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An Economic Assessment of Smokefree Policies in Tennessee

A White Paper

*There is no safe level of
secondhand smoke exposure as a
brief exposure could have
devastating health consequences
-U.S. Surgeon General, 2006*

Hadii M. Mamudu, PhD, MA, MPA
Prasun Bhattacharjee, PhD
Kate L. Nolt, MPH, PhD
Christen Minnick, MPH
Valentine Nriagu, MD
Kelli Greer (Undergraduate)
Jon L. Smith, PhD
Donley T. Studlar, PhD

TABLE OF CONTENTS	
FORWARD	0
EXECUTIVE SUMMARY	1
ABBREVIATIONS AND ACRONYMS	4
1.0. THE PROBLEM	5
1.1. Tobacco use	5
1.1.0. Secondhand tobacco smoke (SHS)	6
■ <i>Health Burden:</i>	6
■ <i>Economic Burden</i>	6
1.2.1. The Nonsmoker Protection Act (NSPA)	7
■ <i>Smokefree environments</i>	7
■ <i>Exempted venues</i>	7
■ <i>State Preemption of Tobacco Regulation</i>	7
1.3. Conclusion	7
2.0. ECONOMIC DATA ANALYSIS	7
2.1. Economic Assessment of Tobacco Control Policies	8
2.1.1. Number of Restaurant Establishments, 2001-2019	8
2.1.2. Employment in the Restaurant Sector, 2001-2019	9
2.1.3. Total annual payroll for Restaurant Establishment, 2001-2019	10
2.2. Assessments of Economic Effects at the Metropolitan Statistical Area (MSA) Level	10
2.3. Assessment of Economic effects by the Size of Establishment	15
2.5. Supplemental Analysis: Results of the Qualitative Data	16
2.6. Conclusion	17
3.0. RECOMMENDATIONS	18
3.1. Evidence-based Strategies	18
3.1.1. Amend the NSPA to remove all exemptions from state SFPs:	18
3.1.2. Amend the NSPA to remove preemption to tobacco regulation:	18
3.1.4. Enforcement of SFPs	18
3.2. The rationale for these recommendations	19
3.3. Counter Arguments	20
3.4. Section conclusion	21
4.0. OVERALL CONCLUSION	22
5.0. REFERENCE	23
APPENDICES	31

FORWARD

Smokefree Policies (SFPs) have proliferated across the United States (U.S.) and worldwide. Research evidence indicates that policies that make a venue 100% SFPs are the best approaches to protecting the public from exposure to secondhand smoke (SHS). SFPs are cost-effective, feasible, appropriate to implement, and supported by a majority of the U.S. population, including people who smoke. In 2007, Tennessee enacted and implemented the Nonsmoker Protection Act (NSPA) to protect nonsmokers from exposure to SHS. The NSPA created 100% smoke-free restaurants; however, it exempted several other types of venues, including age-restricted ones such as bars, and preempted tobacco regulation (which means local jurisdictions cannot pass regulations or policies regarding tobacco). Thus, the NSPA is not an equitable SFP because it overlooks vast segments of nonsmokers such as, employees and patrons of bars, leaving them unprotected from SHS exposure and thwarted any local initiative to pursue 100% SFPs. While this predisposes these nonsmokers to the health dangers associated with SHS exposure, the NSPA as currently written undermines meeting significant health goals which align with the objectives of Healthy People 2030. Healthy People 2030's key objectives include removing preemption from tobacco laws and passing 100% SFPs in all venues. Goals of the state public health strategic plans are also difficult to meet because of this legislation. In 2021, the United Health Foundation ranked Tennessee's smokefree legislation 42nd out of 50 states because this legislation fails to protect all Tennesseans.

Smokefree environments have not curtailed the growth of restaurant establishments in Tennessee (see section 2.0). While current regulations are not equitable nor effective in protection of everyone from SHS exposure, it is costing Tennessee taxpayers billions of dollars in lost productivity and healthcare expenditures.

It is recommended that the state amend the preemption of tobacco regulation so that local municipalities could pursue the adoption of 100% SFPs. Based upon Tennessee specific data, evidence from the literature about the economic effects of SFPs, and the national and international trends toward 100% SFPs, it is therefore recommended that the state amend the NSPA to include 100% SFPs for all public venues (including entertainment and sport venues), and bars. Additionally, amending the NSPA to remove preemption allows local jurisdictions to pursue 100% SFPs. Further, many states, including the neighbor states of Louisiana and Mississippi, have jettisoned preemption since the peak period of the 1990s. As such, as of September 2021, only 12 states, including Tennessee, have laws or court decisions in effect that explicitly preempt tobacco regulation.

