district leaders from both eras were next analyzed to determine if a significant difference existed between them. The first descriptive index utilized for this comparison was the Class index. Nearly 60% of the respondents from 1993 and 2009 reported a bond debt. The difference was not significant. Table 131 presents the results.

Wealth was the next index employed to analyze responses when sorted by increasing valuation per pupil. The comparisons between the 1993 and 2009 cohorts showed that the districts in Quartiles 1, 2, and 3 had a similar percentage of districts

Table 131

Comparison of The 2009 Responses To The 1993 Responses of the Number and Percent of Nebraska School Districts Reporting a Bond Debt By Class

Class III	Reporting Bond Debt			
	No	Percent	Yes	Percent
1993	95	42.2	130	57.8
2009	38	40.4	56	59.6

$\chi^2(1) = .09$, $p = .764$
Class II = 1,000 or less inhabitants.
Class III = 1,000 to 100,000 inhabitants.
Class IV = 100,000 to 250,000 inhabitants.
Class V = 250,000 or more inhabitants

reporting bond debt. In 1993, districts with the most valuation dollars reported a lower percentage of districts (37.9%) with a bond debt while the same quartile in 2009 reported a higher percentage of districts (52.2%) with a bond debt. The difference was significant. The results are displayed in Table 132.

Population change was utilized to compare responses between the 1993 superintendents and the 2009 superintendents. All but the 2009 Quartile 4 districts reported a slightly lower percentage of school systems noted the use of a bond debt when compared to the 1993 results. Districts with the greatest population growth in 2009 reported a higher percentage of districts with bond debt than was reported in 1993. The difference was significant. The results are shown in Table 133.

As with the special building fund levy, an examination to the central tendencies of the amount of bond debt was compared. While the special building fund levy was regulated by the levy limitations enacted in 1998, the levy utilized to retire the bond debt has no such requirements.

Table 132

Comparison of The 2009 Responses To The 1993 Responses of the Number and Percent of Nebraska School Districts Reporting a Bond Debt By Quartile of Increasing Valuation Per Pupil

Quartile of Valuation /Pupil	Reporting Bond Debt			
	No	Percent	Yes	Percent
1993				
Quartile 1	24	33.8	47	66.2
Quartile 2	20	31.3	44	68.7
Quartile 3	33	54.1	28	45.9
Quartile 4	18	62.1	11	37.9
2009				
Quartile 1	8	33.3	16	66.7
Quartile 2	7	29.2	17	70.8
Quartile 3	12	52.2	11	47.8
Quartile 4	11	47.8	12	52.2

$G^2 = 23.46$, $p = .009$

Quartile categories of Nebraska school districts when ranked by each district's total dollars of taxable property valuation divided by the number of pupils reported in average daily membership (ADM). Range of wealth per pupil by quartile: Quartile 1 = $140,000 to $477,065; Quartile 2 = $479,663 to $602,959; Quartile 3 = $614,058 to $803,162; Quartile 4 = $804,979 to $1,823,480.

Table 133

Comparison of The 2009 Responses To The 1993 Responses of the Number and Percent of Nebraska School Districts Reporting a Bond Debt By Population Change

Population Change Category	Reporting Bond Debt			
	No	Percent	Yes	Percent
1993				
Major Decline	44	46.8	50	54.2
Decline	45	49.5	46	50.5
Growth	4	12.5	28	87.5
Major Growth	2	25	6	75
2009				
Major Decline	13	48.1	14	51.8
Decline	20	52.6	18	47.4
Growth	5	18.5	22	81.5
Major Growth	0	0	2	100

$G^2 = 38.94$, $p < .001$
Major Growth = A population increase of 10% or more.
Growth = A population increase from 0.1% to 9%.
Decline = A population decrease from 0% to -9%.
Major Decline = A population decrease from -10% or more.

The average bond debt reported in 2009 was $7.4 million dollars while the average in 1993 was $1.65 million dollars. The maximum bond debt reported in 2009 was $57.38 million dollars. The maximum bond debt reported by Class III superintendents in 1993 was $53.87 million dollars. The least amount of bond debt reported in 1993 was $1,000.00. The least amount reported in 2009 was $70,000.00. The central tendencies by Class are shown in Table 134.

Table 134

Comparisons of the 2009 Responses to The 1993 Responses of The Central Tendency of Bond Debt by Class

Class III*	Frequency	Mean	Maximum	Minimum	Median
1993	130	1.65	53.87	0.001	0.66
2009	56	7.40	57.38	0.07	2.78

* reported in millions of dollars
Class II = 1,000 or less inhabitants.
Class III = 1,000 to 100,000 inhabitants.
Class IV = 100,000 to 250,000 inhabitants.
Class V = 250,000 or more inhabitants

In comparing bond debt by district wealth, the highest amount of debt was reported by districts with the fewest valuation dollars in both the 1993 and the 2009 studies. The average bond debt decreased as the wealth of the district increased. The same comparison may be noted when reviewing the median bond debt. Table 135 illustrated the central tendencies of bond debt when compared by wealth.

When making a comparison of the central tendencies of reported bond debt by population change, districts claiming a growth in county population have the highest average of bond debt. The responses of the 2009 participants reported higher central tendencies in all of the categories than did the 1993 cohort. The results are displayed in Table 136.

Comparisons were made between the responses of 1993 and 2009 superintendents when asked about the anticipation of a bond issue to meet facility needs. Although the 1993 superintendents' responses show a higher rate (61.8%) of no bond issue needed,

Table 135

Comparisons of the 2009 Responses to The 1993 Responses of The Central Tendency of Bond Debt By Quartile of Increasing Valuation Per Pupil

Quartile of Valuation /Pupil*	Frequency	Mean	Maximum	Minimum	Median
1993					
Quartile 1	47	3.12	53.87	0.03	0.95
Quartile 2	44	1.03	4.01	0.20	0.65
Quartile 3	28	0.68	1.75	0.001	0.59
Quartile 4	11	0.33	1.43	0.03	0.11
2009					
Quartile 1	16	18.21	57.38	0.64	7.36
Quartile 2	17	3.98	18.33	0.28	3.20
Quartile 3	11	2.92	8.97	0.19	2.04
Quartile 4	12	1.95	6.50	0.07	1.21

* reported in millions of dollars
Quartile categories of Nebraska school districts when ranked by each district's total dollars of taxable property valuation divided by the number of pupils reported in average daily membership (ADM). Range of wealth per pupil by quartile: Quartile 1 = $140,000 to $477,065; Quartile 2 = $479,663 to $602,959; Quartile 3 = $614,058 to $803,162; Quartile 4 = $804,979 to $1,823,480.

they 2009 superintendents had a higher percentage (71.3%) of responses that made the same claim. The difference was significant. The results are displayed in Table 137.

Of the superintendents who anticipated a bond issue, a question was posed about their perception of a successful bond referendum. The 2009 superintendents had a more positive outlook about the success of a bond issue (73.1%) than did their 1993 counterparts (53.3%). The difference was not significant. The results are presented in Table 138.

Table 136

Comparisons of the 2009 Responses to The 1993 Responses of The Central Tendency of Bond Debt By Population Change

Population Change Category*	Frequency	Mean	Maximum	Minimum	Median
1993					
Major Decline	50	0.99	5.93	0.001	0.55
Decline	46	0.84	3.53	0.02	0.58
Growth	28	3.95	53.87	0.61	1.28
Major Growth	6	2.73	7.54	0.07	1.72
2009					
Major Decline	16	1.35	6.50	0.07	0.94
Decline	16	3.58	8.00	0.59	2.92
Growth	22	14.46	57.38	0.67	4.85
Major Growth	2	8.68	13.46	3.90	8.68

* reported in millions of dollars
Major Growth = A population increase of 10% or more.
Growth = A population increase from 0.1% to 9%.
Decline = A population decrease from 0% to -9%.
Major Decline = A population decrease from -10% or more.

Table 137

Comparison of The 2009 Responses To The 1993 Responses of Superintendents Who Anticipated a Bond Issue By Class

Class III	Anticipated Bond Issue			
	No	Percent	Yes	Percent
1993	139	61.8	86	38.2
2009	67	71.3	27	28.7

$\chi^2(1) = 2.62$, $p = .01$
Class II = 1,000 or less inhabitants.
Class III = 1,000 to 100,000 inhabitants.
Class IV = 100,000 to 250,000 inhabitants.
Class V = 250,000 or more inhabitants

Table 138

Comparison of The 2009 Responses To The 1993 Responses of Superintendents Who Predicted Success Of A Bond Issue By Class

Class III	Successful Bond Issue			
	No	Percent	Yes	Percent
1993	43	46.7	49	53.3
2009	7	26.9	19	73.1

$\chi^2(1) = 3.26$, $p = .07$
Class II = 1,000 or less inhabitants.
Class III = 1,000 to 100,000 inhabitants.
Class IV = 100,000 to 250,000 inhabitants.
Class V = 250,000 or more inhabitants

The relative wealth of a district reflected the property valuation per pupil. Table 139 presents results of the comparison between the 1993 and 2009 responses when sorted into the Quartile of Valuation per Pupil index. In 1993, the districts of Quartile 1 split 50 – 50 as to whether or not they anticipated a bond issue. Their 2009 counterparts had a stronger opinion with nearly 60% of the superintendents in Quartile 1 anticipating a bond issue. The same percent of 2009 Quartile 2 districts were anticipating a bond issue. The expectancy of a bond referendum increased as the wealth of the district increased. The difference was significant between the responses given by both generations of superintendents.

