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UNIVERSITY OF LA VERNE

La Verne, California

AN EXAMINATION OF THE DIFFUSION OF ASSOCIATE DEGREE PROGRAMS IN PUBLIC ADMINISTRATION

A Dissertation Submitted in Partial Fulfillment of the
Requirements for the Degree
of
Doctor of Public Administration

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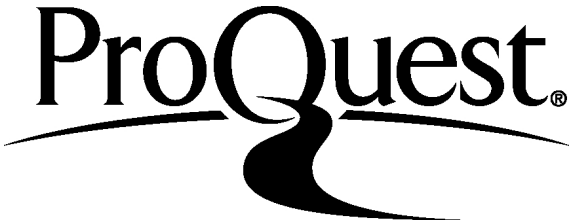
January 2016



ABSTRACT
An Examination of the Diffusion of Associate Degree Programs
in Public Administration

By **Randall S. Joslin**, DPA

Purpose: This study addressed (1) the diffusion of Associate Degree in Public Administration (ADPA) programs, (2) correlations relating leading demographic variables to contemporary ADPA programs, and (3) comparative availability of public administration sub-baccalaureate educational programs at community colleges compared to four-year colleges and universities.

Theoretical Framework: The theoretical foundation of this study is Rogers' (2003) diffusion of innovation theory. The research model is informed by Geis' (1985) study of the diffusion of Associate Degree in Nursing (ADN) programs.

Methodology: Secondary data was utilized to perform analysis of the diffusion of ADPA programs from 1983 to 2013, to identify statistical correlations between contemporary ADPA programs and demographic variables, and a determination of how many sub-baccalaureate education programs for public administration are provided exclusively by community colleges.

Findings: The study found that community colleges have provided most ADPA programs, that availability has increased slightly over time, and that newer programs have greater longevity. Furthermore, while the majority of currently available ADPA programs are not located near significant population centers, institutions are somewhat more likely to adopt ADPA programs when they are closer to such areas. Additionally, institutions are somewhat more likely to adopt ADPA programs when they are located nearer to state capitals, in areas that have a lower level of minority population, or in areas that have experienced significant changes in minority population. The study also showed that institutions in states with a higher population of public employees are much more likely to adopt ADPA programs, and that the majority of public administration sub-baccalaureate programs are at community colleges.

Conclusion and Recommendations: Further studies are recommended to (1) identify correlations between significant public events such as the 9/11 terrorist attacks and the proliferation of public service educational programs, (2) quantify the true need for public administration undergraduate education, (3) identify how the proliferation of bachelor's degree programs at community colleges might affect the field, and (4) explore the suitability of the public administration accreditation processes, and (5) develop standardized guidelines for ADPA programs.

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ACKNOWLEDGEMENTS

First of all, my heartfelt thanks to God for all of the continued trials, tribulations, and life lessons. You have carried me through these events, and to grow as a person through each experience. There is no joy in life without some degree of sacrifice, but there is also no greater joy than to know that you are there with me through no matter what the circumstance.

My sincerest love, appreciation and gratitude to my wife Debra, without whom none of my graduate education would been possible. You are the greatest example of strength and encouragement that I have ever known, and I learn something from you with each and every passing day. You are my best friend, my staunchest supporter, and the reason why I strive to make life better every day.

My sincere thanks to Dr. Matt Witt, my committee chair, and to Drs. Suzanne Beaumaster, Marcia Godwin, Terry Ford, and Jack Meek for their support and guidance throughout my time in the DPA program. An additional special mention to Dr. Beaumaster for convincing me to 'take the plunge' into the DPA program in the first place—my time at the University of La Verne is perhaps the most rewarding and enriching educational experience of my life, and I thank you for that.

DEDICATION

I dedicate this work, first and foremost to my wife Debra, for her never-ending love, support, and encouragement. You are my rock and are undoubtedly the best of the best. I could not possibly love or appreciate you more for who you are and for all of the positive influence you have had on me and on all of our children, whether they choose to admit it or not.

I would also like to dedicate this to my mother Carol for the examples of tenacity that she taught me early in life, and for showing me that it's never too late to get an education.

To my sons, James, Thomas, Justin, and Jacob, it is my sincerest hope that you may all see some example to follow from all of the years of work that you know it took me to achieve this. Remember that you can achieve anything if you focus on something positive, dare to dream big, and do not let anyone or anything deter you from achieving that dream. Try to remember and follow this, my 'Ten Years' advice:

> *"What may seem important today may mean nothing ten years from now, but what will matter ten years from now may be completely absent from your focus right now. The 'trick' to living a happy life is to find the proper balance between the two, and thus avoid setting yourself up for unnecessary regret ten years down the road. Among all of the things that we do, the things that we want, and the accomplishments that we may look to achieve, we must ask ourselves, what is it that is REALLY important, and what seems important now that just won't matter ten years from now? Follow your heart. Avoid bad habits and anyone who would bring negative influences upon you. You will NOT matter to those people ten years from now, but never forget who you WILL matter to!"*
>
> *Dad*

Lastly, I would like to dedicate this work to my granddaughters Jillian and Lilly, so that you both may know that very difficult things can be achieved in life, even when they may seem truly impossible in the beginning—all you have to do to achieve anything is to want it bad enough.

CHAPTER I

INTRODUCTION

In an age of consistently diminishing public resources, the efficiency and effectiveness of the public sector work force is becoming increasingly significant to the creation of public value, a responsibility of public organizations that Moore (1995) posits is best served by ensuring the value, sustainability, and feasibility of public work. One essential aspect to this is the corresponding importance of the quality and quantity of available academic programs for those in or entering public service. Overall, the field of Public Administration (PA) has a diverse field of choices when it comes to available academic programs, both in geographic location and in the programmatic emphasis of participating educational institutions. But unlike educational programs such as those found in the field of business administration, the majority of public administration college degrees are conferred mostly at the Master's degree level (Banas & Emory, 1998; IPEDS, 2015; Snyder & Dillow, 2011)

Data relating to the availability of undergraduate public administration education shows that there are only a small number of two-year Public Administration degree programs available within the United States (IPEDS, 2015; Maxwell, 2005). This low quantity of available two-year degree programs in Public Administration directly affects those whom Lipsky (2010) considers to be 'street-level bureaucrats', specifically those who have no available higher education program that directly relates to their job, and also to those do not aspire to obtain a bachelor degree or higher (Klay & Maxwell, 2009).

Statement of the Problem

Undergraduate educational opportunities in public administration are comprised of baccalaureate (bachelor's degree) and sub-baccalaureate (Associate degree and certificate) programs. Some scholars of public administration have historically frowned upon this type of program, generally (Ventriss, 1998), while Dougherty (2011) notes that such programs have received scant attention in the literature. Analysis of the data in Table 1 shows that graduate programs (post-baccalaureate certificates, master's degrees, post-master's certificates, and doctoral degrees) together comprised approximately two thirds (65.5%) of all available public administration-specific programs for the 2012-2013 academic year, while undergraduate educational programs for public administration comprised over one third (34.5%) of that same total.

Table 1:

All Postsecondary Education Programs offered for Public Administration (CIP Code 44.0401) for the 2012-2013 Academic Year. Source: IPEDS (2015)

Type of Program:	Total # of Programs:	Percent of Total:
Doctorate Degree:	49	6.6%
Master's Degree and Post-Master's Certificate:	377	50.7%
Post-Baccalaureate Certificate:	61	8.2%
Undergraduate Degree and Certificate:	257	34.5%
Total:	744	100.0%

Additionally, approximately one-fifth (19.9%) of all degrees and certificates conferred for the field of public administration during the 2012-13 academic year

were at the undergraduate level (IPEDS, 2015). Undergraduate programs comprise a significant portion of the available educational programs for the field of public administration. It is therefore in the best interest of the field to pursue further research of these programs.

This dissertation focuses primarily on one type of undergraduate educational program for public administration, the Associate Degree in Public Administration (ADPA). To date, the extent of available scholarship on such programs is very limited. Banas & Emory (1998) examined data for one single academic year to identify the availability of ADPA programs in relation to associate degree programs available for other public service-related fields. Maxwell (2005) examined data for one single academic year to identify ADPA program locations and characteristics. Klay & Maxwell (2009) examined data for one single academic year to identify ADPA program locations and availability, and also posed questions as to potential alternatives to the ADPA program. These three sources are the extent of available literature on ADPA programs. While all of them make significant contributions to the literature, none of these sources examined ADPA programs longitudinally, nor did they examine institutional or demographic characteristics in relation to program diffusion.

There are a wide variety of occupations within the lower, operational level of the public sector, and together these occupations comprise a vital element within the overall range of responsibility of public organizations. Many of those who perform these jobs need to be educated on aspects of public work that are specifically within

the domain of ADPA programs, including such subjects as the culture and operation of public agencies, ethics, budgeting, personnel, and the societal roles of public administration. Banas & Emory (1998) argued that if we believe that a well-educated public work force is thus potentially more effective, then lower echelon public servants would benefit from the type of public administration education found in an ADPA program. Maxwell (2005) found that graduates from one ADPA program in 2002 were employed not only in the public sector, but a significant percentage were employed in the private and non-profit sectors as well. Those graduates employed in the public sector worked for local government (29.75%), state government (25.75%), and the federal government (6.06%). Others graduates work in the non-profit organizations (12.06%) while many of these graduates (26.38%) worked in health care administration and business organizations.

Banas & Emory (1998) further relate that education for public administration "has been considered the exclusive domain" (p. 225) of graduate degree programs. This is evidenced by the fact that over 76% of all public administration-specific degrees and certificates awarded in the 2012-2013 academic year were for master's degrees (IPEDS, 2015). This explicit focus on master's degree programs comes at the expense of lower ranking operational level public employees (Banas & Emory, 1998; Maxwell, 2005). These lower-echelon employees are those who would most specifically benefit from ADPA programs, which are intended to cultivate skills, improve competence, and to instill values in those who work in the public sector. Whereas higher-level degrees are intended for middle managers and executives,

ADPA programs are for lower-level echelon employees (Banas & Emory, 1998). These lower-level employees, who Lipsky (2010) described as *street level bureaucrats* are the specific population public employees who Banas and Emory (1998) posit are most relevant to ADPA programs.

Banas & Emory (p. 226) ask why we can "teach business to students at all collegiate levels but consider public administration education legitimate only at the graduate level?" In comparison to public administration, employment and professional development of students of Business Administration are benefitted by degrees at all levels of higher education, whereas public administration seemingly occurs only "at the mid-level management level and above" (p. 226). Also, it is generally believed that only job-specific training is needed for entry-level jobs in the public sector. This belief, coupled with a dominant focus on graduate degree programs comprise what the authors considered to be elitist viewpoint of the field that ignores the high level of job responsibilities that operational level employees really have, and only serves to limit the potential to better the field of public administration. Thus, the main arguments made by Banas and Emory are that there is a significant need for more public administration education at the lower levels of higher education, and that there is a great-untapped potential at community colleges across the nation to provide that education.

Similarly, citing needs for mass education within the field of public administration and for increased intergenerational mobility, Klay & Maxwell (2009) also called for increased participation by community colleges in public

administration education, and further point out that despite the earlier call by Banas & Emory (1998) for this, it has still not happened. Only 46 (3.2%) of the two-year colleges that existed during the 1992-1993 academic year offered an associate degree program specifically related to public administration (Banas & Emory, 1998; Snyder, 1994), while only 20 (1.1%) of those two-year institutions listed for the 2000-2001 school year offered ADPA programs (Maxwell, 2005; Snyder, 2003). For the 2005-2006 school year, only 23 (1.37%) of community colleges offered such programs (Klay & Maxwell, 2009; Snyder, 2008).

This data shows that there is fluctuation in the overall number of programs during the years listed here, and that the utilization of community colleges for public administration programs has apparently not notably increased over a significant period of time, an especially concerting thought when one considers the increases in population during that same period. What the above data does not explain is where the programs are located or if they have been in operation for any significant length of time. The data also provides no explanation as to where any programs have been terminated or where any new programs were instituted. There is also no information relating to characteristics of the institutions themselves and the environment that these institutions exist in.

This raises questions that require us to examine the degree programs themselves. Are the number of ADPA programs actually increasing or decreasing over time? Are they proliferating, and in any particular pattern of diffusion? Where and in what context do they exist? To answer these questions requires analysis of

variables related to the place and context of these programs. Do ADPA programs exist only in or near large metropolitan areas, or perhaps in close proximity to state capitals? Do they exist only in urban areas and not at all in rural areas? Do they exist only in prosperous geographical regions? Is there any relation to the location of ADPA programs and changes in population characteristics?

Previous scholars have emphasized the low level of utilization of community colleges in the education of public servants (Banas & Emory, 1998; Klay & Maxwell, 2009; Maxwell, 2005). This raises the question of just how much community colleges actually do participate in the education of public servants. This study addresses this question, with specific emphasis on ADPA programs. Previous analysis on the subject of ADPA programs has focused solely on one single academic year per study, and did not significantly explore demographic information beyond identifying which state the programs were located in (Banas & Emory, 1998; Klay & Maxwell, 2009; Maxwell, 2005).

This study expands on previous ADPA-related literature. Specifically, the first part of this dissertation is a longitudinal analysis of the diffusion of ADPA programs for the period of 1983 to 2013 to identify the quantity and location of ADPA programs during the study period. This analysis also identifies the proportion of those programs that were conducted by publicly vs. privately funded institutions.

The second part of the study analyzes ADPA programs for the 2012-2013 academic year, the most current data available at the time of this writing. This analysis examines correlations between institutional characteristics of the schools

that conduct these programs with demographic variables relating to the context in which these schools operate. The variables are largely based on those used in a similar study on the diffusion of Associate Degree in Nursing (ADN) programs by Geis (1985). These include location variables for each institution, population variables, income variables, and variables related to a demand for ADPA programs. These variables are examined in order to identify possible correlation with the innovativeness of the institutions that conduct ADPA programs.

The authors cited above posit that community colleges should be more involved in the education of public servants. So just how much are community colleges involved in the education of public servants? The third part of this dissertation answers this question by offering a comparative analysis of the availability of ADPA programs at community colleges to other types of colleges and universities.

Purpose of the Study

The purpose of this study is to examine not only the diffusion of ADPA programs during the 31-year (1983 to 2013) study period, but to also examine the current state of ADPA degree programs. Specifically, the study sought to (1) identify the long-term diffusion of ADPA program in the United States, (2) identify correlations relating leading demographic variables to ADPA programs for the most recent year of data available, and (3) to compare the current availability of public administration sub-baccalaureate educational programs at community colleges to that of all other types of colleges and universities.

Data was analyzed over a 31-year period (1983 to 2013) to examine the diffusion of ADPA programs during the study period. Analysis was also be conducted for the 2012-13 academic year to determine the innovativeness characteristics of those institutions that the currently offer ADPA degree programs. Finally, the study identified the proportion of ADPA programs that are conducted at community colleges as opposed to those conducted by other types of postsecondary institutions.

Research Questions

1. Has the number and availability of ADPA programs increased over time?
2. Are Late Adopters more likely to continue ADPA programs than Early Adopters?
3. Have ADPA programs historically been conducted primarily by community colleges?
4. Do demographic variables help to explain the current diffusion of two-year Public Administration programs?
5. Do community colleges provide more sub-baccalaureate educational programs for public administration than all other types of colleges and universities?

Research Hypotheses

H_1 - The diffusion of ADPA programs has increased over time.

H_2 - Institutions that adopt ADPA programs earlier ('Innovators' and 'Early Adopters') are more likely to continue ADPA programs than those that adopt later ('Early Majority', 'Late Majority', and 'Laggards').

H_3 - More ADPA programs are historically located at community colleges than at all other types of colleges and universities.

H_4 - ADPA programs are predominantly located in or in close proximity to large metropolitan areas.

H_5 - Institutions that operate in an environment of greater change and heterogeneity are more likely to adopt ADPA programs.

H_6 – Institutions with greater wealth are more likely to adopt ADPA programs.

H_7 – Institutions operating in an environment of greater demand for ADPA programs are more likely to adopt ADPA programs.

H_8 - *Community Colleges provide more sub-baccalaureate educational programs for public administration than do any other types of colleges and universities.*

Study Limitations

Studies of the diffusion of innovations have four main elements: (1) the innovation, (2) the communication of the innovation through channels within the structure of a social system, (3) the time by which the diffusion of the innovation is measured, and (4) the social system itself (Rogers, 2003). This study utilized secondary data originating from the National Center for Education Statistics (NCES) to analyze the diffusion of ADPA programs within the United States from 1983 to 2013. The data set is derived from the Higher Education General Information Survey (HEGIS) for the 1983 academic year and from the Integrated Postsecondary Education Data System (IPEDS), the survey instrument that replaced HEGIS, for the years of 1984 to 2013.

One limitation of the study relates to what time period can be studied. According to the Higher Education General Information Survey (HEGIS) for the 1970-1971 academic year, people were graduating from 'Public Administration and Management Technologies' associate degree programs as early as 1970, from which we can infer that two-year public administration degree programs have probably

been active since at least 1968 (ICPSR, 2005b). Under HEGIS, instructional programs were coded according to the Taxonomy of Instructional Programs in Higher Education (TIPHE) (Huff & Chandler, 1970). Prior to 1970, there was no code used in HEGIS to identify Associate degrees in Public Administration (ICPSR, 2005a). Consequently, while there is a distinct possibility that ADPA programs were being conducted prior to 1968, there is no way to count these programs and thus no way to verify that any such programs existed since there was no code with which to identify them, and thus no record of their existence.

Beginning in 1970, associate degrees in public administration were first identified in the Taxonomy of Instructional Programs in Higher Education (TIPHE) coding system in a manner that separated them from other social science associate degrees. In the TIPHE system, code number '5508' identified 'Public Administration and Management Technologies' Associate degree programs (ICPSR, 2005b). This code remained in use through the HEGIS XVII study that showed data for the 1982 academic year (ICPSR, 1985). Beginning with the 1983 academic year, the newer Classification of Instruction Program (CIP) code system was implemented (IPEDS, 2015). Under the CIP coding system, all educational programs in the academic discipline of public administration began to be identified by the code number of '440401'. Queries for different degree levels or certificate programs then began to be conducted using a separate variable from the CIP code for the discipline itself. This is the coding scheme still in use today for the reporting of any public administration program to IPEDS.

Consequently, the data prior to 1970 is limited and leaves no other data option from which to determine any notion of early ADPA program quantities or locations. Furthermore, the code '5508' that was used from 1970 through 1982 categorized public administration associate degree programs along with other related degree programs as 'Public Administration and Management Technologies'. Public administration associate degree programs were thus still not specifically differentiated from amongst the other associate degree programs within the 'Public Administration and Management Technologies' umbrella. Ultimately, because of the fact that there was no code to specifically differentiate public administration associate degree programs from amongst all other similar degree programs, it is necessary to limit the period of time of this study to begin with the 1983 academic year.

Another limitation of the study is the method in which all educational programs for public service are counted, including ADPA programs. The program data available in HEGIS and IPEDS is derived from programs in which degrees were conferred during an academic year, not from a specific count of active individual programs themselves. To count actual programs for any given year would require a survey of each individual higher education institution in the U.S., a task that is beyond the scope of this study. There is therefore a possibility that some programs may have been in operation during the study period that were not reported during any years in which an institution's ADPA program had no degrees earned or awarded. The study therefore assumes that the programs reported in HEGIS and

IPEDS for degrees earned and awarded are representative of the only active ADPA programs for each individual academic year's worth of data.

Lastly, it is pertinent to note that this study uses HEGIS and IPEDS data in lieu of data sources used in previous studies on this subject (Banas & Emory, 1998; Klay & Maxwell, 2009; Maxwell, 2005), all of which used different secondary data sources. Data contained in HEGIS and IPEDS is representative of the most accurate data available for actively operating ADPA programs during each individual year of the study. There are two distinct reasons for use of the HEGIS and IPEDS data, in lieu of the *College Blue Book* and the *Peterson's Guides*, as were used in the studies cited above. First, copies of both the *College Blue Book* and *Peterson's Guides* for all years of the study period are out of print and are thus simply not obtainable. Secondly, both Maxwell (2005) and Klay & Maxwell (2009) found significant problems with the validity of the data in the *Peterson's* publications, in that many of the programs listed as active were found to not actually exist.

Significance of the Study

Education for the field of Public Administration is focused primarily on graduate-level degree programs, a stance that Dougherty (2011) argues is due to the development of the field after World War II. Some scholars of public administration have historically frowned upon undergraduate degrees in public administration, generally (Ventriss, 1998). Further, the Network of Schools of Public Policy, Affairs, and Administration (NASPAA), the sole accrediting body for the field of public administration, has defined the master's degree as the primary degree program

within the field. Consequently, the MPA is the only level of public administration degree that has an accreditation process in place (NASPAA, 1997). This stands in contrast to undergraduate degree programs in the field of business administration, a discipline which has accreditation processes in place for all degree levels from undergraduate up through doctoral degree programs (AACSB, 2012). This may be attributable to the fact that NASPAA only accredits degree programs while AACSB accredits the institutions themselves that conduct business degree programs, regardless of the level or quantity of degree programs offered by institutions.

Dougherty (2011) states that NASPAA is "generally unsupportive and occasionally antagonistic to undergraduate education in public administration" (p. 325). This is supported by Laudicina's (2011) statement that "since the early 1970's NASPAA's attitude toward undergraduate education has ranged from benign neglect to overt hostility" (p. 321). Specifically, Laudicina found that opposition by NASPAA member institutions to undergraduate PA degree programs relates to concerns that undergraduate programs detract from the effectiveness of MPA programs, have a detrimental affect on the bottom line of institutions that host an MPA program, or that undergraduate PA degree programs detract from the amount of liberal arts education that a student would otherwise receive.

Specific to associate degree programs for Public Administration, Klay & Maxwell, (2009) have posited that there are far too few two-year degree programs available within the United States to appropriately support the needs of the field. Existing ADPA programs are sparsely located and are thought to not support Public

Administration in a manner that will sustain the field nor support any notion of growth (Banas & Emory, 1998; Klay & Maxwell, 2009; Maxwell, 2005).

Public administration scholars should care about this topic, particularly because there are a lot of us. Following upon a comparison first made by Klay & Maxwell (2009), there are nearly 22.5 million public servants in the U.S. (U.S. Census Bureau, 2012). If we adopt the same analytical assumption used by Klay & Maxwell (2009) that only one in ten of these employees needs even the most basic knowledge of our profession, then that leaves 2.2 million people who still, theoretically, need to be educated. Despite this need, necessary academic programs are few and far between. There are now 1,132 community and junior colleges currently operating across the United States (AACC, 2013). Community colleges, many of which have multiple campuses, offer a unique ability to help a community, including local governments, to meet their labor needs (Phifer, 2003). And yet only about 2.2% (25) of all two-year colleges across the nation offered ADPA degree programs in 2013. This same type of associate degree programs was also offered at 17 different four-year colleges and universities, amounting to a total of only 42 ADPA degree opportunities available in 23 of the 50 states (IPEDS, 2015).

Definitions of Terms

Adopter Categories: Classifications of members of a social system based on their innovativeness.

> Innovator: An adopter category describing those who are the very first to adopt an innovation in the diffusion process.
>
> Early adopter: An adopter category describing those who adopt an innovation very early in the diffusion process.

Early Majority: An adopter category describing those who adopt an innovation somewhat early in the diffusion process.

Late Majority: An adopter category describing those who adopt an innovation somewhat late in the diffusion process.

Laggards: An adopter category describing those who are the very last to adopt an innovation in the diffusion process.

Adoption: The decision by a system to make full use of an innovation.

CIP Code: The "Classification of Instruction Program" code used by IPEDS for reporting of postsecondary educational programs.

Diffusion: The process of communicating an innovation throughout the members of a social system, relating to a kind of social change by which alteration occurs in the structure and function of that social system.

Diffusion of Innovation: The spread of adoption of an innovation within a social system.

Exnovation: The act of removing an innovation from an organization that had previously adopted the innovation, also known as discontinuance.

HEGIS: The Higher Education General Information Survey administrated by the U.S. Department of Education for reporting of data by postsecondary education institutions. HEGIS was replaced by IPEDS beginning with the 1984 academic year.

Innovation: An idea that is seen or perceived as new by an individual or other unit of adoption.

Innovativeness: The measure of how early an individual, organization, or group adopts an innovation in relation to other potential adopters within their social structure.

IPEDS: The Integrated Postsecondary Education Data System administrated by the U.S. Department of Education for reporting of data by postsecondary education institutions.

Sub-Baccalaureate Education: Postsecondary education programs that are below the level of a bachelor's degree, consisting of associate degree programs and certificate programs.

Summary

There is a gap in the literature relating to the diffusion of two-year degree programs in Public Administration. Despite previous calls for increased proliferation of these types of degrees (Banas & Emory, 1998; Klay & Maxwell, 2009), no detailed research exists as to the long-term diffusion of these degree programs and what correlations among pertinent variables there might be for those programs that currently exist. This research seeks to identify the innovativeness characteristics of those institutions that have adopted ADPA programs by examining both the longitudinal history of past programs and correlation between current programs and leading demographic variables. Finally, the study seeks to identify the proportion of ADPA programs are provided specifically by community colleges.

This research is based on Diffusion of Innovation theory (Rogers, 2003). The research design is a longitudinal case study design that considers the diffusion of an innovation, the Associate Degree in Public Administration (ADPA), as the case. All data is analyzed *ex post facto* from secondary data sources. The next chapter reviews the literature that is most relevant to this study.

CHAPTER II

REVIEW OF THE LITERATURE

If the efficiency and effectiveness of the public sector work force is significantly important to the public good, then so is the quality and quantity of available academic programs for those employed in public service. The values, training, and education that appointed public managers receive greatly affects their decision making process, and thus has great influence on the lives of our citizens (Mosher, 1982). Conversely, Strayer (1975) stressed that too little emphasis is placed on aspects of administration related to the lower echelons of public service, specifically including the recruitment and training of lower ranking public servants. These "street level bureaucrats" are whom we usually interact with as citizens, those that we usually observe on the front line of service delivery in the public sector. They exercise wide-ranging discretion in how public policy is carried out, and in doing so are the direct representatives to us of the organizations that employ them (Lipsky, 2010).

Overall, Public Administration has a diverse field of choices when it comes to available academic programs, both in geographic location and in the programmatic emphasis of participating educational institutions. But, unlike the academic discipline of business administration, the vast majority of public administration college degrees are conferred at the Master's degree level (Banas &

Emory, 1998; IPEDS, 2015; Snyder & Dillow, 2011), a circumstance that is in direct accordance with the stated desires of the Network of Schools of Public Policy, Affairs, and Administration (NASPAA, 1997).

Abbott (1988) observed that individuals and groups develop their future environments through an interpretation of their past. Public Administration is certainly no different, with scholars having long espoused a belief that Public Administration should pay more serious attention to history, in order best decide what activities are most appropriate to pursue in respect to the past history of the field (Chandler, 2006; Schacter, 2007). The history of administration is part of the larger history of science, and is essential to the training of both appointed and elected public servants (Raadschelders, 1998; Rutgers, 1997). Raadschelders cites Van Braam and Bemelmans-Videc (1986) in relating that this history is also directly relevant to the structure and operation of administrative organizations, and to the employees of those organizations. In short, knowing the antecedents of the current state of the field can allow us to better understand the context of public administration and thus public administration education in our own time. Following on Strayer (1975), and within the apposition of public servant training and administrative history, this study focuses on one particular path in public administration education used in the training of the lower echelon public servants, the Associate Degree in Public Administration (ADPA), focusing both on the diffusion of these programs during the period of 1983 to 2013 and on the current availability of ADPA programs.

This chapter begins with a review of the scholarly literature that is most specifically relevant to the study topic, starting with the first call for attention to this topic by Banas & Emory (1998). This is followed by a review of Maxwell's (2005) study of ADPA programs in the 2002-2003 academic year and Klay and Maxwell's (2009) similar study for the 2007-2008 academic year, both of which examined specific aspects of available ADPA programs during single academic years. Lastly, Geis' (1985) study of the diffusion of Associate Degree in Nursing (ADN) programs are reviewed, due to that study's direct relevance in terms of both it's focus on associate degrees, and it's use of diffusion of innovation theory and relevant variables to examine the diffusion of those programs.

The chapter then discusses the historical origins and development of American higher education itself, to include the advent of community colleges, followed by a discussion of the hierarchy of accreditation granting agencies for all institutions within that system, with particular emphasis on accreditation of public affairs and administration degree programs by NASPAA. The chapter then explores alternatives to an Associate degree within public administration that are appropriate to those "street-level bureaucrats" (Lipsky 2010) who desire to be qualified or simply better prepared for their public service duties. The chapter closes with a comparative analysis between the quantity of ADPA programs conducted at community colleges and those conducted by other types of postsecondary institutions. We begin, though, with a review of the literature most relevant to obtaining an appropriate knowledge on the background of existing research,

beginning with the first call for attention to these programs by Banas & Emory (1998).

A Review of Literature Relevant to the Study of ADPA Programs

Scholarly literature authored thus far on two-year degree programs in American public administration is notable for how little of it there actually is. In fact, this body of work is comprised fully of two journal articles (Banas & Emory, 1998; Klay & Maxwell, 2009), and a doctoral dissertation (Maxwell, 2005). This is the full, limited extent of existing literature on this subject thus far. An additional study that is reviewed in this chapter is one that focused on the diffusion of associate degree programs from the field of nursing (Geis, 1985), relevant to the present study due to the value, purpose, and applicability of its methodology and variables.

The existing literature relating to the two-year degree program in public administration is limited but pertinent, commonly referring to a perceived problem within the academic field of public administration in that the field all but ignores the potential provided by America's community colleges to enhance education for the field. Banas & Emory (1998) authored the initial scholarly documentation of this problem.

Banas and Emory: The Initial Call for Attention to the Issue

There is, overall, little to be found in the literature on the role or utilization of community colleges for public administration education in the United States. Banas & Emory (1998) explore the history and characteristics of community colleges in the United States, in support of their contention that community colleges could be a

fundamental resource in the overall structure of American public administration education. This was a descriptive study that examined secondary data, the statistical reporting of Snyder (1995), to determine what community college offerings for public administration were available during the 1992-1993 academic year. The authors then based their main argument, that community colleges are not being used to anywhere near their full potential to provide public administration (PA) education, on a comparison of available PA-related associate degree programs during the 1992-1993 academic year to the number of community colleges in operation during that same year (Banas & Emory, 1998).

Relating the community college offerings for public administration during the 1992-1993 academic year, Banas and Emory list 22 different degree and certificate titles that are in or related to the field, culled from the statistical reporting of Snyder (1995). This list of degrees and certificates is dominated by titles from the Criminal Justice (6), Fire Sciences (5), and Heath Care (4) fields. Of the remaining seven titles listed, only one is specifically called *Public Administration*, which is further described as providing support courses for many of the other above-mentioned degree and certificate programs (Banas & Emory, 1998).

As beneficial as Banas and Emory argue that community colleges could be for American public administration education, they also anticipated some challenges for those community colleges that pursued the implementation of a public administration degree program. First among these challenges was the development and maintenance of academic integrity for both the program and the individual

courses. Secondly, target groups must be identified within the region that the community college serves, and then the program and courses must be marketed to the target groups to entice prospective students. Target markets that exist for public administration programs in community colleges include younger students motivated towards a career in the public-sector, students from other public-sector related degree and certificate programs, and working adults—especially those who already work for a public organization and are seeking a degree or specific courses for professional and personal development. An additional target market is comprised of organizations that have specific professional development and training needs for their employees (Banas & Emory, 1998).

Third, Banas and Emory posit that programmatic dialogue and connections must be established with senior institutions that offer public administration programs. Community colleges already do interact with both high schools and four-year colleges and universities to integrate other educational programs, but further efforts to develop a local network would help to foster a successful transfer program specifically for their public administration students. Also, funding must be obtained to ensure that the students have access to appropriate journals and academic databases. Lastly, at the time that Banas and Emory published their article on community colleges in 1998, NASPAA did not accredit two-year degrees for public administration. Listed as an additional challenge to implementing a public administration program, the authors contended at the time that it would be beneficial for community colleges to investigate having their program accredited by NASPAA

(Banas & Emory, 1998). Despite the amount of time that has passed since this article was published, accreditation of two-year degree programs is something that NASPAA still does not do.

Public administration programs offered at community colleges are intended "to develop skills, competencies, and values" (p. 223) for those who work in the public sector. Whereas higher-level degrees are intended for middle managers and executives, the associate degree and certificate programs provided at community colleges are for lower-level managers and subordinate employees. A significant conclusion drawn by Banas and Emory is that "for too long, public administration education has been considered the exclusive domain of graduate schools without consideration of the public work carried out by street-level-bureaucrats" (p. 225). Street level bureaucrats are those whom Lipsky (2010) has identified as the operational level public employees at the lower ranks of the public sector.

There are a wide variety of occupations within the public sector at this level, and together they comprise a vital element within the overall range of responsibility of public organizations. Those who perform these jobs need to be educated on many aspects of public work that are specifically within the domain of the two-year degree in public administration, including the culture and operation of public agencies, ethics, budgeting, personnel, and the societal roles of public administration. While this is of course not an all-inclusive list, the point made by Banas and Emory is that if we believe that a well educated public work force is thus potentially more effective, then most street level bureaucrats need the type of public administration education

related to here, and community colleges are poised to most effectively deliver this education (Banas & Emory, 1998).

In comparison to public administration, it is commonly accepted that the employment and professional development of students of Business Administration are benefitted by degrees at all levels of higher education; whereas public administration seemingly occurs only "at the mid-level management level and above" (p. 226), and it is commonly believed that only job-specific training is needed for entry-level jobs. This belief, coupled with a primary focus on graduate degree programs (NASPAA, 1997) comprise what Banas & Emory considered to be elitist viewpoint of the field that ignores the high level of job responsibilities that operational level employees really have, and only serves to limit the potential of the field of public administration.

While the main argument made by the authors is that there is a significant need for more public administration education at the lower levels of higher education, specifically at community colleges, the contrast stated above serves to demonstrate that there is also a wide disparity between how much the fields of business administration and public administration utilize community colleges in the United States as an educational resource (Banas & Emory, 1998). While correlation between accreditation process and program quantity remains to be proven, there were 737 Associate Degree in Business Administration (ADBA) programs available at community colleges in the 2012-2013 academic year, while there were only 24

ADPA programs available during that same year at those very same institutions (IPEDS, 2015).

Maxwell: Another Snapshot in Time of ADPA Programs

Maxwell (2005) examined public administration associate degree programs for the 2000-2001 academic year, as identified in the 2002 edition of *Peterson's Guide to Two Year Colleges* (Peterson's, 2001). This descriptive study first verified that the degree programs listed in the *Peterson's Guide* were in fact operating at the institution identified, a process that left a final study population of only 20 institutions. The study then used a structured interview survey instrument to obtain data from these institutions relating to their degree programs during that particular academic year. The survey sought information relating to finding and classifying the academic emphasis of these degree programs. The study also sought information on the utilization of these degrees at the time of the study relating to what work sector and type of organization the degree recipients were employed in. Lastly, the study sought information relating to any changes taking place in the surveyed degree programs.

Maxwell found significant commonality among the curriculum of the 20 associate degree programs in public administration that were studied. This study also showed that these degrees were being utilized at all levels of the public sector, federal, state, and local, and also in the private sector. It is notable that the public sector is the largest among this distribution of utilization, at 61.56% of the total. From within this amount, the local government level had the largest share of persons

with an associate degree in public administration with 29.75% of the overall total. The next most significant was the state level of government with 29.6%, and the federal level was 6.06%. The other 38.44% was the group titled *not for profit and other* which included those degree recipients working in the private sector, in positions that included the health care industry and business organizations.

Changes being experienced in the variety of programs surveyed correlate to changes in demographics. As population numbers increase or decrease, enrollment in public administration associate degree programs is affected correspondingly. Other changes related to changes in opportunities for employment, with these changes being also reflected as increased enrollment in some programs and decreased enrollment in others.

One notable finding from Maxwell (2005) relates to the commonality amongst associate degree programs in public administration. Maxwell found that 80% of the programs surveyed have an active program to articulate associate degree graduates to higher-level institutions to pursue a bachelor degree in public administration. In fact, a distinct finding was that associate degree programs in public administration exist primarily for the purpose of being able to transfer to a bachelor degree program. Maxwell relates that Swain (1985) studied bachelor degree programs in public administration, and found that those degree programs also share some commonality of curriculum. Ultimately, Maxwell found that the curriculum of associate degree and bachelor degree programs in public administration are "very similar" (p. 89). He also states the similarities between associate, bachelor, and

masters degree programs in public administration comprise a potential triple redundancy whereby students progressing through all three degree programs will have courses that they will have to repeat to meet curriculum and degree program requirements. Maxwell's suggestion is that this potential triple redundancy issue needs to be addressed by NASPAA and other leaders within the field, a finding that was duplicated by Klay & Maxwell (2009).

Klay and Maxwell: An Update to Previous Single-Year Studies

Like the studies performed by Banas & Emory (1998) and Maxwell (2005), Klay & Maxwell (2009) examined aspects of the available ADPA programs during one particular academic year, as listed in *Peterson's Guide to Two Year Colleges, 2007* (Peterson's, 2006). Data for the study was compiled from a telephone survey in which 20 ADPA program directors participated. This is out of a total of 23 total programs listed for that year in *Peterson's*. The specific programmatic aspects discussed were the growth and change of the ADPA programs, content of the curriculum, articulation with four-year schools, and whether the development of the ADPA program had been guided in any way by NASPAA documentation or guidelines.

Despite the fact that community college enrollment accounts for nearly half of all undergraduate students in the United States, the findings of this study begin with the surprising observation that less than two percent (2%) of all community colleges offer an ADPA program. The 23 total programs listed in *Peterson's* (2006) were very much geographically dispersed, existing in 17 states, with no more than

two ADPA programs exiting in any individual state. Study findings indicate that enrollment was stable in nine of these 20 programs, while seven of the programs were experiencing enrollment growth and the other four were in a state of decline. The authors interpreted this as indicative of low potential for the overall future growth of these types of programs. A separate finding is that while associate degree programs for the areas of public safety and health do exist, there is still a significant need for what the authors posit as mass education for lower-echelon public servants. The authors cited U.S. Census Bureau data showing that there were 21 million public sector employees in 2002. They postulated that if only ten percent of these employees needed "at least minimal exposure to our profession" (p. 177), then there is a need of *mass education* for over 2.1 million public sector employees. They then modified the equation to a seemingly more palatable number, reducing their assumption to a mere one percent of this total, a number that still exceeded 210,000 in need of public administration education.

The authors then further emphasize that an additional 8.8 million nonprofit sector employees could also be added to this equation, arriving at an amount of nearly 30 million public and nonprofit sector employees at the time of their study. This calculation ultimately resulted in a number that exceeded 300,000 people that could benefit from some basic level of education in public affairs and administration at the time of their study. This is what the authors referred to as the need for mass education in the field.

Another finding of this study emanated from concerns expressed to the authors from colleagues within the discipline that community college level programs cause serious problems with articulation: the study, like that of Maxwell (2005), validated these concerns. There are five curriculum subject areas that are strongly emphasized in ADPA programs: budgeting and finance processes, political and legal institutions and processes, organization and management, decision making/problem solving, and human resource management/supervisory skills. Similar to the triple redundancy finding by Maxwell (2005), Klay and Maxwell posit that students seeking to progress from the associate degree level to the bachelor's degree and then an MPA can be subjected to a triple redundancy of curriculum through all three degree levels, although they also found that of the 20 ADPA programs surveyed, 16 had an established articulation process with baccalaureate-level institutions.

One of the areas explored in the study survey asked about the influence of NASPAA guidelines on ADPA program development. The findings indicate that only four of the 20 programs had used NASPAA information as a source for developing their ADPA program. Klay and Maxwell emphasize that there are, at present, no published guidelines for ADPA programs. NASPAA's (1997) *Guidelines for Baccalaureate Degree Programs in Public Affairs/Administration* is the only current document that NASPAA has relating to undergraduate education in Public Affairs/Administration. NASPAA's (1997) *Guidelines* do mention two-year degree students and the transfer of associate-level courses in paragraph 2.12:

> Many students take their first two years of college at a community or junior college. It is important that transfer policies be developed in

> cooperation with and be fully understood by the community and junior colleges from which the majority of transfers will occur. With reference to the transfer of PA courses from associate to baccalaureate programs, the PA baccalaureate degree-granting unit should provide at least the majority of required professionally-oriented courses in a student's program. All courses transferred from the associate level for credit toward the baccalaureate degree should involve logical and analytical thinking processes designed to develop the reasoning capacity of the individual. Courses not generally regarded as transferable are those which are essentially procedural or routinized "how-to-do-it" courses.

The content of NASPAA's 1997 *Guidelines* leave one to infer that NASPAA may harbor a negative stance towards associate degrees in the field. This is because the 1997 *Guidelines* document is specifically focused on baccalaureate degree programs, with almost no guidance whatsoever on associate degree programs. The 1997 *Guidelines* document also mentions training people for management and leadership positions in public service, while any mention of training people for the lower echelons of public service is noticeably absent. This appears to distance NASPAA from any notion of supporting two-year degree programs. Additionally, detailed reading of the paragraph 2.12 (quoted above) shows NASPAA to be in favor of some sort of transfer policy to be developed "in cooperation with and be fully understood by" (p. 3) community and junior colleges, yet provides nothing beyond the paragraph quoted above for guidance on how to actually develop such a policy. Further research into this subject would be beneficial to the field.

Klay & Maxwell (2009) found that less than two percent of U.S. community colleges offered an ADPA program in the 2007-2008 academic year. While associate degrees are in fact available for public health and safety occupations in the lower

echelons of public service, Klay and Maxwell posit that there is large portion of public sector employees who need training in the basics of public service and management skills, a number that they conservatively calculate to be at least 300,000 people, and that American higher education institutions are not meeting this need.