This White Paper aims to assess the economic effects of Tennessee's approach to SFPs specifically smokefree restaurant policies. This effort aims to determine the implications for venues exempted by the NSPA (see section 2).

By Hadii M. Mamudu, PhD, M.A., MPA
East Tennessee State University
Professor of Public Health

EXECUTIVE SUMMARY

The Problem

Tobacco use in Tennessee has consistently remained higher than the national average, accounting for 11,400 deaths and \$5.6 billion in economically attributable costs (healthcare costs and lost productivity) annually.^{1,2} In 2020, for example, 19.5% of adults in Tennessee were current smokers, compared to 15.5% nationwide, ranking 46th out of the 50 states.^{3,4} This historically high prevalence of tobacco use in the state and ensuing exposure to secondhand tobacco smoke (SHS) culminated in the enactment and implementation of the Nonsmoker Protection Act (NSPA) in 2007. At the time the NSPA was enacted, the American Lung Association graded Tennessee with a “B+” in its 2008 report “State of Tobacco Control;” however, in the 2022 report, the American Lung Association graded Tennessee a “C” due to the exemptions of age-restricted venues like bars in the law.⁵ The 2022 report also suggests that the Tennessee legislature should amend the NSPA to remove the preemption provision and restore local control to municipalities to adopt stronger smokefree laws. Tennessee is 1 of 10 “Most Challenged” states according to the United Health Foundation’s 2022 “America’s Health Rankings Annual Report” because among other issues, Tennessee was ranked 42nd out of 50 for non-smoking regulations.⁶ This low ranking suggests there is a gap in regulations that protect all nonsmokers in the state.



The NSPA created regulation that resulted in smokefree restaurants; however, it simultaneously exempted some hospitality workplaces, including age-restricted venues such as bars, entertainment, and sport venues. The NSPA also continued with the explicit preemption of tobacco regulation that was introduced by the 1994 Prevention of Youth Access to Tobacco Act to prohibit local jurisdictions from enacting local policies.⁷⁻¹⁰ Thus, there is lack of equity in smokefree protections by the NSPA, and the ability of local jurisdictions to enact 100% smokefree policies (SFPs). Nonsmoking employees and patrons of the exempted venues across the state, including servers, bartenders, athletes and performing artists, make significant economic contributions to the state and local communities and have rights and liberties to smokefree air. They deserve to be protected from SHS. The health benefits of 100% SFPs are beyond dispute, concerns of the adverse economic effects of tobacco prevention and control policies, perpetuated by the tobacco industry, allied groups, and lobbyists,^{11,12} served as the catalyst for this economic assessment of the effects of SFP in Tennessee.

The Evidence

This report analyzed the Tennessee data regarding the positive economic effects of a smokefree environment on restaurants, the only 100% smokefree hospitality venue covered by the NSPA, along with published scientific studies (see Section 2). The consensus in the literature is that 100% SFPs is the only means to ensure equal and equitable protection of all nonsmokers from the health hazards of SHS exposure.^{13–19} The evidence indicates that SFPs:

- Provide protections from SHS exposure and health risks to nonsmokers;^{13,19–23}
- Help individuals to quit or reduce smoking;^{14,24}
- Do not adversely affect sales or employment in the hospitality, entertainment or sport industries, including bars, hotels and motels, and restaurants;^{25–27}
- Have strong public support and compliance, including those in Tennessee.^{7,9,10,28–30}

Additionally, the results of this economic assessment of the effects of SFPs in restaurant establishments, using Tennessee-specific data, revealed that SFPs do not adversely affect the growth of the industry. This aligns with studies from elsewhere in the U.S. and worldwide.^{18,26,27} Specifically, it was found that during the 12-year period following the enactment of the NSPA, i.e. between 2008 and 2019ⁱ:

- Retail sales in Tennessee eating and drinking establishments increased by 62%.
- The number of restaurant establishments increased by 16%
- Employment in the restaurant sector increased by 23%
- While nominal payroll of restaurant establishments increased by 81%, that of real payroll increased by 52% after controlling for inflation
- Except for the smallest and largest size categories, the number of restaurant establishments grew across all size categories; and
- The increase in the number of restaurant establishments, ensuing employment, and payroll occurred in the larger metropolitan areas of Chattanooga, Knoxville, Memphis, and Nashville