With the anticipation of a bond issue, comes the level of confidence of it coming to fruition. Quartile 1 districts, the poorest systems, had the highest level of confidence in both studies (83.3%, 1993; 80%, 2009). Approximately 75% of the wealthiest districts

Table 139

Comparison of The 2009 Responses To The 1993 Responses of Superintendents Who Anticipated a Bond Issue By Quartile of Valuation per Pupil

Quartile of Valuation /Pupil	Anticipated Bond Issue			
	No	Percent	Yes	Percent
1993				
Quartile 1	35	49.3	36	50.7
Quartile 2	41	64.1	23	35.9
Quartile 3	45	73.8	16	26.2
Quartile 4	18	62.1	11	37.9
2009				
Quartile 1	14	58.3	10	41.7
Quartile 2	14	58.3	10	41.7
Quartile 3	19	82.6	4	17.4
Quartile 4	20	87	3	13

$G^2 = 352.22$, $p < .001$
Quartile categories of Nebraska school districts when ranked by each district's total dollars of taxable property valuation divided by the number of pupils reported in average daily membership (ADM). Range of wealth per pupil by quartile: Quartile 1 = $140,000 to $477,065; Quartile 2 = $479,663 to $602,959; Quartile 3 = $614,058 to $803,162; Quartile 4 = $804,979 to $1,823,480.

did not share the high level of confidence in 1993, but in 2009 the same percentage did believe that a bond issue was going to be successful. Table 140 displays the results, which were found to be significant.

The responses of the Population Change Category were next to be compared. For both studies, the greater the loss of population, the less likely the need for a bond referendum. The modern day superintendents had a percentage rate of not anticipating a

Table 140

Comparison of The 2009 Responses To The 1993 Responses of Superintendents Who Predicted Success Of A Bond Issue By Quartile of Valuation per Pupil

Quartile of Valuation /Pupil	Successful Bond Issue			
	No	Percent	Yes	Percent
1993				
Quartile 1	6	16.7	30	83.3
Quartile 2	14	60.9	9	39.1
Quartile 3	9	56.3	7	43.7
Quartile 4	8	72.7	3	27.3
2009				
Quartile 1	2	20	8	80
Quartile 2	4	44.4	5	55.6
Quartile 3	0	0	4	100
Quartile 4	1	25	3	75

$G^2 = 26.78$, $p = .002$
Quartile categories of Nebraska school districts when ranked by each district's total dollars of taxable property valuation divided by the number of pupils reported in average daily membership (ADM). Range of wealth per pupil by quartile: Quartile 1 = $140,000 to $477,065; Quartile 2 = $479,663 to $602,959; Quartile 3 = $614,058 to $803,162; Quartile 4 = $804,979 to $1,823,480.

bond issue than did the past group of superintendents. The proportional relationship between the differences was significant. The outcomes are displayed in Table 141.

The districts that reported the anticipation of a bond issue when sorted into the Population Change category were asked if they thought the referendum would be successful. Table 142 presents the comparisons of their answers. Superintendents of the districts with the greatest population growth in both studies had a high degree of confidence that the bond issue would pass. As time has waned, the superintendents of the

Table 141

Comparison of The 2009 Responses To The 1993 Responses of Superintendents Who Anticipated a Bond Issue By Population Change

Population Change Category	Anticipated Bond Issue			
	No	Percent	Yes	Percent
1993				
Major Decline	69	73.4	25	26.6
Decline	49	53.8	42	46.2
Growth	19	59.4	13	40.6
Major Growth	2	25	6	75
2009				
Major Decline	23	85.2	4	14.5
Decline	28	73.7	10	26.3
Growth	16	59.3	11	40.7
Major Growth	0	0	2	100

$G^2 = 35.62$, $p < .001$
Major Growth = A population increase of 10% or more from 2000 to 2008.
Growth = A population increase from 0% to 10% from 2000 to 2008.
Decline = A population decrease from 0% to -10% from 2000 to 2008.
Major Decline = A population decrease from -10% to -25% from 2000 to 2008.

poorest districts had a higher level of anticipated success (75%) than did their 1993 colleagues (44%). Superintendents whose districts experienced some growth shared the same level of confidence of a successful bond referendum. In 1993, 76% thought the issue would pass and in 2009, 73% shared the same thought. The difference was not significant.

The last groups of comparisons concern the superintendents' perception about the fiscal capability of their district to meet the needs of the facilities without raising property

Table 142

Comparison of The 2009 Responses To The 1993 Responses of Superintendents Who Predicted Success Of A Bond Issue By Population Change

Population Change Category	Successful Bond Issue			
	No	Percent	Yes	Percent
1993				
Major Decline	14	56	11	44
Decline	19	45.2	23	54.8
Growth	3	23.1	10	76.9
Major Growth	1	16.7	5	83.3
2009				
Major Decline	1	25	3	75
Decline	3	33.3	6	66.7
Growth	3	27.3	8	72.7
Major Growth	0	0	2	100

$G^2 = 18.12$, $p = .053$
Major Growth = A population increase of 10% or more from 2000 to 2008.
Growth = A population increase from 0% to 10% from 2000 to 2008.
Decline = A population decrease from 0% to -10% from 2000 to 2008.
Major Decline = A population decrease from -10% to -25% from 2000 to 2008.

taxes over the next ten years. When answers were sorted into the Class index, 83% of the 1993 superintendents did not perceive their district as fiscally capable of meeting the needs of the buildings within their school systems without raising property taxes. Only 70% of the 2009 superintendents had the same perception. The difference was significant. The outcomes are presented in Table 143.

Comparisons were made in relation to a district's wealth. Responses from the 1993 study indicate that the district leaders of that time did not believe that their districts

Table 143

Comparison of The 2009 Responses To The 1993 Responses of Fiscal Capability by Superintendents to Meet Facility Needs By Class

Class III	Fiscal Capability			
	No	Percent	Yes	Percent
1993	187	83.1	38	16.9
2009	65	69.1	29	30.9

$\chi^2(1) = 7.79$, $p = .005$
Class II = 1,000 or less inhabitants.
Class III = 1,000 to 100,000 inhabitants.
Class IV = 100,000 to 250,000 inhabitants.
Class V = 250,000 or more inhabitants

could meet the structural needs without raising property taxes over the next ten years. On the other hand, the school system executives who participated in the 2009 study did perceive the ability to meet facility needs without raising property taxes. The difference was significant. The results are shown in Table 144.

When making a comparison according to population change, districts whose counties felt the impact of a decline or more in population in 1993 or 2009 offered similar beliefs about the fiscal capability of their districts. The 1993 superintendents whose counties experienced growth had a higher rate of doubt than did their 2009 counterparts. There was a significant level of difference of these responses between the eras, which are illustrated in Table 145.

Conclusions

Four research questions were posed in this study. The first three questions were from Pool's 1993 study, the fourth question was directed toward the impact of the 1998

Table 144

Comparison of The 2009 Responses To The 1993 Responses of Fiscal Capability by Superintendents to Meet Facility Needs By Quartile of Increasing Valuation Per Pupil

Quartile of Valuation /Pupil	Fiscal Capability			
	No	Percent	Yes	Percent
1993				
Quartile 1	57	80.3	14	19.7
Quartile 2	57	89.1	7	10.9
Quartile 3	49	80.3	12	19.7
Quartile 4	24	82.8	5	17.3
2009				
Quartile 1	13	54.2	11	45.8
Quartile 2	19	79.2	5	20.8
Quartile 3	17	73.9	6	26.1
Quartile 4	16	69.6	7	30.4

$G^2 = 20.06$, $p = .028$
Quartile categories of Nebraska school districts when ranked by each district's total dollars of taxable property valuation divided by the number of pupils reported in average daily membership (ADM). Range of wealth per pupil by quartile: Quartile 1 = $140,000 to $477,065; Quartile 2 = $479,663 to $602,959; Quartile 3 = $614,058 to $803,162; Quartile 4 = $804,979 to $1,823,480.

levy limitation on a district's ability to maintain its facilities. A response was given to each question in this section. The response was presented as a summary of findings to data presented in the previous section of this chapter.

Research Question 1

What is the current status of Nebraska Class III public school facilities and how do they compare with the results of the 1993 Pool study? As with the Pool study, the following factors were considered: school district building fund levies, bond

Table 145

Comparison of The 2009 Responses To The 1993 Responses of Fiscal Capability by Superintendents to Meet Facility Needs By Population Change

Population Change Category	Fiscal Capability			
	No	Percent	Yes	Percent
1993				
Major Decline	77	81.9	17	18.1
Decline	19	61.3	12	38.7
Growth	25	78.1	7	21.9
Major Growth	6	75	2	25
2009				
Major Decline	21	77.8	6	22.2
Decline	25	65.8	13	34.2
Growth	17	63	10	37
Major Growth	2	100	0	0

$G^2 = 23.04$, $p = .01$
Major Growth = A population increase of 10% or more.
Growth = A population increase from 0.1% to 9%.
Decline = A population decrease from 0% to -9%.
Major Decline = A population decrease from -10% or more.

indebtedness, facility age, safety, capacity, internal environment, school type, and accommodation for the handicapped.