The authors make mention of alternatives to an Associate degree for training public servants. One type of non-degree training that is used to train public employees in the basics of public affairs/administration is the Certified Public Manager (CPM) program. These programs were initially implemented in the 1970's and are now accredited by the National Certified Public Manager Consortium (Klay & Maxwell, 2009; NCPMC, 2015). CPM programs are not intended for those who are likely to seek a bachelor's or master's degree in the field. While the authors relate that the CPM is the most widely implemented program of its type in the field, and that it has the potential to reach many public employees, they also conclude that it too has not expanded enough to meet existing needs (Klay & Maxwell, 2009).

Additionally, the authors explain that while a demonstrable need for mass education in public service is not being met by either higher education degree programs or CPM programs, there is still much training being given on an ongoing basis that benefits public employees. This refers to in-service training, much of which is conducted by both government human resources departments or contracted private vendors. Although this training is technically acceptable, the authors contend that it is less certain to "emphasize core values of public service" (p. 182) as would be done if the training were provided by higher education institutions. For this reason

too, Klay and Maxwell argue that higher education needs to be more involved in the provision of public service training to public employees.

Citing Hoachlander, Sikora, & Horn (2003), Klay & Maxwell convey that only 30 % of community college students actually transfer to baccalaureate institutions, meaning that a full 70% of community college students do not continue their education past that level of higher education. Additionally, the authors cite Oldfield (2007) who notes the ineffectiveness of master's degree programs in the field to promote intergenerational social mobility. Citing AACC (2007) data, the authors relates that 39% of all community college graduates during one academic year were first generation students, indicative of one of the great strengths of the community college system in that it attracts and successfully graduates many such students. The authors add that many of these graduates of community colleges go on to work in the public sector. Klay & Maxwell also relate their personal experience with state and federal government data that frequently lists an Associate degree as the level of education held by a significant portion of both white-collar public employees, and by many public health and safety employees at the local government level. The authors closing argument is that the problems of mass education and intergenerational mobility could be addressed, at least to some appreciable level, if more public-sector oriented community college students, those who do not wish to pursue a higher-level degree, received some level of basic public affairs and administration college education.

Taken together, Banas & Emory (1998), Maxwell (2005), and Klay &

Maxwell (2009) represent the totality of existing literature on ADPA degree programs. A further study related to the focus of the present study is that of Geis (1985), who studied the diffusion of associate degree programs in the field of nursing over a 28-year period.

Geis: A Diffusion Study of a Different Associate Degree Program

The studies by Banas & Emory (1998), Maxwell (2005), and Klay & Maxwell (2009) looked at how engaged community colleges are in providing ADPA programs in the United States, each looking in detail at ADPA degree programs offered during one particular academic year. Geis (1985) performed a longitudinal study of the diffusion of Associate Degree in Nursing (ADN) programs in the United States. Although Geis' study is focused outside of the field of public administration, it is still significantly relevant to the present study and thus to the field. Using census data, nursing education directories, college catalogs, and data derived from subject interviews, Geis examined the diffusion of ADN programs in the U.S. during the period of 1954 to 1982, the diffusion of ADN programs specifically within the state of Illinois for the period of 1957 to 1980, and the innovativeness of junior (community) colleges towards adopting the ADN program specifically for the 1978-1979 academic year.

McLeod (2000) relates a 19th century case by Dr. John Snow in which Snow stopped the 1854 cholera epidemic in London, England. Prior to Snow's actions, people blamed the spread of cholera on a variety of sources, including the inaccurate notion that it was an airborne disease. Snow plotted many of the hundreds of deaths

attributed to the epidemic on a street map, and narrowed the center of activity to one specific location, a public water pump. He removed the handle from the pump to prevent any further usage, and in doing so stopped the epidemic. His resulting theory on water-borne disease transmission was revolutionary and made him a medical hero in his day. Today, Snow is celebrated as a leading pioneer in epidemiology, the study of how infectious diseases spread into a society, and what factors contribute to that spread (Rogers, 2003). Bailey as cited in Rogers, (2003) relates that there is close similarity between the mathematical models used to study both the diffusion of innovations into a society and those used to study the spread of epidemics into a society.

Following on this, Geis (1985) measured innovativeness using an epidemiological model such as that used to measure the spread of infectious disease into a society. Specifically, Geis measured the effects of state level factors on the adoption behavior of two-year colleges. To do this, she first identified all two-year colleges within each state, and then those among the resulting group that had active ADN programs. She was then able to calculate a *case rate* for each state, based on the following formula:

$$SCR = \frac{P}{T}\ (10)$$

Where: "SCR" = The State Case Rate for each state.
"P" = The number of two-year colleges in that state that operate ADN programs.
"T" = The total number of two-year colleges in that state.
"10" = A base rate multiplier such as those commonly used in epidemiological studies.

The resulting SCR calculated is thus representative of the number of cases per population unit for each state. Geis assumed that the SCR for each state is representative of the level of innovativeness in the population of two-year colleges for that state. A low SCR would thus equate to low levels of innovation amongst the two-year colleges of a given state. In relation to the overall study, Geis identified the SCR for each state as the dependent variable. To explain the variation in SCR levels among the states, Geis then explored the effects of state level factors on the adoption behavior by two-year colleges of ADN programs.

Citing Baldridge and Burnham, Geis, (1985) relates that the more innovative organizations are those that function "in changing, heterogeneous environments", while less innovative organizations are those that operate in "stable, homogeneous environments" (p. 159). Following this notion, Geis postulated that those states with a higher SCR are those that have more heterogeneity and change in their environments. Heterogeneity is then measured by using the demographic measurement of the percent of non-whites among a states population, and change was measured as the percentage of increase in this measurement from the previous census, with the census years chosen (1960 and 1970) based on their correlation to the time of great increase in the number of ADN programs across the nation.

Geis (1985) relates that diffusion research has established that an abundance in the availability of funds or other "superior resources" (p.162) correlate positively to the adoption of innovations. Since the dependent variable in Geis' study was based on a state population, per capita income was used as the measure of wealth of

each state. Two other factors studied relating to the SCR for each state were the need for nurses and the demand for nursing education. The need related to here refers to the availability of employment opportunities for graduates of ADN programs. The demand for nursing education refers to the potential market for students that may wish to enroll in an ADN program (Geis, 1985).

Geis used a total of four separate measurements to establish these two independent variables. First, the *RN Rate* of registered nurses per 100,000 population (in 1970) was used. She hypothesized that the lower the RN Rate, the more apt two-year colleges in a state may be to establish new ADN programs. The second measure used was the average daily hospital census, in which short term stays of 30 days of less for each state were accounted for. Since short term stays typically correlate to more acute health conditions, the nursing tasks associated with these patients require a greater level of skill than does long-term hospital stays, for which lesser-qualified and lesser-trained nurses are typically used. Consequently this number is a method of specifically quantifying the need for ADN program graduates. The third measure used is a representation of the overall general health of the residents of a state, based on the infant mortality rate of the state. The fourth measure used to determine demand for nursing education, specifically, is based on the number of students enrolled in secondary schools for each state. This particular measure provides the "best available measure of the potential demand for programs in higher education" (p. 164), generally, and thus relates to the overall propensity for two-year colleges to offer any of the programs that they do offer.

Geis also used the measure of diploma schools, the forerunner to ADN programs at two-year schools, to determine the demand for nursing education. Diploma schools for nursing education had originated in the Northeastern U.S. soon after the Civil War ended, but were rapidly disappearing by the time of Geis' study. As the older nursing education model, represented by the diploma schools, continued to decline in a state, the need for the newer nursing educational model, represented by ADN programs, would hypothetically increase. This is based on the assumption that the number of continuously operating, surviving diploma schools in a state is negatively correlated to the number of ADN programs in that state.

Geis analyzed the ADN program curriculum at 26 different community colleges within the state of Illinois, categorizing the results of that analysis into either traditional or integrated programs. The traditional programs were those based on a specific medical specialty such as pediatric nursing or psychiatric nursing. The integrated programs were those that other structures outside of traditional medical specialties, such as those based on patient life cycle and a concept known as the wellness-illness continuum. Of the 26 programs analyzed, eleven programs were identified as traditional and the other fifteen were identified as integrated programs. She then analyzed host characteristics of each of the 26 schools. Geis found that the traditional schools had some resemblance, albeit not at a statistically significant level, to non-adopting schools. Generally, Geis found that non-adopting schools are different from those schools that do adopt ADN programs. In comparison to non-adopting schools, Geis found that organizations that had adopted ADN programs

were more likely to be public colleges, mostly in urban locations, and were among the larger and wealthier two-year institutions. Geis' most significant finding was that adopting schools tended to offer a greater variety of occupational programs.

Citing Kimberly (1981), Geis relates exnovation as completely removing a previously adopted innovation from an organization. Williams (2011) described exnovation as "disengagement of interventions and practices" (p. 1) by an organization, while Rogers (2003) simply refers to it as "discontinuance" (p. 21), the decision to reject an innovation after it had previously been implemented. While Geis found statistically significant differences between adopting schools and non-adopting schools, she also found differences between the two groups of adopting organizations in her study. Specifically, Geis found that among adopting schools, those that kept ADN programs had decidedly different organizational characteristics than those adopting schools that started ADN programs and then discontinued them, the exnovators. In fact, Geis also found distinguishing similarity in the organizational characteristics of both exnovators and non-adopters of ADN programs during the period of study.

One other noteworthy finding from Geis' study is that local organizations that are potential stakeholders in an ADN program were found to be a significant factor in a school's decision to adopt an ADN program in the first place. In Geis' study, local hospitals and hospital-sponsored nursing schools proved to have had a great impact on whether or not their local community college adopted an ADN program. Finally, Geis recommended further analysis of adopting schools using theoretical

frameworks that included not only the adopting school itself, but of all other organizations that would be within the network formed by the adoption of the ADN program. In the case of Geis' study, this would include local hospitals, local hospital-sponsored school, private medical practice organizations, public health organizations, and the like. In short, any organization with whom the community college interacts in the course of its operation that could benefit from the college adopting the ADN program.

Although Geis' study was focused on an associate degree program that is unrelated to public administration, both the structure used in her study and the many of the subject areas for her variables are directly relevant to this study. This study therefore utilizes the State Case Rate (SCR) as the dependent variable. The subject areas of heterogeneity and change, wealth indicators, and indicators of demand for ADPA programs are used as the conceptual foundation for the independent variables in this study.

This section of the text has discussed the problem to be addressed by the present study, and has reviewed the literature relevant to obtaining an appropriate knowledge on the background of existing research. The next section of the text addresses the advent of the Network of Schools of Public Policy, Affairs, and Administration (NASPAA), the sole accrediting agency of public administration degree programs.

Professional Organization Influence on PA Education: The Advent of NASPAA

Between 1962 and 1969, over forty major legislation actions were

passed, all requiring an increase in the cooperative interaction between different levels of government (Honey, 1967; 1969). By 1967, the federal administrative structure had grown to over 2.5 million personnel, and more than 70 graduate programs in public administration were operating across the country (Honey, 1967). This was not adequate to fulfill the perceived needs of the field though, with less than 3 percent of the all American public servants—the administrative structure at the federal, state, and local levels—having had any exposure to public administration curricula (Honey, 1969). In one apt description of this finding, Frederickson (1976) commented on the public administration education of public administrators of this era, saying that "Few have ever had a course in it, and fewer still hold a degree in the subject" (p. 565). Despite existing needs, the stance held by American higher education towards public administration was perceived to be largely passive (Honey, 1969).

This was despite the efforts of the field's primary professional organization, the American Society for Public Administration (ASPA). The influence of the American Society for Public Administration (ASPA) on education for public administration has been significant, starting most prominently with the establishment of the Committee on Graduate Education for Public Administration (CGEPA) in 1958 (Laudicina, 2011; Pugh, 1990). The CGEPA was created by academics within ASPA who had interests that were neither shared nor addressed by the general member population (Henry,

1995). Comprised mostly of deans of the larger public administration education programs, the committee's charge was to systematically address educational issues that mattered to PA programs across higher education, while primarily focusing on graduate education (Henry, 1995; Laudicina, 2011). The CGEPA established public administration faculty and student internships, studied the quality of graduate level public administration education, developed graduate-level education standards, and adopted policy positions that called on higher education to increase their emphasis on education for the field (Pugh, 1990).

As a public administration advisory entity to the government, the National Academy of Public Administration (NAPA) originated in 1967, also from within ASPA. Comprised of the field's most eminent scholars and practitioners, NAPA would become an independent organization in 1970, although still remaining closely aligned with ASPA (Plant, 2009). As the 1960's drew to a close, many dominant members of the CGEPA became alarmed at the lack of quality in many emerging small programs, and equally as alarmed at the size and influence of a number of large schools (Laudicina, 2007). The CGEPA formally dissolved in 1970 and reformed as the National Association of Schools of Public Affairs and Administration (NASPAA), still under the auspices of ASPA (NASPAA, 2013a). This was done to ensure the inclusiveness of higher education institutions for public affairs and administration, to influence higher education to improve its offerings to the

field, and to improve marketing of the field to students (Henry, 1995; Laudicina, 2007).

The Honey Report of 1967, *A Report: Higher Education for Public Service* (Honey, 1967) had identified numerous gaps between the potential offered by American higher education and the reality within higher education for public administration itself, and consequently called for many proactive changes to enhance the field (Henry, 1995; Laudicina, 2011). One of these changes was standardization, implemented later through NASPAA, but only on MPA degree programs (Laudicina, 2011). Another recommendation, now rather obscured by time, was a study of the applicability of public administration training in two-year and junior colleges. There is no evidence that any such study ever happened. Honey (1967) had also posited "it would be useful to know the extent to which undergraduate training in public administration is occurring" (p. 314), something that didn't happen until nearly 20 years later (Swain, 1985), and even then without any specific focus on associate degree programs.

The first survey conducted by NASPAA in 1970 identified 125 graduate programs in public affairs and administration (Henry, 1995). Undergraduate programs became eligible for NASPAA *membership* in 1971 (NASPAA, 2013a). By 1974, the number of graduate programs had grown to 138 (Henry, 1995). In a measure designed to prescribe academic content, to serve as a guide for education for the field, and to advocate for the

development of competency and performance skills, NASPAA published its *Guidelines and Standards* in 1974 (Mackelprang & Fritschler, 1975; Young & Eddy, 1982). In 1975, NASPAA formally separated from ASPA and became its own entity, although still significantly dependent on ASPA for administrative support (NASPAA, 2013a). The decade of the 1970's was a coming of age era for public administration, with 200 programs affiliated with NASPAA by 1976 (Frederickson, 1976). Standards for curriculum content of graduate programs in public affairs and administration were adapted by NASPAA in 1977, along with a process of self-study and peer review implemented through the newly established Peer Review Committee (PRC). The peer review process was used until near the end of the 1980s (Daniels & Johansen, 1987; NASPAA, 2013a). Laudicina (2007) notes Poore's (1982) observation that NASPAA published the first roster of 45 programs approved through the peer review process in July of 1979. In 1983, NASPAA members voted to expand beyond the peer review process. The NASPAA Committee on Peer Review was then changed to the Commission on Peer Review and Accreditation (COPRA) in 1985, and thus granted authority for accreditation decisions (NASPAA, 2013a).

In that same year, Swain (1985) performed a survey of all 71 public administration undergraduate programs listed in the 1983-1984 NASPAA directory. He found that despite stated guidelines listed by NASPAA for such programs, there was great disparity in the structure of the programs,

seemingly due to adopting standards to local context. Further, neither ethics training nor technical and professional subjects were emphasized in the majority of programs. An inventory conducted by NASPAA in 1994 identified 171 undergraduate public affairs and administration programs across the country, 77 of which existed at NASPAA member institutions (NASPAA, 1997).

By 2004 NASPAA had granted accreditation to 153 graduate programs in public affairs and administration (NASPAA, 2004). Efforts to revise the NASPAA accreditation standards began in 2006, and the newly revised standards were approved in 2009 (NASPAA, 2013a). In recognition of the increasingly "global focus and presence", NASPAA changed its name in 2013 to the Network of Schools of Public Policy, Affairs, and Administration (NASPAA, 2013b). There were 166 graduate programs in public affairs and administration accredited by NASPAA for the 2012-2013 school year (NASPAA, 2013c).

This section has discussed the influence on public administration education of the American Society for Public Administration (ASPA), the primary professional organization for the field, and by NASPAA, the educational-focused offspring of ASPA. The next section of the text discusses the advent of the community colleges within the United States.

The Advent of the Community College

Having now existed in America for well over a century, the rise of the community college in America derived from the need to train workers for an increasingly industrialized society, and from the greater social equity perceived to be gained by improved access to higher education (Cohen & Brawer, 2003). Joliet Junior college, America's first two-year college, was founded at Joliet, Illinois in 1901 (Vaughan, 2006). This was the culmination of years of effort led by William Rainey Harper, the president of the University of Chicago (Witt, Wattenbarger, Gollattschek, & Suppinger, 1994). At the time that the first community colleges began operating, demands placed on schools at all levels of the American education system were significantly increasing (Cohen & Brawer, 2003). By 1910, a network of 13 junior colleges and six-year high schools had been founded that were connected through agreements with the University of Chicago (Fretwell, 1954). As the years passed and the number of junior colleges increased, steps were taken to standardize processes and thus formalize the existence of this new form of higher education. Accreditation standards were adopted for junior colleges in 1917, a move which formalized the membership of junior and community colleges within the greater sphere of American higher education (Vaughan, 2006).

By 1919 the number of junior colleges had grown to 170, and by 1922 there were 207 junior colleges operating in 37 states (Cohen & Brawer, 2003). In that same year, the American Association of Junior Colleges was founded. In 1930, the Stanford University Press began publishing the first professional journal of the

community college movement, the *Community College Journal*. Passage of the GI Bill of Rights, officially known as the Servicemen's Readjustment Act of 1944, assured access to higher education for millions of U.S. military veterans. In 1947, the President's Commission on Higher Education for American Democracy issued the Truman Commission Report. This report recommended the proliferation of publicly funded community colleges across the nation, minimal tuition charges, emphasis on civic mindedness, and close proximity to the institutions student body (Vaughan, 2006). There were 650 junior and community colleges operating in the U.S at the time that the report was issued. By the early 1970's, there were enough community colleges in operation to meet the recommendation of close proximity to students, so the proliferation of new community colleges ebbed considerably with 1,141 in operation by 1972 (Cohen & Brawer, 2003). There are now 1,132 community and junior colleges currently operating on 1,729 campuses across the United States (AACC, 2013).

The Mission of Community Colleges

Generally, the three types of education provided by community colleges are pre-baccalaureate, vocational, and developmental. One of the main functions of community colleges is to provide pre-baccalaureate education that serves as the first two years of a four-year degree program (Cohen & Brawer, 2003). The different types of associate degrees, all of which are two-year curricula, include the Associate in Arts (A.A.) degree, the Associate in Science (A.S.) degree, the Associate in Applied Arts (A.A.A.) degree, and the Associate in Applied Science (A.A.S.) degree.

The A.A. and A.S. degrees are intended for students who will transfer to another institution to complete a bachelor's degree, while the A.A.A. and A.A.S. degrees are oriented towards occupational training in a specific field and are thus considered terminal degrees (Banas & Emory, 1998). Upon completion of the Associate degree, the student can then transfer to a four-year institution to begin working on their bachelor's degree (Cohen & Brawer, 2003). Certificates earned at a community college vary in course load between 15 and 30 semester hours, and are earned for vocational training on specific skills within a field or discipline. These certificate programs are often linked to the professional development needs of specific employers within a community college's constituent region. In this same vein, individual courses are offered, both for credit and non-credit, to meet specific educational or professional development needs of students (Banas & Emory, 1998).

Originally conceived as a type of terminal technical training that was more intense than training received in high school, vocational training has evolved to now include occupational training specific to many jobs. Additionally, the lines between vocational training and a classic liberal college education are becoming less distinct because of the successful transfer of many graduates of community college vocational training programs to universities to complete a higher-level degree. Increased access to higher education is an element of social equity that is of universally paramount importance to community colleges (Cohen & Brawer, 2003). Contrary to the popular notion that community colleges will accept any student, in actuality, community colleges have the same entrance standards as any other type of

higher education institution. Their difference is that community colleges offer developmental education as an avenue of assistance to become qualified (Vaughan, 2006). Developmental education, often referred to as remediation or basic skills courses, provides basic academic education in the areas of reading, writing, and math, as well as life skills that assist the student in successfully acclimating to college life (Cohen & Brawer, 2003).

Although community and junior colleges offer pre-baccalaureate certificate programs and community education opportunities that include both credit and non-credit courses, they primarily grant Associate degrees (Hull & Parnell, 1991; Vaughan, 2006). Undergraduate certificate programs are considered terminal training as most students who complete these certificates go out into the work force and do not continue on with further college education (Sanchez, Laanan, & Wisely, 1999). Community education provided by community colleges includes courses that teach a hobby, basic self-improvement courses, and service learning courses that are conducted in conjunction with the various scholarly disciplines to benefit the local community in some way. Associate degrees are generally representative of about two years of full time education, and are widely accepted for transfer at both public and private four-year schools across the country (Vaughan, 2006). It is the diffusion of this type of degree, specific to public administration that is the primary focus of this study.

While baccalaureate degrees are the predominant requirement for managerial and professional positions in most organizations, obtaining an Associate degree can

still double a person's chances of obtaining such a position over those with only a high school diploma. An Associate degree will also significantly increase a person's upward mobility within work organizations for positions that are subordinate to the managerial and professional positions. Additionally, public service oriented Associate degrees are specifically notable for bringing a higher level of economic returns for those that obtain them (Grubb, 1996).

This section of the text has discussed the advent of community colleges within the United States. This included the origins and chronological development of community colleges within the American higher education system, as well as discussion on the mission and specific programs offered by community colleges. The next section of the text discusses the system of accreditation for postsecondary education with the U.S., culminating with a discussion on NASPAA and their accreditation role within the field of public administration.

The Accreditation of American Higher Education Institutions

Accreditation is a peer-review evaluation process that is the standard measure of reliability for the quality of academic programs provided by an institution (ACICS, 2010; Eaton, 2012). It is a process whereby an external agency, an authorized accreditation organization, reviews an institution or program against established standards to measure and assure the present and continuing quality of educational operations and outcomes (Eaton, 2012). The process of accreditation originated in the United States with regional accrediting agencies in 1880, and expanded over time in reaction to the

expanded oversight and regulation of education by state and federal government. For American higher education, accreditation once granted under the authority of the Council on Postsecondary Accreditation (COPA) continues today under the authority of its successor, the Council for Higher Education Accreditation (CHEA) (ACICS, 2010; Eaton, 2012).

There are currently 65 accrediting organizations that are recognized by the CHEA to conduct and oversee accreditation of higher education institutions and programs in the United States (CHEA, 2013). The legitimacy of these accrediting organizations is not rooted in government, but is derived from the institutions and programs that created the accreditation standards and processes (Eaton, 2012). This legitimacy is formalized through recognition by the CHEA, which thus formally authorizes an organization to conduct and administer accreditations. The four types of accrediting organizations recognized by CHEA are regional accreditors, national faith-related accreditors, national career-related accreditors, and programmatic accreditors. Accreditation can be granted to institutions or to programs (Eaton, 2012). There are 53 organizations currently recognized by CHEA to perform programmatic accreditations, each related to some specific field or profession (CHEA, 2013; Daniels & Johansen, 1987). Among these organizations, NASPAA is the sole agency recognized by CHEA to grant accreditation to public affairs and administration programs (CHEA, 2013).

The Evolution of NASPAA Accreditation

There was much debate and discussion during the 1970's about the feasibility of joining some elements of administrative education programs for business and public administration. At the suggestion of Elmer Staats, Comptroller General of the United States, meetings between NASPAA and the Association to Advance Collegiate Schools of Business (AACSB) were initiated that continued over a period of several years. The subject of these discussions included accreditation under the structure of what the AACSB then offered. The ultimate result was that public administration insisted it was too distinct to be joined to business administration, and no joint NASPAA/AACSB projects were ever pursued. What also happened, though, was that many NASPAA representatives were exposed to the inner workings of the AACSB accreditation process: the seed had been sown. Whereas the general subject of accreditation for public administration degree programs had previously been somewhat of a taboo topic of discussion within the realm of NASPAA, that stance began to quickly dissolve (Henry, 1995).

The AACSB is still notable among the programmatic accreditation organizations recognized by CHEA. In the spectrum of higher education for business administration, accreditation is a function of the AACSB (CHEA, 2013). Under the most current accreditation standards, AACSB does not accredit a specific program, but rather the institution itself, and whatever degree programs that institution wishes to be considered for accreditation.

Under this structure, business administration degree programs at all levels, from associate through doctoral level can be accredited (AACSB, 2012). Under the present NASPAA accreditation structure, public administration programs are only accredited at the master's degree level. NASPAA has established something less than standards for programs at levels other than the master's degree, with a *policy* for doctoral programs and *guidelines* for baccalaureate programs (NASPAA, 2013b). As of this writing, there are no established standards or guidelines for associate degree programs in public administration.

This section of the text has discussed the advent of the community college. The structure of accreditation agencies for higher education was also discussed, with specific emphasis on NASPAA, the sole accrediting agency for the field of public administration. The next section of the text addresses current alternatives to the ADPA program

Consideration of Alternatives to the ADPA Program

As indicated by Banas & Emory (1998) and Klay & Maxwell (2009), there are alternatives to ADPA programs that can also serve to prepare students for public service. One alternative is Certified Public Manager (CPM) programs. These are non-degree oriented training programs in which university-originated training programs are delivered to students who are already in public service, with the cooperation of their employers. Like an associate degree, these programs have the potential to train many public servants who would never otherwise enter a

baccalaureate or master's degree program. CPM programs have not however reached a point to sufficiently meet the needs of the nation's public service work force. One other alternative is the in-service training usually provided by government human resources departments or private vendors, but these were felt by Klay & Maxwell (2009) to not offer the level of emphasis on "core values of public service" (p. 182) that would be conveyed if the training were received through an actual college course.

Other currently available public administration degree programs constitute another set of alternatives to an Associate degree. These include the traditional undergraduate (Baccalaureate) and graduate (Master's or Doctorate) degree programs available at many U.S. colleges and universities. While it is beyond the scope of this text to offer a survey of all available degree programs relating to public administration, for informational purposes a quick survey showed that there were 74 schools currently offering undergraduate degree programs in public administration (NASPAA, 2014a). Additionally, there are 179 MPA programs accredited by NASPAA, an additional 107 that are not accredited, and an additional 71 schools with doctoral degree programs in public administration (NASPAA 2013c, 2014b, 2014c).

Are these good alternatives to an Associate degree? The answer to this question is contextual. It depends upon the job, the circumstances, and the career goals of the individual. The CPM program, as the name implies, is clearly intended for managers, not street-level bureaucrats, and is in fact described by Balanoff &

Balanoff (2008) as a "companion program to the traditional Master of Public Administration (MPA) program" (p. 79). If the person is or intends to be a street-level bureaucrat, with no intention of pursuing education beyond an Associate degree, then all of the aforementioned educational programs—either baccalaureate, masters, or doctorate degrees in public administration, or CPM programs—are all quickly deemed inappropriate.

Some scholars of public administration have historically frowned upon undergraduate programs in public administration, generally (Ventriss, 1998), while Dougherty (2011) notes that such degree programs have received scant attention in the literature (Dougherty, 2011). Banas & Emory (1998) posit that this skepticism can only harm the field of public administration as it limits the potential for transforming public service, which cannot happen at the managerial level, but instead at the nexus of citizens and street-level bureaucrats. They add that this skepticism of undergraduate education in public administration is not justified, and that the prospect of an associate degree in public administration should be pursued for the overall good of the discipline:

> For too long, public administration education has been considered the exclusive domain of graduate schools without consideration of the public work carried out by street-level bureaucrats [who] need to understand public agencies, ethics, budgeting, personnel, and the roles of PA in our society. An elitist perspective that limits understanding… to the upper cadre of public managers fails to acknowledge that these very same functions are realized and accomplished every day by the first-line public employees who deliver the 'public good'. If we fail to acknowledge the scope of work being done by nonmanagerial public employees, we fail to provide the opportunity for enriching the capacity of public service and communities. An associate degree can help state and local government employees be prepared for the

changes in the work environment of governmental organizations. (Banas and Emory, 1998:225).

Undergraduate educational programs for public administration comprise a significant portion of all postsecondary education programs available in the U.S. for public administration.

As can be seen in Table 2, of the 744 total programs available or public administration in the 2012-13 academic year, 42 (5.6%) were ADPA programs.

Table 2:

Count of All Graduate and Undergraduate Education Programs Offered for Public Administration (CIP code 44.0401) for the 2012-13 Academic Year. Source: IPEDS (2015)

Program Category:	Type of Program:	Total Programs:	Percent of Total:
Graduate:			
	Doctorate Degree:	49	6.6%
	Master's Degree and Post-Master's Certificate:	377	50.7%
	Post-Baccalaureate Certificate:	61	8.2%
	Total of All PA Graduate Programs Offered:	487	65.5%
Undergradtuate:			
	Bachelor's Degree	181	24.3%
	Associate's Degree	42	5.6%
	Certificate, Less Than 1 Year	21	2.8%
	Certificate, 1 Year But Less Than 2	11	1.5%
	Certificate, 2 Years But Less Than 4	2	0.3%
	Total of All PA Undergraduate Programs Offered:	257	34.5%
	Total of All PA Programs Offered:	744	100%

Sub-Baccalaureate programs that are comprised of all ADPA and certificate programs accounted for just over one tenth (10.2%) of the total. Undergraduate programs, which include bachelor's degree programs and all sub-baccalaureate programs comprised more than one third (34.5%) of this total. Furthermore, undergraduate programs accounted for nearly one fifth (19.9%) of all degrees and certificates conferred for public administration during the 2012-13 academic year

(IPEDS, 2015). Consequently, the totality of undergraduate programs within the sphere of postsecondary education available for public administration is simply is too significant to be discounted. Further consideration of the value of these programs to the field of public administration is thus warranted and is directly contributed to by this study. This section of the text has reviewed potential alternatives to the ADPA program. The next section compares the availability of ADPA programs to those undergraduate education programs available for an identified set of all other public service-related fields.

Other Public Service-Related Undergraduate Education in the United States

Although the primary focus of this study is on ADPA programs, public administration is admittedly only one academic discipline among a wide variety of other public service-related undergraduate programs offered in the United States. These programs provide educational opportunities for police, firefighters, public works, and the many other public service fields. Knowing the full spectrum of availability for these programs for each particular public service-related field serves to illustrate a foundation for the necessity of this study. Furthermore, knowing what proportion of these programs that are specific to public administration helps to establish a more thorough understanding of the need for this study.

This section of the text utilizes data from the Integrated Postsecondary Education Data System (IPEDS) data to first identify a set of all public service-related fields in the United States, including public administration, and then to show all of the undergraduate education programs, by type, that were available for each of

these fields for the 2012-2013 academic year. Finally, the analysis shows the proportion of these programs that was specific to public administration.

The list of public service-related academic disciplines selected here was based on those identified by Banas & Emory (1998), with some additional fields selected based on the study author's personal knowledge and also on suggestions from a study advisor. The programs analyzed were from the 2012-2013 academic year and were identified by the Classification of Instruction Program (CIP) code used to identify academic disciplines to IPEDS (2015) by reporting institutions.

In IPEDS, all educational programs in any academic discipline are identified by a Classification of Instruction Program (CIP) code. For instance, the specific CIP code for public administration is 440401. Queries for a variety of data, including different levels of degree and/or certificate programs are conducted using a separate variable from the discipline's CIP code. This is the coding scheme used for the reporting of any postsecondary educational program to the Integrated Postsecondary Education Data System (IPEDS) (NCES, 2014c).

IPEDS is administered by the Postsecondary Branch of the Administrative Data Division of the National Center for Education Statistics (NCES), one of four centers that comprise the Institute of Education Sciences (IES) within the U.S. Department of Education (DOE) (DOE, 2014; IES, 2014; NCES, 2014a). The NCES is a federal organization congressionally mandated by the Education Sciences Reform Act of 2002 to be responsible for the collection and analysis of educational data both in the United States and internationally, and to report on the condition of

education within the U.S. (IES, 2014; NCES, 2014a). The placement of IPEDS within the overall hierarchy of the DOE is shown in Figure 1.

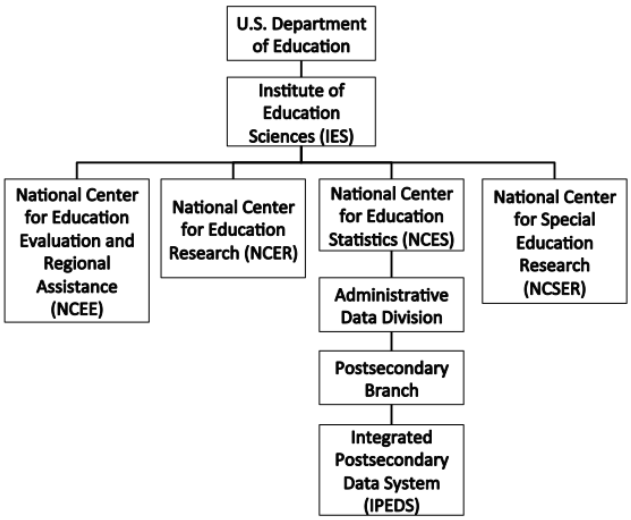

Figure 1: IPEDS Placement within the U.S. Department of Education Hierarchy

As required by the Higher Education Act of 1965, all public and private institutions that participate in the federal student financial aid program must supply data to IPEDS that ranges from enrollment and program completion data to graduation rates, finances, institutional prices, data on student financial aid, and even data on the faculty and staff of the institution. The varieties of institutions that supply data to IPEDS include colleges, universities, technical schools, and vocational institutions. IPEDS data is subsequently used for both descriptive and analytical purposes by end users that include members of government at all levels, private business entities, the media, educational researchers, and ultimately by students and parents (NCES, 2014b).

One of the reports developed by IPEDS is *Number of Programs Offered by Program and Number of Programs Offered via Distance Education, by Award Level,*

which represents a count of all programs in which a degree or certificate is awarded, at any level from undergraduate certificates up to doctoral degrees. As can be seen in Figure 2, this data is categorized and sorted by instructional program, using the six-digit Classification of Instruction Program (CIP) code. These codes are organized into a two-digit, four-digit, and six-digit code hierarchy, which have been designated for the purposes of this dissertation as 'Group' (two-digit), 'Sub-Group'(four-digit), and 'Individual' (six-digit) CIP codes.

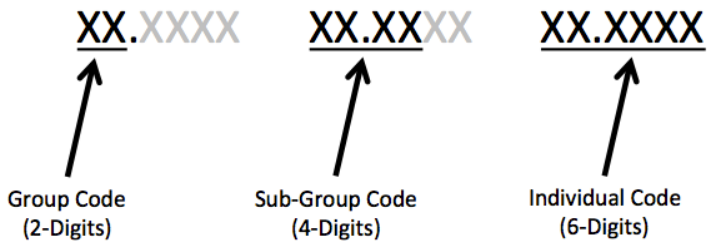

Figure 2: Elements of the classification of Instruction Program (CIP) Code

A group code has one or more sub-group codes, and each sub-group code has one or more individual CIP codes. Figure 3 explains the hierarchy more graphically, using a fictitious '99' group-level code for explanatory purposes:

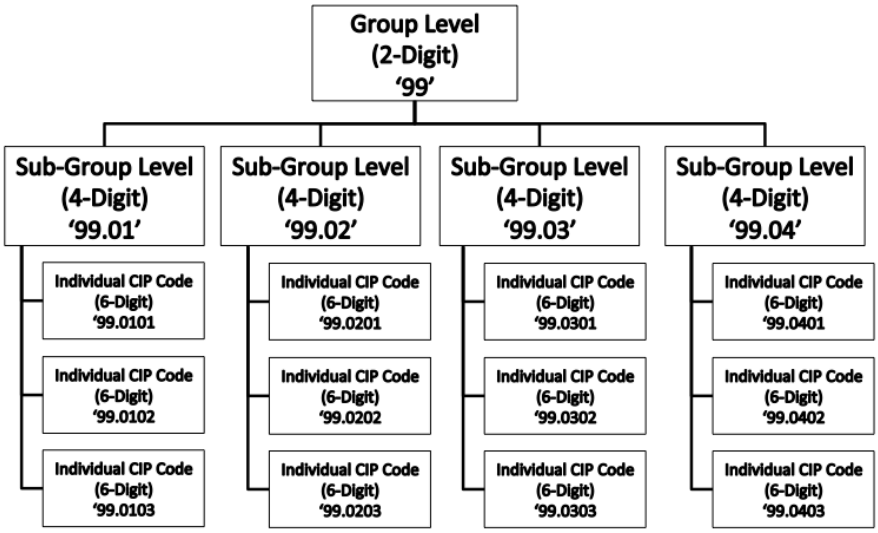

Figure 3: Hierarchy of Classification of Instruction Program (CIP) Code Elements

There are 47 two-digit group codes. Within these 47 group codes are a total of 388 sub-group codes, these are four-digit codes that further delineate the group codes into more specific categories. Finally, within the 388 sub-group codes there are a total of 1,720 individual CIP codes. These individual CIP codes are used to track fields of study and programs, at all levels, for any educational institution that participates in the federal financial aid program (NCES, 2014c).

Selection of CIP Codes Related Specifically to Public Service

The data set of undergraduate educational programs shown here consists of bachelor's degree, associate degree, and certificate programs offered by degree-granting postsecondary institutions within the United States. For the initial screening for data selection, some groups of CIP codes within IPEDS were found to not be applicable to higher education and thus are not applicable to the present study. These codes were discarded from further analysis. Listed here are the CIP group codes that were excluded from the study:

Group 28: “Military Science, Leadership And Operational Art”
Group 32: “Basic Skills And Developmental/Remedial Education”
Group 33: “Citizenship Activities”
Group 34: “Health-Related Knowledge And Skills”
Group 35: “Interpersonal And Social Skills”
Group 36: ”Leisure And Recreational Activities”
Group 37: ”Personal Awareness And Self-Improvement”
Group 53: “High School/Secondary Diplomas And Certificates”
Group 60: “Residency Programs”

It is pertinent to note here that the intent of this analysis is to identify public service-related educational programs, as opposed to the identification of all public *sector*-related programs, which would include Group 13, *Education*, among others, which was excluded. This group represents all of the programs the educate teachers for our public school systems. It is relevant to note why here. Although the public education sector serves the public, it is not serving the public in the nature of public service, as are other public service related fields, most notably public administration. Also, education is mandatory. Everyone is processed through it, but not so with public administration. The nature of the social contract between the public and their administrators vs. children and their teachers is completely different. The two are very different natured institutions. For these reasons, educational degree programs were excluded.

Additionally, Group 29, *Military Technologies And Applied Sciences*, is specifically military-sector based and thus not applicable to the present study. This group of codes was also excluded from the analysis. Of the 1,720 total individual CIP codes listed in IPEDS, these ten group codes listed here represent a total of 261 individual codes that were discarded from further analysis, leaving 1,459 individual

CIP codes for further analysis. For the secondary screening for data selection, each of the remaining 1,459 individual CIP codes were analyzed as to how inherently related they are to public administration, based on the perceived relationship to public administration and/or their applicability to public service. This analysis was based primarily on those public service-related undergraduate programs included in prior studies (Banas & Emory, 1998; Klay & Maxwell, 2009; Maxwell, 2005).

The public service-related undergraduate program disciplines identified by Banas & Emory (1998) were from Public Administration (Public Administration, and Public Policy), Law Enforcement (Administration of Justice, Criminal Justice, Criminal Justice Administration, Criminal Justice and Corrections, Criminal Justice Technology, and Criminal Justice Management), Fire Sciences (Fire Safety and Technology, Fire Administration, Fire Science and Administration, Fire Science Management, and Fire Science Administration), Health Care (Health Care Administration, Public Health and Health Technology Health Care Management, , and Health Services Administration) and other programs (Public Safety, Public Service Technology, Public Services, Public Works, and Fish and Wildlife Management). Klay & Maxwell (2009) examined the availability of associate degree programs in Public Affairs, Public Administration, Public Management, and Public Policy. Their study also found four programs that fell under the category of "Public Administration and Social Service Professions-Related." Maxwell (2005) specifically studied associate degree programs in Public Administration.

Additionally, some CIP codes were added based on this researcher's own personal knowledge, and also two suggestions from a study advisor specifically relating to agricultural business management and urban planning. This process ensures that some programs that are not traditionally included were included for purposes of this research.

The analysis found that 70 individual CIP codes that are related to public service. It is the undergraduate programs within these 70 CIP codes that was analyzed to determine just what the proportion of available public administration undergraduate educational programs are in relation to those of all other identified public service-related fields. The undergraduate program data from IPEDS for these public service-related CIP codes were analyzed to calculate the proportion that each program represents from amongst the total of all public service-related undergraduate educational programs. Part of this calculation is the determination of what proportion of all public service-related programs is specific to public administration programs.

What proportion of public service-related undergraduate educational programs are specific only to public administration? From amongst a universe of 4,974 degree granting postsecondary institutions within the U.S., this analysis shows that there were a total of 9,208 undergraduate programs offered for the 70 identified public service-related disciplines in the 2012-13 academic year. Of this total, 257 programs were specifically within the field of public administration. This shows that public administration undergraduate programs comprise only 2.79% of all public

service-related undergraduate education programs available in the United States. Table 3 was compiled from IPEDS data and lists the results of this analysis for the specific undergraduate programs offered within the 70 selected CIP codes at these 4,974 postsecondary institutions.