To be able to discuss the implications of these positive economic effects of SFPS in restaurant establishments in Tennessee for venues exempted by the NSPA such as bars, entertainment and sport venues, the quantitative analysis was supplemented by qualitative interviews with some establishments that voluntarily transitioned to 100% smokefree environment. The main reasons why these establishments transitioned, included:

- Increase new customer base to improve revenue;
- Respond to employees and customers complaints and reviews;
- Overall health concerns employees and consumers; and
- In response to the COVID-19 pandemic.

All respondents supported smokefree age-restricted venues in their local communities. This mixed methods approach revealed that those smokefree restaurants and age-restricted venues that voluntarily became smokefree experienced economic benefits. Interestingly, these establishments also support removing exemptions from the state SFP and giving local jurisdictions the ability to regulate age-restricted venues.

ⁱ It should be noted that the economy entered into a recession in December 2007; although the recession officially lasted till June 2009, the effects of the recession were long-lived beyond 2009

Recommendations

Based upon this Tennessee-specific data, the reviewed scientific literature, and the general trend toward 100% SFPs nationally and internationally, we propose the following evidence-based policies for equal and equitable protection of all Tennesseans from SHS:

- Amend the NSPA to remove exemptions to achieve 100% SFPs that promote equal (everyone regardless of smoking status) and equitable (focus is on nonsmokers) protection of all against SHS exposure;
- Amend the NSPA to remove preemption provision(s), benchmarking the NSPA as the floor, not a ceiling, for the state. This means that local jurisdictions cannot remove current policies; only improve on them; and
- Enforce the SFPs, along with other evidence-based tobacco control policies to ensure compliance.

Arguments in Support of Recommendation

These policies are not only consistent with best practices^{13,14,31} but also aligns with the key objectives of Healthy People 2030³² and the Tennessee state public health strategic plans.³³ Additionally, these proposals are based upon:

- Cost-effectiveness
- Proven economic benefits
- Improved population health benefits
- Equal and equitable protected from the dangerous health effects of SHS exposure
- Economic costs attributable to SHS exposure; and
- Higher demand for smokefree places, even among those exempted from the NSPA

Counter Arguments

Because of the documented history of tobacco industry practices,^{11,12,34} it is expected that the tobacco companies, allied front groups, and lobbyists will use several counter arguments to thwart any legislative action towards these recommendations, including but not limited to:

- The slippery slope of implications of policy change for other health-related issues
- The alleged adverse economic effects of tobacco control policies such as SFPs
- The overall declining trend of tobacco use prevalence
- Potential weaker local SFPs by removing preemption
- Voluntary actions by the private sector; and
- Majority of the state's population already covered by the NSPA.

Conclusion

Evidence from Tennessee specific data indicates the creation of SFPs for restaurant establishments did not adversely affect the growth of the restaurant industry. In fact, the

restaurant industry experienced significant growth after the implementation of SFPs. Further, scientific studies show that SFPs improve population health, and therefore have positive economic benefits. This evidence suggests that age-restricted venues, including bars, entertainment and sport venues and other workplaces exempted from the NSPA will also benefit from becoming smokefree. The persistently high prevalence of tobacco use in the state is untenable, costs billions of dollars to Tennessee taxpayers, and acts as a deterrent to economic development. Therefore, these policy recommendations proposed in this report are critically needed to improve population health, increase productivity, and foster economic growth in the State.

ABBREVIATIONS AND ACRONYMS

ALA	American Lung Association
CACIA	Children's Act for Clean Indoor Air
CDC	Centers for Disease Control and Prevention
WHO FCTC	WHO Framework Convention on Tobacco Control
MSA	Master Settlement Agreement
NSPA	Nonsmoker Protection Act
PYATA	Prevention of Youth Access to Tobacco Act
SHS	Secondhand Tobacco Smoke
SFP	Smokefree Policy
TN	Tennessee
U.S.	United States
WHO	World Health Organization
NAICS	North American Industrial Classification System