Building demographics. The participating building administrators reported that 4.8% were overcrowded. This compares with 14.5% of Class III buildings reported as overcrowded in the 1993 study. The 2009 cohort of building administrators rated 12% of their building as poor for providing an adequate place for current instructional programs; 19% of the Class III buildings received the same rating for providing an adequate place

for instructional programs. Current day building administrators reported that 46% of their buildings prevented or inhibited making appropriate changes to the educational program. This compares to 47% of the administrators who participated in the Pool study.

Thirty percent of the building administrators who responded to the 2009 questionnaire stated their facility did not accommodate the use of technology. In contrast, 46% of administrators who partook in the 1993 study opined that their facilities did not accommodate the use of technology. Eight percent of the 2009 building administrators rated the interior of their facility as poor, while 11% of the 1993 respondents made the same claim about their interior. When considering the safety of their buildings, the 2009 participants reported that approximately 10% were not completely free from hazards. The 1993 group of Class III building administrators reported that approximately 11% were not completely free of safety concerns. One quarter of the 2009 building supervisors reported that their buildings were not completely handicap accessible. In comparison, 53% of the 1993 building supervisors concurred that their structures were not completely handicap accessible.

In 2009, 6% of the participating Class III building administrators reported that their facility did not have air-conditioning available. Sixty-eight of the 1993 respondents reported the same. As for consistently comfortable classrooms, 33% of building administrators did not offer a favorable opinion while 43% of the 1993 building administrators did not consider their classrooms to be consistently comfortable.

District demographics. Class III superintendents who participated in this study reported that 54% of their districts had delayed maintenance within the last five years. This compares with 45% of the superintendents who participated in the 1993 facility

study. In 2009, superintendents of 51% of the districts perceived their facilities as limiting the restructuring of the instructional program. In contrast, superintendents from Pool's study reported that 65% of the districts had the same perception. Facilities that inhibited the use of technology were reported by 43% of the 2009 facility study superintendents. This compares to 65% of the 1993 cohort reporting the same perception about technology in their districts.

District facility fiscal condition and facility needs. Information about the level of the special building fund levy and bond debt were gathered to measure the efforts by local patrons to support the facility needs of their district. The necessity of new construction and the fiscal capability of a district to meet the demands of building upkeep were measured by the opinions expressed by superintendents.

In 1993, 73% of Class III school superintendents reported the use of the special building fund levy. In 2009, the superintendents reported a similar percentage of districts utilizing the special building fund levy. In 1993, 57% of the school districts were assessing property taxes to retire bond debt. This compares to 59% of school districts reporting to use property taxes for the same purpose.

Comparisons were made between the responses of 1993 and 2009 district leaders when asked about the anticipation of a bond issue to meet facility needs. Although 61.8% of the 1993 superintendents did not foresee the need of a bond issue, the 2009 superintendents had a higher percentage (71.3%) of responses that made the same claim. Of the superintendents who anticipated a bond issue, a question was posed about their perception of a successful bond referendum. The 2009 superintendents offered a more positive outlook about the success of a bond issue (73.1%) than did their 1993

counterparts (53.3%). Only 17% of the 1993 cohort considered their district fiscally capable of meeting the facilities of their district without raising property taxes. Thirty percent of the 2009 cohort came to the same conclusion.

Research Question 2

Were there significant differences between the 2009 and 1993 studies in the areas of district class, wealth, county population growth and how public superintendents perceived their district's need for facility bond issues, potential for success of a bond issue, delay of facility maintenance, and implementation of technology?

Comparisons were made between the responses of 1993 and 2009 superintendents when asked about the anticipation of a bond issue to meet facility needs by Class of District. Although the 1993 superintendents' responses showed a higher rate (61.8%) of no bond issue needed, the 2009 superintendents had a higher percentage (71.3%) of responses that made the same claim. Although both generations of superintendents reported delaying building maintenance projects over the last five years, the 2009 participants reported that 54% of their districts had delayed maintenance in comparison to 45% of delayed maintenance projects in 1993. The earlier group of superintendents reported the 65% of their district's buildings inhibited the use of technology. The 2009 school superintendents reported that 43% of their districts' building inhibited the use of technology.

In 1993, superintendents in the districts categorized in the poorest quartile, one (51%), anticipated a bond issue in comparison with the superintendents in the districts categorized as the poorest quartile in 2009 (41%). All of the quartiles from the 2009 study reported a lower anticipation of a bond referendum than did all of the quartiles

from the 1993 study. Superintendents from both studies whose districts were categorized in the poorest quartile reported the highest percentage of predicted success when placing a bond issue before the registered voters of their districts. The difference between the responses of the superintendents of both studies was significant. Whereas the majority of superintendents from the 1993 study reported their facilities as inhibiting the use of technology, the 2009 results illustrated that the two wealthiest quartiles did not perceive the use of technology as inhibited by the districts' buildings.

The percent of county population change was used to determine the change category for each school district in both studies. The districts within counties that were impacted by a major growth in population in both studies anticipated bond issues at a higher percentage than did the other population categories. Except for the growth category results reported in the 2009 study, the population categories that reported the least amount of growth had the lowest percentages of anticipated bond referendums. These differences were found to be significant. In both studies, districts experiencing growth reported a higher degree of a successful bond issue than districts with a decreasing population base.

When considering the impact of population change on the districts use of technology, a significant difference was found to exist between the 1993 and 2009 studies. The majority of superintendents in 1993 reported that their districts' building inhibited the use of technology. The results of the 2009 study reported the opposite effect. In 2009, a higher percentage of superintendents reported that they did not delay maintenance than did their 1993 counterparts. This difference was significant.

Research Question 3

Were there significant differences between the 1993 and 2009 studies when considering relative district wealth, county population change, and how school superintendents perceived their districts' ability to fund facility needs without raising the property tax levy?

In both studies, the relative wealth accessible to the patrons of a school district for facility construction was determined by the dollars of assessed property valuation per pupil in average daily membership. As in 1993, Nebraska school district patrons were totally reliant upon this tax base to generate the revenues required to construct school facilities. (Pool, 1993).

The rate of change in county population in Nebraska during the period from 2000 to 2008 varied greatly from county to county. The number of counties experiencing decline greatly outnumbered by the number of counties in which there was a population increase. Relative property wealth and population change were major categories used for the analysis of responses in this study.

In 1993, 17% of the reporting superintendents believed their district fiscally capable of meeting the facility needs of their districts' structures. Only 31% of the 2009 respondents reported the same perception. This difference was significant. When relative district wealth was taken into account, a vast majority of superintendents who reported in 1993 did not believe their districts had the fiscal capacity to meet the needs of their buildings. The same could be said about the 2009 superintendents, but to a lesser degree. The difference when wealth was considered was significant.

The analysis of fiscal capacity to fund facilities without raising property taxes by Population Change Category did reveal a significant difference between the responses offered in 1993 and 2009. In 1993, districts experiencing a major decline in population reported a higher fiscal capacity than other population categories. However, in 2009, the districts experiencing major population growth reported the highest percentage of fiscal capacity to fund facility maintenance and construction. The districts experiencing a modicum of growth in 1993 reported a higher percentage (78.1%) of fiscally capable districts than did their 2009 counterparts (63%).

Research Question 4

Has the property tax limitation affected the capacity of Nebraska Class III school districts to maintain their facilities?

In 1998, the Nebraska legislature passed a law that limited a school district's ability to generate revenue. As a result of this levy limit, the total amount of revenue for funds that were supported by property taxes could not exceed a levy of $1.00 per hundred dollars of valuation. This law did not include the building fund levy, which is utilized to retire bond debt. This law also limited how much a district could expend. In essence, school districts in Nebraska had a double lid placed upon them.

School officials have the option of placing a referendum before the registered voters of the district seeking their permission of override either the revenue and/or expenditure section of the levy limit by raising the limit set forth by law. Law delineates the maximum length of the override but the district has the option to shorten the term of the override. At expiration of the override the voters have the option to renew it.

Class III superintendents had opinions about the 1998 levy limit. Their answers were sorted into the descriptive indices of this study and presented for analysis and discussion. Sixty-one percent of the participating superintendents perceived the levy limit as hindering their districts' ability to maintain the facilities of their districts. When considering the wealth of a district, the majority of superintendents whose districts were in the lower three tiers of valuation per pupil viewed the levy limit as a hindrance to the maintenance projects for their districts. When the population of a district decreased, the perception of the levy limit as a hindrance increased.

District leaders of Class III school systems were asked if they prioritize facility needs differently because of the levy limits. Approximately 70% of the superintendents said that they did prioritize facility needs differently. When the wealth of a district was taken into account, district leaders of quartile 2 and 3 school systems tendered a higher percentage (app. 76%) of claims that they did prioritize facility projects differently than their colleagues in the upper and lower quartiles of wealth. As population decreased the need to prioritize facility needs became more important to the superintendents.