Table 3:

Public Service-Related Programs Offered During the 2012-2013 Academic Year from all U.S. Degree-Granting Postsecondary Education Institutions. Source: IPEDS (2015)

Individual or Group CIP Code:	Individual or Group CIP Code Title:	Bachelor's Degree Programs	Associate Degree Programs	Certificate Programs			Total:
				Less Than 1 Year	1 Year but Less Than 2	2 Year but Less Than 4	
1.0801	Agricultural and Extension Education Services	5	2	0	0	0	7
1.0899	Agricultural Public Services Other	2	0	1	0	0	3
1.1105	Plant Protection and Integrated Pest Management.	7	3	3	1	0	14
1.1106	Range Science and Management.	14	6	1	1	0	22
3.0201	Natural Resources Management and Policy.	43	16	5	3	0	67
3.0206	Land Use Planning and Management/Development.	7	3	0	0	0	10
3.0208	Natural Resources Law Enforcement and Protective Services	2	3	2	0	0	7
3.0299	Natural Resources Management and Policy, Other	12	8	6	7	0	33
3.0301	Fishing and Fisheries Sciences and Management	18	10	0	2	0	30
3.0601	Wildlife, Fish and Wildlands Science and Management	58	29	6	3	0	96
4.0301	City/Urban, Community and Regional Planning	41	0	4	1	0	46
15.0506	Water Quality and Wastewater Treatment Management and Recycling Technology/Technician	2	44	39	26	0	111
43.XXXX	Homeland Security, Law Enforcement, Firefighting and Related Protective Services *(Includes all 34 Individual CIP Codes from group 43)*	1,514	2,505	1,027	702	14	5,762
44.XXXX	Public Administration and Social Service Professions *(Includes all 12 Individual CIP Codes from group 44)*	1,069	467	159	110	2	1,807
45.1201	Urban Studies/Affairs	91	3	1	0	0	95
46.9999	Construction Trades, Other [1]	2	31	14	17	0	64
51.0701	Health/Health Care Administration/Management	428	107	19	16	1	571
51.0702	Hospital and Health Care Facilities Administration/Management	67	6	6	7	1	87
51.0799	Health and Medical Administrative Services, Other	24	28	49	17	0	118
51.2201	Public Health, General	58	7	5	3	0	73
51.2206	Occupational Health and Industrial Hygiene	7	1	2	0	0	10
51.2207	Public Health Education and Promotion	64	2	1	1	0	68
52.0808	Public Finance	1	0	0	0	0	1
52.1002	Labor and Industrial Relations	23	9	11	1	2	46
52.1005	Human Resources Development	15	0	7	3	0	25
52.1099	Human Resources Management and Services, Other	19	5	6	4	1	35
	Totals:	3,593	3,295	1,374	925	21	9,208

Note: 1) CIP code 46.9999 is included because it includes Public Works Management programs (Large, 2014).

Table 4 offers a summary of the data presented in Table 3. From this summary data we see that bachelor's degrees in Public Administration represent just over 5% of all public service-related bachelor degree programs, while ADPA programs represent only 1.27% of all public service-related associate degree programs.

Table 4:

Comparison of Undergraduate Degrees and Certificates Programs Offered for CIP Code 44.0401 (Public Administration) as a Proportion of All Public Service Undergraduate Degrees and Certificates Programs Offered for the 2012-2013 Academic Year. Source: IPEDS (2015)

CIP Code:	CIP Code Description:	Bachelor Degree Programs	Associate Degree Programs	Certificate Programs			Total:
				Less Than 1 Year	1 Year but Less Than 2	2 Year but Less Than 4	
*Public Service	All Public Service CIP Codes	3,593	3,295	1,374	925	21	9,208
44.0401	Public Administration	181	42	21	11	2	257
	PA Percent of Total:	5.04%	1.27%	1.53%	1.19%	9.52%	2.79%

The greatest proportion of PA undergraduate programs under any one particular program area was for the *2-Year but Less than 4-Year* certificate programs, for which Public Administration programs of this type account for 9.52% of the total of all such programs. Further, the data shows that ADPA programs represent less than 1.97% of all public service-related associate degree programs in the United States.

Comparison of Two Current ADPA Programs

In discussing associate degree programs in public administration, it is relevant to examine a sample of current programs to get an idea of curriculum offerings, and later opportunities for transfer from these programs to a public administration program at a four-year institution. Two such programs that are discussed here include those of San Antonio College and Palomar College.

San Antonio College offers an Associate of Applied Science (A.A.S.) degree in Public Administration. In addition to general education courses, the curriculum includes courses in the academic areas of Public Administration, Government, and Human Resources. The Public Administration courses include Public Administration, Public Sector Supervision and Management, Budgeting in the Public Sector, Urban

Planning, and Legal Aspects of Public Management. Human Resources courses include Management and Labor Relations and Human Resource Management in the Public Sector. Government courses relate to both the Federal government and the Texas state government. Program electives include courses from the areas of accounting, public administration, human resources, and management. The accounting elective focuses on accounting for government and non-profit organizations. The public administration electives include courses in Governmental Agencies, Ethics in the Public Sector, Special Topics in Public Administration, and Public Relations in the Public Sector. The human resources elective course is Special Topics in Labor/Personnel Relations and Studies, while the management elective is Communication Skills for Managers. Additionally, students in this program complete one of two Practicum courses that involve the student in actual training in a Public administration-related workplace. According to the program description from the San Antonio College catalog, the program focuses on preparing the student to be an effective member of a public organization by teaching them practical knowledge, skills, and methods for public service. The program emphasizes conceptual relations amongst all of the above-mentioned program areas. There is no specific mention of transfer opportunities listed, but there it is noted that students should research transfer requirements of other institutions as these requirements change quite often (SAC, 2015).

The Associate in Arts (A.A.) program in Public Administration at Palomar College has a set list of program requirements courses that apply to either the degree

program itself or to a certificate program in public administration. For students to complete the AAPA program, a they must complete all of the required courses that serve as the core requirements of the program, and all also other requirements for an AA degree, which includes a standard set of general education courses. The core required courses for the AAPA program are listed from the academic areas of political science, economics, business, accounting, and math. The political science courses include introductory courses in Politics/American Political Institutions, federal and state government, and Public Administration. Courses from the other academic subject areas include the Principles of Micro Economics, Business Writing, Financial Accounting, and Elementary Statistics.

The Palomar program is designed to develop skills to prepare students for public management positions and also to assist in meeting the requirements for professional growth in local government. While the program at Palomar does offer direct transfer to the public administration program at San Diego State University, they also encourage students to research transfer requirements of other four-year institutions that they may wish to transfer to (Palomar, 2015).

There is obvious variety in the scope of ADPA programs, as evidenced by the significant differences between these two particular programs. The San Antonio College program is specifically focused towards obtaining an associate degree, while the core required courses of the Palomar College program are applicable to either an associate degree program or to a sub-baccalaureate certificate program, depending only on if the student desires to take the additional course work to earn the associate

degree. Additionally, the Palomar College program includes only one course that is specific to public administration, which is offered as a political science course. In comparison, the San Antonio College program has five courses that are specific to public administration, all of which are listed as public administration courses and not political science. Furthermore, the San Antonio College program requires numerous other courses that are more specifically focused towards public administration work. This comprises a significant comparative difference between these two programs. Lastly, the Palomar program offers a specific transfer option, while the program at San Antonio College appears to not offer any specific transfer option.

Summary

This chapter has explained the problem to be addressed by studying the diffusion of Associate Degree in Public Administration (ADPA) programs. The chapter opened with a review of the literature that is specifically relevant to the study topic, the Associate Degree in Public Administration (ADPA). This included the first call for attention to this topic by Banas & Emory (1998). This was followed by a review of Maxwell's (2005) study of ADPA programs in the 2002-2003 academic year and Klay and Maxwell's (2009) similar study for the 2007-2008 academic year, both of which examined specific aspects of available ADPA programs during the respective academic years. Lastly, Geis' (1985) study of the diffusion of Associate Degree in Nursing (ADN) programs was reviewed, to including a review of relevant dependent and independent variables from that study.

The text then discussed the historical origins and development of NASPAA, from within the American Society for Public Administration (ASPA). This was followed by a discussion of the advent of community colleges within the United States, a topic that included the origins and chronological development of community colleges within the U.S., as well as a discussion of the mission and specific programs offered by these institutions. This was followed by a discussion of the accreditation process for postsecondary educational institutions within the United States, with specific focus on NASPAA and their role with the field of public administration. The chapter then reviewed alternative training options to the ADPA program, with clarifications on their perceived applicability of these alternatives as suitable direct substitutes for ADPA programs.

The chapter then examined and identified the spectrum of undergraduate education for public service by first identifying those fields that are known to be related to public service, and then showed comparative analysis of all public service-related undergraduate education to that available specifically for public administration. Lastly, the chapter closed with an examination of two sample ADPA programs that are currently offered, followed by a discussion of differences between these two programs.

This text has portrayed the perceived shortage of available ADPA programs and the perceived under-utilization of community colleges for educating public servants, following on what was first posited by Banas & Emory (1998). This study analyzes the diffusion of the ADPA program within American higher education in an

effort to better understand just how many of these programs there are, where they have been located in the past, and how certain demographic variables influence their diffusion and continued existence. The theoretical foundation of this dissertation is Rogers (2003) Diffusion of Innovations Theory, an in depth review of which follows in the next chapter.

CHAPTER III

REVIEW OF THEORY

This chapter discusses the theoretical framework used to examine the diffusion of Associate Degree in Public Administration (ADPA) programs in the United States. In this study, Rogers (2003) Diffusion of Innovations Theory serves as the analytical framework to examine the strength and existence of correlations in the relationships between leading demographic variables and the adoption and continuance of ADPA programs.

This chapter begins with an explanation of the four sub-theories that together comprise Rogers Diffusion Theory. The chapter then discusses the origins of diffusion theory, followed by a description of the elements of the innovation diffusion process. A discussion of idea-only innovations then leads into a presentation and description of the theoretical model used for this study.

The Theoretical Perspectives of Diffusion of Innovation Theory

Rogers' diffusion theory has been described as a meta-theory that presents four separate theoretical perspectives that all focus on diffusion (Yates, 2001) and as a framework of sub-theories or concepts (Hubbard & Sandmann, 2007). The first of these is the theory of perceived attributes, which helps to explain why some innovations diffuse more rapidly than others. The next is innovation-decision process theory, which is time-based in reference to the potential adopter of an innovation.

The last two are individual innovativeness theory and rate of adoption theory, both of which are time-based in reference to the innovation itself (Rogers, 2003).

The Theory of Perceived Attributes

When a potential adopter is researching an innovation, the characteristics of that innovation will affect the ultimate decision to adopt or not. These characteristics are what Rogers (2003) refers to as the "perceived attributes of innovations" (p. 15), and they can help to determine how adoptable an innovation is. These attributes are: relative advantage, compatibility, complexity, trialability, and observability. Relative advantage is a measurement of how much better an innovation is perceived to be over what idea it is replacing. Compatibility relates to how consistent an innovation is with the values, experiences, and needs of potential adopters. Complexity is synonymous with the perceived difficulty of the implementation of the innovation by the potential adopter. Trialability relates to the perception of how easy an innovation will be to experiment with prior to deciding whether or not to adopt. Observability is a measure of how easy or difficult it is to communicate the results of the innovation. Innovations are adopted faster when they are perceived to have low complexity and higher amounts of all other innovation attributes (Rogers, 2003).

Frederickson & Smith (2003) classify diffusion theory under the greater theoretical umbrella of Public Institution Theory. Correlating innovation to change, generally, they cite various sources who put forth a list of hypotheses that relate to different patterns of diffusion. These sources include Rogers (1995) and Strang & Seoule (1998) who state that diffusion theory can explain the perceived association

between a crisis and the potential adoption of a change, and Frederickson & Johnson (2001) who relate that diffusion theory be used to describe the compatibility between the purposes of a change and the dominant social values. The authors also cite Hood and Jackson (1991) and Strang and Seoule (1998) in postulating that diffusion theory serves to help explain the importance of the spatial proximity between potential adopters of a change, and can also foster analysis of fashion setting, a term that relates to keeping up with the latest popular management and business trends, books, or fads in a manner that affects the diffusion process. Furthermore, the authors also refer to Strang and Seoule (1998) who posit that diffusion theory can foster analysis of the desire of both individuals and organizations for prestige, status and social standing that affects diffusion. Lastly, the authors reference DiMaggio and Powell, (1983) who hold that diffusion theory can help to explain the effects of the *iron cage of isomorphism*, which relates to the difficulty in changing similarly structured bureaucracies, the willingness of some organizations to adopt an innovation just because similar organizations have done so, and the lack of an association between an organization's propensity to adapt a change and organizational productivity. All of these hypotheses relate directly to Rogers (2003) innovation characteristic of *compatibility*.

Other characteristics of the diffusion process are discussed by Frederickson & Smith (2003), who relate that Strang and Seoule (1998) showed that diffusion theory can emphasize the importance of the mass media in the diffusion of an innovation, and can also emphasize the value and importance of change agents in the

diffusion process. The former relates to Rogers' characteristic of *relative advantage* while the latter relates to the communications channels themselves and thus the communication of the perceived attributes stated by Rogers.

Innovation Decision Process Theory

A level of uncertainty develops simultaneously when an individual or organization first learns of an innovation, heralding a period of information-seeking that precedes the ultimate decision of whether to adopt or not—this is descriptive of the beginnings of the innovation-decision process. This process is comprised of five steps that almost always occur in a set, time-ordered sequence: (1) knowledge, (2) persuasion, (3) decision, (4) implementation, and (5) confirmation. At some point after learning of an innovation, the potential adopter begins a process of research relating to the innovation in an effort to alleviate their uncertainty. As the potential adopter obtains more and more information, they analyze the potential advantages and disadvantage of the innovation as it relates to them or their organization. Once this level of uncertainty is diminished to an acceptable level, the potential adopter will make a decision as to whether or not to adopt the innovation. If adopted, the innovation is implemented and the adopter begins the confirmation period, during which they will decide to continue the innovation, or to discontinue it (Rogers, 2003).

Individual Innovativeness Theory

This theory is based on who adopted an innovation and when they adopted it (Yates, 2001). The term *innovativeness* is used to describe how early an adopter adopted an innovation in relation to all other members of the system under study.

Members of a system are further classified into adopter categories according to their degree of innovativeness. The five adopter categories are (1) innovators, (2) early adopters, (3) early majority, (4) late majority, and (5) laggards (Rogers, 2003). These categories are usually displayed on a bell curve (Yates, 2001). Both the degree of innovativeness and adopter categorization are based on when an innovation is adopted. It is interesting to note that of all adopters within any given category, whether individuals or organizations, most all will share many similar behavioral traits related to innovativeness (Rogers, 2003).

Rate of Adoption Theory

Although the structure within a system can directly affect the diffusion of an innovation, similarly structured units within a system allow the researcher to more accurately predict just what that system behavior will be. One such measure of system behavior is the rate of adoption, which is a relative measure of how fast the members of a system adopt an innovation. A cumulative graph-plot developed to represent the rate of adoption of most innovations displays an S-shaped curve distribution (Rogers, 2003).

In a normal diffusion distribution, the rate of adoption has a slow and gradual growth early in the diffusion, followed by a period of rapid growth. The diffusion then levels off and stabilizes followed in the end by a period of decline. Rogers (2003) also notes that the rate of adoption for the same innovation will be different across different social systems. This study focuses on the rate of adoption of ADPA programs within the American higher education system.

In actual application, diffusion studies will use only one or more of these sub-theories as the analytical basis to the research. As an example, the research of Geis (1985) used Rogers' Rate of Adoption Theory to examine the nationwide diffusion of Associate Degree in Nursing (ADN) programs in the U.S., and also used Rogers' Individual Innovativeness Theory to test the innovativeness of individual colleges that had adopted ADN programs.

The Origins of Diffusion Research

The field of diffusion research began in the early 1880's with the initial publications of articles on "the laws of universal repetition" in society by Gabriel Tarde (Giddings, 1903). These articles would be compiled by Tarde (1890) into *The Law of Imitation*, the first book published on diffusion research—a second edition was published in 1895, and an English translation version was subsequently published in 1903. In *Laws*, Tarde observed that only a small percentage of the innovations that he observed in French society would actually diffuse, or as Tarde described it, to "spread abroad" (p. 20). Although some terminology is slightly different—Tarde used the word *imitation* for what we know today as *adoption*, Tarde was nonetheless among the first to study "distinctly social phenomena" (Giddings, 1903), and is described by Rogers (2003) as both a "sociological pioneer" and "one of the European forefathers of the diffusion field" (p. 41).

The first university professor to specifically teach sociology, and to actually be called a sociologist was Georg Simmel. Simmel was another early diffusion scholar who taught in Germany during the same period that Tarde was teaching and

publishing in France. Early research by Simmel led to the development by later scholars of concepts such as heterophily, cosmopoliteness, and social distance, all of which relate directly to diffusion (Rogers, 2003).

Rogers cites research by Kroeber (1937) who noted that other groups of diffusion scholars came from the field of anthropology in the very early twentieth century. Referred to by their respective locations, the British diffusionists and the German-Austrian diffusionists each focused their research from the perspective that all changes in a society can be explained by the introduction of innovations from one sole source, as opposed to having originated from multiple parallel sources, as we know today to be the case. Consequently, the position taken by these European diffusionists that all social change could be explained by diffusion alone has not stood the test of time. Social science research has objectively shown their position to be incorrect, and that social change is in fact brought about by both the invention and the diffusion of innovations. What the British and German-Austrian diffusionists did accomplish though was to bring the term *diffusion* into vogue within social science (Rogers, 2003).

In his theory of the growth of science, Kuhn (as cited by Rogers, 2003, p. 46) identifies a "revolutionary paradigm" as the birth of any new scientific field. When such a major research discovery occurs, it fuels a prodigious amount of other research on this new scientific subject. Other scholars react to the new intellectual paradigm, they become attracted to the new field of research in the hopes of making their own contribution. Thus, an "invisible college" (p. 46) develops, comprised of

scholars focused on the study of the specific field of research. Over time, consensus is reached as to the conceptual tenets of the field. As the research subsequently begins to generate less and less significant discoveries, the interest of those within the invisible college begins to gradually diminish. Citing separate works by Kuhn, Crane, and Price, Rogers emphasizes that any scientific field will ordinarily experience these particular steps in the course of its evolution, as has the field of diffusion research, and that this is all within the normal pattern of the growth of science.

Early Diffusion Research in the United States

After Tarde's initial introduction of diffusion research through the publication of the English language version of *The Laws of Imitation*, it would be another four decades before any significant diffusion research was accomplished in the United States. Diffusion research started in the United States in the 1920's with American anthropologists who continued the work of the European diffusionists. Ultimately, the most noteworthy contribution of the early American diffusionists was their indirect influence upon Ryan and Gross' (1943) classic study of the diffusion of hybrid seed corn in Iowa, a study that established the revolutionary paradigm in the field of diffusion research (Rogers, 2003).

To be sure, there were a few pre-paradigmatic diffusion studies conducted during the 1920's and 1930's, but it was the Ryan and Gross study that established the methodological and theoretical framework that has persisted in diffusion research. What specifically separates the Ryan and Gross study from earlier diffusion research

is that it, for the first time, sought answers relating to the innovation-decision process. The hypothetical questions related to this aspect of the study pointed future researchers in a specific direction that has been followed ever since. The Ryan and Gross hybrid corn study would profoundly influence diffusion research not only in early sociology, but in numerous other fields as well, including anthropology, rural sociology, education, public health and medical sociology, communication, marketing and management, geography, general sociology, and a variety of other research traditions that include public administration, political science, economics, psychology, and industrial engineering (Rogers, 2003).

The Innovation Diffusion Process

Rogers (2003) defines diffusion as "the process in which an innovation is communicated through certain channels over time among the members of a social system" (p. 5). This plainly states the four main elements of the process of the diffusion of an innovation: (1) the innovation, (2) communication channels, (3) time, and (4) the social system. Taken together, these are descriptive of the innovation diffusion process (Rogers, 2003).

The Innovation

Rogers (2003) relates that an innovation is "an idea, practice, or object that is perceived as new by an individual or other unit of adoption" (p. 36). It is important to note that an innovation need not be new in terms of measured time to qualify as an innovation, but rather only that it is new in the perception of the potential adopter, which can be either an individual or an organization. As an example, despite the

many years on existence of computers and the Internet, if a person were to only now learn of their existence, then these now very common technologies would still be considered an innovation to these people. This is described as the newness of an innovation, which can be expressed as the knowledge of the innovation, as the persuasion of some other person or organization to adopt the innovation, or ultimately as the decision by a person or organization to adopt the innovation (Rogers, 2003).

Rogers does note that not all innovations are created equal, nor will they diffuse within a consistent period of time. Some innovations diffuse quickly, such as cellular telephones and VCR's, both of which diffused over a period of only a few years, and both of which would have had very high scores on all of Rogers perceived attributes discussed above. Other innovations, such as seat belts, take decades to diffuse, and would have had low compatibility with the personal values of many potential adopters who felt them too confining during the early decades of diffusion (Rogers, 2003). In the present study, the innovation is the Associate Degree in Public Administration (ADPA).

Communication Channels

Rogers (2003) defines communication as "the process by which participants create and share information with one another in order to reach a mutual understanding" (pg. 18) Diffusion is a form of communication in which the message being communicated relates specifically to an idea, an innovation. At the heart of the diffusion process is the exchange of information between individuals and/or

organizations. The elements of the communication process are (1) the innovation, (2) an individual, group, or organization who knows about and/or has used the innovation; (3) an individual, group, or organization who has no knowledge of or experience with the innovation, and (4) a communication channel through which the two entities can communicate. Communication channels include mass media channels and interpersonal channels. Mass media channels use mediums such as television, radio, and new services. Interpersonal channels involve communication on a personal level, either in person or over some medium such as telephone or the Internet (Rogers, 2003).

People—and organizations—tend to base their decision to adopt an innovation primarily on the opinion of someone or some organization who is similar to them in some way, and has already adopted the innovation. This relates to the concepts of *homophily* and *heterophily*, how much the two participants in the communication process do or do not share common attributes. Homophilous communicators belong to the same groups, live and work within close proximity, and have common interests. Due to their commonalities, their communication is more frequent, more effective, and the participants find it more rewarding. Participants in the communication of the diffusion of innovations are usually not homophilous, which hampers communication. Optimally, the two participants would be homophilous in almost all respects, but heterophilous in regards to the innovation. In reality, the participants are usually largely heterophilous due to a lack of commonality in most of their individual attributes, such as education and social or

economic status. Thus, we see that diffusion is a social process that depends greatly on interpersonal communication (Rogers, 2003).

Communication channels related to the dependent variable exist both internal and external to the American higher education system. Within the system are college catalogs, class schedules, marketing posters and the like, and interpersonal communications. Outside of the American Higher Education System, communication channels involve professional organizations and governmental agencies, and the records that these organizations develop and maintain over time. This study does not analyze communication channels directly, but focuses primarily on historical records generated outside of the American higher education system, using secondary data culled from within the system. This refers specifically to the statistical records of American higher education developed by the U.S. Department of Education (DOE) and administered by the Integrated Postsecondary Education Data System (IPEDS).

Time

Rogers (2003) lists time as the third element within the diffusion of innovations process. In this process, time can be used to measure how long it takes (1) for a potential adopter to adopt an innovation from when they first learned of it, (2) how long others take to adopt an innovation after it is first adopted by another, or (3) the rate of adoption of an innovation within a system (Rogers, 2003). The period of time examined in the present study is from 1983 to 2013.

The Social System

Rogers (2003) defines a social system as "a set of interrelated units that are engaged in joint problem solving to accomplish a common goal" (p. 23). The social system examined in this study is the American higher education system, most specifically relating to community colleges, but also involving those other types of institutions that have offered ADPA programs. Further, Rogers describes diffusion as "a kind of social change" (p. 6) that occurs in the functionality or structure of a given social system. Thus, this study seeks to examine relationships between certain variables pertaining to American higher education that involve functional and/or structural changes that relate explicitly to the adoption of ADPA programs. Specifically, the study seeks to identify which higher education institutions have offered ADPA programs during the study period of 1983 to 2013, and what demographic characteristics affect the current continuance of these degree programs.

'Idea-Only' Innovations

Some innovations, such as religious or philosophical ideas, policy changes, or even computer software programs are intangible and thus are not observable except in practice. These *idea-only* innovations are typically adopted slower because they are not nearly as observable as are innovations that involve physical objects that one can actually see and touch. These types of innovations have little or no physical properties to them, except in the objects developed purely to communicate the innovation. This includes innovations such as the printed materials developed by scholars, subject matter experts, or others knowledgeable on at least some aspect of

the innovation, or the disks that one might receive when purchasing a computer software program (Rogers, 2003).

Since these types of innovations have such a small level of observability, they usually diffuse slowly. Geis (1985) bears this out, specifically relating that the majority of educational innovations diffuse slowly. The ADPA is an idea-only innovation in that it is an intangible thing, realized in physical form only in the college catalogs and schedules used to administer the programs, in the actual degrees handed to those who graduate from such programs, and finally in the statistical records developed and administered by both HEGIS and IPEDS.

Study Part I

Study Part I utilizes HEGIS and IPEDS data to perform a longitudinal analysis of the diffusion of Associate Degree in Public Administration (ADPA) programs for the years 1983 through 2013. This analysis is in two parts, the first being a temporal and spatial analysis of ADPA program locations within the U.S. for the entire of the study period. Under this first part of the study, Rogers' Rate of Adoption Theory serves as the analytical basis to test hypotheses #1, and #2, while Rogers' Individual Innovativeness Theory serves as the analytical basis for testing hypotheses #3:

H_1 - The diffusion of ADPA programs has increased over time.

H_2 - Institutions that adopt ADPA programs earlier ('Innovators' and 'Early Adopters') are more likely to continue ADPA programs than those that adopt later ('Early Majority', 'Late Majority', and 'Laggards').

H_3 - More ADPA programs are historically located at community colleges than at all other types of colleges and universities

It is relevant to state that this study is largely exploratory in nature. There is currently no scholarly literature on what the past diffusion of ADPA programs has been, and initial pre-study analysis showed that there is still only a very small quantity of ADPA programs available in the United States: this is the basis of hypothesis 1. Hypothesis 2 is based on Rogers (2003) statement that laggards, who "have a higher rate of discontinuance" (p. 191) of an innovation. Hypothesis 3 relates to findings and/or statements made by Banas and Emory (1998) and Klay & Maxwell (2009) that community colleges should be utilized more in the training of lower-echelon public servants.

Study Part II

Study Part II uses Rogers' Individual Innovativeness Theory as an analytical basis to examine the innovativeness of institutions that have adopted ADPA programs during the 2012-2013 academic year. Together, the variables analyzed in study part II are used to test hypotheses #4 through #7, as displayed in Figure 4, below:

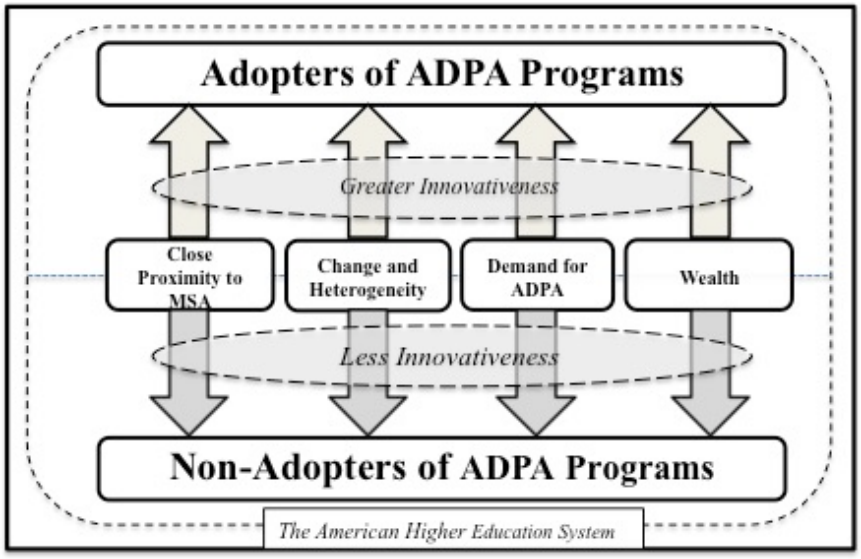

Figure 4: Theory Model of Innovativeness Towards ADPA Adoption

Metropolitan Statistical Areas (MSA's) are geographical areas with a population of at least 250,000 that is used in conjunction with the reporting of census data (OMB, 2010). As shown above in Figure 4, those institutions that are closer to MSA's are hypothesized to be more likely to adopt ADPA programs, and are thus more innovative. This part of the model represents H_4 – *'ADPA programs are predominantly located in or in close proximity to large metropolitan areas'*. The large populations that exist in metropolitan statistical areas are accompanied by a greater presence of governmental entities, with many different levels of government. As mentioned previously, this study is largely exploratory in nature. Therefore, hypothesis 4 is based on the assumption that due to these population magnitudes and the increased level of associated governmental presence within an MSA, that there should therefore be ADPA programs within close proximity to these areas.

The next part of the model in Figure 4 represents H_5 – '*Institutions that operate in an environment of greater change and heterogeneity are more likely to adopt ADPA programs'*. As shown in Figure 4, it is hypothesized that those institutions that operate in an environment of greater change and heterogeneity are more likely to adopt and ADPA program, and are thus more innovative. Hypotheses 5 is based on the work of Geis (1985) who did a similar study on the diffusion of Associate Degree in Nursing (ADN) programs. Her use of the concepts of heterogeneity and change as the basis of independent study variables is directly applicable to this study.

A representation of H_6 – '*Institutions with greater wealth are more likely to adopt ADPA programs'* is shown next in Figure 4. Here, it is hypothesized that the more wealthy the institution and the higher the median income of its state, the more likely the institution is to adopt an ADPA program and thus the more innovative the institution. Hypotheses 6 is also based on the work of Geis (1985), whose use of the concept of wealth-related demographic characteristics relating to the educational institution and the area that it serves as the basis of independent study variables is directly applicable to this study.

Lastly, H_7 – '*Institutions operating in an environment of greater demand for ADPA programs are more likely to adopt ADPA programs*' is shown in Figure 4. This represents the hypothesis that those institutions that exist in an environment where a set of variables relating to the demand for an ADPA program are higher are more likely to adopt an ADPA program and are thus more innovative. Hypotheses 7

is also based on the work of Geis (1985), whose use of the concept of the geographical demand for the associate degree program being studied is directly applicable to this study. The specific variables used to test all of the hypotheses represented in Figure 4 are discussed in Chapter IV.

Study Part III

Study Part III examines the total number and types of undergraduate programs offered specifically for public administration, including ADPA programs, in order to test the following hypotheses:

> H_8 - *Community Colleges provide more sub-baccalaureate educational programs for public administration than do any other types of colleges and universities.*

Hypothesis 8 relates to findings and/or statements made by Banas & Emory (1998) and Klay & Maxwell (2009) that community colleges should be utilized more in the training of lower-echelon public servants. While similar in nature to hypothesis 3, which analyzes past ADPA programs in order to determine what portion of these programs were conducted by community colleges as opposed to other types of institutions, hypothesis 8 expands on hypothesis 3 in a manner that relates to all currently available sub-baccalaureate programs for public administration. All currently available sub-baccalaureate programs for public administration, including ADPA programs, are analyzed in hypothesis 8 in order to identify the portion of these programs that are specifically provided by community colleges.

Summary

This chapter has reviewed Rogers' diffusion theory, including discussion on the four sub-theories and their applicability to the present study. Also discussed were the origins of diffusion theory, followed by a review of the basic elements of the innovation diffusion process—the innovation, communication channels, time, and the social system. The chapter concluded with a discussion of the three separate parts of the study, which included an explanation of the theoretical basis of each hypothesis to be tested by the study. This was accompanied by the presentation of a theoretical model that graphically depicts the relation of elements in Study Part II. The next chapter discusses the methodology used to conduct this study.

CHAPTER 4

METHODOLOGY

This chapter presents the methodology used to perform a longitudinal examination of the diffusion of ADPA programs during the period of analysis. This purpose of the study, as well as the research questions and hypotheses on which the study is based are discussed. The research design, description of the variables used in the study, and the statistical analysis to be used are discussed. The chapter concludes with a highlighting of the limitations of the study.

Purpose of the Study

Data is analyzed in this study for a 31-year period (1983 to 2013) to examine not only the diffusion of ADPA programs during the study period, but also the current state of ADPA degree programs. The purpose of this study is to (1) identify the long-term diffusion of ADPA program in the United States, (2) identify correlations relating leading demographic variables to ADPA programs for the 2012-13 academic year, the most recent year of data available, and (3) to compare the current availability of public administration sub-baccalaureate educational programs at community colleges to that at all other types of colleges and universities.

Research Questions

1. Has the number and availability of ADPA programs increased over time?

2. Are Late Adopters more likely to continue ADPA programs than Early Adopters?

3. Have ADPA programs historically been conducted primarily by community colleges?

4. Do demographic variables help to explain the current diffusion of two-year Public Administration programs?

5. Do community colleges provide more sub-baccalaureate educational programs for public administration than all other types of colleges and universities?

Research Hypotheses

H_1 - The diffusion of ADPA programs has increased over time.

H_2 - Institutions that adopt ADPA programs earlier ('Innovators' and 'Early Adopters') are more likely to continue ADPA programs than those that adopt later ('Early Majority', 'Late Majority', and 'Laggards').

H_3 - More ADPA programs are historically located at community colleges than at all other types of colleges and universities

H_4 - ADPA programs are predominantly located in or in close proximity to large metropolitan areas.

H_5 - Institutions that operate in an environment of greater change and heterogeneity are more likely to adopt ADPA programs.

H_6 – Institutions with greater wealth are more likely to adopt ADPA programs.

H_7 – Institutions operating in an environment of greater demand for ADPA programs are more likely to adopt ADPA programs.

H_8 - Community Colleges provide more associate degree programs for public administration than do any other types of colleges and universities.

Research Design

This study utilizes secondary data, and is conducted in three distinct parts.

Referencing Rogers' Rate of Adoption theory, study part I is a longitudinal analysis

of the diffusion of Associate Degree in Public Administration (ADPA) programs in the United States. This first part of the study is conducted in two separate phases, a temporal and spatial analysis of ADPA programs followed by an analysis of host institution characteristics. Study part II analyzes ADPA programs for 2012-2013, the most recently reported academic year. Study part III examines the availability of ADPA programs at community colleges in comparison to all other types of higher education institutions for the 2013 academic year.

Study Part I – Longitudinal Analysis of ADPA Program Diffusion

Study Part I utilizes HEGIS and IPEDS data to perform a longitudinal analysis of the diffusion of Associate Degree in Public Administration (ADPA) programs for the years 1983 through 2013. This analysis is in two parts, the first being a temporal and spatial analysis of ADPA program locations within the U.S. for the entire of the study period. All ADPA program locations for each individual year of the study period are presented on a map of the U.S., with each institution identified as to institutional control and type. Institutional control delineates whether the institution is publicly or privately controlled, and institutional type denotes whether the institution is a two-year or four-year school. This visual type of analysis of the ADPA program location and institutional type facilitates both temporal and spatial analysis of these programs, allowing for the ready identification of ADPA program clusters within geographical areas, a comparison of ADPA activity within individual states, and also for the visual representation of the totality of ADPA programs throughout the period of study.

The next section of Study Part I is an examination of the diffusion of ADPA programs during the study period. This analysis includes a determination of the mean number of ADPA programs during the study period, with identification of the years with the lowest and highest number of ADPA programs. A five-year rolling average is calculated that is used to test H_1: '*The diffusion of ADPA programs has increased over time'*.

This is followed by an analysis of all ADPA adopting institutions during the study period, assigning each into what Rogers (2003) identified as adopter categories. Rogers' method of determining these categories utilizes the mean time of adoption (t) and its standard deviation (σ) to divide the study period into categorical periods of time, based on the point in time during the study period that the institution adopted the innovation. For the diffusion of the ADPA degree for the study period of 1983 through 2013, analysis of the time variable determined the standard deviation (σ) of ADPA program adoption and a mean time of diffusion (t). These variables are used to determine adopter categories using Rogers' method of adopter category determination, as shown in Table 5:

Table 5:

Adopter Categories in a Normal Distribution. Source: Rogers (2003)

Adopter Category:	*Area covered under the normal curve:*
Innovator	Beyond (t - 2σ)
Early Adopter	Between (t – σ) and (t - 2σ)
Early Majority	From t to (t – σ)
Late Majority	Between t and (t + σ)
Laggard	Beyond (t + σ)

Once the adopter categories are determined, data can then be analyzed to determine the longevity, in median years, of each individual adopter category during

the period of study. This is a direct reflection of ADPA program continuance for each adopting institution. The adopter categories are then further categorized into 'earlier' and 'later' groups, reflecting the groups posed in Hypotheses #2: *Institutions that adopt ADPA programs earlier ('Innovators' and 'Early Adopters') are more likely to continue ADPA programs than those that adopt later ('Early Majority', 'Late Majority', and 'Laggards')*. Calculated averages of the mean years of continuance for each of the H_2 groups listed above then allows for the testing of H_2.

The longitudinal data is then analyzed to determine the percentages of publicly controlled institutions, with the results used to test H_3: '*More ADPA programs are historically located at community colleges than at all other types of colleges and universities*.'

Study Part II –Analysis of Innovativeness of Current ADPA Programs

Study Part II examines of the innovativeness of institutions that have adopted ADPA programs during the 2013 academic year. This first utilizes IPEDS data for institutional characteristics and then U.S Census Bureau data for demographic characteristics associated with the educational institutions being examined. ADPA programs during this academic year are analyzed in this part of the study to identify correlations between leading demographic data and the institutions that currently conduct these programs. To test hypotheses H_4, '*ADPA programs are predominantly located in or in close proximity to large metropolitan areas*', the Metropolitan Statistical Area (MSA) with a population of greater than 250,000 nearest to each individual ADPA program are identified (U.S. Census Bureau, 2015a). MSA's are

geographical areas with a population of at least 250,000 that are used in conjunction with the reporting of census data (OMB, 2010). Once the nearest qualifying MSA for each program is identified, the distance between the ADPA program institution and the ZIP code nearest the center of the MSA is calculated. This allows for the calculation of the distance between each ADPA program and the center of its nearest MSA, resulting in the mean distance for all ADPA programs to the closest MSA. Additionally, using a distance of 50 miles as a standard, a percentage of all ADPA programs that are located in near, within 50 miles, of their nearest MSA is calculated. Moreover, the results show what percentage of these programs are at a distance of greater than 50 miles to their nearest MSA, thus testing H_4.

Following on the formula used by Geis (1985), the dependent variable State Case Rate ('SCR') is computed using the following formula:

$$SCR = \frac{P}{T}(100)$$

Where: "SCR" = The State Case Rate for each state.
"P" = The number of two-year colleges that operate ADPA programs in that state.
"T" = The total number of two-year colleges in that state.
"100" = A base rate multiplier as is commonly used in epidemiological studies.

With the SCR as the dependent variable, SPSS is used to compute correlations between the SCR and a variety of independent variables to test a number of hypotheses. The first of these to be tested was H_5 - *Institutions that operate in an environment of greater change and heterogeneity are more likely to adopt ADPA*

programs. This hypotheses focuses on correlation between the SCR and independent variables related to demographic changes in the environment of the educational institutions. The independent variables to be used to test H_5 are the change in the minority population from 2000 to 2013 and the median income of both the host county and the host state of the ADPA programs during 2013. The results of the Pearson's correlation computations from SPSS are analyzed for correlations and significance.

The State Case Rate (SCR) is again used as the dependent variable to test H_6 - *Institutions with greater wealth are more likely to adopt ADPA programs*. The independent variables used here are the net assets of the ADPA institution and the median income of both the host county and the host state of the ADPA programs for 2013. The results of the Pearson's correlation computations from SPSS are then analyzed for correlations and significance.

The State Case Rate (SCR) is once again used as the dependent variable to test H_7 – *Institutions operating in an environment of greater demand for ADPA programs are more likely to adopt ADPA programs.* The independent variables used here all relate to the potential demand for ADPA programs. These independent variables include the population of the secondary schools in the host county, the distance to the capital of the host state, the distance to the nearest Metropolitan Statistical Area (MSA), the distance to the nearest Certified Public Manager (CPM) program, and a count of the number of public employees per 10,000 population of

the host state. The results of the Pearson's correlation computations from SPSS are analyzed for correlations and significance.

Study Part III – PA Sub-Baccalaureate Programs at Community Colleges

Study Part III examined the total number and types of undergraduate programs offered specifically for public administration, including ADPA programs, in order to test the following hypotheses:

> H_8 - Community Colleges provide more associate degree programs for public administration than do any other types of colleges and universities.

Construct Validity

Construct validity relates to how relevant a theory is to a study concept (Bryman, 2004). This study utilizes Roger's (2003) diffusion theory as lens to perform a longitudinal analysis of the diffusion of ADPA programs in the United States. The research design used is based significantly on the research design used in a similar study of the diffusion of associate degree programs in nursing (ADN) in the United States (Geis, 1985).

Internal Validity

Internal validity relates to the validity of a determined causal relationship between variables (Bryman, 2004). The present study examines correlation between demographic variables and institutional characteristics to the innovativeness of institutions that have adopted ADPA programs. This analysis includes the use of SPSS to determine the Pearson's Correlation Coefficient to test the internal validity of these relationships.

External Validity

Bryman (2004) relates that external validity is representative of how generally applicable the results of a study are outside of the context of a particular study or population that was examined. The population chosen for the present study examined all ADPA programs within the American system of higher education. The research design can be applicable to the examination of any other types of degree programs within such a population.

Reliability

Reliability relates to how repeatable the results of a study are (Bryman, 2004). This study uses SPSS to determine the Pearson's Correlation Coefficient to test correlation and significance of the relationships between the dependent variable and the various independent variables. The reliability of this study is strong in that the results can be repeated very easily using the same statistical techniques and the same source data.

Limitations of the Study

The first and foremost limitation of this study relates to the time period that could be studied for the longitudinal analysis of ADPA programs. Due to two different but related factors, the study period started necessarily with the 1982-83 academic year. The first factor that necessitated this circumstance is the non-existence of data showing ADPA program completions, degree's conferred, or program locations prior to 1970. The second factor that necessitated this circumstance is the method by which ADPA programs and completions were

reported prior to the 1983 academic year. Under the Higher Education General Information System (HEGIS) system prior to 1983, ADPA degrees, and thus programs, were reported under the category of 'Public Administration and Management Technologies', which also unfortunately included other associate degree programs that are not specifically ADPA programs. To have included this earlier HEGIS data in the study would have significantly impeded the accuracy of the results of this study. For this reason, the earlier HEGIS data was excluded, thereby limiting the study to the period of 1983 through 2013 for the longitudinal analysis.