1.0. THE PROBLEM

1.1. Tobacco use

Tennessee is one of the states with the highest prevalence of tobacco use in the United States (U.S.; 19.5 vs. 15.5 nationwide in 2020) (See Figure 1.1).^{3,4} The prevalence of tobacco use ranked Tennessee 46th of 50 states in 2020.⁶ However, variations in the prevalence rate exists across counties, ranging from 14% in Williamson County to 31% in Lake, Perry, Grundy, Morgan, and Cocke counties (Figure 1.2).³⁵ As shown in Table 1.1, this high prevalence rate imposes excessive healthcare and economic costs on the state. As such, addressing issues related to tobacco use in the state should not only be a public health priority but also an economic development one. Economic growth is predicated on a healthy population. Vulnerable populations and communities are disproportionately affected by tobacco use therefore rendering this a health equity priority. Addressing this major public health problem is an economic imperative.³⁶⁻³⁸

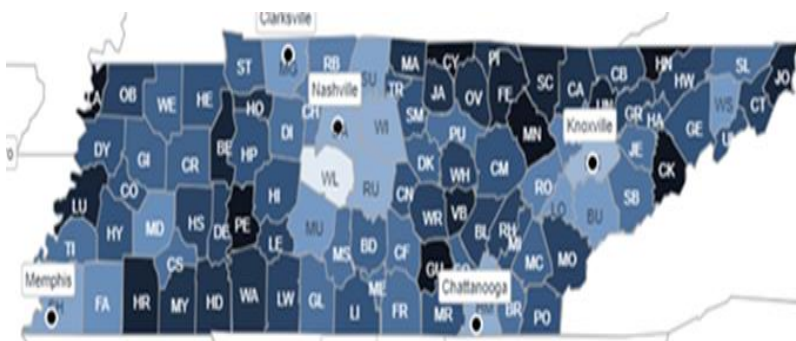
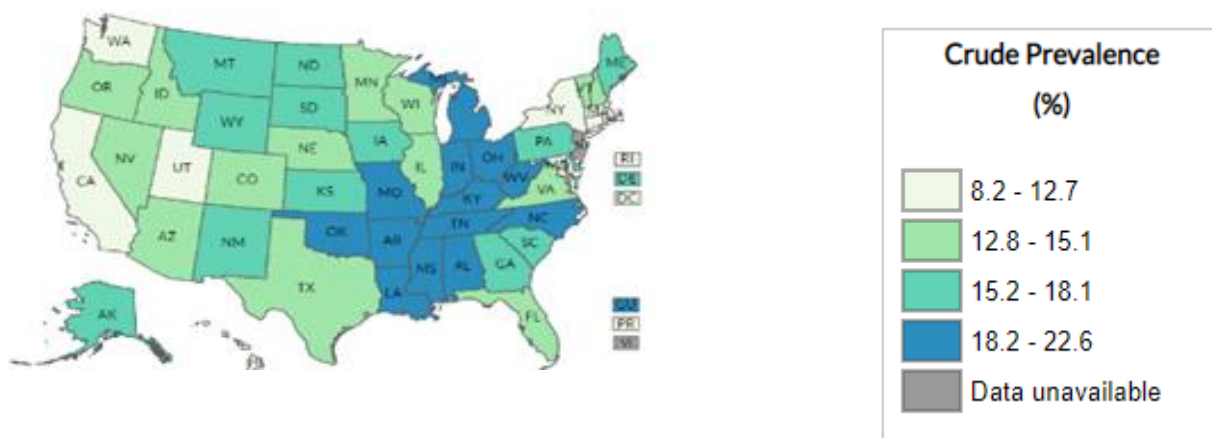


Figure 1.2: Variation in current adult smokers across counties.

Darkest blue: 31%; lightest blue: 14%

**Table 1.1: Tobacco Toll in Tennessee
(crude population numbers)**

Adults who smoke	19.5% (1,037,000)
High school students who smoke	7.1% (24,700)
High school students who use e-cigarettes	22.1%
Death caused by smoking each year	11,400
Annual healthcare costs directly cause by smoking	\$2.67 billion
Proportion of cancer deaths attributable to smoking	32.9%
Residents' state and federal tax burden from smoking caused government expenditures	\$891/household
Estimated annual tobacco industry marketing in TN	\$266.3 million

Source: Campaign for Tobacco Free Kids³⁹

1.1.0. Secondhand tobacco smoke (SHS)

The burden of tobacco use extends beyond the smoker to include the involuntary nonsmoker. SHS contains over 7,000 chemicals, 250 of which are toxins and 70 are known carcinogens or cancer causing agents.^{14,15,40,41}