Since most superintendents felt the need to prioritize the needs of their facilities due to the levy limit, did it mean that the upkeep of their structures became of less importance? In an overall view of the responses, 80% of district superintendents stated that they did not lessen the importance of facility maintenance. When answers were sorted into the wealth index, at least 70% of all superintendents participating in this study did not lessen the importance of maintaining their buildings. According to responses sorted into the population change index, three-quarters of the Class III superintendents did not lessen the importance of facility maintenance.

Summary

A summarization of the conclusions from the research questions yielded the following information:

1. The current building administrators did not perceive their facility as overcrowded. Only 31% of the 2009 superintendents perceived the need for a bond issue. Of those who held this perception, 73% believed the bond referendum would be a success. However, communities are not as likely to pass a bond issue if they are aware of the decreasing enrollment in their district. Chances are good that voters will not wish to enter into a bond indebtedness when they do not know if their district will be much smaller or may not be in existence 20 years from now.

   When considering their school district's fiscal capability to meet the needs of the school system's buildings without raising property taxes, the 2009 superintendents offered a more positive opinion than did the 1993 superintendents. This perception could be caused by the levy limitations. Unless the voters of the district had voted to exceed the levy limit, the school system's ability to generate the necessary revenue were bound by the 1998 levy limitation.
2. More buildings were reported as air conditioned in the 2009 study and there were a higher perception of consistently comfortable classrooms. Fewer building interiors were rated as poor in the 2009 study. Building administrators from both eras reported that their facilities were not totally free of safety hazards.

3. The ability to use technology was not as great a concern for the 2009 study participants as the 1993 building administrators. Nebraska school facilities had either cable or wireless connections installed since the 1993 study.
4. A greater number of superintendents from the 2009 study had a higher percentage that reported that they had delayed maintenance over the last five years. This may be tied to the levy limitations put in place by the Nebraska legislature in 1998. A review of the data in Tables 128, 129, and 130 illustrate that the levy rates for the Special Building Fund are lower in 2009 than in 1993.
5. The perceptions of superintendents changed over time in regard the anticipation of a bond issue. More superintendents reported in the 2009 study indicated that they did not foresee a bond referendum being placed before the voters of their district. However, of the superintendents who did foresee a bond issue, the 2009 cohort predicted a higher probability of success.
6. The levy limitations passed in 1998 were perceived by Nebraska Class III superintendents to hinder a district's ability to maintain their facilities. This perception was prevalent across the three indices that were utilized to analyze responses. This perception also affected how superintendents prioritized their budgets. Many superintendents responded that, although building maintenance was a very important issue, it received less of a priority because other areas of the budget demanded more funds.

Recommendations

As a result of this study's findings and conclusions, the following recommendations are presented for consideration:

1. State leaders and policymakers should study an alternative method of supporting facility needs with other revenue streams outside of property taxes. Iowa has a program that levies a one-cent sales tax for the purpose of facility and equipment support. Payouts to the district are calculated according to a mandated amount per child. Districts are then paid throughout the year, similar to State Aid payments. The funds are then expended by the district according to a Revenue Purpose Statement, which had been approved by the registered voters of the district.
2. Policymakers and state leaders are highly encouraged to become more aware of what facility maintenance entails. Research has demonstrated that the physical environment of a school building has an impact on student achievement. School leaders may not be left with a choice when it comes to prioritizing facility needs into their budgets due to levy limit restraints.
3. With computer technology and smart phones becoming increasingly more powerful, are the great monoliths of education needed anymore? Will the classic structure of a school building be re-invented due to the growth of technology? Can the prediction of when school buildings change be made? Wireless technology, 3G broadband networks, and laptops are offering a tether-free environment in which our students may learn. Programs such as GoToMeeting© and dimdim.com offer a video conferencing and collaboration

system that allows a teacher to present classes without the student being present in the traditional sense. State Aid regulations should be adjusted to take into account the new technologies. Even now, a student may be miles away from the classroom yet still be able to 'attend' and participate in a very meaningful manner. The idea of a snow day may go the way of the dinosaur.

4. A study should be conducted to examine the impact of school consolidations and mergers over the last ten years. A common perception is that consolidation saves money, but money is only saved when buildings are closed and staff reduced. Have the consolidations and mergers that have taken place over the past ten years been successful in terms of saving money? Are the students of those same districts receiving an effective education?
5. Future researchers are encouraged to revisit the effects of the levy limitations on a school system's ability to provide at least an adequate facility for the students that occupy it.

In the concluding paragraph of his study, Pool challenged policymakers and legislative leaders to develop a plan to address the deficiencies and fiscal inequities that were brought to the fore. The author of this study to underscores that challenge. Many of the building administrators who participated in this study had buildings that are almost a century old. These same buildings were considered obsolete when Pool conducted his study in 1993. The resources necessary to at least maintain facilities were further hampered by the 1998 levy limitations. The idea of a State One-Cent Sales Tax for the purpose of providing districts with another means to address the needs of the state's facility predicament without putting more pressure on the use of property taxes must be

closely examined. Failure to addresses the concerns of this study may only exacerbate an already serious situation.

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Appendix A

IRB Letter of Approval

University of Nebraska Lincoln

August 6, 2009

John Weidner
Department of Educational Administration

Larry Dlugosh
Department of Educational Administration
141C TEAC UNL 68588-0360

IRB Number: 2009089890 EX
Project ID: 9890
Project Title: Nebraska school facilities: Educational adequacy of structures and their funding 2009 study

Dear John:

This letter is to officially notify you of the approval of your project by the Institutional Review Board (IRB) for the Protection of Human Subjects. It is the Board's opinion that you have provided adequate safeguards for the rights and welfare of the participants in this study based on the information provided. Your proposal is in compliance with this institution's Federal Wide Assurance 00002258 and the DHHS Regulations for the Protection of Human Subjects (45 CFR 46) and has been classified as exempt.

You are authorized to implement this study as of the Date of Final Approval: 08/06/2009. This approval is Valid Until: 08/05/2010.

We wish to remind you that the principal investigator is responsible for reporting to this Board any of the following events within 48 hours of the event:
• Any serious event (including on-site and off-site adverse events, injuries, side effects, deaths, or other problems) which in the opinion of the local investigator was unanticipated, involved risk to subjects or others, and was possibly related to the research procedures;
• Any serious accidental or unintentional change to the IRB-approved protocol that involves risk or has the potential to recur;
• Any publication in the literature, safety monitoring report, interim result or other finding that indicates an unexpected change to the risk/benefit ratio of the research;
• Any breach in confidentiality or compromise in data privacy related to the subject or others; or
• Any complaint of a subject that indicates an unanticipated risk or that cannot be resolved by the research staff.

This project should be conducted in full accordance with all applicable sections of the IRB Guidelines and you should notify the IRB immediately of any proposed changes that may affect the exempt status of your research project. You should report any unanticipated problems involving risks to the participants or others to the Board. For projects which continue beyond one year from the starting date, the IRB will request continuing review and update of the research project. Your study will be due for continuing review as indicated above. The investigator must also advise the Board when this study is finished or discontinued by completing the enclosed Protocol Final Report form and returning it to the Institutional Review Board.

If you have any questions, please contact the IRB office at 472-6965.

Sincerely,

Mario Scalora, Ph.D.
Chair for the IRB

Appendix B

Nebraska School Facilities Questionnaires

SUPERINTENDENT QUESTIONNAIRE

Please feel free to make estimates as necessary to complete the questionnaire. It is more important to the data that we get general answers to all questions than that you labor over fine tuning responses or omit them entirely.

1. District Name:
2. County/District Number:
3. Superintendent's Name:
4. If you maintain a current special building fund, what is the levy rate for that purpose in your 2008 - 2009 budget? (i.e. 0.9238)
5. What is your current bonded indebtedness? (i.e. 5,142,985)
6. Do you anticipate the necessity of a bond issue?

6. YES NO

7. If yes, do you feel this anticipated bond issue would be successful?

7. YES NO

8. If yes, in what year would you expect it to occur?
9. Have you delayed maintenance on your facilities within the past five years because of budget constraints?

9. YES NO

10. Do your present facilities limit your response to the current call for restructuring or the installation of new instructional programs you believe desirable?

10. YES NO

11. Do your present facilities inhibit your full use of technological advancements?

11. YES NO

12. Has the attention to asbestos removal, radon checks, handicapped accessibility or other required work prevented or delayed desired remodeling, maintenance, or new construction?

12. YES NO

13. Do you consider your district fiscally capable of meeting your facility needs over the next ten years without raising the property tax levy rate?

13. YES NO

14. In this District, indicate the number of attendance sites which are permanent:
15. In this District, indicate the number of attendance sites which are portable:
16. Has the levy restraints passed in 1998 hindered your districts ability to keep pace with the maintenance and upkeep needs of your district?
17. Do you prioritize your district’s needs differently because of the 1998 levy restrictions? Y N
18. Has facility maintenance become less important since the passage of the 1998 levy restrictions? Y N

BUILDING QUESTIONNAIRE

Please feel free to make estimates as necessary to complete the questionnaire. It is more important to the data that we get general answers to all questions than that you labor over fine tuning responses or omit them entirely.