The second limitation of the study relates to how ADPA programs were counted. This study utilized secondary data originating from the National Center for Education Statistics (NCES) to analyze the diffusion of ADPA programs within the United States from 1983 to 2013. The data set was derived from HEGIS for the 1983 academic year and from the Integrated Postsecondary Education Data System (IPEDS) for the years of 1984 to 2013. It was not until the 2011-2012 academic year that program offerings were first reported in IPEDS, but even this data is based on degrees conferred. This left the recorded counts of degrees conferred as the only method in which to determine where active programs were conducted for any given discipline. Therefore, a limitation of this study is that the available data conveys only those programs from which were degrees conferred for each year. This means that there is a possibility that some programs may have been in operation during the study period that were not reported during any years in which an institution's ADPA

program had no degrees conferred. This study has therefore assumes that the programs reported in HEGIS and IPEDS for degrees conferred are representative of the only active ADPA programs for each individual academic year's worth of data.

Summary

This chapter has outlined the methodology to be used to analyze the diffusion of ADPA programs during the period of study. The purpose of the study, as well as the research questions and hypotheses on which the study is based were discussed. The research design, description of the variables used in the study, and the statistical analysis to be used were then discussed. The chapter concluded with a highlighting of the limitations of the study.

CHAPTER V

RESEARCH FINDINGS

This chapter presents the findings of the research conducted through this study. In Study Part I, a graphic presentation of all ADPA programs during the study period allows for temporal and spatial analysis of these programs in the United States for the academic years of 1983 through 2013. Further, a longitudinal analysis is performed of the diffusion of Associate Degree in Public Administration (ADPA) programs during the 31-year study period that analyzes adapter categories and related findings. Study Part II examines correlations relating leading demographic variables to ADPA programs for the 2012-13 academic year, the most recent year of data available. Study Part III identifies the portion of ADPA programs that are conducted specifically at community colleges.

Study Part I - Longitudinal Analysis of ADPA Program Location and Institution Type

The first part of the longitudinal analysis provides a geographical point display of where the ADPA programs were located within the U.S. during the 31 years of the study period. This analysis differentiates between whether the institutions are publicly or privately controlled, and also whether the institutions were two-year or four-year schools. This visual type of analysis of the ADPA program location and institutional type facilitates both temporal and spatial analysis

of these programs, allowing for the ready identification of ADPA program clusters within geographical areas, a comparison of ADPA activity within individual states, and also for the visual representation of the totality of ADPA programs throughout the period of study.

The map diagrams on the proceeding pages were developed by the author using data from both HEGIS and IPEDS. Tables corresponding to this data are shown in Appendix A. Beginning with the 1982-83 academic year, there were 29 programs that conferred Associate degrees in public administration. These programs were spread across the country, with only small clusters to be found in the areas of southern California, Michigan, Ohio, and in the eastern half of Pennsylvania. The next year there were a total of 39 programs, with the most notable cluster across the state of New York. This cluster would persist through the following year, followed by a significant drop in the number of programs for the 1985-86 academic year, when only 27 programs conferred ADPA degrees, with the only notable cluster again in the southern California region. There was a decline in the overall number of programs for the next few years, with only 15 programs in 1986-87, 18 the following year, and 17 programs in the 1988-89 academic year: there were no identifiable regional clusters of programs during this period.

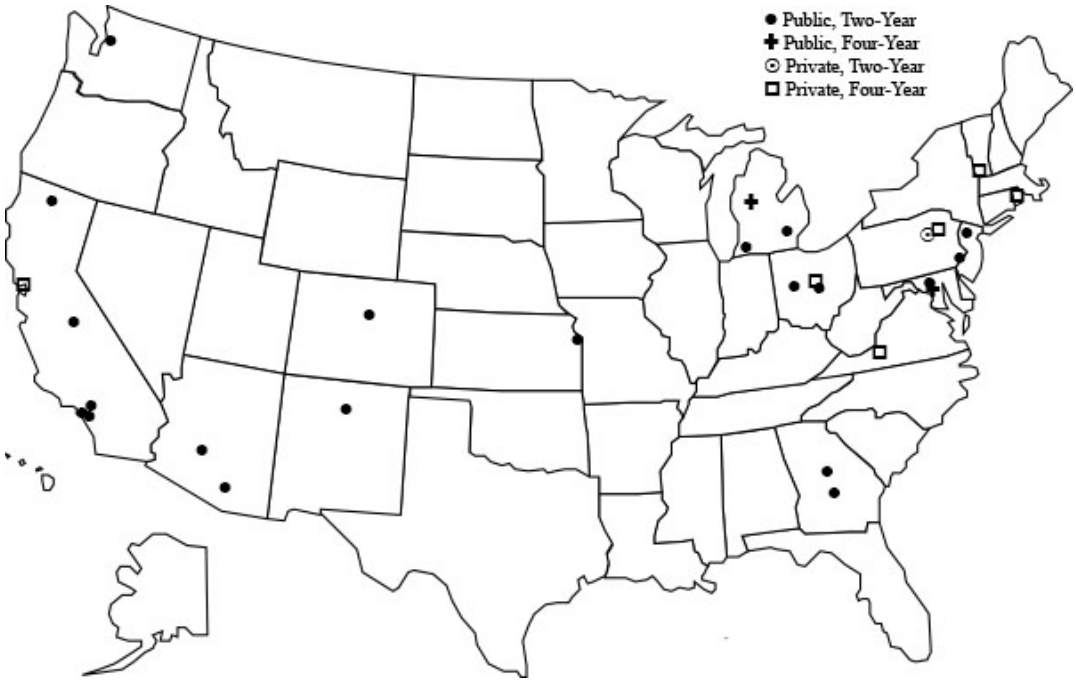

Figure 5: Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 1982-83 Academic Year. Source: HEGIS (1983)

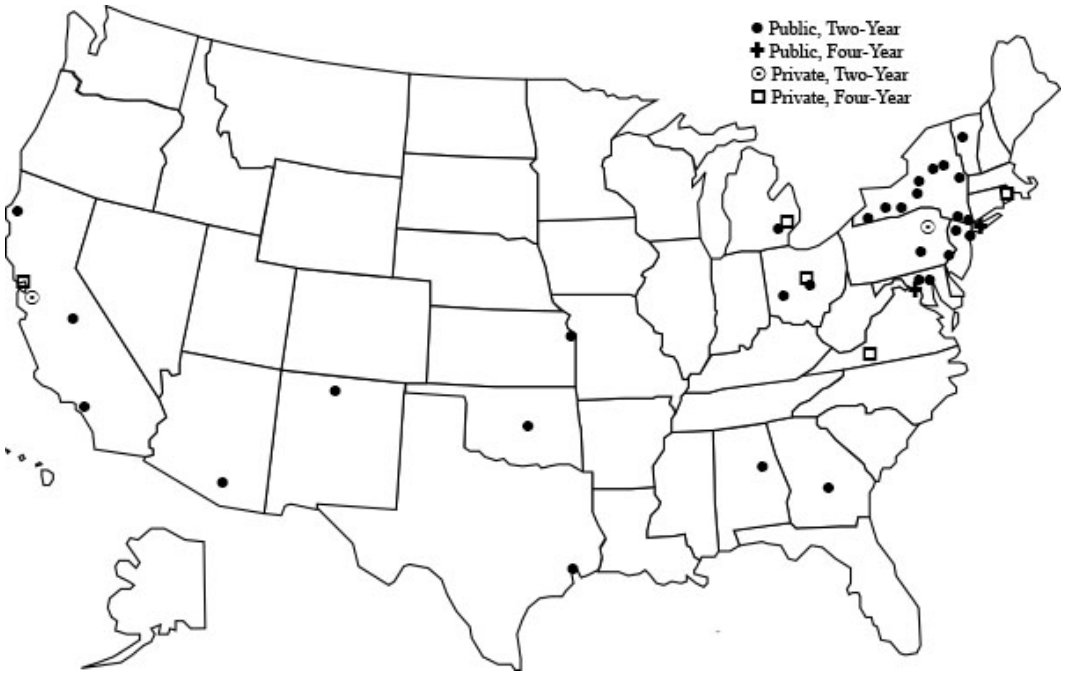

Figure 6: Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 1983-84 Academic Year. Source: IPEDS, (2015)

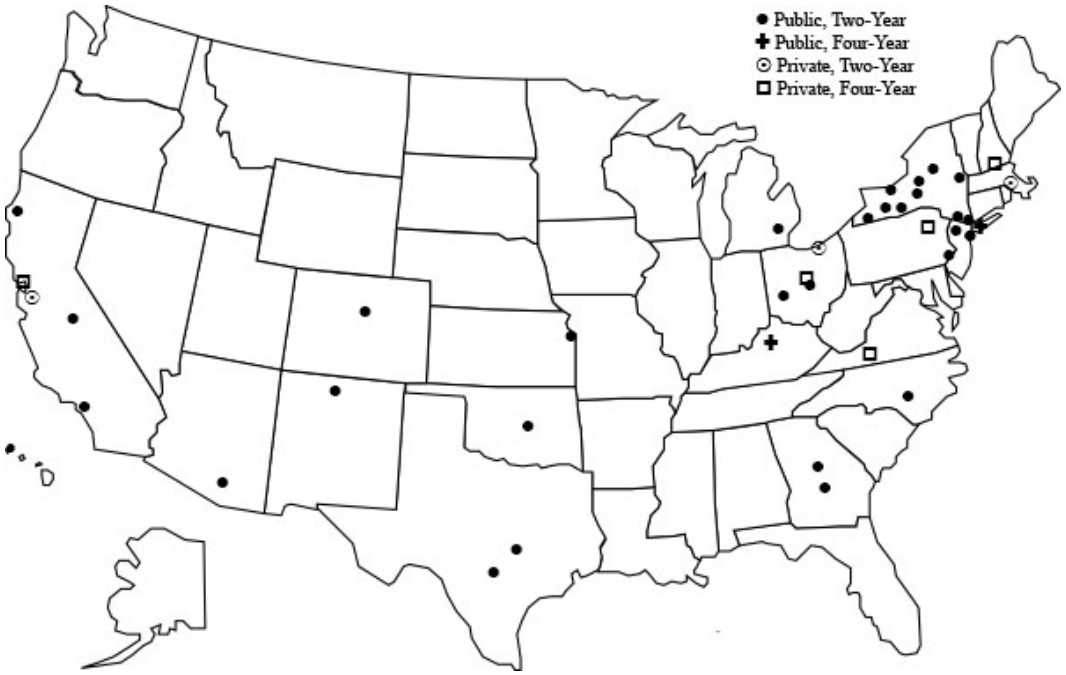

Figure 7: Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 1984-85 Academic Year. Source: IPEDS, (2015)

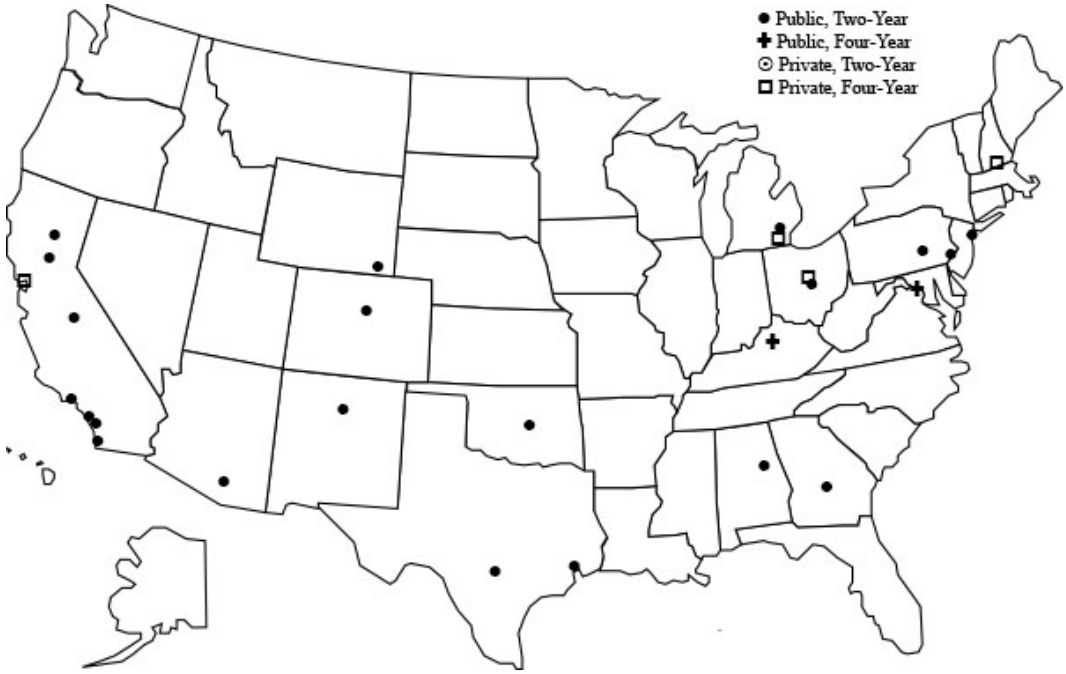

Figure 8: Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 1985-86 Academic Year. Source: IPEDS, (2015)

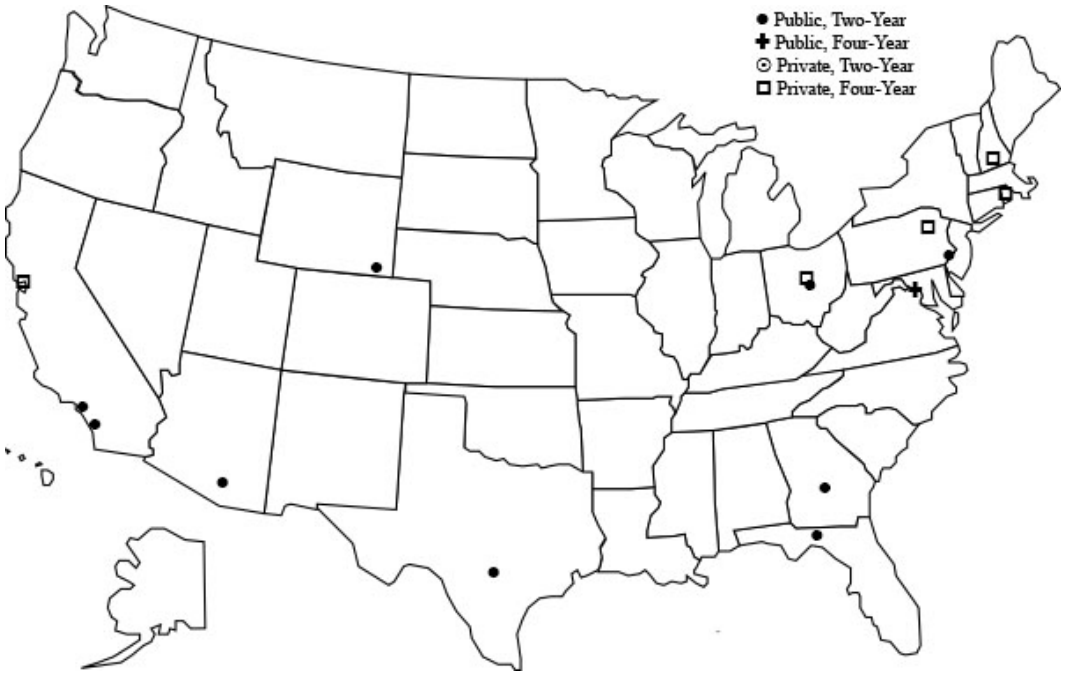

Figure 9: Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 1986-87 Academic Year. Source: IPEDS, (2015)

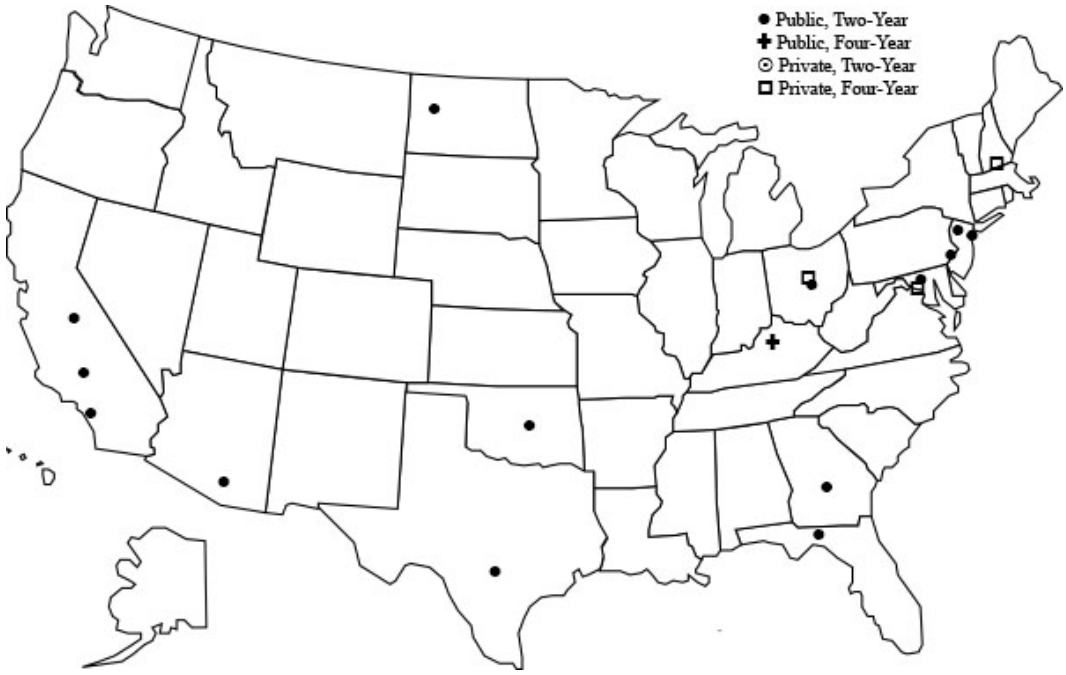

Figure 10: Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 1987-88 Academic Year. Source: IPEDS, (2015)

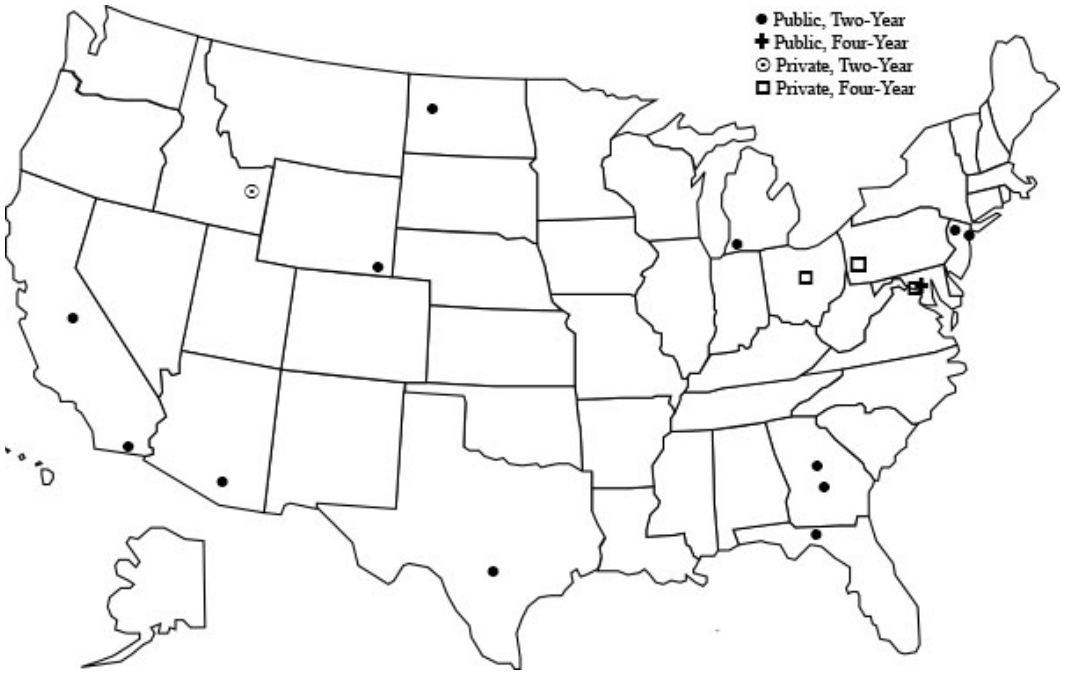

Figure 11: Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 1988-89 Academic Year. Source: IPEDS, (2015)

In the 1989-90 academic year, a loose cluster of ADPA programs appears in California, but there is no appreciable longevity in this cluster of programs over the succeeding years. In the 1991-92 academic year, a loose cluster of programs forms in the states of Texas, and also in Indiana during following year. Texas maintains its presence as a leader in ADPA programs for the remainder of the study period, a status that it still maintains. The cluster in Indiana will last consistently for the next 16 years, discontinuing around the 2010-2011 academic year. These Indiana ADPA programs are notable for the fact that they are conducted solely at public four-year institutions.

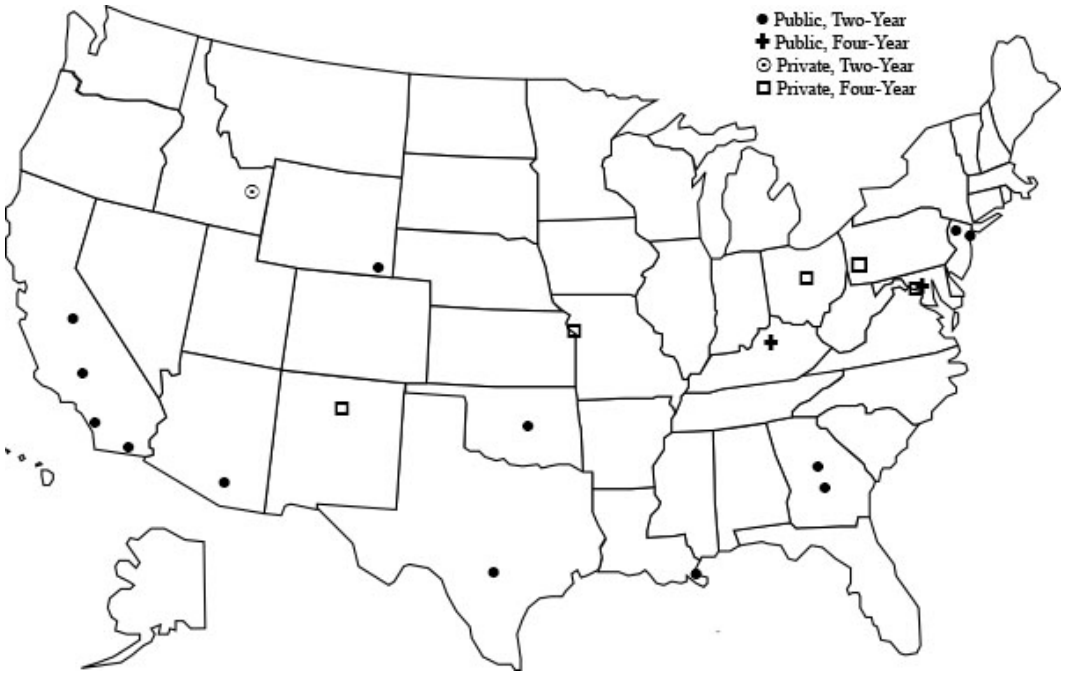

Figure 12: Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 1989-90 Academic Year. Source: IPEDS, (2015)

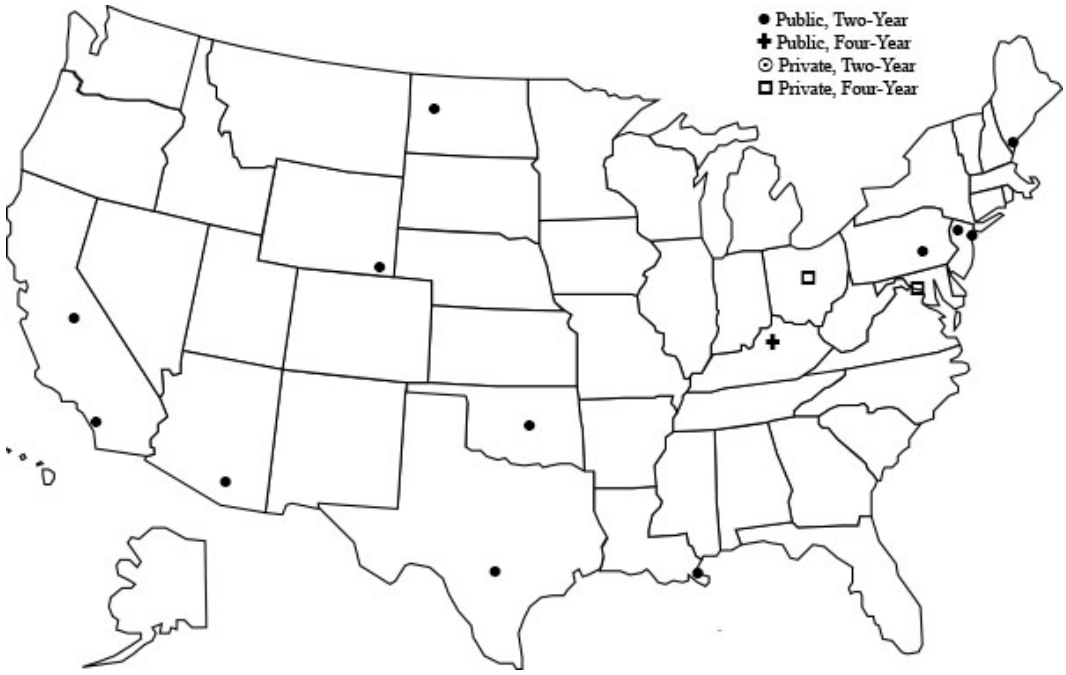

Figure 13: Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 1990-91 Academic Year. Source: IPEDS, (2015)

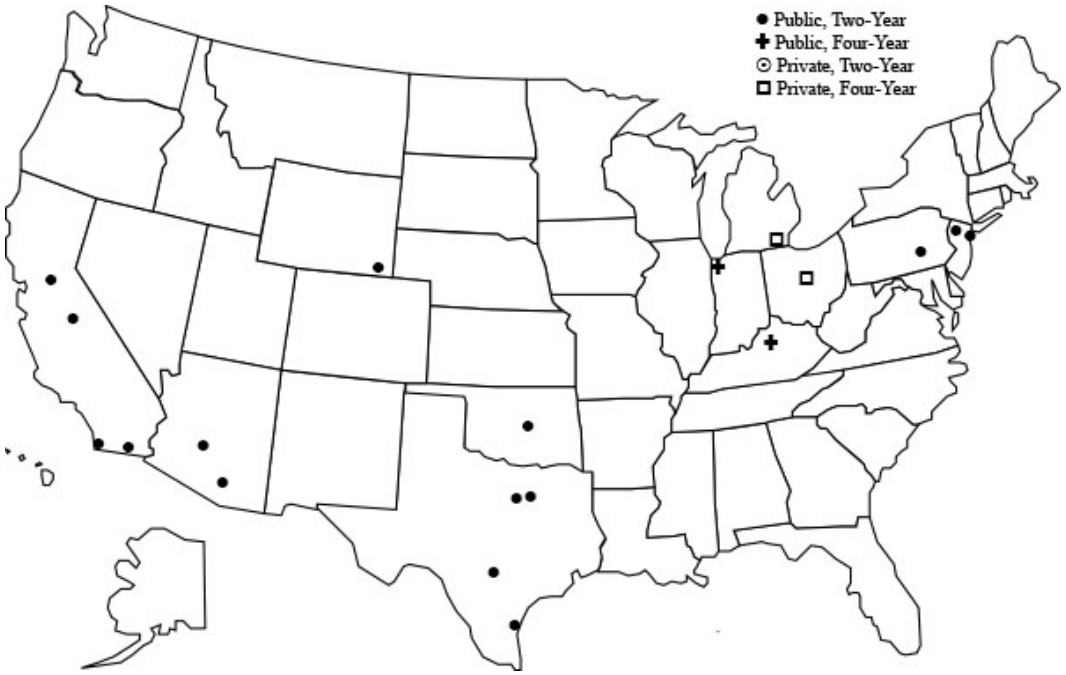

Figure 14: Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 1991-92 Academic Year. Source: IPEDS, (2015)

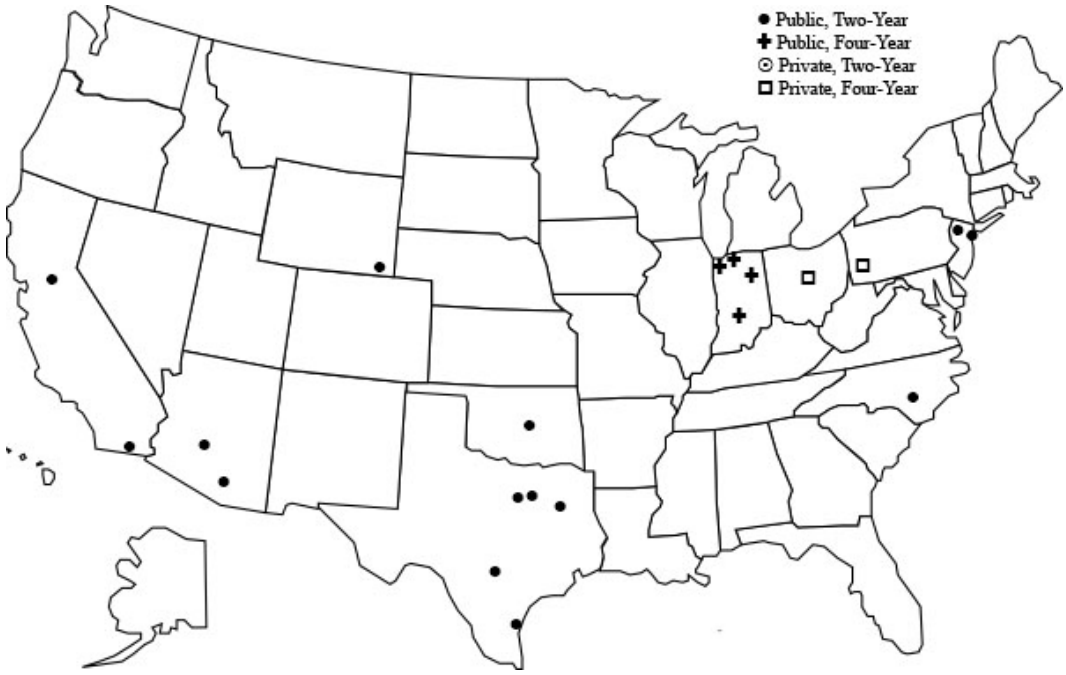

Figure 15: Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 1992-93 Academic Year. Source: IPEDS, (2015)

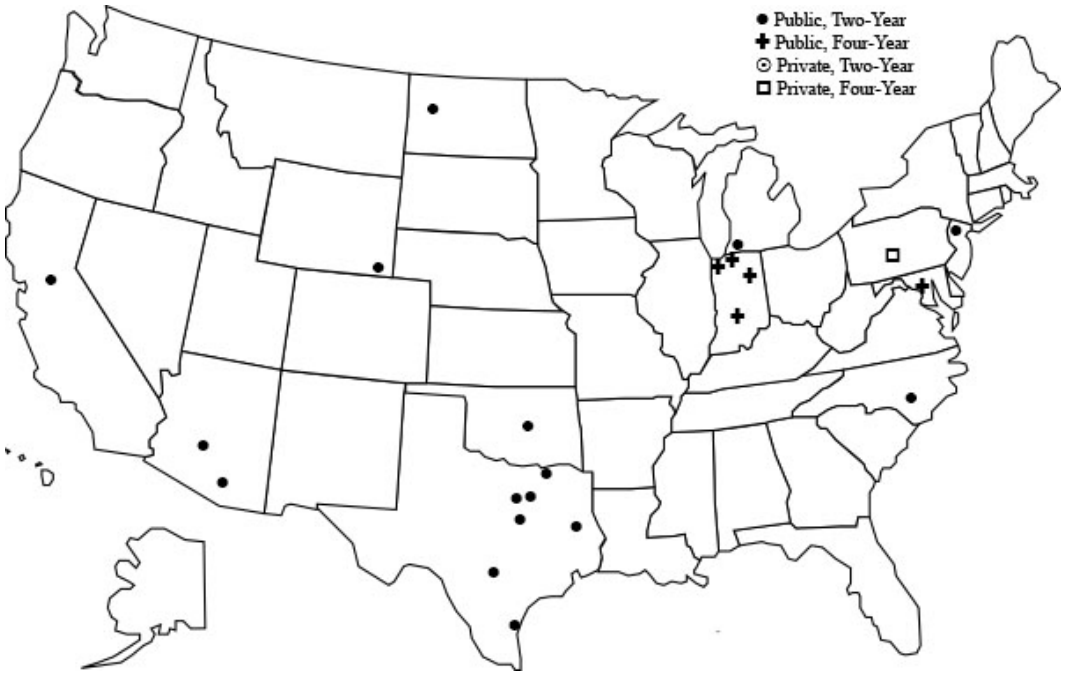

Figure 16: Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 1993-94 Academic Year. Source: IPEDS, (2015)

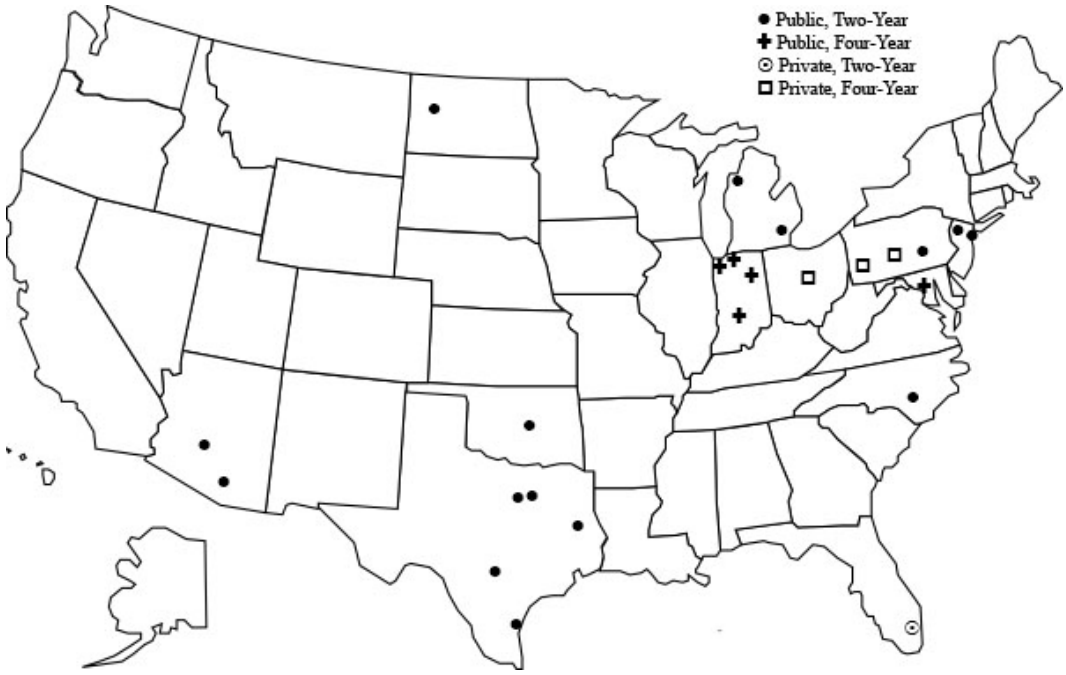

Figure 17: Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 1994-95 Academic Year. Source: IPEDS, (2015)

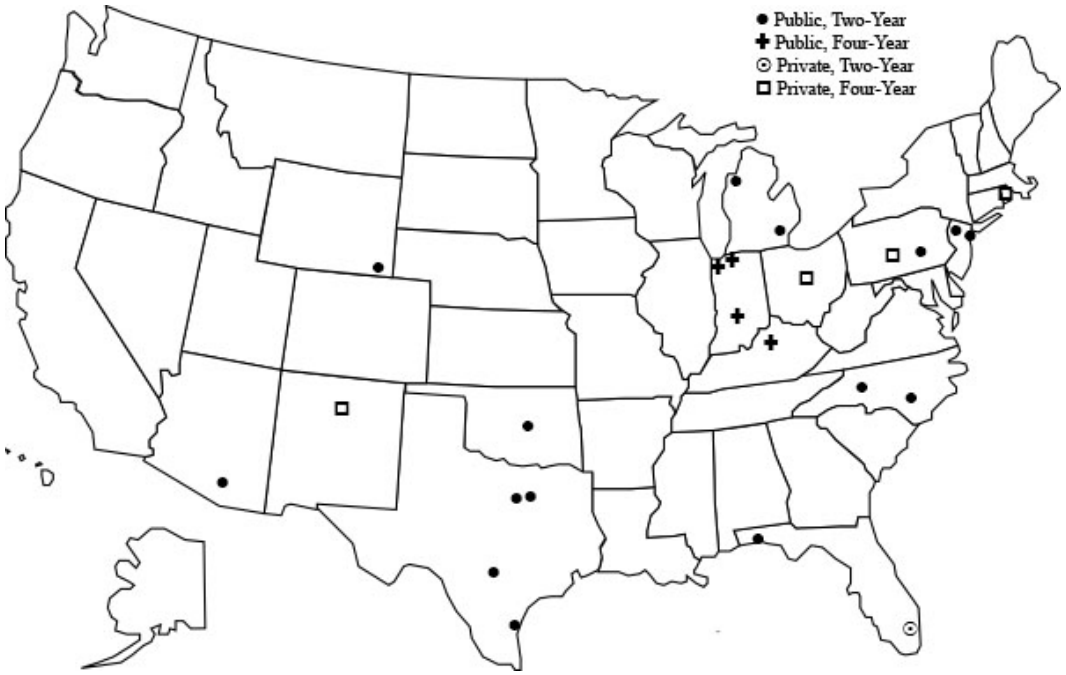

Figure 18: Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 1995-96 Academic Year. Source: IPEDS, (2015)

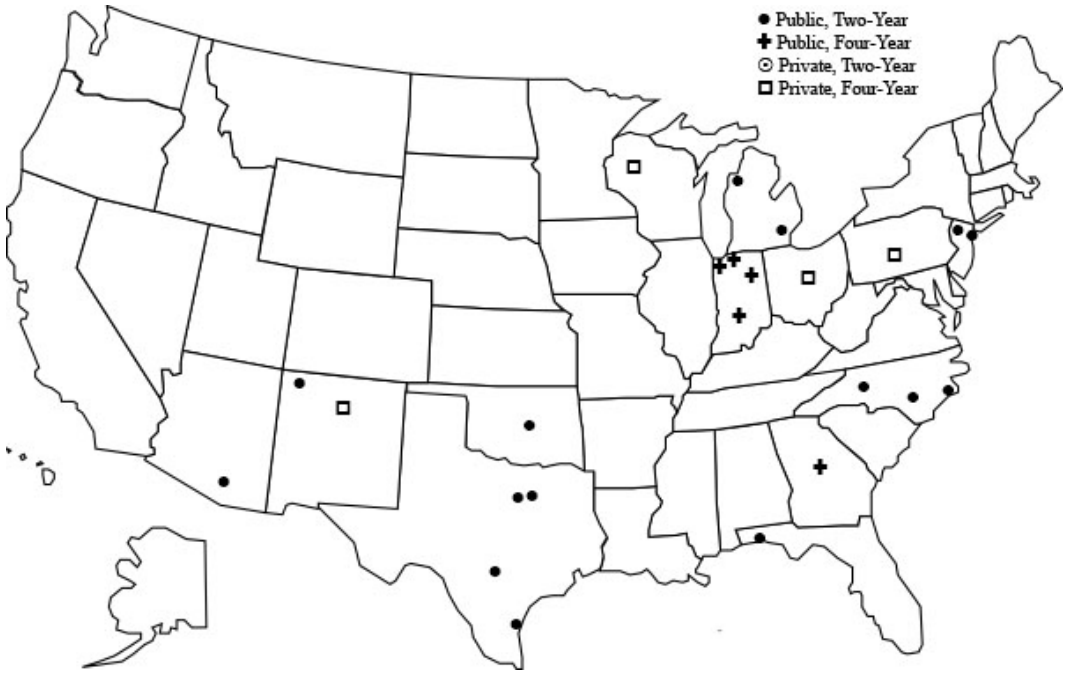

Figure 19: Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 1996-97 Academic Year. Source: IPEDS, (2015)

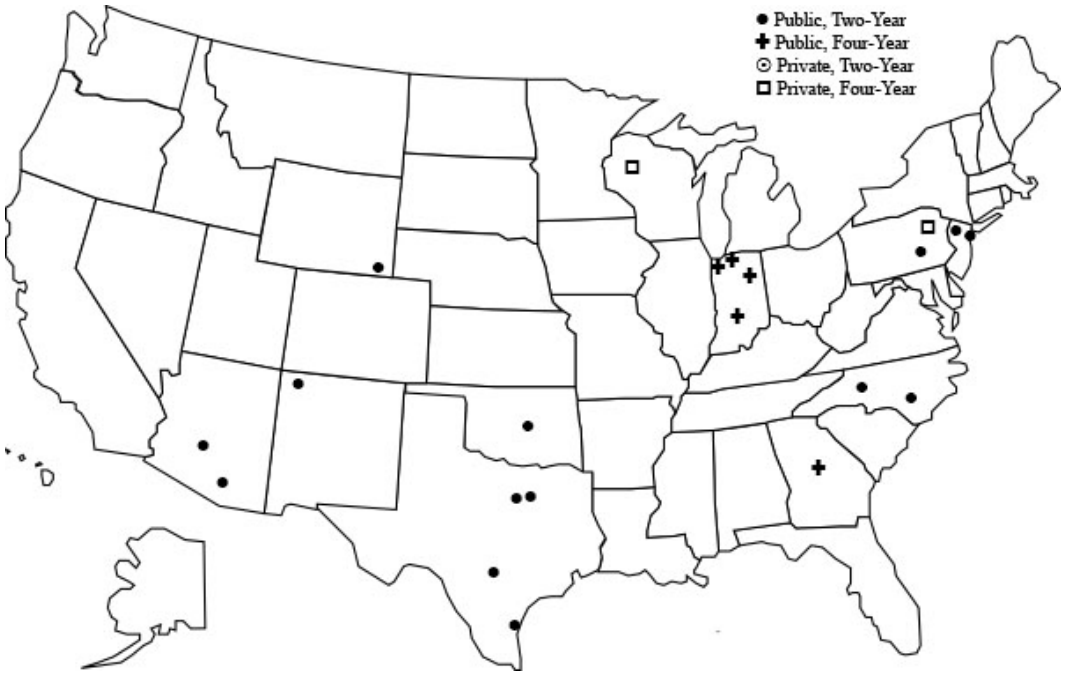

Figure 20: Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 1997-98 Academic Year. Source: IPEDS, (2015)

