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INTRODUCTION

The past and the future are like foreign countries to us. The present is but a fleeting transition, familiar territory and the sole vantage point from which we can understand the past before it disappears from memory. The future is terra incognita that only exists in our imaginations until we arrive.

Vermont is a remarkable place. Among the 50 states, Vermont is frequently listed either at the top or at the bottom of many rankings, and its national reputation is far more expansive than its size warrants. As one wit put it, “Vermont only has the population of a medium sized city, but it aspires to be a whole state.” The purpose of this study is straightforward: to pull together a wide selection of recent statistical data representing the most significant social, economic environmental trends in Vermont. The resulting text is unique in the way that it combines the following characteristics: it is *holistic* in its broad spectrum of subjects covered; it is *historical* in its focus on change over time; and it is *quantitative* in its reliance on objective data. Finally, each topic is presented in the *context* of regional or national developments.

The view of Vermont that emerges in the following pages provides the reader a rich mosaic painted on a broad canvas. Or perhaps a better metaphor would be that of a “5,000 foot” aerial tour of the state’s landscape; high enough to see the broad trends, yet too high to see all the local dynamics as they blend together from one town to the next. The more we studied the patterns and trends, the more we came to appreciate the unique nature of Vermont. Every state makes similar claims to uniqueness, of course, but Vermont’s special combination of characteristics has resulted in a more coherently recognizable “personality” than most states. And like a personality, it gives Vermont a reputation that affects the behaviors and attitudes of its citizens, draws selected people (and companies) to the state, while discouraging others. We hope that by bringing together the most important trends in a single volume, Vermonters will

have the opportunity to better understand how our state has evolved in recent years and to prepare for the challenges ahead.

Background and Organization

In the spring of 2008, the *Center for Social Science Research* at Saint Michael’s College signed a contract with the Vermont Council on Rural Development to provide a statistical profile of the state as a key component of its two-year Council on the Future of Vermont project. Between 2007 and 2008, The Council on the Future of Vermont project held 14 public forums and over 80 focus groups around the state to gather information on the values and priorities of Vermonters and what they see as the challenges of the future. Most of the chapters included in this text reflect the most pressing issues that emerged from these forums. As project directors, we added to the list of topics based upon our expertise in our respective fields of Sociology and Economics as well as our own 30 years of state based research.

This study is divided into four sections and 14 chapters. The first section sets the broader context of the study with chapters on Population (1), the Environment and Climate (2), and Land Use (3). The second section focuses on the economy with chapters on the overall Economy (4) and special areas of study including Affordability (5), Agriculture (6), Forestry (7), and the Creative Economy (8). The third section examines key parts of the state’s infrastructure including the Physical and Electronic Infrastructure (9), Energy (10), and Education (11). The final section considers areas that we grouped into a catch-all category that we called the institutions—Health and Health Care (12), Crime and Corrections (13), and Governance, Civic Engagement and Quality of Life (14).

Truly, this is a study of “statistics” in the original sense of the word: “a descriptive arithmetic of the state.” We have been fascinated by the trends we have found in the course of our research. They gave us new insights and a fresh perspective into Vermont’s past and present in a way that has made us more fully appreciate George Bernard Shaw’s belief that “it is the mark of a truly civilized person to be moved by statistics.”

This study is based upon hundreds of sources and interviews as well as a great number of charts and tables. Space restrictions prohibited us from displaying all 320 of the charts and tables gathered in this text, eight to 15 of which are integrated into each chapter. References appear in each chapter to the other 156 charts that appear only in a supplementary **on-line Appendix**. Readers can find this Appendix and a copy of the complete text in a ‘pdf’ format at either the Council on the Future of Vermont website (www.futureofvermont.org) or the Vermont Council on Rural Development website (www.vtrural.org).

Complexities in Capturing ‘Trend lines’

We started this project with the intention of documenting trends over a consistent time period of 20 years—1987 to 2007. This worked well for many trends, such as for population growth or the unemployment rate, but less well when examining such subjects as the growth in broadband access and cell phone use, two innovations unheard of in 1987. On the other end of the continuum, we found that a 20-year time span was inadequate to see significant trends in climate change, where shifts are often measured in centuries. We also encountered occasional problems with changes in data classification systems from one decade to the next. These modifications are helpful in the long run, but in the short run, they disrupt trend lines mid-course. This was the case, for example, when the federal government replaced a system of tracking industrial output that was started in the 1930s with an entirely new system in the late 1990s. Our solution to all these difficulties was ultimately a pragmatic one: to report on trends for whatever time span seemed to be both meaningful and available.

Regardless of how recent our statistics, all trends become “dated” as newer data becomes available. Most trends, we expect, will change little over the months between our last data point and the time of the study’s publication. But the recent volatility in the economic markets reminds all of us that trends can sometimes turn on a dime. As of December, 2008, Vermont had not been as heavily impacted by the economic crisis as many other states, but this too may change. Fortunately, even rapid upturns and downturns do not alter the past, and the trends that we have documented remain accurate to the most recent data point available. Even as financial and energy markets experience extraordinary swings, the fundamental challenges and strengths of the Vermont economy have changed little in the last few years.

Social scientists have had limited success predicting the future. (Indeed, we have been accused of being able to predict everything but the future!) Few social observers studying Vermont in the middle of the twentieth century could have imagined many of the major social and economic changes that brought us to where we are in 2008. As recently as 1960, how many people in Vermont could have imagined that the state would become a major world producer of microchips, that pollutants from the Midwest would endanger our lakes and forests, that an ice cream factory would become the top tourist attraction in the state, that phones would become mobile (and not produced by AT&T), that the percentage of women with young children in the labor force would double, that home computers would become as ubiquitous as the dishwasher, that there would be a major terrorist attack on U.S. soil, or that the Vermont electorate would give a near landslide victory to the first Black President in the White House?