District Name:

County/District/Building Number:

Building Name:

Address:

City:

Indicate which grade levels instruction is provided on a scheduled basis in this building (check any grade levels applicable).

1. Pre-K	1. YES	N/A
2. Kindergarten:	2. YES	N/A
3. 1st Grade:	3. YES	N/A
4. 2nd Grade:	4. YES	N/A
5. 3rd Grade:	5. YES	N/A
6. 4th Grade:	6. YES	N/A
7. 5th Grade:	7. YES	N/A
8. 6th Grade:	8. YES	N/A
9. 7th Grade:	9. YES	N/A
10. 8th Grade:	10. YES	N/A
11. 9th Grade:	11. YES	N/A
12. 10th Grade:	12. YES	N/A
13. 11th Grade:	13. YES	N/A
14. 12th Grade:	14. YES	N/A
15. Other (Special Education, Adult Education):	15. YES	N/A

Date of construction of original building (check one category)

21. 2000-2003
22. 1990-1999
23. 1980-1989
24. 1970-1979
25. 1960-1969
26. 1950-1959
27. 1940-1949
28. 1930-1939
29. 1920-1929
30. Prior to 1920

Date of additions to original building: (If your building has had more than one addition, please make as many entries on this section of the questionnaire as necessary to indicate so. If more than one addition was made within the same year bracket, write in the number of additions during those years. Do NOT include remodeling projects.

31. 1st Addition:
32. Number of additions that year:
33. 2nd Addition:

34. Number of additions that year:
35. 3rd Addition:
36. Number of additions that year:
37. 4th Addition:
38. Number of additions that year:
39. 5th Addition:
40. Number of additions that year:

A teaching station is defined as an area to which a class can be assigned. Some spaces may be multiple teaching stations. For example, a gymnasium to which two classes may be scheduled simultaneously should be counted as two teaching stations. Likewise, teaching pods designed for team teaching may be counted for as many teaching stations was would correspond to the number of conventional classes of 25 to 30 students assigned to that team.

41. Number of teaching stations in this building complex:
42. Size of site to nearest acre:
43. Current enrollment in this building:
44. Over-capacity? 44. YES NO
45. How would you rate the adequacy of your building for the existing instructional program?
45. Poor Adequate Good
46. How would you rate the interiors physical condition of your building --e.g., paint, flooring, equipment, lighting, etc.?
46. Poor Adequate Good
47. How would you rate the exterior physical condition of your building -- e.g., roof, tuck pointing, paint, windows, etc.?
47. Poor Adequate Good
48. Are the classrooms in this building air conditioned?
48. YES NO
49. Are the classrooms in this building consistently comfortable (not too warm, old, drafty, stuffy, etc.)?
49. YES NO
50. Do your teaching stations accommodate changing technologies -- computers, data access, closed circuit TV, sufficient electrical outlets, sufficient power, etc.?
50. YES NO
51. Is this building completely accessible for handicapped persons?
51. YES NO
52. Is this building generally free of safety hazards?
52. YES NO
53. Does this building inhibit or prevent the changes you would like to make in educational programming?
53. YES NO

Appendix C

Raw Data

Principal Raw Data

Superintendent Raw Data

Principal Raw Data

Object	School Name	Class	County	Growth	Wealth Qrtl	Build Type	Date Constr	Over Cap	Adequate	Interior
1	Geneva	3	Fillmore	-10%	3	Sec	1960 - 1969	No	Adequate	Adequate
2	Wolbach	3	Greeley	-16%	2	k12	1980 - 1989	No	Good	Good
3	Lynch	3	Boyd	-14%	3	k12	1970 - 1979	No	Good	Good
4	Paxton	3	Keith	-12%	1	k12	1950 - 1959	No	Adequate	Adequate
5	Tri county	3	Jefferson	-11%	1	k12	1960 - 1969	No	Good	Good
6	Sargent	3	Custer	-8%	1	k12	1920 - 1929	No	Poor	Poor
7	Sargent	3	Custer	-8%	1	k12	1920 - 1929	No	Good	Good
8	Henderson	3	York	-3%	4	k12	1950 - 1959	No	Good	Good
9	weeping water	3	Cass	5%	1	k12	1930 - 1939	No	Adequate	Adequate
10	Twin River	3	Nance	-12%	4	k12	1920 - 1929	No	Good	Good
11	Imperial	3	Chase	-11%	2	k12	1990 - 1999	No	Good	Good
12	South Platte	3	Deuel	-10%	1	k12	1940 - 1949	No	Adequate	Adequate

Object	Air Conditioned	Comfort	Technology	Handi	Safety	Inhibit
1	Yes	Yes	Yes	Yes	Yes	No
2	Yes	Yes	Yes	Yes	Yes	No
3	Yes	Yes	Yes	Yes	Yes	No
4	Yes	No	No	No	Yes	Yes
5	Yes	Yes	Yes	Yes	Yes	No
6	No	No	No	Yes	Yes	Yes
7	Yes	Yes	Yes	No	Yes	No
8	Yes	Yes	Yes	Yes	Yes	No
9	Yes	Yes	Yes	No	No	Yes
10	Yes	Yes	Yes	Yes	Yes	Yes
11	Yes	Yes	Yes	Yes	Yes	No
12	Yes	No	No	No	Yes	No

Object	School Name	Class	County	Growth	Wealth Qrtl	Build Type	Date Constr	Over Cap	Adequate	Interior
13	Howells	3	Colfax	-4%	4	k12	1960 - 1969	No	Good	Good
14	Dorchester	3	Saline	-1%	2	k12	2000 - 2009	No	Good	Good
15	Ponca	3	Dixon	-1%	3	k12	Prior to 1920	No	Poor	Poor
16	Johnson-Brock	3	Johnson	0%	3	k12	1930 - 1939	No	Adequate	Adequate
17	Arapahoe	3	Furnas	-13%	2	k6	1920 - 1929	No	Adequate	Adequate
18	Arapahoe	3	Furnas	-13%	2	k6	1960 - 1969	No	Adequate	Adequate
19	Coleridge	3	Cedar	-13%	4	k6	1970 - 1979	No	Good	Good
20	Falls City	3	Richardson	-13%	1	k6	1950 - 1959	No	Good	Good
21	Burwell	3	Garfield	-10%	2	k6	1970 - 1979	No	Adequate	Good
22	Exeter-Milligan	3	Fillmore	-10%	4	k6	Prior to 1920	No	Poor	Poor
23	Valentine	3	Cherry	-9%	3	k6	1960 - 1969	No	Poor	Good
24	West Point	3	Cuming	-9%	2	k6	1950 - 1959	No	Good	Good

Object	Air Conditioned	Comfort	Technology	Handi	Safety	Inhibit
13	Yes	Yes	Yes	Yes	Yes	No
14	Yes	Yes	Yes	Yes	Yes	Yes
15	Yes	No	No	No	No	Yes
16	Yes	Yes	Yes	No	Yes	Yes
17	Yes	Yes	Yes	Yes	Yes	Yes
18		Yes	Yes	Yes	Yes	Yes
19	Yes	Yes	Yes	Yes	Yes	Yes
20	Yes	Yes	Yes	Yes	Yes	No
21	Yes	Yes	No	Yes	Yes	No
22	Yes	No	No	No	No	Yes
23	Yes	No	No	No	Yes	Yes
24	Yes	Yes	Yes	Yes	Yes	No

Object	School Name	Class	County	Growth	Wealth Qrtl	Build Type	Date Constr	Over Cap	Adequate	Interior
25	Broken Bow	3	Custer	-8%	1	k6	1930 - 1939	No	Poor	Poor
26	Central City	3	Merrick	-6%	2	k6	1920 - 1929	No	Adequate	Good
27	Indianola	3	Red willow	-6%	2	k6	1970 - 1979	No	Adequate	Adequate
28	McCook	3	Red willow	-6%	1	k6	1950 - 1959	No	Good	Good
29	Minden	3	Kearney	-6%	3	k6	1920 - 1929	No	Good	Good
30	David City	3	Butler	-5%	3	k6	1960 - 1969	No	Good	Good
31	Schuyler	3	Colfax	-4%	1	k6	2000 - 2009	No	Adequate	Good
32	Crete	3	Saline	-1%	1	k6	1940 - 1949	Yes	Good	Good
33	Fremont	3	Dodge	-1%	1	k6	1970 - 1979	No	Adequate	Adequate
34	Gering	3	Scottsbluff	-1%	1	k6	1920 - 1929	Yes	Poor	Adequate
35	Wilber-Clatonia	3	Saline	-1%	2	k6	2000 - 2009	No	Good	Good
36	Beatrice	3	Gage	0%	1	k6	1950 - 1959	No	Adequate	Adequate

Object	Air Conditioned	Comfort	Technology	Handi	Safety	Inhibit
25	No	No	No	No	Yes	Yes
26	Yes	Yes	Yes	Yes	Yes	Yes
27	Yes	Yes	Yes	Yes	Yes	No
28	Yes	No	Yes	Yes	Yes	No
29	Yes	Yes	No	No	Yes	No
30	Yes	Yes	No	Yes	Yes	No
31	Yes	Yes	No	Yes	Yes	No
32		Yes	Yes	Yes	Yes	No
33	Yes	Yes	Yes	Yes	Yes	Yes
34	Yes	No	No	No	No	Yes
35	Yes	Yes	Yes	Yes	Yes	No
36	Yes	No	Yes	No	No	Yes