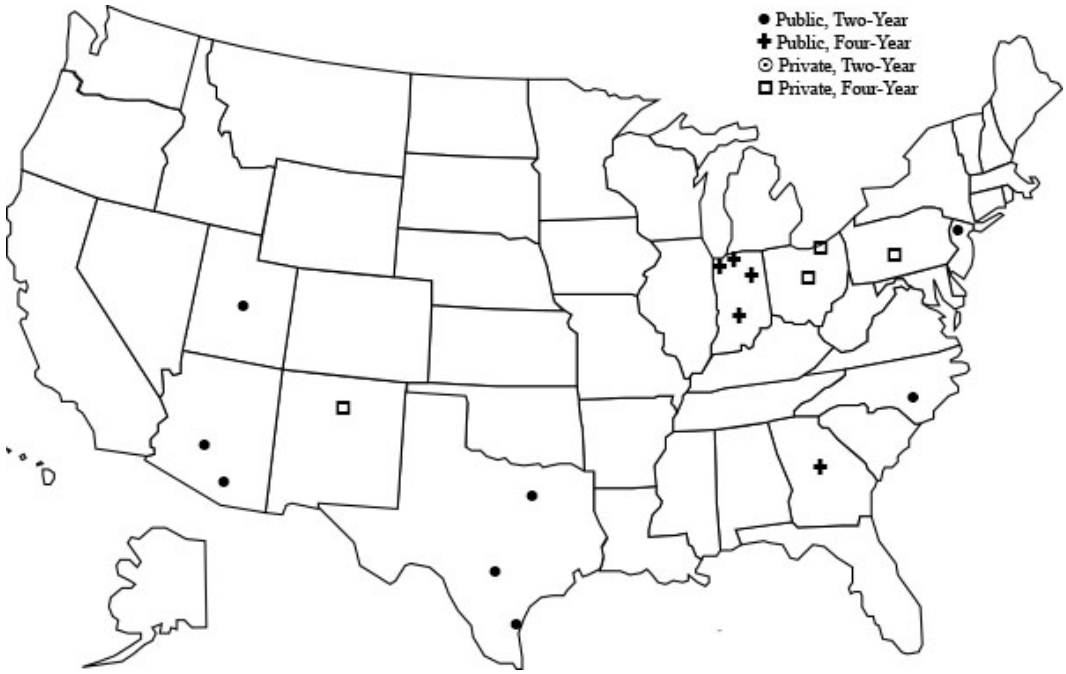

Figure 21: Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 1998-99 Academic Year. Source: IPEDS, (2015)

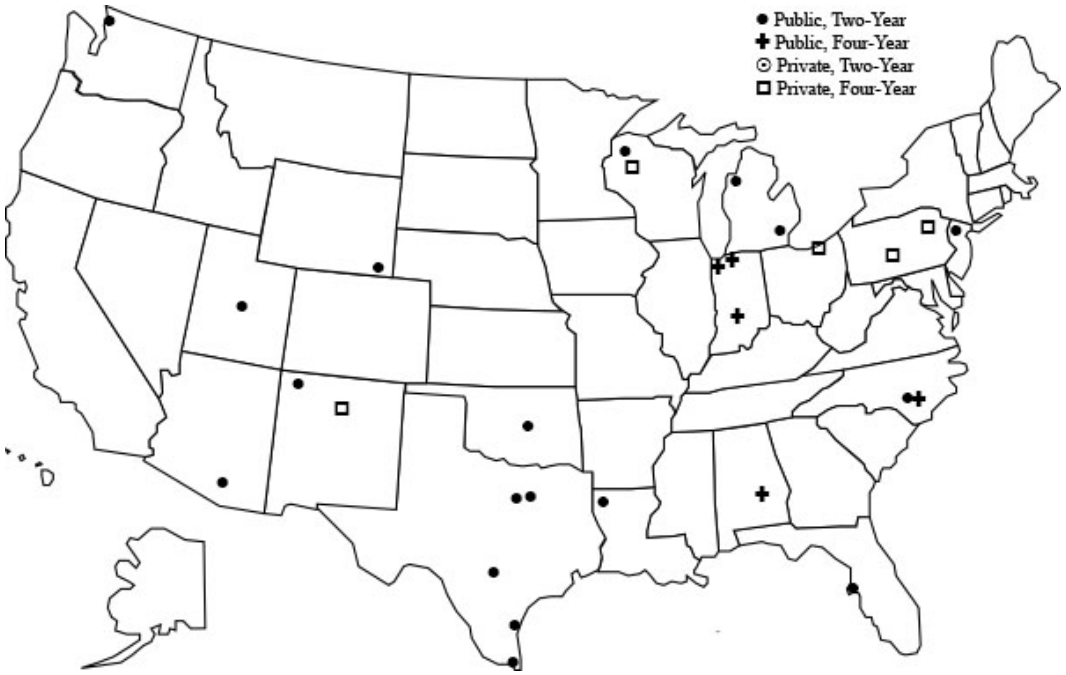

Figure 22: Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 1999-00 Academic Year. Source: IPEDS, (2015)

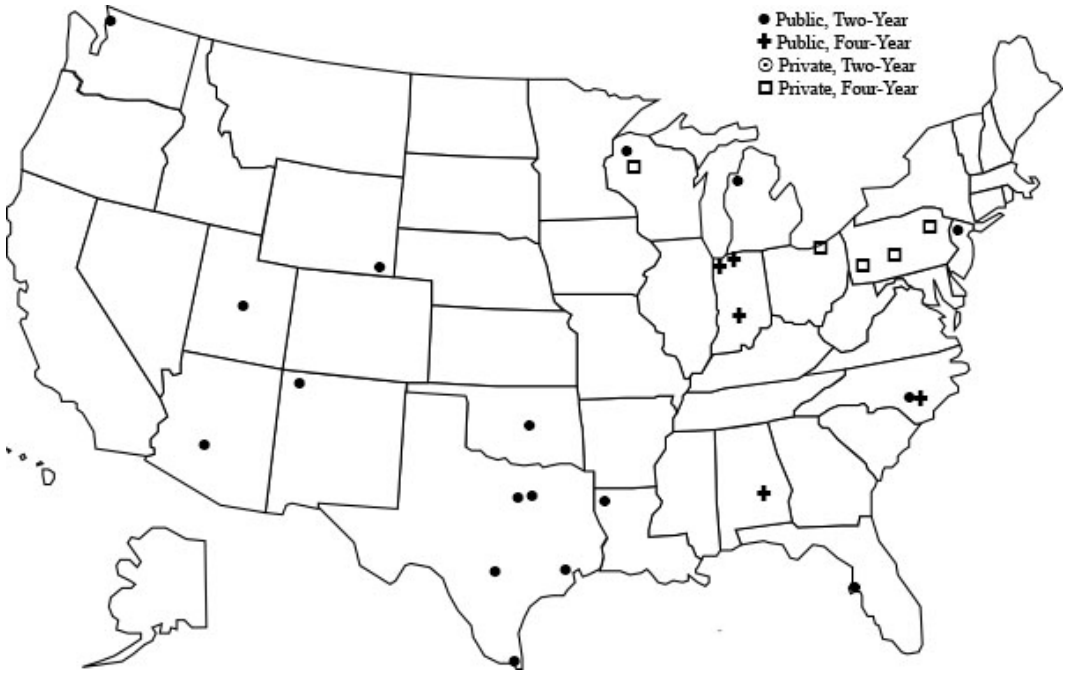

Figure 23: Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 2000-01 Academic Year. Source: IPEDS, (2015)

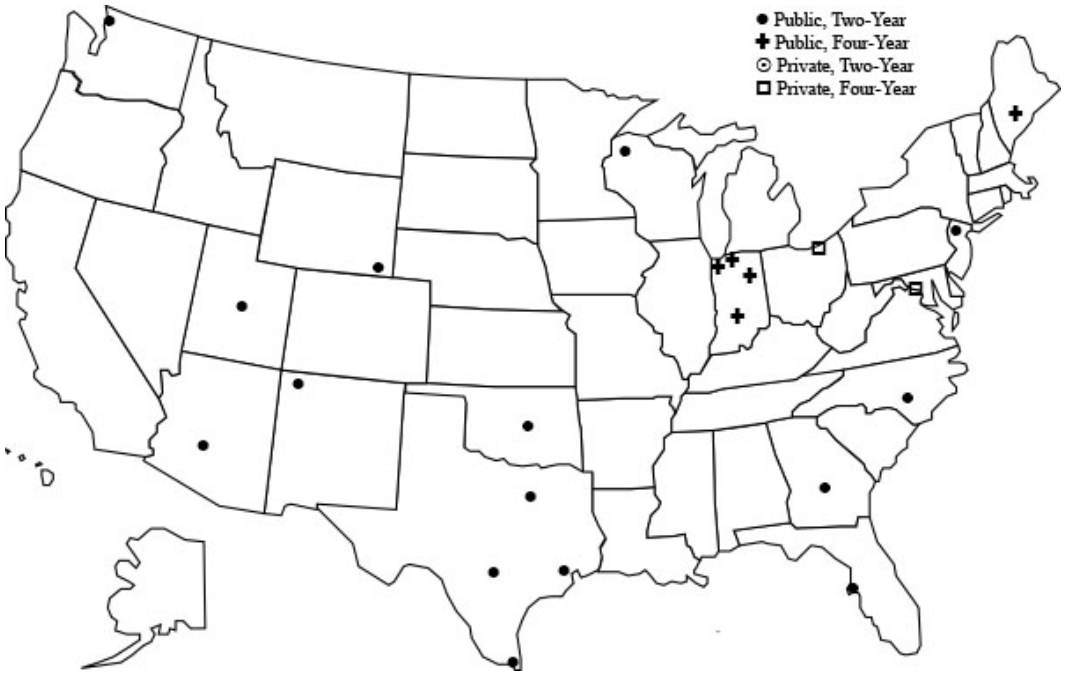

Figure 24: Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 2001-02 Academic Year. Source: IPEDS, (2015)

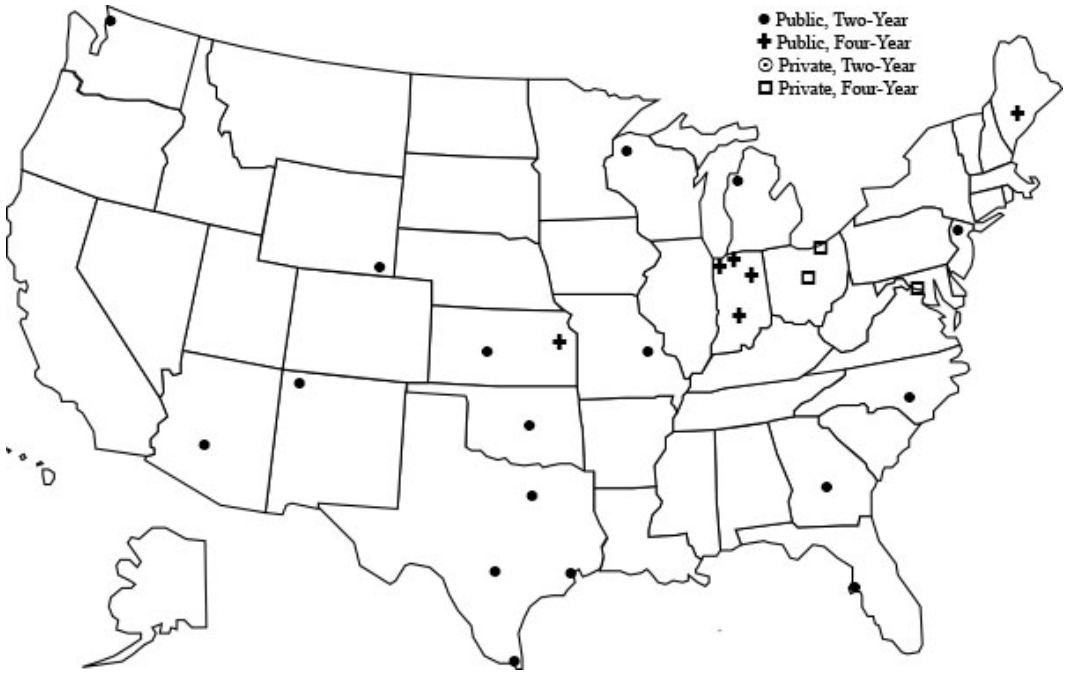

Figure 25: Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 2002-03 Academic Year. Source: IPEDS, (2015)

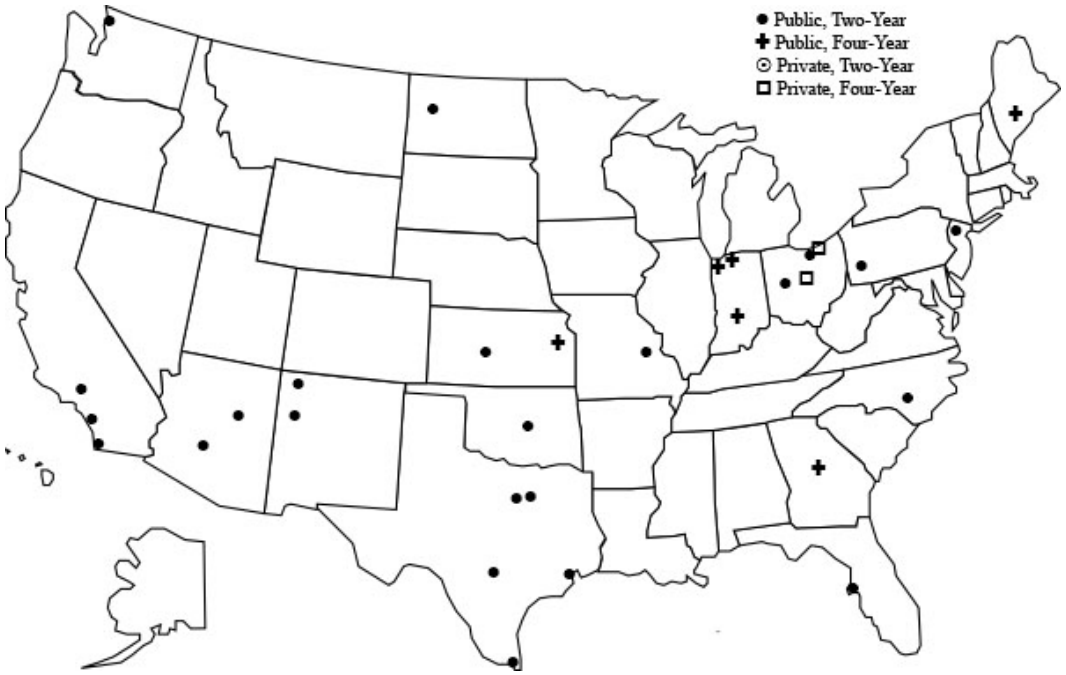

Figure 26: Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 2003-04 Academic Year. Source: IPEDS, (2015)

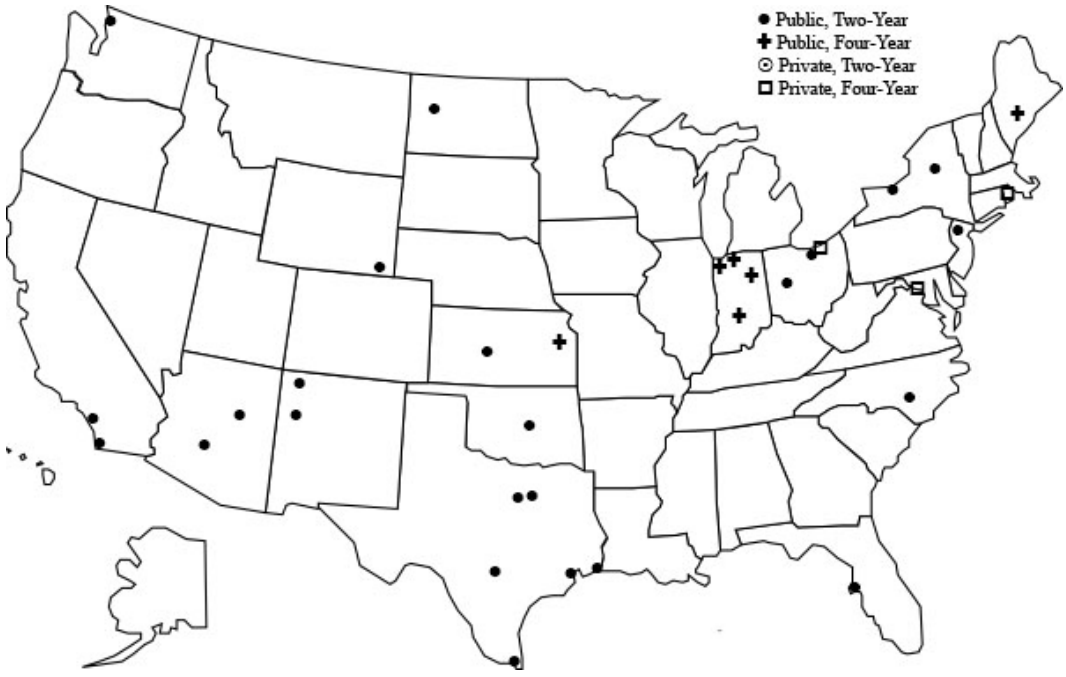

Figure 27: Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 2004-05 Academic Year. Source: IPEDS, (2015)

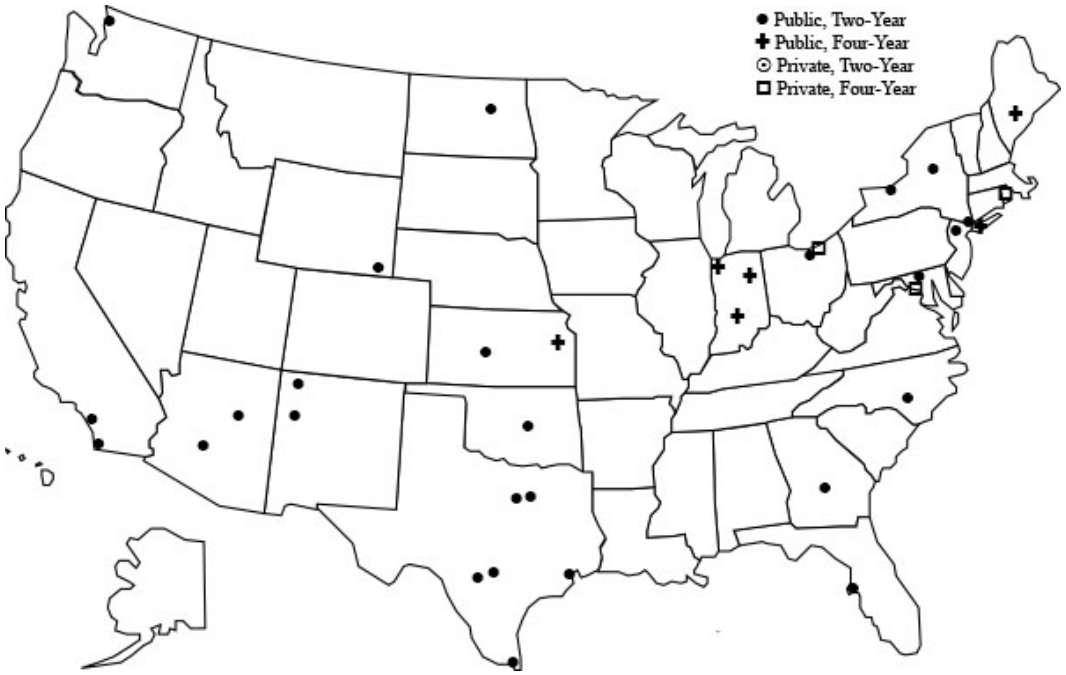

Figure 28: Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 2005-06 Academic Year. Source: IPEDS, (2015)

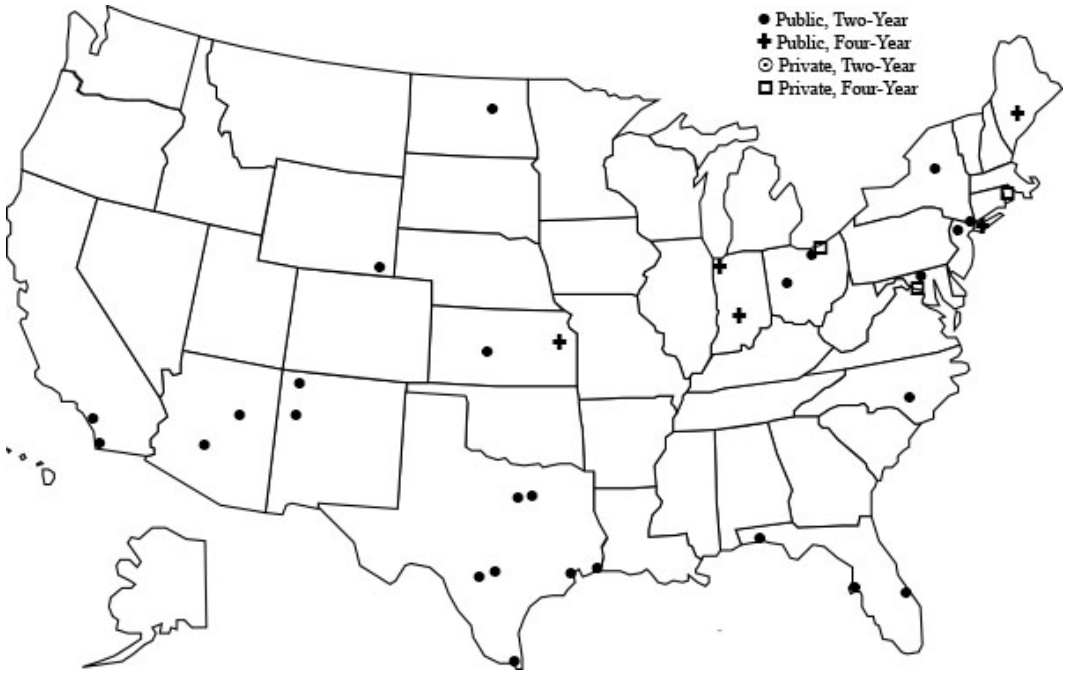

Figure 29: Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 2006-07 Academic Year. Source: IPEDS, (2015)

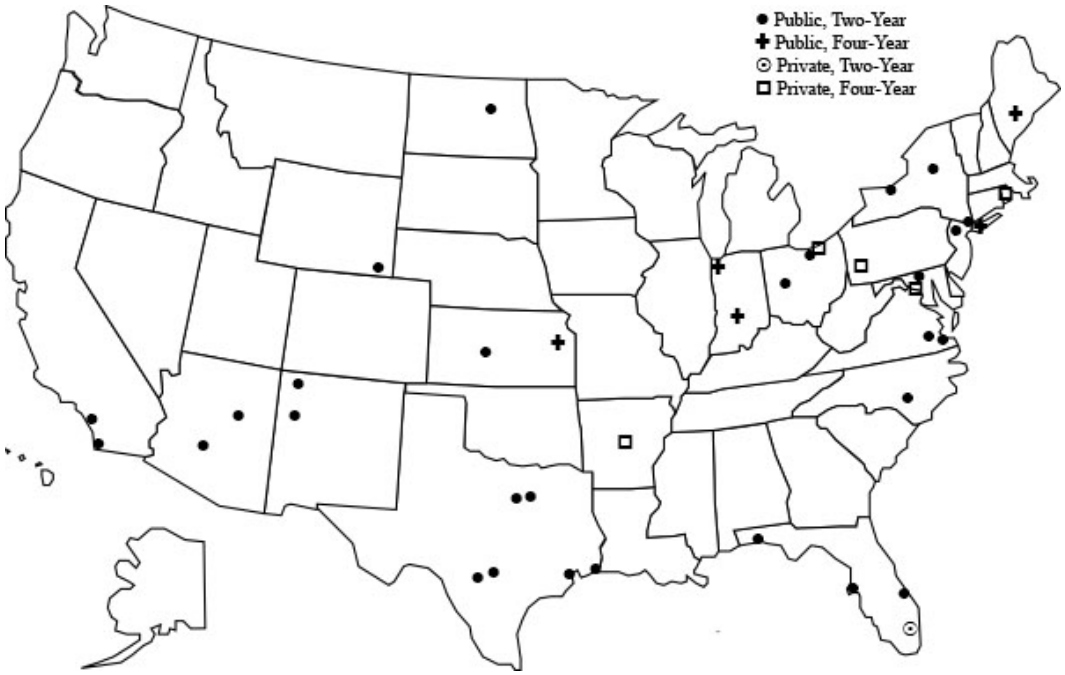

Figure 30: Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 2007-08 Academic Year. Source: IPEDS, (2015)

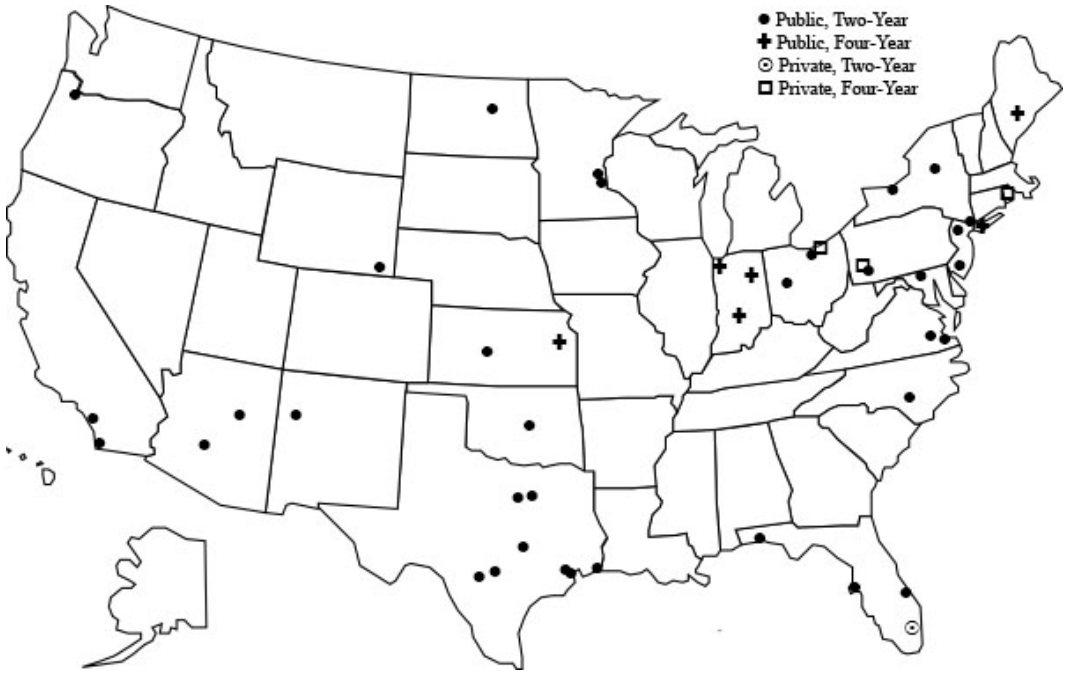

Figure 31: Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 2008-09 Academic Year. Source: IPEDS, (2015)

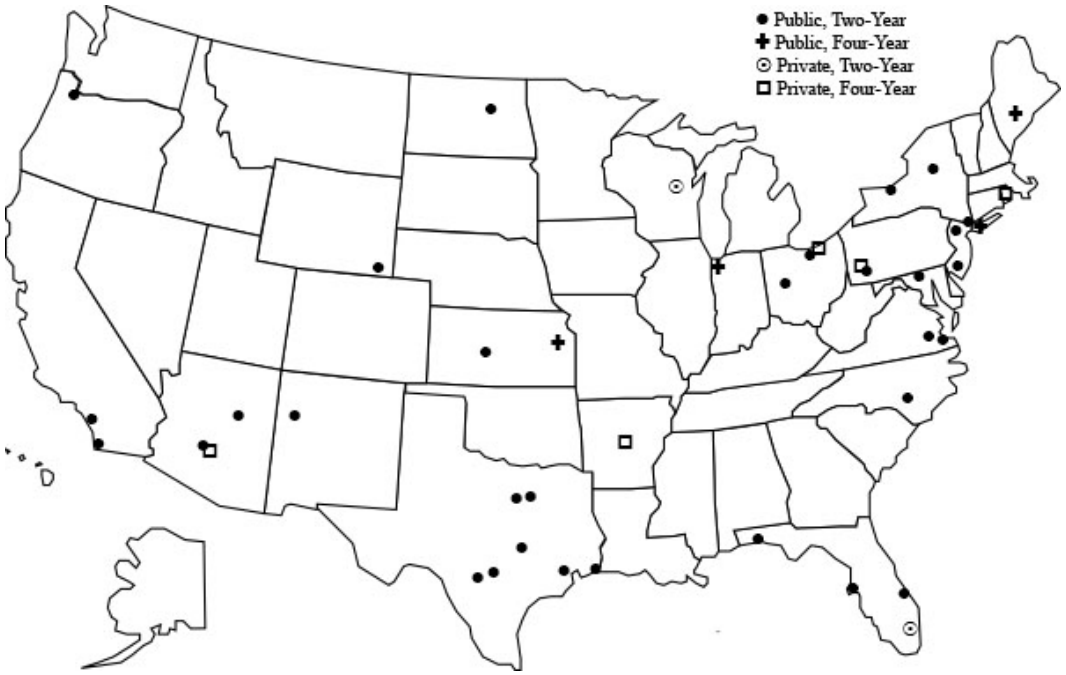

Figure 32: Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 2009-10 Academic Year. Source: IPEDS, (2015)

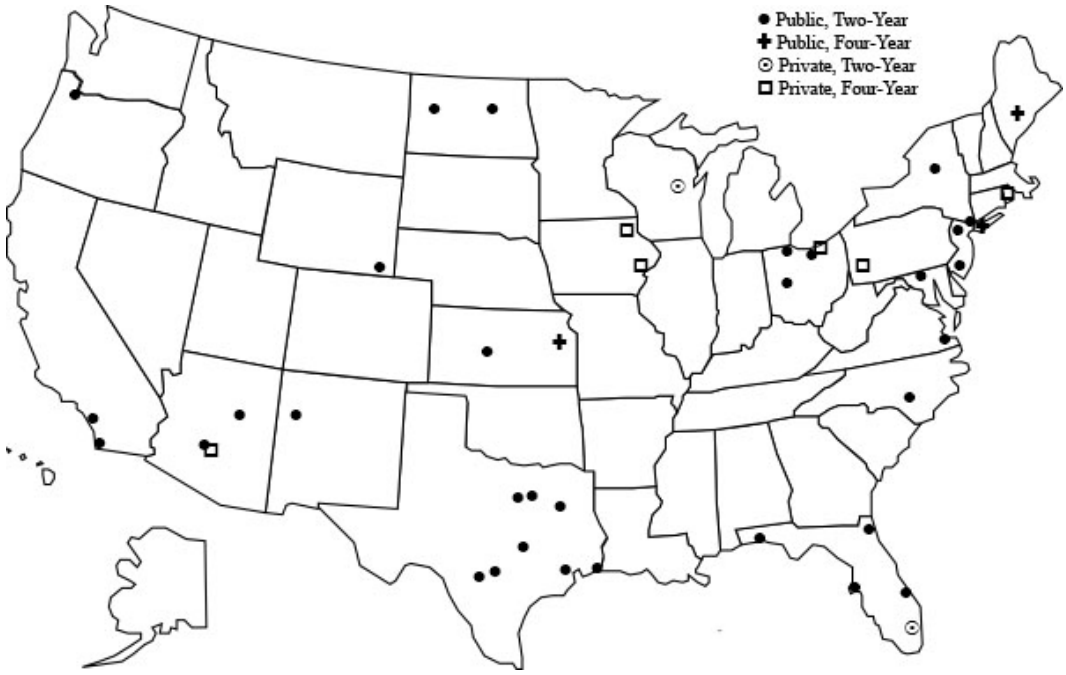

Figure 33: Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 2010-11 Academic Year. Source: IPEDS, (2015)

ADPA programs begin in Florida in the 1999-00 academic year, with the quantity increasing gradually over time to a loose cluster of programs by the 2010-11 academic year. The later years of the study are most notable for both the quantity of programs being conducted and also for the portion of these programs conducted by private four-year institutions. This is most notable in the state of Iowa, but is also present in numerous other states. Individual institutions that are worth noting for their longevity in this study are the County College of Morris (Randolph, N.J.) and San Antonio College (San Antonio, TX), each of which had active, degree-conferring ADPA programs for 29 years of this 31-year study.

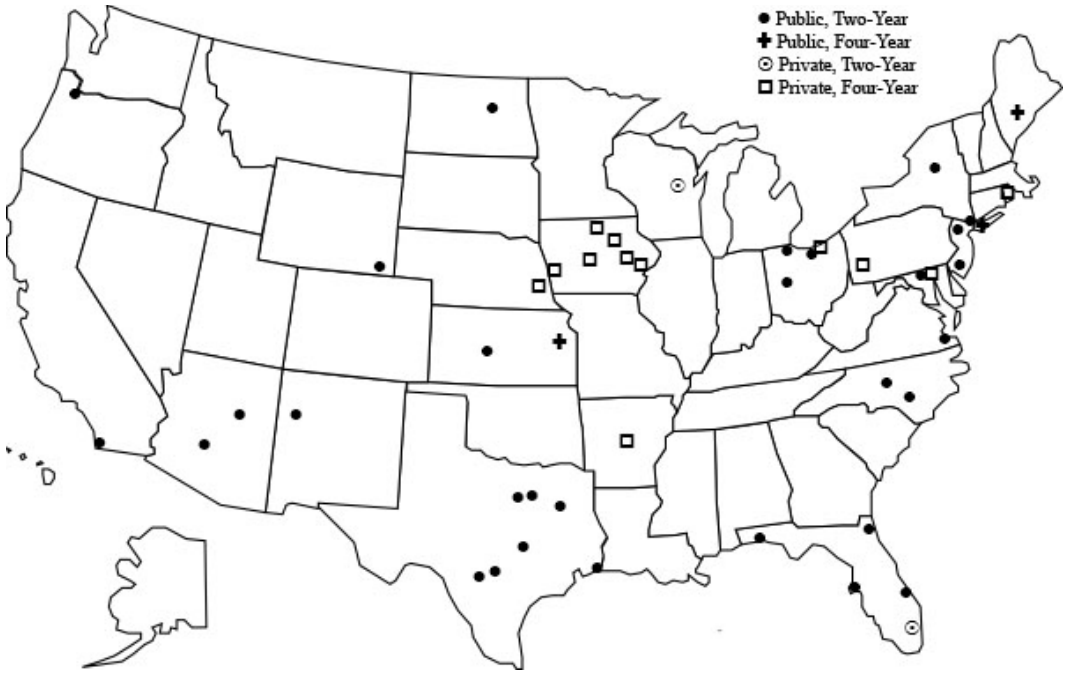

Figure 34: Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 2011-12 Academic Year. Source: IPEDS, (2015)

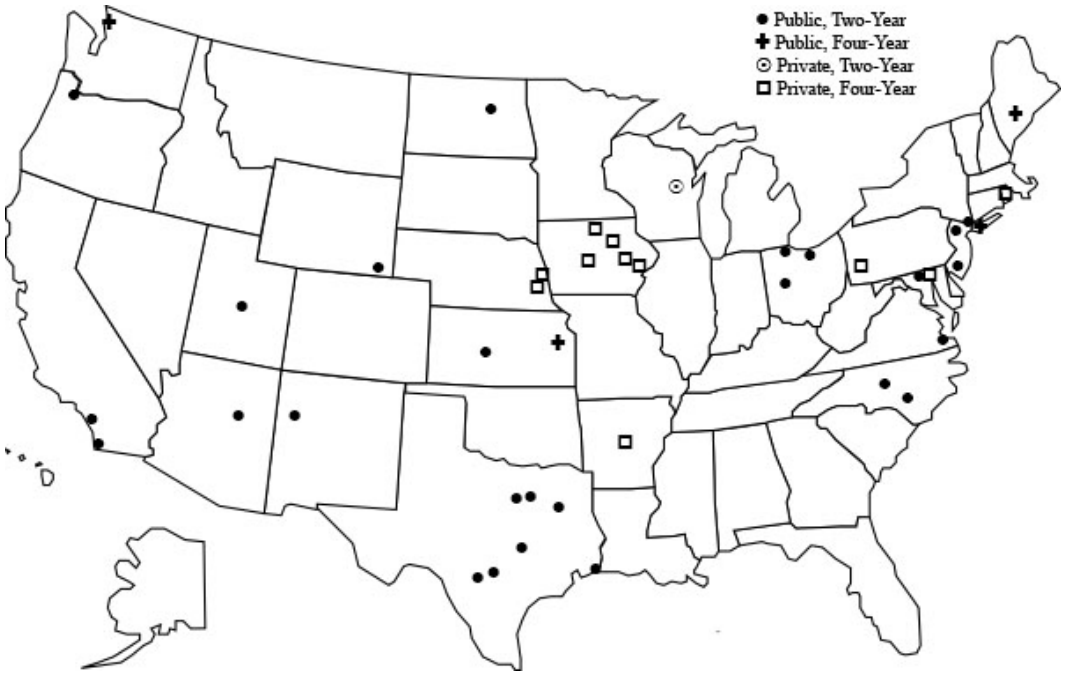

Figure 35: Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 2012-13 Academic Year. Source: IPEDS, (2015)

Innovation Diffusion Analysis of ADPA Programs

Tables relating the number and location of ADPA programs are shown in Appendix A. The mean number of ADPA programs per year was 28.55 programs for all years of the study. The lowest number of programs for any individual year of the study was 15 in 1991, while the highest annual number of programs was 47 in 2012. In the most recent year, 2013, there are 42 programs. Calculating a five-year rolling average for all years of the study shows an initial average of 30 programs for year five of the study, with the lowest being an average of 17.2 programs in year nine, and the highest being an average of 43.6 programs in 2013, the most current year. By this data, H_1: '*The diffusion of ADPA programs has increased over time'* is proved to be valid as the number of ADPA programs is in fact increasing over time.

Rogers (2003) identifies adopter categories in a diffusion study as Innovators, Early Adopters, Early Majority, Late Majority, and Laggards, with the latter category being the last to adopt the diffusion. His method of determining these categories is to utilize the mean time of adoption (t) and its standard deviation (σ) to divide the study period into categorical periods of time, as shown in Table 6:

Table 6:

Adopter Category Determination for a Normal Distribution. Source: Rogers (2003)

Adopter Category:	Area covered under the normal curve:	% of Adopters for each Category:
Innovator	Beyond (t - 2σ)	2.50%
Early Adopter	Between (t – σ) and (t - 2σ)	13.50%
Early Majority	From t to (t – σ)	34.00%
Late Majority	Between t and (t + σ)	34.00%
Laggard	Beyond (t + σ)	16.00%

This widely accepted method of adopter categorization is based on a normal adopter distribution, with percentages of adopters within each adopter category consequently conforming to a predefined percentage of the distribution as listed above. This general method of determining adopter categories offers numerous advantages to the field of diffusion study. Given a normal distribution of the innovation, Rogers' categorization method is easy to use and presents results that are easily generalizable across studies, and it also allows for categorical predictability in the diffusion of innovations. Other more complex methods of determining adopter categories have been established, but depend on the existence of a linear relationship in the data (Mahajan, Muller, & Srivastava, 1990).

Rogers (2003) relates how the S-curve is used in diffusion studies to graphically display the cumulative diffusion of an innovation over time. The S-curve is related by numerous other authors as well, including Berry & Berry (2014), who

studied innovation and diffusion models that are used in policy research, and Newell, Genschel, & Zhang (2014) who studied the use of reverse S-curves in the discontinuance of innovations. While the S-curve is a useful tool in diffusions with a more normal distribution, it is not usable in all diffusion studies. This is the case with the diffusion of ADPA programs, where there is a wide variety in the number of newly adopted programs per year, with the greatest quantity per year actually occurring during the beginning of the study period. Additionally, there is one year during the study period where there were no new programs added, a fact that in and of itself prevents the use of linear regression and therefore the development of a meaningful S-curve. Figure 36 shows the cumulative diffusion of ADPA programs during the study period. The number of newly adopted ADPA programs is shown for each year during the study period as well as the total number of ADPA programs per year.