What We Could Not Cover

Simple humility demands we acknowledge that our study is limited to “measurable” subjects that are primarily of local and regional importance. We recognize that some of the most important changes in society receive little attention within these pages—no matter how important and powerful. For example, the role of religion, human rights, or overseas military

conflicts are all well beyond the scope of our work. And try as we have to document Vermont's most important trends, we surely have missed some changes that are gestating beneath the surface of observation, and which will not emerge into our collective consciousness for some time to come. There is little doubt that one day future historians will look back at our shortsightedness, but in 2008, this is the best we can do.

When scholars from earlier generations gave us our categories of thought and modes of analysis, they also determined the subjects that eventually would be quantified. Some trends are not part of the public discourse simply because no one collects data on the subject. Some trends become more prominent in the minds of the public than they may deserve, and others—sometimes even more important—are virtually invisible. For example, our nation keeps much better statistics on rates of car theft than political and corporate malfeasance and “white collar crime,” all hidden forms of anti-social behavior that have much greater consequences to our collective wellbeing. Likewise, there are scores of high quality measures of economic production that are widely tracked, but it has only been in the last few years that the state has been tracking foreclosures in Vermont. Health officials warn of the potential for human catastrophe with the increased numbers of drug resistant communicable diseases, but we could find no one who has organized the data sufficiently to include in this study. Homelessness is not documented as well as it warrants, nor is hunger, nor many other phenomena. Social scientists working on innovative “genuine progress indicators” recognize some of these shortcomings and are developing improved measures (including measures of happiness) that may one day be central to our thinking, but even those are predicated upon new data collection procedures not commonly available.

Our Data Partners

It should be of little surprise that some agencies or organizations are much better than others at collecting and collating high quality data. The clearest trends in this report are only possible because of the long term efforts by people and organizations who take their obligation to the public seriously

and understand the importance of objective data in policy formation and business decisions—from the person who manages the enormous data base of decades of daily traffic volumes for the state's highways, to the marine biologists who documented 60,000 larval stage Zebra mussels in a cubic meter of water in Lake Champlain, to a private group that is documenting the growth of direct sales by local farmers to Vermonters. We owe a debt of gratitude to workers like these who have devoted their professional lives to collecting, organizing and disseminating statistics that describe so many facets of life in the state.

We were also deeply impressed with the willingness of workers in both the private sector and the State Government to share their data with us. This small group of data analysts and “number crunchers” care deeply about “getting the data right” and were willing to spend hours—sometimes days—with us to be sure that their data would be represented as accurately as possible. Our requests for information were rarely met with skepticism or bureaucratic resistance; trust and cooperation were more often the rule than the exception. We can only wonder how difficult our job would have been in a larger state with complex layers of impersonal bureaucracy and where the most common contact between a citizen and the State is a phone tree or unanswered voice mail. We have come to believe that it is one of the many ways that a small state can take advantage of its size—living and working in Vermont is more personal, more congenial, and ultimately more satisfying.

Many government agencies publish volumes of statistics in their own areas of responsibility, and these were of tremendous help. Trying to track changes in areas that are not yet fully developed presented problems that were not easily resolved. For example, identifying trends in “the creative economy,” “sprawl,” or “affordability” were particularly challenging because of a lack of consensus on how and what should be measured. In these areas, a greater degree of subjectivity was inevitable. In other areas, such as education or crime, abundant objective data is available, but even here, the meanings ascribed to the trends often are contested. We have attempted to contribute to the public dialogue in as neutral a manner as possible without implying specific policy recommendations. We leave that task to others.

Even in areas where there is widespread agreement on the units of measurement, the numbers are sometimes less consistent than we would like. One might expect that there would be strong agreement on the number of homicides that occur in Vermont in any given year, but in fact, different sources reported very different numbers. With rare exception, these inconsistencies were usually rooted in interagency methodological or definitional issues rather than any attempt to distort the data, and most of the data that we relied on is quickly becoming standardized. As Daniel Patrick Moynihan has said, “everyone is entitled to his or her own personal opinions, but they are not entitled to their own data.”

A vast amount of data is presented in the following pages. We have tried to make sense of these observations by placing them in a contemporary context. But the broad scope of this study limits the extent to which any one topic can be explored. Numerous books and articles have been written about virtually every trend identified and different authors frequently interpret them differently. We have included citations of source material in the text that will enable the reader to explore these issues on their own and in more detail.

Authorship and Acknowledgements

After reaching a joint agreement with the Vermont Council on Rural Development on the chapters to be covered, we exercised full editorial discretion in all matters related to the content of this publication. We jointly authored many of the chapters, and hired other experts to write part (or the entirety) of the chapters that fell outside our areas of disciplinary specialization, but all chapters were edited by us to assure a common format and writing style. Several of the authors were also from Saint Michael’s College, including Dr. John Carvellas (Economics), Dr. William Karstens (Physics), and Dr. Richard Kujawa (Geography). Other authors were Dr. Art Hessler of Burlington College, Hank Lambert, of Lambert Mediation and Consulting, and Patricia H. Richards and Jake Dubuque. John Carvellas was particularly helpful not only as the first author of the chapter on Education and a joint author on Affordability, but also as a general advisor

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A second century sage, Ben Zoma, was quoted as saying: “Who is wise? One who learns from all persons.” Indeed, we listened carefully to the many people in both the public and private sphere who generously shared their wisdom and data with us. Their contributions provided the foundation for this study; without them, it would not have been possible. While the data came from a vast number of sources, we alone must accept responsibility for any errors. In the public sector, we are indebted to:

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