Object	School Name	Class	County	Growth	Wealth Qrtl	Build Type	Date Constr	Over Cap	Adequate	Interior
37	Johnson County	3	Johnson	0%	4	k6	1930 - 1939	No	Adequate	Adequate
38	Palmyra	3	Otoe	1%	1	k6	1980 - 1989	No	Good	Good
39	North Platte	3	Lincoln	3%	1	k6	1970 - 1979	No	Good	Poor
40	North Platte	3	Lincoln	3%	4	k6	Prior to 1920	No	Adequate	Adequate
41	North Platte	3	Lincoln	3%	4	k6	1960 - 1969	No	Adequate	Adequate
42	Blair	3	Washington	5%	1	k6	2000 - 2009	No	Good	Good
43	Ralston	3	Douglas	8%	1	k6	1960 - 1969	No	Adequate	Adequate
44	Westside	3	Douglas	8%	3	k6	1950 - 1959	No	Good	Adequate
45	Fullerton	3	Nance	-12%	2	k6	1990 - 1999	No	Good	Good
46	North Bend	3	Dodge	-1%	1	k6	1960 - 1969	No	Good	Good
47	Humboldt	3	Richardson	-13%	3	k6	1930 - 1939	No	Adequate	Adequate
48	Tecumseh	3	Johnson	0%	4	k8	1960 - 1969	No	Good	Good

Object	Air Conditioned	Comfort	Technology	Handi	Safety	Inhibit
37	Yes	No	No	Yes	Yes	Yes
38	Yes	No	Yes	Yes	Yes	No
39	Yes	Yes	No	Yes	Yes	Yes
40	Yes	Yes	Yes	Yes	Yes	No
41	No	No	No	No	Yes	Yes
42	Yes	Yes	Yes	Yes	Yes	No
43	Yes	No	No	Yes	Yes	Yes
44	Yes	Yes	Yes	Yes	Yes	No
45	Yes	Yes	Yes	Yes	Yes	No
46	Yes	Yes	Yes	Yes	Yes	No
47	Yes	Yes	No	Yes	Yes	No
48	Yes	Yes	Yes	Yes	Yes	No

Object	School Name	Class	County	Growth	Wealth Qrtl	Build Type	Date Constr	Over Cap	Adequate	Interior
49	Falls City	3	Richardson	-13%	1	ms	1980 - 1989	No	Good	Good
50	Table Rock	3	Richardson	-13%	4	ms	1940 - 1949	No	Adequate	Adequate
51	South Platte	3	Deuel	-10%	3	ms	1950 - 1959	No	Adequate	Adequate
52	Valentine	3	Cherry	-9%	4	ms	1950 - 1959	No	Adequate	Good
53	McCook	3	Red Willow	-6%	1	ms	1960 - 1969	No	Adequate	Poor
54	Chadron	3	Dawes	-4%	1	ms	1920 - 1929	Yes	Poor	Adequate
55	Norfolk	3	Madison	-3%	1	ms	1990 - 1999	No	Good	Good
56	Lexington	3	Dawson	1%	2	ms	Prior to 1920	No	Good	Good
57	North Platte	3	Lincoln	3%	1	ms	1960 - 1969	No	Adequate	Good
58	Plattsmouth	3	Cass	5%	3	ms	1970 - 1979	No	Good	Good
59	Kimball	3	Kimball	-14%	3	sec	1960 - 1969	No	Good	Adequate
60	Wisner-pilger	3	Cuming	-9%	2	sec	1960 - 1969	No	Adequate	Good

Object	Air Conditioned	Comfort	Technology	Handi	Safety	Inhibit
49	Yes	Yes	Yes	Yes	Yes	Yes
50	Yes	No	Yes	No	Yes	Yes
51	Yes	Yes	Yes	Yes	Yes	No
52	Yes	Yes	Yes	Yes	Yes	Yes
53	Yes	Yes	Yes	No	Yes	Yes
54	Yes	No	No	Yes	Yes	Yes
55	Yes	Yes	No	Yes	Yes	No
56	Yes	Yes	Yes	Yes	Yes	No
57	Yes	Yes	Yes	Yes	Yes	Yes
58	Yes	No	Yes	Yes	Yes	No
59	Yes	No	Yes	Yes	Yes	No
60	Yes	Yes	Yes	No	Yes	Yes

Object	School Name	Class	County	Growth	Wealth Qrtl	Build Type	Date Constr	Over Cap	Adequate	Interior
61	Wakefield	3	Wayne	-6%	2	sec	1970 - 1979	No	Good	Good
62	Chadron	3	Dawes	-4%	1	sec	1930 - 1939	No	Poor	Adequate
63	Battle Creek	3	Madison	-3%	2	sec	2000 - 2009	No	Good	Good
64	Crete	3	Saline	-1%	1	sec	1970 - 1979	No	Adequate	Good
65	Fremont	3	Dodge	-1%	1	sec	1950 - 1959	No	Adequate	Adequate
66	Gering	3	Scotts bluff	-1%	1	sec	1960 - 1969	No	Adequate	Adequate
67	Morrill	3	Scotts bluff	-1%	1	sec	1960 - 1969	No	Adequate	Adequate
68	North Bend	3	Dodge	-1%	3	sec	1960 - 1969	No	Good	Good
69	Scribner-Snyder	3	Dodge	-1%	3	sec	1920 - 1929	No	Poor	Poor
70	Wahoo	3	Saunders	1%	4	sec	1970 - 1979	No	Adequate	Good
71	Yutan	3	Saunders	1%	1	sec	1970 - 1979	No	Good	Good
72	Seward	3	Seward	2%	3	sec	1960 - 1969	No	Good	Good

Object	Air Conditioned	Comfort	Technology	Handi	Safety	Inhibit
61	Yes	Yes	Yes	Yes	Yes	No
62	Yes	Yes	Yes	Yes	Yes	Yes
63	Yes	Yes	Yes	Yes	Yes	Yes
64	Yes	Yes	Yes	Yes	Yes	No
65	Yes	No	No	No	Yes	Yes
66	No	No	Yes	No	Yes	No
67	No	No	Yes	Yes	Yes	Yes
68	Yes	Yes	Yes	Yes	Yes	No
69	Yes	No	No	No	No	Yes
70	Yes	Yes	Yes	No	Yes	No
71	Yes	Yes	No	Yes	Yes	Yes
72	Yes	No	Yes	Yes	Yes	No

Object	School Name	Class	County	Growth	Wealth Qrtl	Build Type	Date Constr	Over Cap	Adequate	Interior
73	Plattsmouth	3	Cass	5%	3	sec	1990 - 1999	No	Adequate	Adequate
74	Adams Central	3	Adams	7%	4	sec	1960 - 1969	No	Good	Adequate
75	Gibbon	3	Buffalo	7%	1	sec	2000 - 2009	No	Good	Good
76	Ralston	3	Douglas	8%	1	sec	1950 - 1959	No	Adequate	Good
77	DC West	3	Douglas	8%	4	sec	1970 - 1979	No	Good	Good
78	Garden County	3	Garden	-23%	4	sec	1920 - 1929	No	Adequate	Good
79	Superior	3	Nuckolls	-12%	2	sec	1960 - 1969	No	Adequate	Adequate
80	Burwell	3	Garfield	-10%	2	sec	1970 - 1979	No	Adequate	Good
81	Osmond	3	Pierce	-8%	1	sec	1990 - 1999	No	Good	Good
82	Lexington	3	Dawson	1%	3	sec	2000 - 2009	No	Good	Good
83	Grand Island	3	Hall	5%	1	sec	1950 - 1959	Yes	Adequate	Adequate

Object	Air Conditioned	Comfort	Technology	Handi	Safety	Inhibit
73	Yes	No	No	Yes	No	Yes
74	Yes	No	No	Yes	Yes	No
75	Yes	Yes	Yes	Yes	Yes	No
76	Yes	Yes	Yes	Yes	Yes	No
77	Yes	Yes	Yes	Yes	Yes	No
78	Yes	Yes	Yes	Yes	Yes	Yes
79	Yes	No	No	Yes	No	No
80	Yes	Yes	Yes	Yes	Yes	Yes
81	Yes	Yes	Yes	Yes	Yes	No
82	Yes	Yes	Yes	Yes	Yes	No
83	Yes	No	No	Yes	Yes	Yes

Superintendent Raw Data

Object	District Name	County	Growth	Wealth Qrtl	Use Spec Bldg	Spec Bld Levy	Bond Debt?	Amt Bond Debt	Anticipate	Successful
1	Garden County	Garden	-23%	4	Y	0.037449	N	0	No	No
2	Thedford	Thomas	-20%	4	Y	0.0353	N	0	No	No
3	Eustis-Farnam	Frontier	-17%	3	Y	0.0199	N	0	No	Yes
4	Maywood	Frontier	-17%	4	N	0	N	0	No	
5	Deshler	Thayer	-16%	3	Y	0.0327	N	0	No	
6	Thayer Central	Thayer	-16%	3	Y	0.0617	Y	192,000	No	
7	Blue Hill	Webster	-14%	1	N	0	Y	2,025,000	No	
8	Kimball	Kimball	-14%	3	Y	0.010629	N	0	No	
9	Lynch	Boyd	-14%	3	N	0	N	0	No	
10	Arapahoe	Furnas	-13%	2	Y	0.0283	Y	300,000	Yes	No