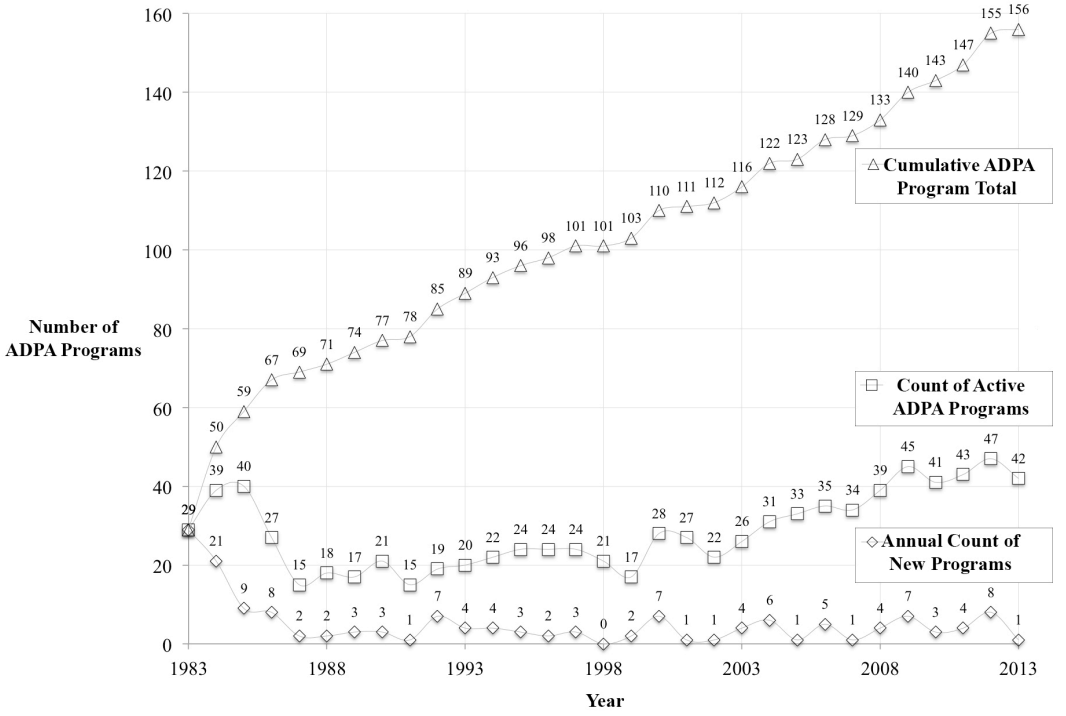

Figure 36: Cumulative ADPA Program Adoption, 1983 – 2013
Source: (HEGIS, 1983; IPEDS, 2015)

As can be observed in the scatter plot in Figure 37, adoption data for the diffusion of ADPA degrees does not follow a normal distribution. Moreover, the data is significantly skewed, displays no linear relationship between the variables, and contains significant outliers at years 1 and 2, with other outliers throughout the study period.

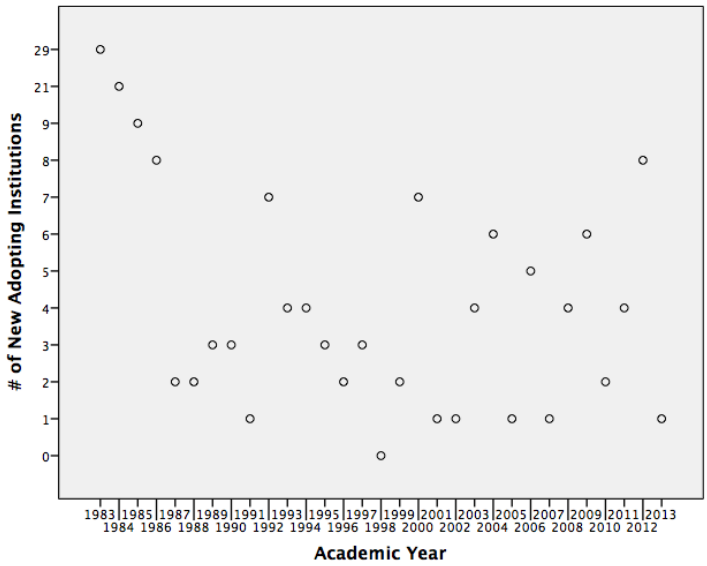

Figure 37: Scatterplot of ADPA Program Adoption, 1983 – 2013
Source: (HEGIS, 1983; IPEDS, 2015)

Mahajan, Muller, & Srivastava (1990) question the validity of assigning fixed percentages to adopter categories, given the lack of empirical justification for such practice. Consequently, this study utilizes the Rogers method of adopter category determination, accepting that the resulting percentage of adopters within each category does not match the predefined percentages found in a normal distribution as prescribed by Rogers (2003).

For the diffusion of the ADPA degree for the study period of 1983 through 2013, analysis of the time variable yields a standard deviation (σ) of 5.95 and a mean time of diffusion (t) of 16 years. Thus, the adopter categories were determined as shown in Table 7:

Table 7:

Adopter Category Determination for ADPA Diffusion.

Adopter Category:	N	Area covered under the normal curve:	% of Adopters for each Category[1]:	Time Period (Years) of Study:
Innovator	59	Beyond (t - 2σ)	38.31%	1 - 3
Early Adopter	19	Between ($t - \sigma$) and (	12.34%	4 - 9
Early Majority	23	From t to ($t - \sigma$)	14.94%	10 - 15
Late Majority	21	Between t and ($t + \sigma$)	13.64%	16 - 22
Laggard	32	Beyond ($t + \sigma$)	20.78%	23 - 31

This data then allows for the testing of Hypotheses #2: *Institutions that adopt ADPA programs earlier ('Innovators' and 'Early Adopters') are more likely to continue ADPA programs than those that adopt later ('Early Majority', 'Late Majority', and 'Laggards')*. Once the adopter categories are determined, data can then be analyzed to determine the longevity, in median years, of each adopter category during the period of study. This is a direct reflection of ADPA program continuance for the adopting institutions. The results of this analysis are as shown in Table 8:

Table 8:

ADPA Program Longevity by Adopter Category.

Adopter Category:	N	Longevity, in Mean Years of Continuance:	H_2 Categorization:	H_2 Categorization Mean:
Innovator	59	5.71 Years	Early	—
Early Adopter	19	4.47 Years	Early	5.09 Years
Early Majority	23	8.52 Years	Later	—
Late Majority	21	6.86 Years	Later	—
Laggard	32	3.84 Years	Later	6.41 Years

Calculated averages of the mean years of continuance for each of the H_2 categories were 5.09 years for the 'Early' category of adopting institutions and 6.41 years for the 'Later' category. These results clearly show that those institutions that adopted later in the study period have a greater degree of continuance than those that

adopted early in the process, thus disproving H_2.

There were a total of 154 adopting institutions over the entirety of the study period. Of this total, 88 (57.1%) were community colleges. Of the other types of colleges and universities, 22 (14.3%) were public four-year schools, 4 (2.6%) were privately controlled two-year schools, and 40 (26.0%) were privately controlled four-year schools. This data supports H_3: '*More ADPA programs are historically located at community colleges than at all other types of colleges and universities*.' Additional analysis of institution type, which examines all ADPA institutions regardless of control type, shows that 59.5% were two-year institutions and 40.5% were four-year institutions.

Study Part II - Analysis of Current ADPA Programs

All degree-granting postsecondary institutions in the U.S. were selected for this analysis, which provided a universe of 4,974 institutions. Of this total, there were a total of 42 institutions located in a total of 23 states that had active ADPA programs in the 2013 academic year.

ADPA programs during this academic year were analyzed in this part of the study to identify correlations between leading demographic data and the institutions that currently conduct these programs. To test hypotheses H_4, '*ADPA programs are predominantly located in or in close proximity to large metropolitan areas*', the Metropolitan Statistical Area (MSA) that was nearest to each individual ADPA program was identified (U.S. Census Bureau, 2015a). MSA's are geographical areas with a population of at least 250,000 that are used in conjunction with the reporting

of census data (OMB, 2010). Once the nearest MSA for each program was identified, the distance between the ADPA program institution and the ZIP code nearest the center of the MSA was calculated. This allowed for the calculation of the distance between each ADPA program and the center of its nearest MSA. Doing so resulted in a mean distance for all ADPA programs of 91.24 miles to its nearest MSA. Additionally, using a distance of 50 miles as a standard, only 42.86% of all ADPA programs are located in near, within 50 miles, of their nearest MSA. Moreover, the results show that 57.14% of these programs are at a distance of greater than 50 miles to their nearest MSA, thus proving H_4 to be false.

In order to test H_5 - *Institutions that operate in an environment of greater change and heterogeneity are more likely to adopt ADPA programs* the dependent variable State Case Rate ('SCR') was computed using the following formula:

$$SCR = \frac{P}{T}(100)$$

Where: "SCR" = The State Case Rate for each state.

"P" = The number of two-year colleges that operate ADPA programs in that state.

"T" = The total number of colleges and universities in that state.

"100" = A base rate multiplier as is commonly used in epidemiological studies.

Data on the number of colleges and universities was obtained from IPEDS (2015). Table 9 shows the calculated SCR for each state that had an active ADPA program during the 2012-13 academic year. With the SCR as the dependent variable,

SPSS was used to compute correlations between the SCR and a variety of independent variables to test a number of hypotheses.

Table 9:

State Case Rate for each ADPA Host State.

N:	State:	Number of Colleges and universities in the Host State:	Number of ADPA Programs in the Host State:	State Case Rate:
1	AR	54	1	1.852
2	AZ	95	1	1.053
3	CA	512	2	0.391
4	IA	68	5	7.353
5	KS	74	2	2.703
6	MD	69	2	2.899
7	ME	34	1	2.941
8	NC	154	2	1.299
9	ND	21	1	4.762
10	NE	45	2	4.444
11	NJ	74	2	2.703
12	NM	44	1	2.273
13	NY	319	2	0.627
14	OH	232	3	1.293
15	OR	69	1	1.449
16	PA	275	2	0.727
17	RI	13	1	7.692
18	TX	296	7	2.365
19	UT	45	1	2.222
20	VA	138	1	0.725
21	WA	88	1	1.136
22	WI	96	2	2.083
23	WY	11	1	9.091

The first of these to be tested was H_5, which focused on correlation between the SCR and independent variables related to change in the environment of the educational institutions. These independent variables were the change in the minority population (U.S Census Bureau, 2015b) and the change in the median income of both the host county and the host state (U.S. Census Bureau, 2015c, 2015d) of the ADPA programs.

The results of the two-tailed correlation computations from SPSS are shown in Table 10. Indicators of the change in the minority population from 2000 to 2013

showed a moderate positive correlation for both counties (0.307) and states (0.372) to the state case rate that was statistically significant at the 0.05 level. Indicators of the change in median income during this same period at both the county and state levels during this same period showed no statistically significant correlations to the state case rate.

Table 10:

Correlation to Change Variables

		SCR	County Minority Pop Change	State Minority Pop Change	County Median Income Change	State Median Income Change
SCR	Pearson Correlation	1	.307*	.372*	0.072	0.196
	Sig. (2-tailed)		0.048	0.015	0.651	0.213
	N	42	42	42	42	42
County Minority Pop Change	Pearson Correlation	.307*	1	.547**	-0.015	0.063
	Sig. (2-tailed)	0.048		0	0.925	0.691
	N	42	42	42	42	42
State Minority Pop Change	Pearson Correlation	.372*	.547**	1	-0.055	-0.017
	Sig. (2-tailed)	0.015	0		0.73	0.916
	N	42	42	42	42	42
County Median Income Change	Pearson Correlation	0.072	-0.015	-0.055	1	.611**
	Sig. (2-tailed)	0.651	0.925	0.73		0
	N	42	42	42	42	42
State Median Income Change	Pearson Correlation	0.196	0.063	-0.017	.611**	1
	Sig. (2-tailed)	0.213	0.691	0.916	0	
	N	42	42	42	42	42

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

This indicates that those institutions that experience greater increase in minority populations are somewhat more likely to adopt ADPA programs, while changes in median income had no affect on the likelihood of an institution to adopt an ADPA program. Overall, H_5 - *Institutions that operate in an environment of greater change and heterogeneity are more likely to adopt ADPA programs* is supported in terms of population change, but not in changes of median income.

The State Case Rate (SCR) was used again as the dependent variable to test H_6 - '*Institutions with greater wealth are more likely to adopt ADPA programs'*. The independent variables used were the net assets of the ADPA institutions and the median income of both the host county and the host state (U.S. Census Bureau, 2015d) of the ADPA programs. The results of these correlation computations from SPSS output are shown in Table 11. Indicators of institutional wealth showed no statistically significant correlations to the state case rate, thus disproving H_6 - '*Institutions with greater wealth are more likely to adopt ADPA programs'*.

Table 11:

Correlations to Institutional Wealth Variables

		SCR	NetAssets	Median Income, County	Median Income, State
SCR	Pearson Correlation	1	-0.128	0.189	-0.03
	Sig. (2-tailed)		0.419	0.23	0.849
	N	42	42	42	42
NetAssets	Pearson Correlation	-0.128	1	0.193	-0.05
	Sig. (2-tailed)	0.419		0.221	0.752
	N	42	42	42	42
Median Income, County	Pearson Correlation	0.189	0.193	1	.581**
	Sig. (2-tailed)	0.23	0.221		0
	N	42	42	42	42
Median Income, State	Pearson Correlation	-0.03	-0.05	.581**	1
	Sig. (2-tailed)	0.849	0.752	0	
	N	42	42	42	42

** Correlation is significant at the 0.01 level (2-tailed).

Once again, the State Case Rate (SCR) was used as the dependent variable to test H_7 – *Institutions operating in an environment of greater demand for ADPA programs are more likely to adopt ADPA programs.* The independent variables used here all relate the potential demand for ADPA programs. These independent variables included the population of the secondary schools in the host county (ADOE, 2015; Navajo County, 2015; NCES, 2015; NDOE, 2013), the distance to the capital

of the host state, the distance to the nearest Metropolitan Statistical Area (MSA) (U.S. Census Bureau, 2015a), the distance to the nearest Certified Public Manager (CPM) program (NCPMC, 2015), and a count of the number of public employees per 10,000 population of the host state (BLS, 2015). The results of the correlation computations from SPSS output are shown below in Table 12.

County secondary school population shows a moderate negative correlation to the state case rate that is statistically significant at the 0.05 level, indicating that institutions in counties with a lower level of minority populations are somewhat more likely to adopt ADPA programs. The distance of the institution to the capital of the state also shows a negative correlation to the state case rate that is statistically significant at the 0.05 level. This indicates that institutions that are closer in distance to state capitals are somewhat more likely to adopt ADPA programs.

Table 12:

Correlations to ADPA Demand Variables

		SCR	County Secondary School Pop	Distance to State Capital	MSA Distance	CPM Distance	Public EE/10K State Pop
SCR	Pearson Correlation	1	-.347*	-.362*	.380*	-0.037	.508**
	Sig. (2-tailed)		0.024	0.019	0.013	0.815	0.001
	N	42	42	42	42	42	42
County Secondary School Pop	Pearson Correlation	-.347*	1	.634**	-.443**	-0.171	-.348*
	Sig. (2-tailed)	0.024		0	0.003	0.279	0.024
	N	42	42	42	42	42	42
Distance to State Capital	Pearson Correlation	-.362*	.634**	1	-0.022	0.253	-.335*
	Sig. (2-tailed)	0.019	0		0.889	0.107	0.03
	N	42	42	42	42	42	42
MSA Distance	Pearson Correlation	.380*	-.443**	-0.022	1	.532**	.309*
	Sig. (2-tailed)	0.013	0.003	0.889		0	0.047
	N	42	42	42	42	42	42
CPM Distance	Pearson Correlation	-0.037	-0.171	0.253	.532**	1	0.087
	Sig. (2-tailed)	0.815	0.279	0.107	0		0.583
	N	42	42	42	42	42	42
PE/10K State Pop	Pearson Correlation	.508**	-.348*	-.335*	.309*	0.087	1
	Sig. (2-tailed)	0.001	0.024	0.03	0.047	0.583	
	N	42	42	42	42	42	42

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

The distance of the institution to the nearest Metropolitan Statistical Area

(MSA) of the state also shows a positive correlation to the state case rate that is statistically significant at the 0.05 level. This indicates that institutions that are located nearer to areas with a population of at least 250,000 are somewhat more likely to adopt ADPA programs.

The correlation between the distance of an institution to the nearest Certified Public Manager (CPM) programs to the state case rate was very low and not statistically significant. The number of public employees per 10,000 residents of the state showed a strong correlation to the state case rate that was statistically significant at the 0.01 level. This indicates that institutions in states with a higher proportion of public employees within their population are much more likely to adopt ADPA programs.

Study Part III - PA Sub-Baccalaureate Programs Provided by Community Colleges

Study Part III examined the total number and types of undergraduate programs offered specifically for public administration, including ADPA programs, in order to test the following hypotheses:

> H_8 - *Community Colleges provide more sub-baccalaureate educational programs for public administration than do any other types of colleges and universities.*

To test H_8, data was examined relating to all available types and quantities of undergraduate education for public administration for the 2012-13 academic year. This data is reflected in Table 13.

Table 13:

Public Administration Undergraduate Programs Provided by Institution Type. Source: IPEDS (2015)

Type of Program:	All Institutions:		Community Colleges:		All Other Institutions:	
	Total Programs:	Percent of Total:	Total Programs:	Percent of Total:	Total Programs:	Percent of Total:
Bachelor's Degree	181	70.4%	0	0.0%	181	100.0%
Associate's Degree	42	16.3%	24	57.1%	18	42.9%
Certificate, Less Than 1 Year	21	8.2%	12	57.1%	9	42.9%
Certificate, 1 Year But Less Than 2	11	4.3%	9	81.8%	2	18.2%
Certificate, 2 Years But Less Than 4	2	0.8%	0	0.0%	2	100.0%
Total of All PA Undergraduate Programs Offered:	257	100.0%	45	17.5%	212	82.5%

This data shows that publicly controlled two-year colleges, community colleges, did provide the majority (57.14%) of ADPA programs, and also the majority (61.76%) of all types of certificate programs during the 2012-13 academic year. Overall, community colleges provide 59.2% of all sub-baccalaureate education programs for public administration. This data supports H_8. Table 13 also shows that less than 18% of all PA undergraduate programs were provided by community colleges during the 2012-13 academic year. This is to be expected though, as community colleges do not yet generally offer bachelor's degree programs.

Summary

This chapter has presented the findings of the research conducted by this study. In Study Part I, a graphic presentation of all ADPA programs during the study period showed temporal and spatial analysis of these programs in the United States for the academic years of 1983 through 2013. Further, a longitudinal analysis of the diffusion of Associate Degree in Public Administration (ADPA) programs during the 31-year study period that showed adapter categories and related findings related to longevity of programs hosted by each category. Study Part II examined correlations

between leading demographic variables and ADPA programs for the 2013 academic year, the most recent year of data available. These variables included those related to change in the institutional environment, institutional wealth, and the potential demand for ADPA programs. Study Part III examined ADPA programs within the overall sphere of American higher education, showing that more than half (57.14%) are conducted at community colleges.

CHAPTER VI

SUMMARY, CONCLUSION, AND RECOMMENDATIONS

This chapter reviews the implications of the findings obtained by this research study. A review and discussion of the study findings then follows, with a discussion of the implications of the study to the field of public administration. The chapter concludes with a discussion of the limitations of the study, recommendations for further research, and an appropriate conclusion to the study.

Background of the study

Undergraduate educational programs for public administration comprised more than one third (34.5%) of all public administration-specific degrees and certificates awarded for the 2012-2013 academic year (IPEDS, 2015). Undergraduate programs are therefore a significant portion of all available educational programs for the field, yet the amount of existing scholarship on these programs is surprisingly small, particularly that relating to Associate Degree in Public Administration (ADPA) programs. It is therefore in the best interest of the field to pursue further research of these undergraduate programs.

This study focuses primarily on ADPA programs, one specific type of undergraduate educational program for public administration. The study also includes emphasis on the identification and analysis of undergraduate programs for other public service-related fields in comparative analysis to those of public

administration. To date, the extent of available scholarship on ADPA programs is very limited. Banas & Emory (1998) examined data for one single academic year to identify the availability of ADPA programs in relation to associate degree programs available for other public service-related fields. Maxwell (2005) examined data for one single academic year to identify ADPA program locations and characteristics. Klay & Maxwell (2009) examined data for one single academic year to identify ADPA program locations and availability, and also posed questions as to potential alternatives to the ADPA program. These three sources are the extent of available literature on ADPA programs. While all of them make significant contributions to the literature, none of these sources examined ADPA programs longitudinally, nor did they examine institutional or demographic characteristics in relation to program diffusion.

These scholars see the ADPA program as a significant potential benefit to the field. Banas & Emory (1998) argued that if we believe that a well-educated public work force is thus potentially more effective, then lower echelon public servants will benefit from the type of education found specifically in an ADPA program. Maxwell (2005) found that the ADPA program was a benefit to all work sectors in society, determining that graduates from one ADPA program in 2002 were employed not only in the public sector (61.56%), but significant percentages were employed in the private (26.38%) and non-profit sectors (12.06%) as well.

Banas & Emory (1998:225) further relate that education for public administration "has been considered the exclusive domain" of graduate degree

programs. This is evidenced by the fact that over 76% of all public administration-specific degrees and certificates awarded in the 2012-2013 academic year were specifically master's degrees (IPEDS, 2015). This explicit focus on master's degree programs comes at the expense of lower ranking operational level public employees (Banas & Emory, 1998; Maxwell, 2005).

Similarly, citing needs for mass education within the field of public administration and for increased intergenerational mobility, Klay & Maxwell (2009) also cited the value of ADPA programs by calling for increased participation by community colleges in public administration education, and by further pointing out this has still not happened, despite the earlier call by Banas & Emory (1998). Only 46 (3.2%) of the two-year colleges that existed during the 1992-1993 academic year offered an associate degree program specifically related to public administration (Banas & Emory, 1998; Snyder, 1994), while only 20 (1.1%) of those two-year institutions listed for the 2000-2001 school year offered ADPA programs (Maxwell, 2005; Snyder, 2003). For the 2005-2006 school year, only 23 (1.37%) of community colleges offered such programs (Klay and Maxwell, 2009; Snyder, 2008).

This data shows fluctuation in the overall number of programs during the years listed here, and that the utilization of community colleges for public administration programs has not increased over a significant period of time. What the data does not explain is where the programs are located or if they have been in operation for any significant length of time. This data also provides no explanation as to where any programs have been terminated or where any new programs were

instituted. There is also no information relating to characteristics of the institutions themselves and the environment that these institutions exist in.

This raises questions that require us to examine the degree programs themselves. Is the number ADPA programs actually increasing or decreasing over time? Are they proliferating, and in any particular pattern of diffusion? Where and in what context do they exist? To answer these questions requires analysis of variables related to the place and context of these programs. Do ADPA programs exist only in or near large metropolitan areas, or perhaps in close proximity to state capitals? Do they exist only in urban areas and not at all in rural areas? Do they exist only in prosperous geographical regions? Is there any relation to the location of ADPA programs and changes in population characteristics? Previous analysis on this subject has focused solely on one single academic year per study, and did not significantly explore demographic information beyond identifying which state the programs were located in (Banas & Emory, 1998; Klay & Maxwell, 2009; Maxwell, 2005).

Specifically, the first part of this study is a longitudinal analysis of the diffusion of ADPA programs for the period of 1983 to 2013 that identified the quantity and location of ADPA programs during the study period. This analysis also identified whether the programs adopted earlier in the study period had greater program longevity than those that were adopted later in the study period. This portion of the study also identified the proportion of those programs that were conducted by publicly vs. privately funded institutions.

The second part of the study analyzed ADPA programs for the 2012-2013 academic year, the most current data available at the time of this writing. For this part of the study, a dependent variable called State Case Rate (SCR) was calculated using factors relating to the number of two-year postsecondary institutions in the state and the number of ADPA programs currently active in that state. A multiplier was also used in this equation, which was based on a similar epidemiology-based equation used by Geis (1985). This analysis examined correlations between the dependent variable 'SCR' and institutional characteristics of the schools that conduct these programs, and with demographic variables relating to the context in which these schools operate. Specifically, the independent variables compared include location variables for each institution, population variables, income variables, and variables related to a demand for ADPA programs. These were examined for correlation with the dependent variable SCR in order to determine the levels of innovativeness of the institutions that conduct ADPA programs.

The authors cited above attest to the low availability of ADPA programs, but there are admittedly a wide variety of other public service-related programs available across the United States. Besides associate degree programs specific to public administration, Banas & Emory (1998) list a selection of other two-year degree programs that are related to public service. Further, they posit that community colleges should be more involved in the education of public servants. So just how much are community colleges and all other two-year colleges involved in the education of public servants?

To answer this question first requires the identification of educational programs that are applicable to public service. The third part of this study did this, using Banas and Emory's list as an analytical starting point. Thus all undergraduate educational programs in the U.S. that are related to public service were identified. This was followed by a comparison of the availability of public administration undergraduate educational programs to those of other public service-related disciplines. This third part of the study concluded with a comparison of the availability of these public service-related educational programs between publicly-funded vs. privately funded colleges and universities.

The purpose of this study was to analyze data for a 31-year period (1983 to 2013) to examine not only the diffusion of ADPA programs during the study period, but also the current state of ADPA degree programs and other public service-related undergraduate educational programs. Specifically, the study sought to (1) identify the long-term diffusion of ADPA program in the United States, (2) identify correlations relating leading demographic variables to ADPA programs for the most recent year of data available, (3) to compare the availability of associate degree in public administration (ADPA) programs to those of all other undergraduate educational opportunities for public servants, and (4) to compare the availability of public administration sub-baccalaureate educational programs at community colleges to that of all other types of colleges and universities.

The theoretical base of the study was Rogers' Diffusion of Innovation Theory, a broad set of theories relating to the diffusion of innovations. Specifically used for

this study were Rogers' Rate of Adoption Theory and also his Individual Innovativeness Theory. The literature that served as primary sources to this study were

Summary of the Findings

The research questions are restated and answered here. This is followed by a discussion of the findings that resulted from the analysis for each question as part of the study. The research questions are thus categorized into the parts of the study in which they are applicable:

Study Part I:

Research Question 1: Has the number and availability of ADPA programs increased over time?

Research Question 2: Are Late Adopters more likely to continue ADPA programs than Early Adopters?

Research Question 3: Have ADPA programs historically been conducted primarily by community colleges?

Study Part II:

Research Question 4: Do demographic variables help to explain the current diffusion of two-year Public Administration programs?

Study Part III:

Research Question 5: Do community colleges provide more sub-baccalaureate educational programs than all other types of colleges and universities?

Study Part I

Study Part I addresses Research questions 1 through 3, which are the longitudinal portion of the study. In this part, ADPA programs for the academic

years of 1983 through 2013 comprise the study period, and aspects such as ADPA program availability, longevity in relation to time of adoption, and institutional type were addressed.

Research Question 1

Has the number and availability of ADPA programs increased over time? Yes, the number of ADPA programs is in fact increasing over time. This question was addressed by the testing of hypotheses 1, which states that the diffusion of ADPA programs has not increased over time. The results of the study show that the mean number of ADPA programs per year was 28.55 programs for all years of the study, with the lowest number of programs per year being 15 in 1991, and the highest annual number of programs of 47 in 2012. In the most recent year, 2013, there are 42 programs.

Calculating a five-year rolling average for all years of the study shows an initial average of 30 programs for year five of the study, with the lowest being an average of 17.2 programs in year nine, and the highest being an average of 43.6 programs in 2013, the most current year. By this data, hypotheses 1 is supported since the number of ADPA programs is in fact increasing over time.

Research Question 2

Are Late Adopters more likely to continue ADPA programs than Early Adopters? Yes, institutions that adopted later in the study period have a greater degree of continuance, or longevity, than those that adopted early in the process. This question was addressed by the testing of hypotheses 2, which states that

institutions that adopt ADPA programs earlier ('Innovators' and 'Early Adopters') are more likely to continue ADPA programs than those that adopt later ('Early Majority', 'Late Majority', and 'Laggards'). The analysis showed that those institutions that adopted later in the study period had a greater degree of continuance than those that adopted earlier in the study period, thus disproving H_2.

Rogers (2003) identifies adopter categories in a diffusion study as Innovators, Early Adopters, Early Majority, Late Majority, and Laggards, with the latter category being the last to adopt the diffusion. Rogers' method of determining these categories is to utilize the mean time of adoption (t) and its standard deviation (σ) to divide the study period into categorical periods of time. This general method of determining adopter categories offers numerous advantages to the field of diffusion study. Given a normal distribution of the innovation, Rogers' categorization method is easy to use and presents results that are easily generalizable across studies, and it also allows for categorical predictability in the diffusion of innovations. But, Rogers' widely accepted method of adopter categorization is based on a normal adopter distribution, with percentages of adopters within each adopter category consequently conforming to a predefined percentage of the distribution. Other more complex methods of determining adopter categories have been established, ones that do not necessarily require a normal distribution in the diffusion, but even these depend on the existence of a linear relationship in the data (Mahajan, Muller, & Srivastava, 1990).

Adoption data for the diffusion of ADPA degrees does not follow a normal distribution. The data is significantly skewed, and displays no linear relationship

between the variables. Consequently, this study used the Rogers method of adopter category determination, accepting that the resulting percentage of adopters within each category does not match the predefined percentages found in a normal distribution as prescribed by Rogers (2003).

For the diffusion of the ADPA degree for the study period of 1983 through 2013, analysis of the time variable yielded a standard deviation (σ) of 5.95 and a mean time of diffusion (t) of 16 years. The adopter categories were determined using this data, thus allowing for the determination of the longevity, in median years, of each adopter category during the period of study. Calculated averages of the mean years of continuance for each of the hypotheses 2 categories were 5.09 years for the 'Early' category of adopting institutions and 6.41 years for the 'Later' category. These results are displayed in Table 14, clearly showing that those institutions that adopted later in the study period have a greater degree of continuance, or longevity, than those that adopted early in the process, thus refuting hypotheses 2.

Table 14:

ADPA Program Longevity by Adopter Category.

Adopter Category:	N	Longevity, in Mean Years of Continuance:	H_2 Categorization:	H_2 Categorization Mean:
Innovator	59	5.71 Years	Early	—
Early Adopter	19	4.47 Years	Early	5.09 Years
Early Majority	23	8.52 Years	Later	—
Late Majority	21	6.86 Years	Later	—
Laggard	32	3.84 Years	Later	6.41 Years

Research Question 3

Have ADPA programs historically been conducted primarily by community colleges? Yes, more ADPA programs (57.1%) have historically been located at community colleges than at all other types of colleges and universities. This question was addressed by the testing of hypotheses 3, which states that more ADPA programs are historically located at community colleges than at all other types of colleges and universities. Study results showed that there were a total of 154 adopting institutions over the entirety of the study period. Of this total, 88 (57.1%) were community colleges. Of the other types of colleges and universities, 22 (14.3%) were public four-year schools, 4 (2.6%) were privately controlled two-year schools, and 40 (26.0%) were privately controlled four-year schools. This data thus supports hypotheses 3. Additional analysis of institution type, which examined all ADPA institutions regardless of control type, shows that 59.5% were two-year institutions and 40.5% were four-year institutions.

Study Part II

Study Part II identifies correlations between the institutions that most recently have conducted active ADPA programs and a variety of demographic variables that measure the innovativeness of those institutions. This part of the study addressed research question 4.

Research Question 4

Do demographic variables help to explain the current diffusion of two-year Public Administration programs? This question was addressed by the testing of

hypotheses 4 through 7, which together comprised Study Part II. While the majority of ADPA programs are not located in close proximity (within 50 miles) to their nearest MSA, those that are closer to an MSA are still more likely to adopt an ADPA program. Institutions that experience greater increase in minority populations are somewhat more likely to adopt ADPA programs, while changes in median income had no affect on the likelihood of an institution to adopt an ADPA program. Overall, the results show that institutions that operate in an environment of greater population change are somewhat more likely to adopt ADPA programs, but institutions that operate in an environment of greater change in general wealth indicators are not. Distance of an institution to the nearest Certified Public Manager (CPM) was not statistically significant. Institutions in counties with a lower level of minority populations and also that are closer in distance to state capitals are somewhat more likely to adopt ADPA programs. Institutions in states with a higher proportion of public employees within their population are much more likely to adopt ADPA programs.

All degree-granting postsecondary institutions in the U.S. were selected for this analysis, which provided a universe of 4,974 higher education institutions (IPEDS, 2015). Of this total, there were a total of 42 institutions located in a total of 23 states that had active ADPA programs in the 2012-13 academic year. ADPA programs during this academic year were analyzed in this part of the study to identify correlations between leading demographic data and the institutions that currently conduct these programs.

Metropolitan Statistical Areas (MSA's) are geographical areas with a population of at least 250,000 that are used in conjunction with the reporting of census data (OMB, 2010). An assumption can be made that due to these population magnitudes and the increased level of associated governmental presence within an MSA, that there should therefore be ADPA programs within close proximity to these areas. Following on that assumption, hypotheses 4 states that ADPA programs are predominantly located in or in close proximity to large metropolitan areas. To test hypotheses 4, the Metropolitan Statistical Area (MSA) that was nearest to each individual ADPA program was identified using U.S. Census Bureau (2015a) data. Once the nearest MSA for each program was identified, the distance between the ADPA program institution and the ZIP code nearest the center of the MSA was calculated. This allowed for the calculation of the distance between each ADPA program and the center of its nearest MSA. Doing so resulted in a mean distance for all ADPA programs of 91.24 miles to its nearest MSA. Using a distance of 50 miles as a standard, study results showed that only 42.86% of all ADPA programs are located near, within 50 miles, of their nearest MSA. Likewise, the results show that 57.14% of these programs are at a distance of greater than 50 miles to the nearest MSA. These results therefore refuted hypotheses 4.

Hypothesis 5 states that institutions that operate in an environment of greater change and heterogeneity are more likely to adopt ADPA programs. To test hypotheses 5, the dependent variable State Case Rate ('SCR') was computed using the following formula:

$$SCR = \frac{P}{T}(100)$$

Where: "SCR" = The State Case Rate for each state.

"P" = The number of two-year colleges that operate ADPA programs in a state.

"T" = The total number of two-year colleges in that state.

"100" = A base rate multiplier as is commonly used in epidemiological studies.

Data on the number of colleges and universities was obtained from IPEDS (2015). The calculated SCR for the 23 states that had an active ADPA program during the 2012-13 academic year ranged from a low of 0.391 for the state of California to a high of 9.091 for the state of Wyoming. With the SCR as the dependent variable, SPSS was used to compute Pearson's coefficient correlations between the SCR and a variety of independent variables to test hypotheses 5 through 7.

The first of these to be tested was H_5, which focused on correlation between the SCR and independent variables related to heterogeneity and change in the environment of the educational institutions. These independent variables were the change in the minority population (U.S. Census Bureau, 2015b) and the change in the median income of both the host county and the host state (U.S. Census Bureau, 2015c, 2015d) of the ADPA programs. The results of the correlation computations from SPSS are shown in Table 15.

Table 15:

Correlation to Change Variables

		SCR	County Minority Pop Change	State Minority Pop Change	County Median Income Change	State Median Income Change
SCR	Pearson Correlation	1	.307*	.372*	0.072	0.196
	Sig. (2-tailed)		0.048	0.015	0.651	0.213
	N	42	42	42	42	42
County Minority Pop Change	Pearson Correlation	.307*	1	.547**	-0.015	0.063
	Sig. (2-tailed)	0.048		0	0.925	0.691
	N	42	42	42	42	42
State Minority Pop Change	Pearson Correlation	.372*	.547**	1	-0.055	-0.017
	Sig. (2-tailed)	0.015	0		0.73	0.916
	N	42	42	42	42	42
County Median Income Change	Pearson Correlation	0.072	-0.015	-0.055	1	.611**
	Sig. (2-tailed)	0.651	0.925	0.73		0
	N	42	42	42	42	42
State Median Income Change	Pearson Correlation	0.196	0.063	-0.017	.611**	1
	Sig. (2-tailed)	0.213	0.691	0.916	0	
	N	42	42	42	42	42

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

Indicators of the change in the minority population from 2000 to 2013 showed a moderate correlation for both counties (0.307) and states (0.372) to the state case rate that was statistically significant at the 0.05 level. Indicators of the change in median income during this same period at both the county and state levels during this same period a showed no statistically significant correlations to the state case rate. This indicates that those institutions that experience greater increase in minority populations are somewhat more likely to adopt ADPA programs, while changes in median income had no affect on the likelihood of an institution to adopt an ADPA program.

Overall, these results show that institutions that operate in an environment of greater population change are somewhat more likely to adopt ADPA programs, but

institutions that operate in an environment of greater change in general wealth indicators are not. These results partially support hypotheses 5.

The State Case Rate (SCR) was used again as the dependent variable to test Hypotheses 6, which states that institutions with greater wealth are more likely to adopt ADPA programs. The independent variables used were the net assets of the ADPA institution and the median income of both the host county and the host state (U.S. Census Bureau, 2015d) of the ADPA programs. The results of the institutional wealth correlation computations from SPSS showed no statistically significant correlations to the state case rate, thus disproving hypotheses 6.

The State Case Rate (SCR) was also used as the dependent variable to test Hypotheses 7, which states that institutions operating in an environment of greater demand for ADPA programs are more likely to adopt ADPA programs. The independent variables used for this portion of the study all relate to the potential demand for ADPA programs, and included the secondary school population in the host county (ADOE, 2015; Navajo County, 2015; NCES, 2015; NDOE, 2015), the distance between the ADPA institution and the capital of the host state, the distance between the ADPA institution and the nearest Metropolitan Statistical Area (MSA) (U.S. Census Bureau, 2015a), the distance between the ADPA institution and the nearest Certified Public Manager (CPM) program (NCPMC, 2015), and a count of the number of public employees per 10,000 population of the host state (BLS, 2015). The results of the correlation computations from SPSS output are shown in Table 16.

Table 16:

Correlations to ADPA Demand Variables

		SCR	County Secondary School Pop	Distance to State Capital	MSA Distance	CPM Distance	Public EE/10K State Pop
SCR	Pearson Correlation	1	-.347*	-.362*	.380*	-0.037	.508**
	Sig. (2-tailed)		0.024	0.019	0.013	0.815	0.001
	N	42	42	42	42	42	42
County Secondary School Pop	Pearson Correlation	-.347*	1	.634**	-.443**	-0.171	-.348*
	Sig. (2-tailed)	0.024		0	0.003	0.279	0.024
	N	42	42	42	42	42	42
Distance to State Capital	Pearson Correlation	-.362*	.634**	1	-0.022	0.253	-.335*
	Sig. (2-tailed)	0.019	0		0.889	0.107	0.03
	N	42	42	42	42	42	42
MSA Distance	Pearson Correlation	.380*	-.443**	-0.022	1	.532**	.309*
	Sig. (2-tailed)	0.013	0.003	0.889		0	0.047
	N	42	42	42	42	42	42
CPM Distance	Pearson Correlation	-0.037	-0.171	0.253	.532**	1	0.087
	Sig. (2-tailed)	0.815	0.279	0.107	0		0.583
	N	42	42	42	42	42	42
PE/10K State Pop	Pearson Correlation	.508**	-.348*	-.335*	.309*	0.087	1
	Sig. (2-tailed)	0.001	0.024	0.03	0.047	0.583	
	N	42	42	42	42	42	42

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

Study results showed that the correlation between the distance of an institution to the nearest Certified Public Manager (CPM) programs and the state case rate was not statistically significant. County secondary school population shows a moderate negative correlation (-0.347) to the dependent variable SCR that is statistically significant at the 0.05 level. This indicates that institutions in counties with a lower level of minority populations are somewhat more likely to adopt ADPA programs. The distance of the institution to the capital of its host state showed a negative correlation (-0.362) to the SCR that is statistically significant at the 0.05 level, indicating that institutions that are closer in distance to state capitals are somewhat more likely to adopt ADPA programs.

The distance from the ADPA institution to the nearest Metropolitan Statistical Area (MSA) showed a positive correlation (0.380) to the SCR that is statistically significant at the 0.05 level. This indicates that institutions that are

located nearer to areas with a population of at least 250,000 are somewhat more likely to adopt ADPA programs. It is notable that the results displayed earlier for hypotheses 4 show that a majority of ADPA programs are located at distances greater than 50 miles to the nearest MSA, and yet here it is shown that the distance to the nearest MSA still correlates to the innovativeness of institutions to adopt ADPA programs.

The number of public employees per 10,000 residents of the state showed a strong positive correlation (0.508) to the SCR that is statistically significant at the 0.01 level. This indicates that institutions in states with a higher proportion of public employees within their population are much more likely to adopt ADPA programs.

Study Part III

Study part III identifies the portion of sub-baccalaureate educational programs for public administration that are provided by community colleges as opposed to other types of colleges and universities. This final part of the study addressed research question 5.

Research Question 5

Do community colleges provide more public administration undergraduate educational programs than other types of colleges and universities? Yes, community colleges did in fact provide the majority (57.14%) of ADPA programs, and also the majority (61.76%) of all types of certificate programs during the 2013 academic year. This question was addressed by the testing of hypotheses 8, which stated that

community colleges provide more sub-baccalaureate educational programs for public administration than do any other types of colleges and universities.

The study made the assumption that a community college is a publicly controlled two-year postsecondary institution. Sub-baccalaureate education programs include associate degree programs and certificate programs. The data was examined relating to all available types and quantities of undergraduate education provided for public administration by community colleges for the 2012-13 academic year, which included all sub-baccalaureate programs in the data.

The findings show that community colleges did in fact provide the majority (57.14%) of ADPA programs, and also the majority (61.76%) of all types of certificate programs during the 2012-13 academic year. Overall, community colleges provided 59.2% of all sub-baccalaureate education programs for public administration during the academic year examined. This data supports H_8. While the data also showed that community colleges provided the majority of sub-baccalaureate programs, it also showed that less than 18% of the total of all undergraduate programs for public administration were provided by community colleges during the 2012-13 academic year. This is to be expected though, as community colleges do not generally offer bachelor's degree programs, which are the majority (70.43%) of all undergraduate programs for public administration.

Limitations of the Study

The first and foremost limitation of this study relates to the time period that could be studied for the longitudinal analysis of ADPA programs. Due to two

different but related factors, the study period started necessarily with the 1982-83 academic year. The first factor that necessitated this circumstance is the non-existence of data showing ADPA program completions, degree's conferred, or program locations prior to 1970. The second factor that necessitated this circumstance is the method by which ADPA programs and completions were reported prior to the 1982-83 academic year. Under the Higher Education General Information System (HEGIS) system prior to 1983, ADPA degrees, and thus programs, were reported under the category of *Public Administration and Management Technologies*, which also unfortunately included other associate degree programs that are not specifically ADPA programs. To have included this earlier HEGIS data in the study would have significantly impeded the accuracy of the results of this study. For this reason, the earlier HEGIS data was excluded, thereby limiting the study to the period of 1983 through 2013 for the longitudinal analysis.

The second limitation of the study relates to how ADPA programs were counted. This study utilized secondary data originating from the National Center for Education Statistics (NCES) to analyze the diffusion of ADPA programs within the United States from 1983 to 2013. The data set was derived from the Integrated Postsecondary Education Data System (IPEDS) for the years of 1983 to 2013. It was not until the 2011-2012 academic year that program *offerings* were first reported in IPEDS, but even this data is based on degrees *conferred*. This left the recorded counts of degrees conferred as the only method in which to determine where active programs were conducted for any given discipline. Therefore, a limitation of this

study is that the available data conveys only those programs from which there were degrees conferred for each year. This means that there is a possibility that some programs may have been in operation during the study period that were not reported during any years in which an institution's ADPA program had no degrees conferred. This study therefore assumes that the programs reported in IPEDS for degrees conferred are representative of the only active ADPA programs for each individual academic year's worth of data.

Implications of the Study

This study has implications that apply to both the field of public administration and to public service, generally. The results of this study provide the first longitudinal analysis of Associate Degree in Public Administration (ADPA) programs. The results of the study provide scholars and practitioners of public administration with an immediate source of information on the past quantity and locations of ADPA programs, and characteristics of the institutions that conducted those programs. The study also provides the first contribution to the literature on the innovativeness of institutions that host ADPA programs, with correlations that offer insight on where ADPA programs may or may not exist. Additionally, the study findings indicate that there are no guidelines for ADPA programs, and highlights the need for further research into this issue. If appropriately addressed, such guidelines could possibly lead to increased proliferation of ADPA programs while also ensuring that such program provide the most appropriate curriculum to enrich the field and the public sector.

The study also discusses the process of accreditation for all higher education in the U.S., with emphasis on the applicability of that process to public administration (PA), specifically in comparison to the field of business administration. The particular history examined here discusses how public administration has purposefully chosen to provide accreditation for only those programs that exist at the master's degree level. Potential implications that broader accreditation for PA could hold are that it could first serve to expand and proliferate the field, and in doing so can enhance public servant efficiency at the lower echelons. Secondly, that it may possible serve to remove the 'elitist' stance of the field described by Banas & Emory (1998), or to possibly alleviate concerns such as that raised by Laudicina (2011) that NASPAA has historically been neglectful or even overtly hostile towards undergraduate PA education programs. That concerns such as these exist does not bode well for the field. The potential implications of addressing and resolving these concerns will therefore carry significant implications for the field.

The literature review portion of this study also contributes an analysis of what undergraduate programs are offered for all fields that are related to public service. Scholars may now use the list developed here as an analytical starting point for further research that relates to the study of all public service-related postsecondary educational programs, as well as other sub-sets related to public service education. For educators, the study findings can serve to inform the development of new programs with an emphasis on those institutional characteristics under which such a program may be most likely to succeed.

Undergraduate educational programs for public administration comprised more than one third (34.5%) of all public administration-specific degrees and certificates awarded for the 2012-2013 academic year (IPEDS, 2015). This data shows that undergraduate programs are in fact a significant portion of all available educational programs for the field. And yet, the amount of existing scholarship on these programs is surprisingly small, particularly that relating to Associate Degree in Public Administration (ADPA) programs. It is therefore in the best interest of the field to pursue further research of these undergraduate programs. This study has addressed at least a part of that need, the 'hole' in the literature on PA undergraduate education, and here documents a need for further study that could possibly carry great implications for the future structure of education for the field.

Recommendations for further Study

The results of this study provide the seed for further research in a variety of areas related to the field of public administration. Potential avenues of further research identified here relate to the need to identify any correlations between public events such as the 9/11 terrorist attacks and the proliferation of educational programs for public administration and that of other public safety-related fields.

Other recommended areas for further research identified here are the need to study public organizations in order to quantify just what the true need for public administration undergraduate education is, and also to identify what effects the proliferation of bachelor's degree programs at community colleges might have on the field. In the 19 years of this study that lead up to the events of 9/11, there were an

average of 23.53 ADPA programs per year. In the years since, beginning with the 2001-02 academic year, there have been an average of 36.5 ADPA programs per year. This is a 35.5%increase in the average number of ADPA programs per year in the years since 9/11. Further research should thus seek to identify correlations between the events of 9/11 and any increases in the quantity of educational programs available for public administration.

Similarly, another area of further research emanating from the results of this study relates to the number of educational programs available for public safety-related fields, specifically, to those within CIP Code Group 43, "Homeland Security, Law Enforcement, Firefighting and Relate Protective Services". This single group of public service-related fields had 5,762 undergraduate programs available during the 2012-13 academic year, accounting for nearly two thirds (62.57%) of all available public service-related undergraduate programs. With the events that have transpired since the attacks on the World Trade Center in September of 2001, have these fields expanded disproportionally to other public service-related fields? What effect do world events have on the growth of public service-related fields, and thus the educational programs that support those fields? Further research should seek to answer these questions.

Another potential area of further research should focus on identifying just what the true need for public administration undergraduate education is. Generally, what is happening to public service education and why is it happening? This analysis should be based on a determination of the actual quantity and types of positions

within public service. This analysis should also include an accounting of what educational requirements are currently required for each of these positions. Through this research, those positions for which there is no currently no specific degree or certificate offered can be identified. Consequently, the research would ultimately determine the appropriateness and adequacy of current educational requirements for public positions, and, would specifically identify those positions that would benefit from an ADPA degree.

This study has identified the entire spectrum of sub-baccalaureate postsecondary educational programs that are currently available for public administration, and what types of institutions conduct those programs. This spectrum is changing though, as many community colleges are now incorporating bachelor's degree programs into their curriculum. One additional area of further research should address what effects this might change in venue may have on the field of public administration. Does the result of this change actually increase the total number of bachelor's degree programs that are available to the field? Conversely, will this change cause four-year institutions to decrease the quantity of public administration bachelor's degree programs that they currently offer? Furthermore, the study finding that most ADPA programs are not located within 50 miles of their nearest Metropolitan Statistical Areas (MSA's) is significant to addressing the overall need for undergraduate education for public administration. This finding leads to speculation as to why ADPA programs are not located mostly within our most highly populated areas. Can we assume that there has been a suppression of supply of

ADPA programs within the MSA's due to the presence of Bachelor of Public Administration (BPA) or Master of Public Administration (MPA) programs? Further research should address this question to determine if BPA and/or MPA programs are, in effect, squeezing ADPA programs out of our more highly populated areas.

An additional point to address in analysis of ADPA program proliferation relates to the cumulative adoption rate of these programs in comparison the number of new programs. As can be seen in Figure 38, while the overall existing quantity of ADPA programs has shown an overall increase over the last 27 years, the number of new programs per year has, with few exceptions, been relatively stagnant. Within the overall research umbrella of the actual need for undergraduate public administration education addressed above, further research should address the question as to why few new programs are being implemented,

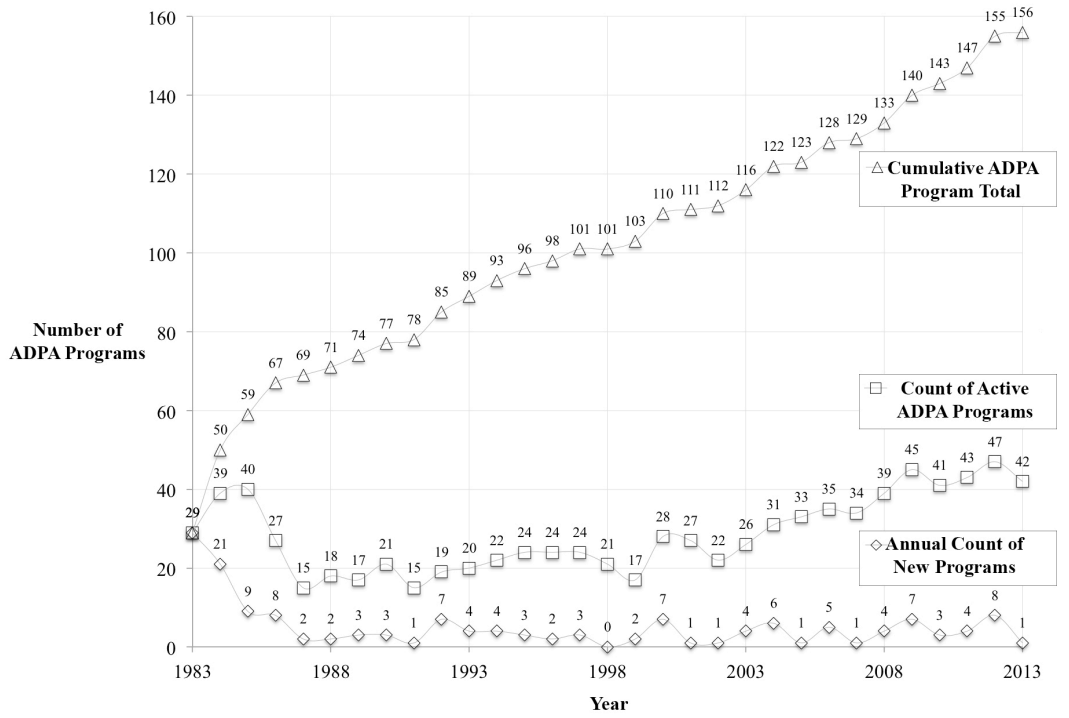

Figure 38: Cumulative ADPA Program Adoption, 1983 – 2013
Source: (HEGIS, 1983; IPEDS, 2015)

This study has examined the process of accreditation for all higher education institutions and programs in the U.S., with emphasis on the applicability of accreditation for public administration. The particular history examined here discusses how public administration has purposefully not provided accreditation at the institutional level nor for any degree programs other than those that at the master's degree level. This relates directly to the concern raised by Banas & Emory (1998:226) when they asked why we can "teach business to students at all collegiate levels but consider public administration education legitimate only at the graduate level?"

To emphasize the current state of the point made by Banas and Emory, the Association to Advance Collegiate Schools of Business. (AACSB) accredits the actual institution where degree programs in business administration are conducted, and thus all levels of degree programs at those institutions (AACSB, 2012). What effect has this had on the field of public administration? One aspect of future research related to this could explore the question of why the field of public administration is only concerned with accreditation at the master's degree level. Does the current stance of NASPAA have any significant effects on what can be considered the method by which the field of public administration markets itself to the rest of the world? What will the long-term effects be on the field if this limited accreditation policy of NASPAA continues unchanged? While correlation between accreditation process and program quantity remains to be proven, there were 737 Associate Degree in Business Administration (ADBA) programs available specifically at community colleges in the 2012-2013 academic year, while there were only 24 ADPA programs available during that same year at those very same institutions (IPEDS, 2015). Further research should examine these questions from a perspective that considers the field as a whole, and not just at the managerial level. Research into these could have significant effects on the long-term viability of the field of public administration.

Lastly, the recommendation is made to research the effect that *guidelines* for ADPA programs might if they were to be developed and implemented. Klay and Maxwell (2009) found that there are, at present, no currently available guidelines for

ADPA programs. NASPAA is the sole accrediting body for public administration degree programs, and the *Guidelines for Baccalaureate Degree Programs in Public Affairs/Administration* (NASPAA, 1997) is the only current document in existence that relates to undergraduate education in Public Affairs/Administration. NASPAA's (1997) *Guidelines* do mention two-year degree students and the transfer of associate-level courses, but the document is specifically focused on baccalaureate degree programs, while any mention of associate degree programs is almost completely nonexistent. The 1997 *Guidelines* document also mentions training people for higher echelon positions in public service, while any mention of the training people for the lower echelons of public service is noticeably absent. This appears to distance NASPAA from any notion of supporting two-year degree programs. Additionally, detailed reading of the document shows NASPAA in favor of some sort of transfer policy to be developed "in cooperation with and be fully understood by" (p. 3) community and junior colleges, yet provides nothing for guidance on how to actually develop such a policy. Further research into this subject would be beneficial to the field, especially if it were to foster the development of guidelines for ADPA programs.

Conclusion

Previous scholars have called for the increased utilization of community colleges in the education of public servants (Banas & Emory, 1998), and posited a great need for more education to be available for those serving in the lower-echelons of public administration (Klay & Maxwell, 2009). There are now nearly 22.5 million

public servants in the United States (U.S. Census Bureau, 2012). Following upon a comparison first made by Klay & Maxwell (2009), if we assume that only 1 in 10 of these needs even the most basic knowledge of public administration, then there are 2.2 million public servants who could benefit from completing an ADPA program. There are now only 8 more ADPA programs in existence than there were when Klay and Maxwell first studied ADPA programs, and consequently identified the significant need for mass education of the field. This is an increase of only 19% in the amount of available ADPA programs over a period of six years, far short of what the authors would consider presumably appropriate to address their identified need.

This research has shown a history of ADPA programs that was missing from the literature. The results of the study provide scholars with an immediate source of information on the past quantity and locations of ADPA programs, and characteristics of the institutions that conducted those programs. By noting both the past diffusion and current availability of ADPA programs, scholars can begin to develop a greater tolerance of these programs and how they may contribute to the effectiveness of the field of public administration.

In regards to past calls for the proliferation of ADPA programs and an increase in the utilization of community colleges by the field, perhaps the data provided here can serve as a catalyst to promote more of an understanding of the value of ADPA programs to lower-echelon public servants, and thus foster an appropriate response from scholars of public administration. Whether such a response comes alone or perhaps in conjunction with a comprehensive analysis of

the true undergraduate education needs of the field, it would be in the best interest of the field that further research be conducted in undergraduate programs, regardless of the specific focus.

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APPENDICES

APPENDIX A

TABLES OF INSTITUTIONS THAT CONFERRED ASSOCIATE DEGREES IN PUBLIC ADMINISTRATION, BY ACADEMIC YEAR, 1983 TO 2013

The tables included in this appendix are for each year that was analyzed during the study period. Data sources include the Higher Education General Information Survey (HEGIS) for 1983 and the Integrated Postsecondary Education Data System (IPEDS) for all other subsequent years of the study.

The total number of institutions that conferred associate degrees in public administration is shown for each individual year of the study. The name and location of each individual postsecondary educational institution is shown along with the type of control of the institution, whether public or private. Lastly, the tables show whether each individual institution was a two-year or four-year institution.

Table A1

Institutions that Conferred Associate Degrees in Public Administration, CIP Code 440401, during the 1982-1983 Academic Year. Source: HEGIS (1983)

N	Institution Name	City	State	Institutional Control	Institution Type
1	Glendale Community College	Glendale	AZ	Public	Two-Year
2	Pima Community College	Tuscon	AZ	Public	Two-Year
3	Compton Community College	Compton	CA	Public	Two-Year
4	El Camino College	Torrance	CA	Public	Two-Year
5	Fresno City College	Fresno	CA	Public	Two-Year
6	Golden Gate University	San Fransicso	CA	Private	Four-Year
7	Los Angeles Harbor College	Wilmington	CA	Public	Two-Year
8	College of the Siskiyous	Weed	CA	Public	Two-Year
9	Community College of Denver, Red Rocks Campus	Golden	CO	Public	Two-Year
10	University of the District of Columbia	Washington	DC	Public	Four-Year
11	Macon Junior College	Macon	GA	Public	Two-Year
12	Middle Georgia College	Cochran	GA	Public	Two-Year
13	Kansas City Kansas Community College	Kansas City	KS	Public	Two-Year
14	Community College of Baltimore	Baltimore	MD	Public	Two-Year
15	Ferris State College	Big Rapids	MI	Public	Four-Year
16	Southwestern Michigan College	Dowagiac	MI	Public	Two-Year
17	Washtenaw Community College	Ann Arbor	MI	Public	Two-Year
18	County College of Morris	Randolph	NJ	Public	Two-Year
19	Northen New Mexico Community College	El Rito	NM	Public	Two-Year
20	Columbus Technical Institute	Columbus	OH	Public	Two-Year
21	Franklin University	Columbus	OH	Private	Four-Year
22	Sinclair Community College	Dayton	OH	Public	Two-Year
23	Lackawanna Junior College	Scranton	PA	Public	Two-Year
24	Community College of Philadelphia	Philadelphia	PA	Public	Two-Year
25	University of Scranton	Scranton	PA	Private	Four-Year
26	Roger Williams College, Main Campus	Bristol	RI	Private	Four-Year
27	Southern Vermont College	Bennington	VT	Private	Four-Year
28	Ferrum College	Ferrum	VA	Private	Four-Year
29	Everett Community College	Everett	WA	Public	Two-Year

Table A2

Institutions that Conferred Associate Degrees in Public Administration, CIP Code 440401, during the 1983-1984 Academic Year. Source: IPEDS (2015)

N	Institution Name	City	State	Institutional Control	Institution Type
1	Southern Union State Junior College	Wadley	AL	Public	Two-Year
2	Pima Community College	Tuscon	AZ	Public	Two-Year
3	Chabot College	Hayeard	CA	Private	Two-Year
4	Fresno City College	Fresno	CA	Public	Two-Year
5	Golden Gate University	San Fransicso	CA	Private	Four-Year
6	Los Angeles Harbor College	Wilmington	CA	Public	Two-Year
7	College of the Redwoods	Eureka	CA	Public	Two-Year
8	University of the District of Columbia	Washington	DC	Public	Four-Year
9	Middle Georgia College	Cochran	GA	Public	Two-Year
10	Kansas City Kansas Community College	Kansas City	KS	Public	Two-Year
11	Community College of Baltimore	Baltimore	MD	Public	Two-Year
12	Essex Community College	Baltimore County	MD	Public	Two-Year
13	Madonna College	Livonia	MI	Private	Four-Year
14	Washtenaw Community College	Ann Arbor	MI	Public	Two-Year
15	County College of Morris	Randolph	NJ	Public	Two-Year
16	Hudson County Community College	Jersey City	NJ	Public	Two-Year
17	Northen New Mexico Community College	El Rito	NM	Public	Two-Year
18	Corning Community College	Corning	NY	Public	Two-Year
19	CUNY New York City Tech College	Brooklyn	NY	Public	Four-Year
20	Herkimer County Community College	Herkimer	NY	Public	Two-Year
21	Hudson Valley Community College	Troy	NY	Public	Two-Year
22	Jamestown Community College	Jamestown	NY	Public	Two-Year
23	Mohawk Valley Community College	Utica	NY	Public	Two-Year
24	Onandaga Community College	Syracuse	NY	Public	Two-Year
25	Rockland Community College	Suffen	NY	Public	Two-Year
26	SUNY Agricultural & Technical College Alfred	Alfred	NY	Public	Two-Year
27	Tompkins-Cortland Community College	Dryden	NY	Public	Two-Year
28	Westchester Community College	Valhalla	NY	Public	Two-Year
29	Columbus Technical Institute	Columbus	OH	Public	Two-Year
30	Franklin University	Columbus	OH	Private	Four-Year
31	Sinclair Community College	Dayton	OH	Public	Two-Year
32	Rose State College	Midwest City	OK	Public	Two-Year
33	Lackawanna Junior College	Scranton	PA	Private	Two-Year
34	Community College of Philadehphia	Philadehphia	PA	Public	Two-Year
35	Reading Area Community College	Reading	PA	Public	Two-Year
36	Roger Williams College, Main Campus	Bristol	RI	Private	Four-Year
37	Lee College	Baytown	TX	Public	Two-Year
38	Ferrum College	Ferrum	VA	Private	Four-Year
39	Community College of Vermont	Waterbury	VT	Public	Two-Year

Table A3

Institutions that Conferred Associate Degrees in Public Administration, CIP Code 440401, during the 1984-1985 Academic Year. Source: IPEDS (2015)

N	Institution Name	City	State	Institutional Control	Institution Type
1	Pima Community College	Tuscon	AZ	Public	Two-Year
2	Chabot College	Hayeard	CA	Private	Two-Year
3	Fresno City College	Fresno	CA	Public	Two-Year
4	Golden Gate University	San Fransicso	CA	Private	Four-Year
5	Los Angeles Harbor College	Wilmington	CA	Public	Two-Year
6	College of the Redwoods	Eureka	CA	Public	Two-Year
7	Red Rocks Community College	Golden	CO	Public	Two-Year
8	Macon Junior College	Macon	GA	Public	Two-Year
9	Middle Georgia College	Cochran	GA	Public	Two-Year
10	Honolulu Community College	Honolulu	HI	Public	Two-Year
11	Kansas City Kansas Community College	Kansas City	KS	Public	Two-Year
12	Kentucky State University	Frankfort	KY	Public	Four-Year
13	Dean Junior College	Franklin	MA	Private	Two-Year
14	Washtenaw Community College	Ann Arbor	MI	Public	Two-Year
15	Franklin Pierce College	Rindge	NH	Private	Four-Year
16	County College of Morris	Randolph	NJ	Public	Two-Year
17	Hudson County Community College	Jersey City	NJ	Public	Two-Year
18	Northen New Mexico Community College	El Rito	NM	Public	Two-Year
19	Corning Community College	Corning	NY	Public	Two-Year
20	CUNY New York City Tech College	Brooklyn	NY	Public	Four-Year
21	Hudson Valley Community College	Troy	NY	Public	Two-Year
22	Jamestown Community College	Jamestown	NY	Public	Two-Year
23	Mohawk Valley Community College	Utica	NY	Public	Two-Year
24	Monroe Community College	Rochester	NY	Public	Two-Year
25	Onandaga Community College	Syracuse	NY	Public	Two-Year
26	Rockland Community College	Suffen	NY	Public	Two-Year
27	SUNY Agricultural & Technical College Alfred	Alfred	NY	Public	Two-Year
28	Tompkins-Cortland Community College	Dryden	NY	Public	Two-Year
29	Westchester Community College	Valhalla	NY	Public	Two-Year
30	Fayetteville Technical Institute	Fayetteville	NC	Public	Two-Year
31	Columbus Technical Institute	Columbus	OH	Public	Two-Year
32	Dyke College	Cleveland	OH	Private	Two-Year
33	Franklin University	Columbus	OH	Private	Four-Year
34	Sinclair Community College	Dayton	OH	Public	Two-Year
35	Rose State College	Midwest City	OK	Public	Two-Year
36	Community College of Philadelphia	Philadelphia	PA	Public	Two-Year
37	University of Scranton	Scranton	PA	Private	Four-Year
38	Austin Community College	Austin	TX	Public	Two-Year
39	San Antonio College	San Antonio	TX	Public	Two-Year
40	Ferrum College	Ferrum	VA	Private	Four-Year

Table A4

Institutions that Conferred Associate Degrees in Public Administration, CIP Code 440401, during the 1985-1986 Academic Year. Source: IPEDS (2015)

N	Institution Name	City	State	Institutional Control	Institution Type
1	Pima Community College	Tuscon	AZ	Public	Two-Year
2	American River College	Sacramento	CA	Public	Two-Year
3	Butte College	Oroville	CA	Public	Two-Year
4	Compton Community College	Compton	CA	Public	Two-Year
5	Fresno City College	Fresno	CA	Public	Two-Year
6	Golden Gate University	San Fransicso	CA	Private	Four-Year
7	Palomar College	San Marcos	CA	Public	Two-Year
8	San Diego City College	San Diego	CA	Public	Two-Year
9	Ventura College	Ventura	CA	Public	Two-Year
10	Red Rocks Community College	Golden	CO	Public	Two-Year
11	University of District of Columbia	Washington	DC	Public	Four-Year
12	Middle Georgia College	Cochran	GA	Public	Two-Year
13	Kentucky State University	Frankfort	KY	Public	Four-Year
14	Siena Heights College	Adrian	MI	Private	Four-Year
15	Washtenaw Community College	Ann Arbor	MI	Public	Two-Year
16	Franklin Pierce College	Rindge	NH	Private	Four-Year
17	Hudson County Community College	Jersey City	NJ	Public	Two-Year
18	Santa Fe Community College	Santa Fe	NM	Public	Two-Year
19	Columbus Tehnical Institute	Columbus	OH	Public	Two-Year
20	Franklin University	Columbus	OH	Private	Four-Year
21	Rose State College	Midwest City	OK	Public	Two-Year
22	Community College of Philadelphia	Philadelphia	PA	Public	Two-Year
23	Reading Area Community College	Reading	PA	Public	Two-Year
24	Lee College	Baytown	TX	Public	Two-Year
25	San Antonio College	San Antonio	TX	Public	Two-Year
26	Laramie County Community College	Cheyenne	WY	Public	Two-Year
27	Southern Union State Junior College	Wadley	AL	Public	Two-Year

Table A5

Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401 during the 1986-1987 Academic Year. Source: IPEDS (2015)

N	Institution Name	City	State	Institutional Control	Institution Type
1	Pima Community College	Tuscon	AZ	Public	Two-Year
2	Golden Gate University	San Fransicso	CA	Private	Four-Year
3	Los Angeles Harbor College	Wilmington	CA	Public	Two-Year
4	Palomar College	San Marcos	CA	Public	Two-Year
5	University of District of Columbia	Washington	DC	Public	Four-Year
6	Tallahassee Community College	Tallahassee	FL	Public	Two-Year
7	Middle Georgia College	Cochran	GA	Public	Two-Year
8	Franklin Pierce College	Rindge	NH	Private	Four-Year
9	Columbus Tehnical Institute	Columbus	OH	Public	Two-Year
10	Franklin University	Columbus	OH	Private	Four-Year
11	Community College of Philadelphia	Philadelphia	PA	Public	Two-Year
12	University of Scranton	Scranton	PA	Private	Four-Year
13	Roger Williams College	Bristol	RI	Private	Four-Year
14	San Antonio College	San Antonio	TX	Public	Two-Year
15	Laramie County Community College	Cheyenne	WY	Public	Two-Year

Table A6

Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 1987-1988 Academic Year. Source: IPEDS (2015)

N	Institution Name	City	State	Institutional Control	Institution Type
1	Pima Community College	Tuscon	AZ	Public	Two-Year
2	Bakersfield College	Bakersfield	CA	Public	Two-Year
3	Fresno City College	Fresno	CA	Public	Two-Year
4	Compton Community College	Compton	CA	Public	Two-Year
5	Southeastern University	Washington	DC	Private	Four-Year
6	Tallahassee Community College	Tallahassee	FL	Public	Two-Year
7	Middle Georgia College	Cochran	GA	Public	Two-Year
8	Kentucky State University	Frankfort	KY	Public	Four-Year
9	Community College of Baltimore	Baltimore	MD	Public	Two-Year
10	Franklin Pierce College	Rindge	NH	Private	Four-Year
11	Hudson County Community College	Jersey City	NJ	Public	Two-Year
12	County College of Morris	Randolph	NJ	Public	Two-Year
13	Fort Bethold Community College	New Town	ND	Public	Two-Year
14	Franklin University	Columbus	OH	Private	Four-Year
15	Columbus Tehnical Institute	Columbus	OH	Public	Two-Year
16	Rose State College	Midwest City	OK	Public	Two-Year
17	Community College of Philadelphia	Philadelphia	PA	Public	Two-Year
18	San Antonio College	San Antonio	TX	Public	Two-Year

Table A7

Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 1988-1989 Academic Year. Source: IPEDS (2015)

N	Institution Name	City	State	Institutional Control	Institution Type
1	Pima Community College	Tuscon	AZ	Public	Two-Year
2	Fresno City College	Fresno	CA	Public	Two-Year
3	Imperial Valley College	Imperial	CA	Public	Two-Year
4	University of District of Columbia	Washington	DC	Public	Four-Year
5	Southeastern University	Washington	DC	Private	Four-Year
6	Tallahassee Community College	Tallahassee	FL	Public	Two-Year
7	Macon College	Macon	GA	Public	Two-Year
8	Middle Georgia College	Cochran	GA	Public	Two-Year
9	Ricks College	Rexburg	ID	Private	Two-Year
10	Southwestern Michigan College	Dowagiac	MI	Public	Two-Year
11	County College of Morris	Randolph	NJ	Public	Two-Year
12	Hudson County Community College	Jersey City	NJ	Public	Two-Year
13	Fort Bethold Community College	New Town	ND	Public	Two-Year
14	Franklin University	Columbus	OH	Private	Four-Year
15	Point Park College	Pittsburgh	PA	Private	Four-Year
16	San Antonio College	San Antonio	TX	Public	Two-Year
17	Laramie County Community College	Cheyenne	WY	Public	Two-Year

Table A8

Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 1989-1990 Academic Year. Source: IPEDS (2015)

N	Institution Name	City	State	Institutional Control	Institution Type
1	Pima Community College	Tuscon	AZ	Public	Two-Year
2	Bakersfield College	Bakersfield	CA	Public	Two-Year
3	Fresno City College	Fresno	CA	Public	Two-Year
4	Imperial Valley College	Imperial	CA	Public	Two-Year
5	Palomar College	San Marcos	CA	Public	Two-Year
6	University of District of Columbia	Washington	DC	Public	Four-Year
7	Southeastern University	Washington	DC	Private	Four-Year
8	Macon College	Macon	GA	Public	Two-Year
9	Middle Georgia College	Cochran	GA	Public	Two-Year
10	Ricks College	Rexburg	ID	Private	Two-Year
11	Kentucky State University	Frankfort	KY	Public	Four-Year
12	DelgadoCommunity College	NEW ORLEANS	LA	Public	Two-Year
13	Park College	PARKVILLE	MO	Private	Four-Year
14	County College of Morris	Randolph	NJ	Public	Two-Year
15	Hudson County Community College	Jersey City	NJ	Public	Two-Year
16	College of Santa Fe	Santa Fe	NM	Private	Four-Year
17	Franklin University	Columbus	OH	Private	Four-Year
18	Rose State College	Midwest City	OK	Public	Two-Year
19	Point Park College	Pittsburgh	PA	Private	Four-Year
20	San Antonio College	San Antonio	TX	Public	Two-Year
21	Laramie County Community College	Cheyenne	WY	Public	Two-Year

Table A9

Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 1990-1991 Academic Year. Source: IPEDS (2015)

N	Institution Name	City	State	Institutional Control	Institution Type
1	Pima Community College	Tuscon	AZ	Public	Two-Year
2	Fresno City College	Fresno	CA	Public	Two-Year
3	Palomar College	San Marcos	CA	Public	Two-Year
4	Southeastern University	Washington	DC	Private	Four-Year
5	Kentucky State University	Frankfort	KY	Public	Four-Year
6	Delgado Community College	New Orleans	LA	Public	Two-Year
7	Southern Maine Technical College	South Portland	ME	Public	Two-Year
8	County College of Morris	Randolph	NJ	Public	Two-Year
9	Hudson County Community College	Jersey City	NJ	Public	Two-Year
10	Fort Bethold Community College	New Town	ND	Public	Two-Year
11	Franklin University	Columbus	OH	Private	Four-Year
12	Rose State College	Midwest City	OK	Public	Two-Year
13	Reading Area Community College	Reading	PA	Public	Two-Year
14	San Antonio College	San Antonio	TX	Public	Two-Year
15	Laramie County Community College	Cheyenne	WY	Public	Two-Year

Table A10

Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 1991-1992 Academic Year. Source: IPEDS (2015)

N	Institution Name	City	State	Institutional Control	Institution Type
1	Pima Community College	Tuscon	AZ	Public	Two-Year
2	Rio Salado Community College	Phoenix	AZ	Public	Two-Year
3	Fresno City College	Fresno	CA	Public	Two-Year
4	Imperial Valley College	Imperial	CA	Public	Two-Year
5	San Joaquin Delta College	Stockton	CA	Public	Two-Year
6	Southwestern College	Chula Vista	CA	Public	Two-Year
7	Indiana University-Northwest	Gary	IN	Public	Four-Year
8	Kentucky State University	Frankfort	KY	Public	Four-Year
9	Siena Heights College	Adrian	MI	Private	Four-Year
10	County College of Morris	Randolph	NJ	Public	Two-Year
11	Hudson County Community College	Jersey City	NJ	Public	Two-Year
12	Franklin University	Columbus	OH	Private	Four-Year
13	Rose State College	Midwest City	OK	Public	Two-Year
14	Reading Area Community College	Reading	PA	Public	Two-Year
15	Del Mar College	Corpus Christi	TX	Public	Two-Year
16	Mountain View College	Dallas	TX	Public	Two-Year
17	San Antonio College	San Antonio	TX	Public	Two-Year
18	Tarrant County Junior College District	Fort Worth	TX	Public	Two-Year
19	Laramie County Community College	Cheyenne	WY	Public	Two-Year

Table A11

Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 1992-1993 Academic Year. Source: IPEDS (2015)

N	Institution Name	City	State	Institutional Control	Institution Type
1	Pima Community College	Tuscon	AZ	Public	Two-Year
2	Rio Salado Community College	Phoenix	AZ	Public	Two-Year
3	Imperial Valley College	Imperial	CA	Public	Two-Year
4	San Joaquin Delta College	Stockton	CA	Public	Two-Year
5	Indiana University-Purdue University-Fort Wayne	Fort Wayne	IN	Public	Four-Year
6	Indiana University-Purdue University-Indianapolis	Indianapolis	IN	Public	Four-Year
7	Indiana University-South Bend	South Bend	IN	Public	Four-Year
8	Indiana University-Northwest	Gary	IN	Public	Four-Year
9	County College of Morris	Randolph	NJ	Public	Two-Year
10	Hudson County Community College	Jersey City	NJ	Public	Two-Year
11	Fayetteville Technical Community College	Fayetteville	NC	Public	Two-Year
12	Franklin University	Columbus	OH	Private	Four-Year
13	Rose State College	Midwest City	OK	Public	Two-Year
14	Point Park College	Pittsburgh	PA	Private	Four-Year
15	Del Mar College	Corpus Christi	TX	Public	Two-Year
16	Mountain View College	Dallas	TX	Public	Two-Year
17	San Antonio College	San Antonio	TX	Public	Two-Year
18	Tarrant County Junior College District	Fort Worth	TX	Public	Two-Year
19	Tyler Junior College	Tyler	TX	Public	Two-Year
20	Laramie County Community College	Cheyenne	WY	Public	Two-Year

Table A12

Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 1993-1994 Academic Year. Source: IPEDS (2015)

N	Institution Name	City	State	Institutional Control	Institution Type
1	Pima Community College	Tuscon	AZ	Public	Two-Year
2	Rio Salado Community College	Phoenix	AZ	Public	Two-Year
3	San Joaquin Delta College	Stockton	CA	Public	Two-Year
4	University of District of Columbia	Washington	DC	Public	Four-Year
5	Indiana University-Purdue University-Fort Wayne	Fort Wayne	IN	Public	Four-Year
6	Indiana University-Purdue University-Indianapolis	Indianapolis	IN	Public	Four-Year
7	Indiana University-South Bend	South Bend	IN	Public	Four-Year
8	Indiana University-Northwest	Gary	IN	Public	Four-Year
9	Southwestern Michigan College	Dowagiac	MI	Public	Two-Year
10	County College of Morris	Randolph	NJ	Public	Two-Year
11	Fayetteville Technical Community College	Fayetteville	NC	Public	Two-Year
12	Fort Bethold Community College	New Town	ND	Public	Two-Year
13	Rose State College	Midwest City	OK	Public	Two-Year
14	Mount Aloysius College	Cresson	PA	Private	Four-Year
15	Angelina College	Lufkin	TX	Public	Two-Year
16	Del Mar College	Corpus Christi	TX	Public	Two-Year
17	McLennan Community College	Waco	TX	Public	Two-Year
18	Mountain View College	Dallas	TX	Public	Two-Year
19	Paris Junior College	Paris	TX	Public	Two-Year
20	San Antonio College	San Antonio	TX	Public	Two-Year
21	Tarrant County Junior College District	Fort Worth	TX	Public	Two-Year
22	Laramie County Community College	Cheyenne	WY	Public	Two-Year

Table A13

Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 1994-1995 Academic Year. Source: IPEDS (2015)

N	Institution Name	City	State	Institutional Control	Institution Type
1	Pima Community College	Tuscon	AZ	Public	Two-Year
2	Rio Salado Community College	Phoenix	AZ	Public	Two-Year
3	University of District of Columbia	Washington	DC	Public	Four-Year
4	Keiser College of Technology	Fort Lauderdale	FL	Private	Two-Year
5	Indiana University-Purdue University-Fort Wayne	Fort Wayne	IN	Public	Four-Year
6	Indiana University-Purdue University-Indianapolis	Indianapolis	IN	Public	Four-Year
7	Indiana University-South Bend	South Bend	IN	Public	Four-Year
8	Indiana University-Northwest	Gary	IN	Public	Four-Year
9	Northwestern Michigan College	Traverse City	MI	Public	Two-Year
10	Schoolcraft College	Livonia	MI	Public	Two-Year
11	County College of Morris	Randolph	NJ	Public	Two-Year
12	Hudson County Community College	Jersey City	NJ	Public	Two-Year
13	Fayetteville Technical Community College	Fayetteville	NC	Public	Two-Year
14	Fort Bethold Community College	New Town	ND	Public	Two-Year
15	Franklin University	Columbus	OH	Private	Four-Year
16	Rose State College	Midwest City	OK	Public	Two-Year
17	Mount Aloysius College	Cresson	PA	Private	Four-Year
18	Point Park College	Pittsburgh	PA	Private	Four-Year
19	Reading Area Community College	Reading	PA	Public	Two-Year
20	Angelina College	Lufkin	TX	Public	Two-Year
21	Del Mar College	Corpus Christi	TX	Public	Two-Year
22	Mountain View College	Dallas	TX	Public	Two-Year
23	San Antonio College	San Antonio	TX	Public	Two-Year
24	Tarrant County Junior College District	Fort Worth	TX	Public	Two-Year

Table A14

Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 1995-1996 Academic Year. Source: IPEDS (2015)

N	Institution Name	City	State	Institutional Control	Institution Type
1	Pima Community College	Tuscon	AZ	Public	Two-Year
2	Keiser College of Technology	Fort Lauderdale	FL	Private	Two-Year
3	Okaloosa-Walton Community College	Niceville	FL	Public	Two-Year
4	Indiana University-Purdue University-Indianapolis	Indianapolis	IN	Public	Four-Year
5	Indiana University-South Bend	South Bend	IN	Public	Four-Year
6	Indiana University-Northwest	Gary	IN	Public	Four-Year
7	Kentucky State University	Frankfort	KY	Public	Four-Year
8	Northwestern Michigan College	Traverse City	MI	Public	Two-Year
9	Schoolcraft College	Livonia	MI	Public	Two-Year
10	County College of Morris	Randolph	NJ	Public	Two-Year
11	Hudson County Community College	Jersey City	NJ	Public	Two-Year
12	College of Santa Fe	Santa Fe	NM	Private	Four-Year
13	Fayetteville Technical Community College	Fayetteville	NC	Public	Two-Year
14	Western Piedmont Community College	Morganton	NC	Public	Two-Year
15	Franklin University	Columbus	OH	Private	Four-Year
16	Rose State College	Midwest City	OK	Public	Two-Year
17	Mount Aloysius College	Cresson	PA	Private	Four-Year
18	Reading Area Community College	Reading	PA	Public	Two-Year
19	Roger Williams University	Bristol	RI	Private	Four-Year
20	Del Mar College	Corpus Christi	TX	Public	Two-Year
21	Mountain View College	Dallas	TX	Public	Two-Year
22	San Antonio College	San Antonio	TX	Public	Two-Year
23	Tarrant County Junior College District	Fort Worth	TX	Public	Two-Year
24	Laramie County Community College	Cheyenne	WY	Public	Two-Year

Table A15

Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 1996-1997 Academic Year. Source: IPEDS (2015)

N	Institution Name	City	State	Institutional Control	Institution Type
1	Pima Community College	Tuscon	AZ	Public	Two-Year
2	Okaloosa-Walton Community College	Niceville	FL	Public	Two-Year
3	Macon State College	Macon	GA	Public	Four-Year
4	Indiana University-Purdue University-Fort Wayne	Fort Wayne	IN	Public	Four-Year
5	Indiana University-Purdue University-Indianapolis	Indianapolis	IN	Public	Four-Year
6	Indiana University-South Bend	South Bend	IN	Public	Four-Year
7	Indiana University-Northwest	Gary	IN	Public	Four-Year
8	Northwestern Michigan College	Traverse City	MI	Public	Two-Year
9	Schoolcraft College	Livonia	MI	Public	Two-Year
10	County College of Morris	Randolph	NJ	Public	Two-Year
11	Hudson County Community College	Jersey City	NJ	Public	Two-Year
12	San Juan College	Farmington	NM	Public	Two-Year
13	College of Santa Fe	Santa Fe	NM	Private	Four-Year
14	Coastal Carolina Community College	Jacksonville	NC	Public	Two-Year
15	Fayetteville Technical Community College	Fayetteville	NC	Public	Two-Year
16	Western Piedmont Community College	Morganton	NC	Public	Two-Year
17	Franklin University	Columbus	OH	Private	Four-Year
18	Rose State College	Midwest City	OK	Public	Two-Year
19	Mount Aloysius College	Cresson	PA	Private	Four-Year
20	Del Mar College	Corpus Christi	TX	Public	Two-Year
21	Mountain View College	Dallas	TX	Public	Two-Year
22	San Antonio College	San Antonio	TX	Public	Two-Year
23	Tarrant County Junior College District	Fort Worth	TX	Public	Two-Year
24	Mount Senario College	Ladysmith	WI	Private	Four-Year

Table A16

Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 1997-1998 Academic Year. Source: IPEDS (2015)