Object	Year Occur	Delay Main	Limit Restr	Inhibit Tech	Asbestos	Fiscal Capable	Permanent	Portable	Levy Restr	Prior Diff	Less Important
1		Yes	Yes	Yes	Yes	No	3	0	Yes	Yes	Yes
2		Yes	No	Yes	Yes	No	2	0	Yes	Yes	Yes
3		Yes	No	No	No	No	4	0	Yes	Yes	No
4		Yes	Yes	No	Yes	No	1	1	Yes	Yes	Yes
5		No	Yes	No	No	No	1	0	No	Yes	No
6		Yes	Yes	No	No	No	3	0	Yes	Yes	No
7		Yes	No	Yes	No	No	1	0	Yes	Yes	No
8		Yes	No	Yes	Yes	No	3	1	Yes	Yes	No
9		Yes	Yes	No	No	Yes	1	0	Yes	No	No
10	2015	Yes	Yes	Yes	Yes	No	1	0	Yes	Yes	No

Object	District Name	County	Growth	Wealth Qrtl	Use Spec Bldg	Spec Bld Levy	Bond Debt?	Amt Bond Debt	Anticipate	Successful
11	Cedar Rapids	Boone	-13%	4	Y	0.06	Y	2,823,000	No	
12	Dundy County	Dundy	-13%	4	N	0	N	0	No	
13	Loup County	Loup	-13%	4	Y	0.00676	Y	71,252	No	
14	Randolph	Cedar	-13%	3	Y	0.0098	N	0	No	No
15	SE NE Cons	Richardson	-13%	4	N	0	Y	1,600,000	No	
16	Alma	Harlan	-12%	1	Y	0.045769	Y	649,587	No	
17	Fullerton	Nance	-12%	2	Y	0.04	Y	400,000	No	
18	Ogallala	Keith	-12%	2	Y	0.0145	Y	285,000	Yes	Yes
19	Paxton	Keith	-12%	3	Y	0.0199	N	0	Yes	Yes
20	So Cntrl NE Uni	Nuckolls	-12%	3	N	0	Y	980,000	No	

Object	Year Occur	Delay Main	Limit Restr	Inhibit Tech	Asbestos	Fiscal Capable	Permanent	Portable	Levy Restr	Prior Diff	Less Important
11		Yes	Yes	Yes	Yes	No	1	0	Yes	Yes	No
12		Yes	No	No	Yes	No	4	0	Yes	Yes	No
13		Yes	No	No	No	Yes	1	0	No	No	No
14		No	Yes	Yes	Yes	No	1	0	Yes	Yes	No
15		No	No	No	No	Yes	2	1	Yes	Yes	No
16		Yes	Yes	No	Yes	No	1	0	Yes	Yes	No
17		No	No	No	No	Yes	1	0	No	Yes	No
18	2009	Yes	Yes	Yes	Yes	No	5	2	Yes	Yes	Yes
19	2009	No	Yes	Yes	No	No	1	0	No	No	No
20		No	No	No	No	No	3	0	Yes	Yes	No

Object	District Name	County	Growth	Wealth Qrtl	Use Spec Bldg	Spec Bld Levy	Bond Debt?	Amt Bond Debt	Anticipate	Successful
21	Twin River	Nance	-12%	3	Y	0.049801	N	0	No	
22	Chase County	Chase	-11%	4	Y	0.0206	Y	1,000,000	No	
23	Clay Center	Clay	-11%	2	Y	0.053	N	0	No	
24	Fairbury	Jefferson	-11%	2	Y	0.045458	Y	565,720	No	No
25	Harvard	Clay	-11%	2	Y	0.0383	N	0	Yes	Yes
26	Tri County	Jefferson	-11%	4	Y	0.039713	Y	2,200,000	No	No
27	West Holt	Holt	-11%	4	Y	0.03	Y	6,500,000	No	
28	Banner Country	Banner	-10%	4	N	0	N	0	No	No
29	Burwell	Garfield	-10%	2	Y	0.0229	N	0	Yes	No
30	Elwood	Gosper	-10%	3	N	0	Y	1,233,112	No	

Object	Year Occur	Delay Main	Limit Restr	Inhibit Tech	Asbestos	Fiscal Capable	Permanent	Portable	Levy Restr	Prior Diff	Less Important
21		Yes	Yes	Yes	No	No	2	0	Yes	Yes	No
22		No	No	No	Yes	Yes	1	0	No	No	No
23		Yes	Yes	Yes	Yes	No	1	0	Yes	Yes	Yes
24		Yes	No	Yes	No	No	4	0	Yes	Yes	Yes
25	2015	Yes	Yes	No	No	No	1	0	Yes	Yes	No
26		Yes	No	No	No	No	1	0	No	Yes	No
27		No	No	No	No	Yes	4	0	No	No	No
28		Yes	Yes	No	Yes	No	1	0	No	No	No
29	2015	No	No	No	Yes	No	4	0	No	Yes	No
30		No	Yes	Yes	No	No	1	0	No	Yes	No

Object	District Name	County	Growth	Wealth Qrtl	Use Spec Bldg	Spec Bld Levy	Bond Debt?	Amt Bond Debt	Anticipate	Successful
31	Fillmore Central	Fillmore	-10%	3	Y	0.06	N	0	Yes	Yes
32	Oakland Craig	Burt	-10%	2	Y	0.032	N	0	Yes	No
33	Ord	Valley	-10%	3	Y	0.0766	N	0	Yes	Yes
34	Shickley	Fillmore	-10%	4	Y	0.08427	Y	910,000	No	
35	Tekamah	Burt	-10%	2	Y	0.02521	N	0	No	
36	Alliance	Box Butte	-9%	1	N	0	N	0	Yes	Yes
37	Hemingford	Box Butte	-9%	3	Y	0.0156	N	0	No	
38	High Plains	Polk	-9%	4	Y	0.00903	N	0	No	
39	Hitchcock County	Hitchcock	-9%	4	Y	0.0344	N	0	Yes	Yes
40	Niobrara	Knox	-9%	2	Y	0.029	N	0	No	No

Object	Year Occur	Delay Main	Limit Restr	Inhibit Tech	Asbestos	Fiscal Capable	Permanent	Portable	Levy Restr	Prior Diff	Less Important
31	2011	No	No	No	Yes	No	3	0	Yes	Yes	No
32		Yes	Yes	Yes	Yes	No	2	1	Yes	Yes	No
33	2009	Yes	Yes	Yes	Yes	No	4	0	Yes	Yes	Yes
34		No	No	No	Yes	Yes	1	0	Yes	Yes	No
35		Yes	Yes	Yes	Yes	No	3	1	Yes	Yes	Yes
36	2011	Yes	Yes	Yes	No	Yes	4	0	Yes	Yes	No
37		No	No	No	No	No	1	0	No	Yes	No
38		Yes	No	No	No	Yes	2	0	Yes	Yes	No
39	2011	Yes	Yes	Yes	Yes	No	2	0	No	No	No
40		No	No	Yes	No	No	1	0	No	No	No

Object	District Name	County	Growth	Wealth Qrtl	Use Spec Bldg	Spec Bld Levy	Bond Debt?	Amt Bond Debt	Anticipate	Successful
41	Shelby	Polk	-9%	3	Y	0.03	N	0	No	
42	Valentine	Cherry	-9%	4	Y	0.0329	N	0	No	No
43	Wheeler Central	Wheeler	-9%	4	Y	0.0226	N	0	Yes	No
44	Broken Bow	Custer	-8%	1	Y	0.0259	N	0	No	No
45	Pierce	Pierce	-8%	2	Y	0.006166	Y	3,100,000	Yes	
46	Sargeant	Custer	-8%	3	N	0	N	0	No	
47	Auburn	Nemaha	-6%	1	Y	0.006	Y	4,500,000	No	
48	Axtell	Kearney	-6%	2	N	0	Y	2,655,000	No	
49	Bertrand	Phelps	-6%	3	Y	0.0451	Y	2,225,000	No	
50	Southwest	Red Willow	-6%	3	Y	0.023604	Y	8,001,631	No	

Object	Year Occur	Delay Main	Limit Restr	Inhibit Tech	Asbestos	Fiscal Capable	Permanent	Portable	Levy Restr	Prior Diff	Less Important
41		No	No	No	No	Yes	1	0	No	No	No
42		Yes	Yes	Yes	No	No	14	1	No	Yes	Yes
43		Yes	Yes	Yes	Yes	No	1	0	No	No	Yes
44	2011	No	Yes	Yes	No	Yes	6	1	Yes	Yes	Yes
45		No	Yes	No	No	No	2	0	No	No	No
46		Yes	No	No	No	No	1	0	Yes	Yes	Yes
47		No	No	No	Yes	Yes	2	0	Yes	Yes	No
48		Yes	No	Yes	No	No	1	0	Yes	Yes	Yes
49		Yes	Yes	Yes	No	No	1	0	Yes	Yes	No
50		Yes	No	No	Yes	Yes	2	2	No	Yes	No