N	Institution Name	City	State	Institutional Control	Institution Type
1	Pima Community College	Tuscon	AZ	Public	Two-Year
2	Rio Salado Community College	Phoenix	AZ	Public	Two-Year
3	Macon State College	Macon	GA	Public	Four-Year
4	Indiana University-Purdue University-Fort Wayne	Fort Wayne	IN	Public	Four-Year
5	Indiana University-Purdue University-Indianapolis	Indianapolis	IN	Public	Four-Year
6	Indiana University-South Bend	South Bend	IN	Public	Four-Year
7	Indiana University-Northwest	Gary	IN	Public	Four-Year
8	County College of Morris	Randolph	NJ	Public	Two-Year
9	Hudson County Community College	Jersey City	NJ	Public	Two-Year
10	San Juan College	Farmington	NM	Public	Two-Year
11	Fayetteville Technical Community College	Fayetteville	NC	Public	Two-Year
12	Western Piedmont Community College	Morganton	NC	Public	Two-Year
13	Rose State College	Midwest City	OK	Public	Two-Year
14	Reading Area Community College	Reading	PA	Public	Two-Year
15	University of Scranton	Scranton	PA	Private	Four-Year
16	Del Mar College	Corpus Christi	TX	Public	Two-Year
17	Mountain View College	Dallas	TX	Public	Two-Year
18	San Antonio College	San Antonio	TX	Public	Two-Year
19	Tarrant County Junior College District	Fort Worth	TX	Public	Two-Year
20	Mount Senario College	Ladysmith	WI	Private	Four-Year
21	Laramie County Community College	Cheyenne	WY	Public	Two-Year

Table A17

Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 1998-1999 Academic Year. Source: IPEDS (2015)

N	Institution Name	City	State	Institutional Control	Institution Type
1	Pima Community College	Tuscon	AZ	Public	Two-Year
2	Rio Salado Community College	Phoenix	AZ	Public	Two-Year
3	Macon State College	Macon	GA	Public	Four-Year
4	Indiana University-Purdue University-Fort Wayne	Fort Wayne	IN	Public	Four-Year
5	Indiana University-Purdue University-Indianapolis	Indianapolis	IN	Public	Four-Year
6	Indiana University-South Bend	South Bend	IN	Public	Four-Year
7	Indiana University-Northwest	Gary	IN	Public	Four-Year
8	County College of Morris	Randolph	NJ	Public	Two-Year
9	College of Santa Fe	Santa Fe	NM	Private	Four-Year
10	Fayetteville Technical Community College	Fayetteville	NC	Public	Two-Year
11	David N Myers College	Cleveland	OH	Private	Four-Year
12	Franklin University	Columbus	OH	Private	Four-Year
13	Mount Aloysius College	Cresson	PA	Private	Four-Year
14	Del Mar College	Corpus Christi	TX	Public	Two-Year
15	Mountain View College	Dallas	TX	Public	Two-Year
16	San Antonio College	San Antonio	TX	Public	Two-Year
17	Snow College	Ephraim	UT	Public	Four-Year

Table A18

Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 1999-2000 Academic Year. Source: IPEDS (2015)

N	Institution Name	City	State	Institutional Control	Institution Type
1	Troy State University-Main Campus	Troy	AL	Public	Four-Year
2	Pima Community College	Tuscon	AZ	Public	Two-Year
3	Saint Petersburg Junior College	Pinellas Park	FL	Public	Two-Year
4	Indiana University-Purdue University-Indianapolis	Indianapolis	IN	Public	Four-Year
5	Indiana University-South Bend	South Bend	IN	Public	Four-Year
6	Indiana University-Northwest	Gary	IN	Public	Four-Year
7	Southern University at Shreveport	Shreveport	LA	Public	Two-Year
8	Northwestern Michigan College	Traverse City	MI	Public	Two-Year
9	Schoolcraft College	Livonia	MI	Public	Two-Year
10	County College of Morris	Randolph	NJ	Public	Two-Year
11	San Juan College	Farmington	NM	Public	Two-Year
12	College of Santa Fe	Santa Fe	NM	Private	Four-Year
13	Fayetteville Technical Community College	Fayetteville	NC	Public	Two-Year
14	Fayetteville State University	Fayetteville	NC	Public	Four-Year
15	David N Myers College	Cleveland	OH	Private	Four-Year
16	Rose State College	Midwest City	OK	Public	Two-Year
17	Mount Aloysius College	Cresson	PA	Private	Four-Year
18	University of Scranton	Scranton	PA	Private	Four-Year
19	Del Mar College	Corpus Christi	TX	Public	Two-Year
20	Mountain View College	Dallas	TX	Public	Two-Year
21	San Antonio College	San Antonio	TX	Public	Two-Year
22	Tarrant County Junior College District	Fort Worth	TX	Public	Two-Year
23	Snow College	Ephraim	UT	Public	Two-Year
24	Mount Senario College	Ladysmith	WI	Private	Four-Year
25	Laramie County Community College	Cheyenne	WY	Public	Two-Year
26	Lac Courte Oreilles Ojibwa Community College	Hayward	WI	Public	Two-Year
27	Northwest Indian College	Bellingham	WA	Public	Two-Year
28	South Texas Community College	McAllen	TX	Public	Two-Year

Table A19

Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 2000-2001 Academic Year. Source: IPEDS (2015)

N	Institution Name	City	State	Institutional Control	Institution Type
1	Troy State University-Main Campus	Troy	AL	Public	Four-Year
2	Rio Salado Community College	Phoenix	AZ	Public	Two-Year
3	Saint Petersburg Junior College	Pinellas Park	FL	Public	Two-Year
4	Indiana University-Purdue University-Indianapolis	Indianapolis	IN	Public	Four-Year
5	Indiana University-South Bend	South Bend	IN	Public	Four-Year
6	Indiana University-Northwest	Gary	IN	Public	Four-Year
7	Southern University at Shreveport	Shreveport	LA	Public	Two-Year
8	Northwestern Michigan College	Traverse City	MI	Public	Two-Year
9	County College of Morris	Randolph	NJ	Public	Two-Year
10	San Juan College	Farmington	NM	Public	Two-Year
11	Fayetteville Technical Community College	Fayetteville	NC	Public	Two-Year
12	Fayetteville State University	Fayetteville	NC	Public	Four-Year
13	David N Myers College	Cleveland	OH	Private	Four-Year
14	Rose State College	Midwest City	OK	Public	Two-Year
15	Mount Aloysius College	Cresson	PA	Private	Four-Year
16	Point Park College	Pittsburgh	PA	Private	Four-Year
17	University of Scranton	Scranton	PA	Private	Four-Year
18	Mountain View College	Dallas	TX	Public	Two-Year
19	San Antonio College	San Antonio	TX	Public	Two-Year
20	San Jacinto College-North Campus	Houston	TX	Public	Two-Year
21	Tarrant County Junior College District	Fort Worth	TX	Public	Two-Year
22	Snow College	Ephraim	UT	Public	Two-Year
23	Mount Senario College	Ladysmith	WI	Private	Four-Year
24	Laramie County Community College	Cheyenne	WY	Public	Two-Year
25	Lac Courte Oreilles Ojibwa Community College	Hayward	WI	Public	Two-Year
26	Northwest Indian College	Bellingham	WA	Public	Two-Year
27	South Texas Community College	McAllen	TX	Public	Two-Year

Table A20

Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 2001-2002 Academic Year. Source: IPEDS (2015)

N	Institution Name	City	State	Institutional Control	Institution Type
1	Rio Salado Community College	Phoenix	AZ	Public	Two-Year
2	Southeastern University	Washington	DC	Private	Four-Year
3	Saint Petersburg Junior College	Pinellas Park	FL	Public	Two-Year
4	Middle Georgia College	Cochran	GA	Public	Two-Year
5	Indiana University-Purdue University-Fort Wayne	Fort Wayne	IN	Public	Four-Year
6	Indiana University-Purdue University-Indianapolis	Indianapolis	IN	Public	Four-Year
7	Indiana University-South Bend	South Bend	IN	Public	Four-Year
8	Indiana University-Northwest	Gary	IN	Public	Four-Year
9	University of Maine at Augusta	Augusta	ME	Public	Four-Year
10	County College of Morris	Randolph	NJ	Public	Two-Year
11	San Juan College	Farmington	NM	Public	Two-Year
12	Fayetteville Technical Community College	Fayetteville	NC	Public	Two-Year
13	David N Myers College	Cleveland	OH	Private	Four-Year
14	Rose State College	Midwest City	OK	Public	Two-Year
15	Mountain View College	Dallas	TX	Public	Two-Year
16	San Antonio College	San Antonio	TX	Public	Two-Year
17	San Jacinto College-North Campus	Houston	TX	Public	Two-Year
18	Snow College	Ephraim	UT	Public	Two-Year
19	Lorain County Community College	Elyria	WY	Public	Two-Year
20	Lac Courte Oreilles Ojibwa Community College	Hayward	WI	Public	Two-Year
21	Northwest Indian College	Bellingham	WA	Public	Two-Year
22	South Texas Community College	McAllen	TX	Public	Two-Year

Table A21

Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 2002-2003 Academic Year. Source: IPEDS (2015)

N	Institution Name	City	State	Institutional Control	Institution Type
1	Rio Salado Community College	Phoenix	AZ	Public	Two-Year
2	Southeastern University	Washington	DC	Private	Four-Year
3	Saint Petersburg Junior College	Pinellas Park	FL	Public	Two-Year
4	Middle Georgia College	Cochran	GA	Public	Two-Year
5	Indiana University-Purdue University-Fort Wayne	Fort Wayne	IN	Public	Four-Year
6	Indiana University-Purdue University-Indianapolis	Indianapolis	IN	Public	Four-Year
7	Indiana University-South Bend	South Bend	IN	Public	Four-Year
8	Indiana University-Northwest	Gary	IN	Public	Four-Year
9	Barton County Community College	Great Bend	KS	Public	Two-Year
10	Haskell Indian Nations University	Lawrence	KS	Public	Four-Year
11	University of Maine at Augusta	Augusta	ME	Public	Four-Year
12	Northwestern Michigan College	Traverse City	MI	Public	Two-Year
13	East Central College	Union	MO	Public	Two-Year
14	County College of Morris	Randolph	NJ	Public	Two-Year
15	San Juan College	Farmington	NM	Public	Two-Year
16	Fayetteville Technical Community College	Fayetteville	NC	Public	Two-Year
17	David N Myers College	Cleveland	OH	Private	Four-Year
18	Franklin University	Columbus	OH	Private	Four-Year
19	Rose State College	Midwest City	OK	Public	Two-Year
20	Mountain View College	Dallas	TX	Public	Two-Year
21	San Antonio College	San Antonio	TX	Public	Two-Year
22	San Jacinto College-Central Campus	Pasadena	TX	Public	Two-Year
23	Lorain County Community College	Elyria	WY	Public	Two-Year
24	Lac Courte Oreilles Ojibwa Community College	Hayward	WI	Public	Two-Year
25	Northwest Indian College	Bellingham	WA	Public	Two-Year
26	South Texas Community College	McAllen	TX	Public	Two-Year

Table A22

Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 2003-2004 Academic Year. Source: IPEDS (2015)

N	Institution Name	City	State	Institutional Control	Institution Type
1	Northland Pioneer College	Holbrook	AZ	Public	Two-Year
2	Rio Salado Community College	Phoenix	AZ	Public	Two-Year
3	Citrus College	Glendora	CA	Public	Two-Year
4	Palomar College	San Marcos	CA	Public	Two-Year
5	Southwestern College	Chula Vista	CA	Public	Two-Year
6	Saint Petersburg Junior College	Pinellas Park	FL	Public	Two-Year
7	Macon State College	Macon	GA	Public	Four-Year
8	Indiana University-Purdue University-Indianapolis	Indianapolis	IN	Public	Four-Year
9	Indiana University-South Bend	South Bend	IN	Public	Four-Year
10	Indiana University-Northwest	Gary	IN	Public	Four-Year
11	Barton County Community College	Great Bend	KS	Public	Two-Year
12	Haskell Indian Nations University	Lawrence	KS	Public	Four-Year
13	University of Maine at Augusta	Augusta	ME	Public	Four-Year
14	East Cenral College	Union	MO	Public	Two-Year
15	County College of Morris	Randolph	NJ	Public	Two-Year
16	Crownpoint Institute of Technology	Crownpoint	NM	Public	Two-Year
17	San Juan College	Farmington	NM	Public	Two-Year
18	Fayetteville Technical Community College	Fayetteville	NC	Public	Two-Year
19	Fort Berthold Community College	New Town	ND	Public	Two-Year
20	David N Myers College	Cleveland	OH	Private	Four-Year
21	Franklin University	Columbus	OH	Private	Four-Year
22	Lorain County Community College	Elyria	OH	Public	Two-Year
23	Sinclair Community College	Dayton	OH	Public	Two-Year
24	Rose State College	Midwest City	OK	Public	Two-Year
25	Community College of Alleghany County	Pittsburgh	PA	Public	Two-Year
26	Mountain View College	Dallas	TX	Public	Two-Year
27	San Antonio College	San Antonio	TX	Public	Two-Year
28	San Jacinto College-Central Campus	Pasadena	TX	Public	Two-Year
29	Tarrant County Junior College District	Fort Worth	TX	Public	Two-Year
30	Northwest Indian College	Bellingham	WA	Public	Two-Year
31	South Texas Community College	McAllen	TX	Public	Two-Year

Table A23

Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 2004-2005 Academic Year. Source: IPEDS (2015)

N	Institution Name	City	State	Institutional Control	Institution Type
1	Northland Pioneer College	Holbrook	AZ	Public	Two-Year
2	Rio Salado Community College	Phoenix	AZ	Public	Two-Year
3	Palomar College	San Marcos	CA	Public	Two-Year
4	Southwestern College	Chula Vista	CA	Public	Two-Year
5	Southeastern University	Washington	DC	Private	Four-Year
6	Saint Petersburg Junior College	Pinellas Park	FL	Public	Two-Year
7	Indiana University-Purdue University-Fort Wayne	Fort Wayne	IN	Public	Four-Year
8	Indiana University-Purdue University-Indianapolis	Indianapolis	IN	Public	Four-Year
9	Indiana University-South Bend	South Bend	IN	Public	Four-Year
10	Indiana University-Northwest	Gary	IN	Public	Four-Year
11	Barton County Community College	Great Bend	KS	Public	Two-Year
12	Haskell Indian Nations University	Lawrence	KS	Public	Four-Year
13	University of Maine at Augusta	Augusta	ME	Public	Four-Year
14	County College of Morris	Randolph	NJ	Public	Two-Year
15	Crownpoint Institute of Technology	Crownpoint	NM	Public	Two-Year
16	San Juan College	Farmington	NM	Public	Two-Year
17	Mohawk Valley Community College-Utica Branch	Utica	NY	Public	Two-Year
18	Monroe Community College	Rochester	NY	Public	Two-Year
19	Fayetteville Technical Community College	Fayetteville	NC	Public	Two-Year
20	Fort Berthold Community College	New Town	ND	Public	Two-Year
21	David N Myers College	Cleveland	OH	Private	Four-Year
22	Lorain County Community College	Elyria	OH	Public	Two-Year
23	Sinclair Community College	Dayton	OH	Public	Two-Year
24	Rose State College	Midwest City	OK	Public	Two-Year
25	Roger Williams University	Bristol	RI	Private	Four-Year
26	Mountain View College	Dallas	TX	Public	Two-Year
27	San Antonio College	San Antonio	TX	Public	Two-Year
28	San Jacinto College-Central Campus	Pasadena	TX	Public	Two-Year
29	Tarrant County Junior College District	Fort Worth	TX	Public	Two-Year
30	Laramie County Community College	Cheyenne	WY	Public	Two-Year
31	Northwest Indian College	Bellingham	WA	Public	Two-Year
32	South Texas Community College	McAllen	TX	Public	Two-Year
33	Lamar Institute of Technology	Beaumont	TX	Public	Two-Year

Table A24

Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 2005-2006 Academic Year. Source: IPEDS (2015)

N	Institution Name	City	State	Institutional Control	Institution Type
1	Northland Pioneer College	Holbrook	AZ	Public	Two-Year
2	Rio Salado Community College	Phoenix	AZ	Public	Two-Year
3	Palomar College	San Marcos	CA	Public	Two-Year
4	Southwestern College	Chula Vista	CA	Public	Two-Year
5	Southeastern University	Washington	DC	Private	Four-Year
6	Saint Petersburg Junior College	Pinellas Park	FL	Public	Two-Year
7	Middle Georgia College	Cochran	GA	Public	Two-Year
8	Indiana University-Purdue University-Fort Wayne	Fort Wayne	IN	Public	Four-Year
9	Indiana University-Purdue University-Indianapolis	Indianapolis	IN	Public	Four-Year
10	Indiana University-Northwest	Gary	IN	Public	Four-Year
11	Barton County Community College	Great Bend	KS	Public	Two-Year
12	Haskell Indian Nations University	Lawrence	KS	Public	Four-Year
13	University of Maine at Augusta	Augusta	ME	Public	Four-Year
14	Frederick Community College	Frederick	MD	Public	Two-Year
15	County College of Morris	Randolph	NJ	Public	Two-Year
16	Crownpoint Institute of Technology	Crownpoint	NM	Public	Two-Year
17	San Juan College	Farmington	NM	Public	Two-Year
18	CUNY Hostos Community College	Bronx	NY	Public	Two-Year
19	CUNY Medgar Evers College	Brooklyn	NY	Public	Four-Year
20	Mohawk Valley Community College-Utica Branch	Utica	NY	Public	Two-Year
21	Monroe Community College	Rochester	NY	Public	Two-Year
22	Fayetteville Technical Community College	Fayetteville	NC	Public	Two-Year
23	Cankdeska Cikana Community College	Fort Totten	ND	Public	Two-Year
24	David N Myers College	Cleveland	OH	Private	Four-Year
25	Lorain County Community College	Elyria	OH	Public	Two-Year
26	Rose State College	Midwest City	OK	Public	Two-Year
27	Roger Williams University	Bristol	RI	Private	Four-Year
28	Mountain View College	Dallas	TX	Public	Two-Year
29	San Antonio College	San Antonio	TX	Public	Two-Year
30	San Jacinto College-Central Campus	Pasadena	TX	Public	Two-Year
31	Southwest Texas Junior College	Uvalde	TX	Public	Two-Year
32	Tarrant County Junior College District	Fort Worth	TX	Public	Two-Year
33	Laramie County Community College	Cheyenne	WY	Public	Two-Year
34	Northwest Indian College	Bellingham	WA	Public	Two-Year
35	South Texas Community College	McAllen	TX	Public	Two-Year

Table A25

Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 2006-2007 Academic Year. Source: IPEDS (2015)

N	Institution Name	City	State	Institutional Control	Institution Type
1	Northland Pioneer College	Holbrook	AZ	Public	Two-Year
2	Rio Salado Community College	Phoenix	AZ	Public	Two-Year
3	Palomar College	San Marcos	CA	Public	Two-Year
4	Southwestern College	Chula Vista	CA	Public	Two-Year
5	Southeastern University	Washington	DC	Private	Four-Year
6	Indian River Community College	Fort Pierce	FL	Public	Two-Year
7	Okaloosa-Walton College	Niceville	FL	Public	Four-Year
8	Saint Petersburg Junior College	Pinellas Park	FL	Public	Two-Year
9	Indiana University-Purdue University-Indianapolis	Indianapolis	IN	Public	Four-Year
10	Indiana University-Northwest	Gary	IN	Public	Four-Year
11	Barton County Community College	Great Bend	KS	Public	Two-Year
12	Haskell Indian Nations University	Lawrence	KS	Public	Four-Year
13	University of Maine at Augusta	Augusta	ME	Public	Four-Year
14	Frederick Community College	Frederick	MD	Public	Two-Year
15	County College of Morris	Randolph	NJ	Public	Two-Year
16	Crownpoint Institute of Technology	Crownpoint	NM	Public	Two-Year
17	San Juan College	Farmington	NM	Public	Two-Year
18	CUNY Hostos Community College	Bronx	NY	Public	Two-Year
19	CUNY Medgar Evers College	Brooklyn	NY	Public	Four-Year
20	Mohawk Valley Community College-Utica Branch	Utica	NY	Public	Two-Year
21	Fayetteville Technical Community College	Fayetteville	NC	Public	Two-Year
22	Cankdeska Cikana Community College	Fort Totten	ND	Public	Two-Year
23	David N Myers College	Cleveland	OH	Private	Four-Year
24	Lorain County Community College	Elyria	OH	Public	Two-Year
25	Sinclair Community College	Dayton	OH	Public	Two-Year
26	Roger Williams University	Bristol	RI	Private	Four-Year
27	Mountain View College	Dallas	TX	Public	Two-Year
28	San Antonio College	San Antonio	TX	Public	Two-Year
29	San Jacinto College-Central Campus	Pasadena	TX	Public	Two-Year
30	Southwest Texas Junior College	Uvalde	TX	Public	Two-Year
31	Tarrant County Junior College District	Fort Worth	TX	Public	Two-Year
32	Laramie County Community College	Cheyenne	WY	Public	Two-Year
33	South Texas Community College	McAllen	TX	Public	Two-Year
34	Lamar Institute of Technology	Beaumont	TX	Public	Two-Year

Table A26

Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 2007-2008 Academic Year. Source: IPEDS (2015)

N	Institution Name	City	State	Institutional Control	Institution Type
1	Northland Pioneer College	Holbrook	AZ	Public	Two-Year
2	Rio Salado Community College	Phoenix	AZ	Public	Two-Year
3	Arkansas Baptist College	Little Rock	AR	Private	Four-Year
4	Palomar College	San Marcos	CA	Public	Two-Year
5	Southwestern College	Chula Vista	CA	Public	Two-Year
6	Southeastern University	Washington	DC	Private	Four-Year
7	Broward College	Fort Lauderdale	FL	Public	Two-Year
8	Indian River Community College	Fort Pierce	FL	Public	Two-Year
9	Okaloosa-Walton College	Niceville	FL	Public	Four-Year
10	Saint Petersburg Junior College	Pinellas Park	FL	Public	Two-Year
11	Indiana University-Purdue University-Indianapolis	Indianapolis	IN	Public	Four-Year
12	Indiana University-Northwest	Gary	IN	Public	Four-Year
13	Barton County Community College	Great Bend	KS	Public	Two-Year
14	Haskell Indian Nations University	Lawrence	KS	Public	Four-Year
15	University of Maine at Augusta	Augusta	ME	Public	Four-Year
16	Frederick Community College	Frederick	MD	Public	Two-Year
17	County College of Morris	Randolph	NJ	Public	Two-Year
18	Crownpoint Institute of Technology	Crownpoint	NM	Public	Two-Year
19	San Juan College	Farmington	NM	Public	Two-Year
20	CUNY Hostos Community College	Bronx	NY	Public	Two-Year
21	CUNY Medgar Evers College	Brooklyn	NY	Public	Four-Year
22	Mohawk Valley Community College-Utica Branch	Utica	NY	Public	Two-Year
23	Monroe Community College	Rochester	NY	Public	Two-Year
24	Fayetteville Technical Community College	Fayetteville	NC	Public	Two-Year
25	Cankdeska Cikana Community College	Fort Totten	ND	Public	Two-Year
26	David N Myers College	Cleveland	OH	Private	Four-Year
27	Lorain County Community College	Elyria	OH	Public	Two-Year
28	Sinclair Community College	Dayton	OH	Public	Two-Year
29	Point Park University	Pittsburgh	PA	Private	Four-Year
30	Roger Williams University	Bristol	RI	Private	Four-Year
31	Mountain View College	Dallas	TX	Public	Two-Year
32	San Antonio College	San Antonio	TX	Public	Two-Year
33	San Jacinto College-Central Campus	Pasadena	TX	Public	Two-Year
34	Southwest Texas Junior College	Uvalde	TX	Public	Two-Year
35	Tarrant County Junior College District	Fort Worth	TX	Public	Two-Year
36	J Sargeant Reynolds Community College	Richmond	VA	Public	Two-Year
37	Thomas Nelson Community College	Hampton	VA	Public	Two-Year
38	Laramie County Community College	Cheyenne	WY	Public	Two-Year
39	Lamar Institute of Technology	Beaumont	TX	Public	Two-Year

Table A27

Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 2008-2009 Academic Year. Source: IPEDS (2015)

N	Institution Name	City	State	Institutional Control	Institution Type
1	Northland Pioneer College	Holbrook	AZ	Public	Two-Year
2	Rio Salado Community College	Phoenix	AZ	Public	Two-Year
3	Palomar College	San Marcos	CA	Public	Two-Year
4	Southwestern College	Chula Vista	CA	Public	Two-Year
5	Broward College	Fort Lauderdale	FL	Public	Two-Year
6	Indian River Community College	Fort Pierce	FL	Public	Two-Year
7	Okaloosa-Walton College	Niceville	FL	Public	Four-Year
8	Saint Petersburg Junior College	Pinellas Park	FL	Public	Two-Year
9	Indiana University-Purdue University-Fort Wayne	Fort Wayne	IN	Public	Four-Year
10	Indiana University-Purdue University-Indianapolis	Indianapolis	IN	Public	Four-Year
11	Indiana University-Northwest	Gary	IN	Public	Four-Year
12	Barton County Community College	Great Bend	KS	Public	Two-Year
13	Haskell Indian Nations University	Lawrence	KS	Public	Four-Year
14	University of Maine at Augusta	Augusta	ME	Public	Four-Year
15	Frederick Community College	Frederick	MD	Public	Two-Year
16	Hennepin Technical College	Brooklyn Park	MN	Public	Two-Year
17	Minneapolis Community and Technical College	Minneapolis	MN	Public	Two-Year
18	County College of Morris	Randolph	NJ	Public	Two-Year
19	Cumberland County College	Vineland	NJ	Public	Two-Year
20	Crownpoint Institute of Technology	Crownpoint	NM	Public	Two-Year
21	CUNY Hostos Community College	Bronx	NY	Public	Two-Year
22	CUNY Medgar Evers College	Brooklyn	NY	Public	Four-Year
23	Mohawk Valley Community College-Utica Branch	Utica	NY	Public	Two-Year
24	Monroe Community College	Rochester	NY	Public	Two-Year
25	Fayetteville Technical Community College	Fayetteville	NC	Public	Two-Year
26	Cankdeska Cikana Community College	Fort Totten	ND	Public	Two-Year
27	David N Myers College	Cleveland	OH	Private	Four-Year
28	Lorain County Community College	Elyria	OH	Public	Two-Year
29	Sinclair Community College	Dayton	OH	Public	Two-Year
30	Rose State College	Midwest City	OK	Public	Two-Year
31	Portland Community College	Portland	OR	Public	Two-Year
32	Community College of Allegheny County	Pittsburgh	PA	Public	Two-Year
33	Point Park University	Pittsburgh	PA	Private	Four-Year
34	Roger Williams University	Bristol	RI	Private	Four-Year
35	Central Texas College	Killeen	TX	Public	Two-Year
36	University of Houston-Downtown	Houston	TX	Public	Four-Year
37	Mountain View College	Dallas	TX	Public	Two-Year
38	San Antonio College	San Antonio	TX	Public	Two-Year
39	San Jacinto College-Central Campus	Pasadena	TX	Public	Two-Year
40	Southwest Texas Junior College	Uvalde	TX	Public	Two-Year
41	Tarrant County Junior College District	Fort Worth	TX	Public	Two-Year
42	J Sargeant Reynolds Community College	Richmond	VA	Public	Two-Year
43	Thomas Nelson Community College	Hampton	VA	Public	Two-Year
44	Laramie County Community College	Cheyenne	WY	Public	Two-Year
45	Lamar Institute of Technology	Beaumont	TX	Public	Two-Year

Table A28

Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 2009-2010 Academic Year. Source: IPEDS (2015)

N	Institution Name	City	State	Institutional Control	Institution Type
1	Northland Pioneer College	Holbrook	AZ	Public	Two-Year
2	Rio Salado Community College	Phoenix	AZ	Public	Two-Year
3	Western International University	Phoenix	AZ	Private	Four-Year
4	Arkansas Baptist College	Little Rock	AR	Private	Four-Year
5	Palomar College	San Marcos	CA	Public	Two-Year
6	Southwestern College	Chula Vista	CA	Public	Two-Year
7	Broward College	Fort Lauderdale	FL	Public	Two-Year
8	Indian River Community College	Fort Pierce	FL	Public	Two-Year
9	Okaloosa-Walton College	Niceville	FL	Public	Four-Year
10	Saint Petersburg Junior College	Pinellas Park	FL	Public	Two-Year
11	Indiana University Northwest	Gary	IN	Public	Four-Year
12	Barton County Community College	Great Bend	KS	Public	Two-Year
13	Haskell Indian Nations University	Lawrence	KS	Public	Four-Year
14	University of Maine at Augusta	Augusta	ME	Public	Four-Year
15	Frederick Community College	Frederick	MD	Public	Two-Year
16	County College of Morris	Randolph	NJ	Public	Two-Year
17	Cumberland County College	Vineland	NJ	Public	Two-Year
18	Crownpoint Institute of Technology	Crownpoint	NM	Public	Two-Year
19	CUNY Hostos Community College	Bronx	NY	Public	Two-Year
20	CUNY Medgar Evers College	Brooklyn	NY	Public	Four-Year
21	Mohawk Valley Community College-Utica Branch	Utica	NY	Public	Two-Year
22	Monroe Community College	Rochester	NY	Public	Two-Year
23	Fayetteville Technical Community College	Fayetteville	NC	Public	Two-Year
24	Cankdeska Cikana Community College	Fort Totten	ND	Public	Two-Year
25	David N Myers College	Cleveland	OH	Private	Four-Year
26	Lorain County Community College	Elyria	OH	Public	Two-Year
27	Sinclair Community College	Dayton	OH	Public	Two-Year
28	Portland Community College	Portland	OR	Public	Two-Year
29	Point Park University	Pittsburgh	PA	Private	Four-Year
30	Roger Williams University	Bristol	RI	Private	Four-Year
31	Central Texas College	Killeen	TX	Public	Two-Year
32	Houston Community College	Houston	TX	Public	Two-Year
33	Mountain View College	Dallas	TX	Public	Two-Year
34	San Antonio College	San Antonio	TX	Public	Two-Year
35	Southwest Texas Junior College	Uvalde	TX	Public	Two-Year
36	Tarrant County Junior College District	Fort Worth	TX	Public	Two-Year
37	J Sargeant Reynolds Community College	Richmond	VA	Public	Two-Year
38	Thomas Nelson Community College	Hampton	VA	Public	Two-Year
39	Laramie County Community College	Cheyenne	WY	Public	Two-Year
40	College of Menominee Nation	Keshena	WI	Private	Two-Year
41	Lamar Institute of Technology	Beaumont	TX	Public	Two-Year

Table A29

Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 2010-2011 Academic Year. Source: IPEDS (2015)

N	Institution Name	City	State	Institutional Control	Institution Type
1	Northland Pioneer College	Holbrook	AZ	Public	Two-Year
2	Rio Salado Community College	Phoenix	AZ	Public	Two-Year
3	Western International University	Phoenix	AZ	Private	Four-Year
4	Palomar College	San Marcos	CA	Public	Two-Year
5	Southwestern College	Chula Vista	CA	Public	Two-Year
6	Broward College	Fort Lauderdale	FL	Public	Two-Year
7	Florida State College at Jacksonville	Jacksonville	FL	Public	Four-Year
8	Indian River Community College	Fort Pierce	FL	Public	Two-Year
9	Okaloosa-Walton College	Niceville	FL	Public	Four-Year
10	Saint Petersburg Junior College	Pinellas Park	FL	Public	Two-Year
11	Upper Iowa University	Fayette	IA	Private	Four-Year
12	BartonCounty Community College	Great Bend	KS	Public	Two-Year
13	Haskell Indian Nations University	Lawrence	KS	Public	Four-Year
14	University of Maine at Augusta	Augusta	ME	Public	Four-Year
15	Frederick Community College	Frederick	MD	Public	Two-Year
16	County College of Morris	Randolph	NJ	Public	Two-Year
17	Cumberland County College	Vineland	NJ	Public	Two-Year
18	Crownpoint Institute of Technology	Crownpoint	NM	Public	Two-Year
19	CUNY Hostos Community College	Bronx	NY	Public	Two-Year
20	CUNY Medgar Evers College	Brooklyn	NY	Public	Four-Year
21	Mohawk Valley Community College-Utica Branch	Utica	NY	Public	Two-Year
22	Fayetteville Technical Community College	Fayetteville	NC	Public	Two-Year
23	Fort Berthold Community College	New Town	ND	Public	Four-Year
24	Cankdeska Cikana Community College	Fort Totten	ND	Public	Two-Year
25	David N Myers College	Cleveland	OH	Private	Four-Year
26	Lorain County Community College	Elyria	OH	Public	Two-Year
27	Owens Community College	Perrysburg	OH	Public	Two-Year
28	Sinclair Community College	Dayton	OH	Public	Two-Year
29	Portland Community College	Portland	OR	Public	Two-Year
30	Point Park University	Pittsburgh	PA	Private	Four-Year
31	Roger Williams University	Bristol	RI	Private	Four-Year
32	Central Texas College	Killeen	TX	Public	Two-Year
33	Houston Community College	Houston	TX	Public	Two-Year
34	Mountain View College	Dallas	TX	Public	Two-Year
35	San Antonio College	San Antonio	TX	Public	Two-Year
36	Southwest Texas Junior College	Uvalde	TX	Public	Two-Year
37	Tarrant County Junior College District	Fort Worth	TX	Public	Two-Year
38	Tyler Junior College	Tyler	TX	Public	Two-Year
39	Thomas Nelson Community College	Hampton	VA	Public	Two-Year
40	Laramie County Community College	Cheyenne	WY	Public	Two-Year
41	Kaplan University-Davenport Campus	Davenport	IA	Private	Four-Year
42	College of Menominee Nation	Keshena	WI	Private	Two-Year
43	Lamar Institute of Technology	Beaumont	TX	Public	Two-Year

Table A30

Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 2011-2012 Academic Year. Source: IPEDS (2015)

N	Institution Name	City	State	Institutional Control	Institution Type
1	Northland Pioneer College	Holbrook	AZ	Public	Two-Year
2	Rio Salado Community College	Phoenix	AZ	Public	Two-Year
3	Arkansas Baptist College	Little Rock	AR	Private	Four-Year
4	Southwestern College	Chula Vista	CA	Public	Two-Year
5	Broward College	Fort Lauderdale	FL	Public	Two-Year
6	Florida State College at Jacksonville	Jacksonville	FL	Public	Four-Year
7	Indian River Community College	Fort Pierce	FL	Public	Two-Year
8	Okaloosa-Walton College	Niceville	FL	Public	Four-Year
9	Saint Petersburg Junior College	Pinellas Park	FL	Public	Two-Year
10	Kaplan University-Mason City Campus	Mason City	IA	Private	Four-Year
11	Kaplan University-Cedar Rapids Campus	Cedar Rapids	IA	Private	Four-Year
12	Barton County Community College	Great Bend	KS	Public	Two-Year
13	Hakell Indian Nations University	Lawrence	KS	Public	Four-Year
14	University of Maine at Augusta	Augusta	ME	Public	Four-Year
15	Frederick Community College	Frederick	MD	Public	Two-Year
16	Kaplan University-Hagerstown Campus	Hagerstown	MD	Private	Four-Year
17	Kaplan University-Lincoln Campus	Lincoln	NE	Private	Four-Year
18	County College of Morris	Randolph	NJ	Public	Two-Year
19	Cumberland County College	Vineland	NJ	Public	Two-Year
20	Navajo Technical College	Crownpoint	NM	Public	Four-Year
21	CUNY Hostos Community College	Bronx	NY	Public	Two-Year
22	CUNY Medgar Evers College	Brooklyn	NY	Public	Four-Year
23	Mohawk Valley Community College	Utica	NY	Public	Two-Year
24	Central Carolina Community College	Sanford	NC	Public	Two-Year
25	Fayetteville Technical Community College	Fayetteville	NC	Public	Two-Year
26	Cankdeska Cikana Community College	Fort Totten	ND	Public	Two-Year
27	David N Myers College	Cleveland	OH	Private	Four-Year
28	Lorain County Community College	Elyria	OH	Public	Two-Year
29	Owens Community College	Perrysburg	OH	Public	Two-Year
30	Sinclair Community College	Dayton	OH	Public	Two-Year
31	Portland Community College	Portland	OR	Public	Two-Year
32	Point Park University	Pittsburgh	PA	Private	Four-Year
33	Roger Williams University	Bristol	RI	Private	Four-Year
34	Central Texas College	Killeen	TX	Public	Two-Year
35	Mountain View College	Dallas	TX	Public	Two-Year
36	San Antonio College	San Antonio	TX	Public	Two-Year
37	Southwest Texas Junior College	Uvalde	TX	Public	Two-Year
38	Tarrant County Junior College District	Fort Worth	TX	Public	Two-Year
39	Tyler Junior College	Tyler	TX	Public	Two-Year
40	Thomas Nelson Community College	Hampton	VA	Public	Two-Year
41	Laramie County Community College	Cheyenne	WY	Public	Two-Year
42	Kaplan University-Davenport Campus	Davenport	IA	Private	Four-Year
43	Kaplan University-Cedar Falls Campus	Cedar Falls	IA	Private	Four-Year
44	Kaplan University-Des Moines Campus	Urbandale	IA	Private	Four-Year
45	College of Menominee Nation	Keshena	WI	Private	Two-Year
46	Lamar Institute of Technology	Beaumont	TX	Public	Two-Year
47	Kaplan University-Council Bluffs Campus	Council Bluffs	IA	Private	Four-Year

Table A31

Institutions that Conferred Associate Degrees in Public Administration, CIP Code 44.0401, during the 2012-2013 Academic Year. Source: IPEDS (2015)

N	Institution Name	City	State	Institutional Control	Institution Type
1	Northland Pioneer College	Holbrook	AZ	Public	Two-Year
2	Arkansas Baptist College	Little Rock	AR	Private	Four-Year
3	Palomar College	San Marcos	CA	Public	Two-Year
4	Southwestern College	Chula Vista	CA	Public	Two-Year
5	Kaplan University-Mason City Campus	Mason City	IA	Private	Four-Year
6	Kaplan University-Cedar Rapids Campus	Cedar Rapids	IA	Private	Four-Year
7	Barton County Community College	Great Bend	KS	Public	Two-Year
8	Haskell Indian Nations University	Lawrence	KS	Public	Four-Year
9	University of Maine at Augusta	Augusta	ME	Public	Four-Year
10	Frederick Community College	Frederick	MD	Public	Two-Year
11	Kaplan University-Hagerstown Campus	Hagerstown	MD	Private	Four-Year
12	Kaplan University-Lincoln Campus	Lincoln	NE	Private	Four-Year
13	Kaplan University-Omaha Campus	Omaha	NE	Private	Four-Year
14	County College of Morris	Randolph	NJ	Public	Two-Year
15	Cumberland County College	Vineland	NJ	Public	Two-Year
16	Navajo Technical College	Crownpoint	NM	Public	Four-Year
17	CUNY Hostos Community College	Bronx	NY	Public	Two-Year
18	CUNY Medgar Evers College	Brooklyn	NY	Public	Four-Year
19	Central Carolina Community College	Sanford	NC	Public	Two-Year
20	Fayetteville Technical Community College	Fayetteville	NC	Public	Two-Year
21	Cankdeska Cikana Community College	Fort Totten	ND	Public	Two-Year
22	Lorain County Community College	Elyria	OH	Public	Two-Year
23	Owens Community College	Perrysburg	OH	Public	Two-Year
24	Sinclair Community College	Dayton	OH	Public	Two-Year
25	Portland Community College	Portland	OR	Public	Two-Year
26	Point Park University	Pittsburgh	PA	Private	Four-Year
27	Roger Williams University	Bristol	RI	Private	Four-Year
28	Central Texas College	Killeen	TX	Public	Two-Year
29	Mountain View College	Dallas	TX	Public	Two-Year
30	San Antonio College	San Antonio	TX	Public	Two-Year
31	Southwest Texas Junior College	Uvalde	TX	Public	Two-Year
32	Tarrant County Junior College District	Fort Worth	TX	Public	Two-Year
33	Tyler Junior College	Tyler	TX	Public	Two-Year
34	Snow College	Ephraim	UT	Public	Four-Year
35	Thomas Nelson Community College	Hampton	VA	Public	Two-Year
36	Laramie County Community College	Cheyenne	WY	Public	Two-Year
37	Kaplan University-Davenport Campus	Davenport	IA	Private	Four-Year
38	Kaplan University-Cedar Falls Campus	Cedar Falls	IA	Private	Four-Year
39	Kaplan University-Des Moines Campus	Urbandale	IA	Private	Four-Year
40	Northwest Indian College	Bellingham	WA	Public	Four-Year
41	College of Menominee Nation	Keshena	WI	Private	Two-Year
42	Lamar Institute of Technology	Beaumont	TX	Public	Two-Year

APPENDIX B

IRB AND CONSENT FORM

University of La Verne
Institutional Review Board

TO: Randall Joslin, Doctor of Public Administration Program

FROM: University of La Verne, Institutional Review Board

RE: **2015-CBPM-12, A Longitudinal Examination of Associate's Degree Programs In Public Administration**

The doctoral dissertation research, cited above, was received and reviewed by the College of Business and Public Management Institutional Review Board (IRB) and University of La Verne IRB Committees. The college review determined that the research activity has minimal risk to human participants and the application received an Exempt Review.

As an Exempt Review IRB application, there is no expiration date or requirement for filing a notice of completion.

Please note the following conditions apply to any IRB submissions:

No new participants may be enrolled beyond the expiration date without IRB approval of an extension.

The IRB expects to receive notification of the completion of this project, or a request for extension within two weeks of the approval expiration date, whichever date comes earlier.

The IRB expects to receive prompt notice of any proposed changes to the protocol, informed consent forms, or participant recruitment materials. No additional participants may be enrolled in the research without approval of the amended items.

The IRB expects to receive prompt notice of any adverse event involving human participants in this research.

There are no further conditions placed on this approval.

The IRB wishes to extend to you its best wishes for a successful research endeavor. If you have any questions, please do not hesitate to contact me.

Sarah L. Dunn, Ph.D.	7/1/2015
Approval Signature	IRB Director/Chair	Date

For the Protection of Human Participants in Research
Contact: email irb@laverne.edu or phone (909) 448-4756
ULV IRB Website: laverne.edu/irb