Object	District Name	County	Growth	Wealth Qrtl	Use Spec Bldg	Spec Bld Levy	Bond Debt?	Amt Bond Debt	Anticipate	Successful
51	David City	Butler	-5%	3	Y	0.04741	Y	2,755,000	No	
52	Howells	Colfax	-4%	3	Y	0.0107	Y	2,040,076	No	
53	Battle Creek	Madison	-3%	2	Y	0.035675	Y	7,000,000	No	
54	Heartland	York	-3%	4	N	0	Y	595,000	No	
55	Stanton	Stanton	-2%	1	Y	0.0232	Y	1,117,518	No	
56	Aurora	Hamilton	-1%	2	Y	0.032478	Y	7,884,000	No	
57	Gering	Scotts Bluff	-1%	1	Y	0.0877	N	0	Yes	Yes
58	Hampton	Hamilton	-1%	4	N	0	N	0	No	
59	Minatare	Scotts Bluff	-1%	1	Y	0.0391	N	0	No	No
60	North Bend	Dodge	-1%	4	Y	0.0559	Y	696,821	No	

Object	Year Occur	Delay Main	Limit Restr	Inhibit Tech	Asbestos	Fiscal Capable	Permanent	Portable	Levy Restr	Prior Diff	Less Important
51		No	No	No	No	Yes	4	0	No	No	No
52		No	No	No	No	Yes	1	0	No	No	No
53		No	No	No	No	Yes	2	0	Yes	Yes	No
54		Yes	No	No	Yes	No	1	0	Yes	Yes	No
55		Yes	Yes	No	No	Yes	2	0	Yes	Yes	No
56		No	No	Yes	No	Yes	1	0	No	No	No
57	2010	Yes	Yes	Yes	No	No	6	0	Yes	Yes	No
58		No	No	No	No	No	2	0	Yes	Yes	Yes
59		Yes	Yes	Yes	Yes	No	2	1	Yes	Yes	No
60		No	Yes	No	No	No	2	0	No	No	No

Object	District Name	County	Growth	Wealth Qrtl	Use Spec Bldg	Spec Bld Levy	Bond Debt?	Amt Bond Debt	Anticipate	Successful
61	Pender	Thurston	-1%	3	Y	0.0978	Y	3,817,864	No	
62	Walthill	Thurston	-1%	1	N	0	N	0	No	No
63	Wilber-Clatonia	Saline	-1%	2	Y	0.0229	Y	4,500,000	No	
64	Beatrice	Gage	0%	1	Y	0.01	Y	5,000,000	No	
65	South Sioux City	Dakota	0%	1	Y	0.0816	Y	1,519,182	Yes	Yes
66	Cedar Bluffs	Saunders	1%	2	N	0	Y	3,200,000	No	
67	Columbus	Platte	1%	1	Y	0.0393	Y	40,000,000	Yes	No
68	Gothenburg	Dawson	1%	1	Y	0.1317	Y	9,725,000	No	No
69	Lexington	Dawson	1%	1	Y	0.0088	Y	4,500,000	Yes	Yes
70	Nebraska City	Otoe	1%	1	Y	0.0451	Y	46,000,000	No	

Object	Year Occur	Delay Main	Limit Restr	Inhibit Tech	Asbestos	Fiscal Capable	Permanent	Portable	Levy Restr	Prior Diff	Less Important
61		Yes	No	No	Yes	No	1	0	Yes	Yes	Yes
62		Yes	Yes	No	Yes	No	1	0	Yes	Yes	No
63		Yes	No	No	No	Yes	2	0	No	Yes	No
64		No	Yes	Yes	Yes	No	6	0	Yes	Yes	No
65	2011	Yes	Yes	Yes	No	No	10	4	Yes	No	No
66		Yes	Yes	No	Yes	No	1	0	Yes	Yes	No
67	2010	No	Yes	Yes	No	No	9	0	No	No	No
68		No	Yes	No	No	Yes	1	0	No	No	No
69	2015	No	Yes	Yes	No	Yes	6	0	No	No	No
70		No	No	No	No	Yes	5	1	No	Yes	No

Object	District Name	County	Growth	Wealth Qrtl	Use Spec Bldg	Spec Bld Levy	Bond Debt?	Amt Bond Debt	Anticipate	Successful
71	Overton	Dawson	1%	1	N	0	N	0	No	
72	Syracuse	Otoe	1%	2	Y	0.04713	Y	18,339,160	No	
73	Wahoo	Saunders	1%	2	Y	0.047	Y	5,000,000	No	
74	Centennial	Seward	2%	4	Y	0.085554	Y	4,700,000	No	
75	Seward	Seward	2%	2	Y	0.0974	Y	3,700,000	Yes	Yes
76	Hershey	Lincoln	3%	2	Y	0.0393	N	0	Yes	No
77	Sutherland	Lincoln	3%	1	Y	0.0175	Y	3,200,000	No	
78	Wallace	Lincoln	3%	4	Y	0.03444	Y	1,430,000	No	No
79	Blair	Washington	5%	1	N	0	Y	57,387,901	No	
80	Conestoga	Cass	5%	3	Y	0.02	Y	8,970,187	No	

Object	Year Occur	Delay Main	Limit Restr	Inhibit Tech	Asbestos	Fiscal Capable	Permanent	Portable	Levy Restr	Prior Diff	Less Important
71		No	No	No	No	Yes	1	0	Yes	No	No
72		No	No	No	No	No	3	0	No	No	No
73		No	No	No	No	No	2	0	No	No	No
74		No	No	No	No	No	1	0	No	Yes	No
75	2010	No	Yes	Yes	No	No	3	0	Yes	Yes	Yes
76		No	Yes	Yes	No	No	1	0	No	No	No
77		No	No	Yes	No	Yes	1	0	No	No	No
78		No	No	No	No	Yes	1	0	No	No	No
79		No	No	No	No	Yes	7	0	No	No	No
80		Yes	Yes	Yes	Yes	No	3	0	Yes	Yes	Yes

Object	District Name	County	Growth	Wealth Qrtl	Use Spec Bldg	Spec Bld Levy	Bond Debt?	Amt Bond Debt	Anticipate	Successful
81	Fort Calhoun	Washington	5%	1	Y	0.065281	N	0	Yes	No
82	Grand Island	Hall	5%	1	Y	0.050785	Y	56,307,027	Yes	Yes
83	Louisville	Cass	5%	3	Y	0.05733	Y	1,270,000	Yes	Yes
84	Weeping Water	Cass	5%	2	Y	0.009781	Y	675,000	Yes	Yes
85	Wood River	Hall	5%	2	Y	0.0202	Y	5,326,481	No	
86	Adams Central	Adams	7%	4	Y	0.0414	Y	900,000	Yes	Yes
87	Gibbon	Buffalo	7%	1	N	0	Y	28,000,000	No	
88	Hastings	Adams	7%	1	N	0	Y	18,000,000	Yes	Yes
89	Kearney	Buffalo	7%	1	Y	0.1159	N	0	Yes	Yes
90	Pleasanton	Buffalo	7%	3	N	0	Y	710,000	No	

Object	Year Occur	Delay Main	Limit Restr	Inhibit Tech	Asbestos	Fiscal Capable	Permanent	Portable	Levy Restr	Prior Diff	Less Important
81		Yes	Yes	Yes	Yes	No	4	3	Yes	Yes	Yes
82	2012	Yes	Yes	Yes	Yes	No	22	11	Yes	Yes	No
83	2009	Yes	No	Yes	Yes	No	1	0	Yes	Yes	Yes
84	2011	No	Yes	No	No	No	1	4	Yes	Yes	No
85		Yes	Yes	Yes	Yes	Yes	3	0	Yes	Yes	No
86	2009	Yes	Yes	Yes	Yes	No	6	0	Yes	Yes	Yes
87		No	No	No	No	Yes	1	0	No	No	No
88	2018	Yes	Yes	No	Yes	No	9	0	Yes	Yes	No
89		Yes	No	No	No	No	14	0	Yes	No	No
90		No	No	No	No	Yes	2	0	Yes	Yes	Yes

Object	District Name	County	Growth	Wealth Qrtl	Use Spec Bldg	Spec Bld Levy	Bond Debt?	Amt Bond Debt	Anticipate	Successful
91	Ravenna	Buffalo	7%	2	N	0	Y	995,000	No	
92	Douglas Co. West	Douglas	8%	4	N	0	N	0	No	
93	Norris	Lancaster	11%	1	N	0	Y	13,460,064	Yes	Yes
94	Raymond Central	Lancaster	11%	2	Y	0.013	Y	3,900,000	Yes	Yes

Object	Year Occur	Delay Main	Limit Restr	Inhibit Tech	Asbestos	Fiscal Capable	Permanent	Portable	Levy Restr	Prior Diff	Less Important
91		Yes	Yes	Yes	No	No	1	0	Yes	Yes	No
92		No	No	No	Yes	No	2	0	Yes	No	No
93	2012	No	No	No	No	No	3	0	No	No	No
94	2009	Yes	Yes	No	No	No	3	0	Yes	Yes	No