Thus, exposure to SHS results in:

- **Health Burden:** There is no known safe or risk-free level of SHS exposure and it is harmful to the health of a fetus, youth, and adults.^{14,40,42} Overall, SHS exposure accounts for over 41,000 annual deaths in the U.S.^{14,24} Similar to tobacco use in general, disparities exist in the prevalence of SHS exposure.⁴³ Nonsmoking non-Hispanic Blacks⁴⁴, people residing in multiunit housing,^{45,46} those living below the federal poverty line,⁴⁷ employed in certain industries like bars and restaurants and construction and residing in states without 100% SFPs^{47,48} have disproportionately high prevalence of exposure to SHS. Vulnerable populations such as children⁴⁹ make up the vast majority of those exposed to SHS. As such, protection from SHS exposure is a primary health and equity issue.
- **Economic Burden:** In addition to approximately \$300 billion (~\$170 billion in direct healthcare expenditures) imposed by tobacco use in the U.S.,^{14,50,51} over \$10 billion of costs are due to SHS exposure.^{14,50,51} In Tennessee, the total economic burden of tobacco use is estimated to be over \$5 billion per year,⁵² but the burden attributable directly to SHS is unclear and requires more research.

1.2.1. The Nonsmoker Protection Act (NSPA)

In 2007, the NSPA¹⁰ was enacted and implemented as a major piece of tobacco prevention and control legislation in Tennessee with the following key components:

- **Smokefree environments:** The NSPA created 100% smokefree restaurant establishments in the stateⁱⁱ.
- **Exempted venues:** The NSPA exempted 10 venue types from the smokefree environment list, including age-restricted places such as bars, as well as entertainment and sport venues. As a result, substantial segments of the state's population remain exposed to SHS whether as an employee, participant, or spectator in one or more of these venues.
- **State Preemption of Tobacco Regulation:** The NSPA reinforces the explicit preemption of tobacco regulation that was introduced by the 1994 Prevention of Youth Access to Tobacco Act and the 1995 Children's Act for Clean Indoor Air.^{7,52} This state preemption clause has been reiterated in the 2021 Prevention of Youth Access to Tobacco, Smoking Hemp, and Vapor Products Act.⁵³ As a consequence, research in Tennessee revealed that local policy actions to address tobacco use continues to be impeded by the preemption.⁷⁻¹⁰

1.3. Conclusion

Tobacco use, and tobacco related diseases are excessively high in Tennessee. The resulting health burden costs Tennessee taxpayers billions of dollars in tobacco related disease expenditures. More than 41,000 deaths nationally occur each year due to exposure to SHS. Still, the state lacks a fully funded comprehensive tobacco control program. In 2007, the NSPA was developed to protect nonsmokers from exposure to SHS through the development of 100% smokefree environments. Exemptions for certain venues persist, and because of this tobacco regulation has been explicitly preempted by the state. Consequently, in 2022, the United Health Foundation ranked the non-smoking regulation of Tennessee 42nd out of 50 states. The American Lung Association (ALA) graded Tennessee a "C" for SFPs because of the exemptions and preemption clauses remaining. The evidence about healthcare cost-savings for implementing evidence-based tobacco prevention and control measures such as SFPs, along with the increasing adoption of 100% SFPs nationally and internationally, served as the impetus for this White Paper. The aim is to outline the economic benefits of SFPs to local business and Tennesseans, with the primary evidence focusing on smokefree restaurants as a benchmark to the impact of 100% SFPs on other hospitality venues.

2.0. ECONOMIC DATA ANALYSIS

Overall, there is a dearth of evidence of the economic impact of tobacco use and tobacco control specific to Tennessee. This analysis of the effects of SFPs on restaurant establishments attempts to close this gap.

ⁱⁱ This is because restaurants in the state are not age-restricted venues.

2.1. Economic Assessment of Tobacco Control Policies

These data for this analysis were collected on specific types of businesses in the industrial sector making up parts of the Accommodation and Food Services sector as defined by the North American Industrial Classification System (NAICS).⁵⁴ It should, however, be noted that NAICS identifies two different types of restaurants, Full-Service Restaurantsⁱⁱⁱ and Limited-Service Restaurants^{iv}. It was determined that data for full-service establishments would be more appropriate for this White Paper because customers' stays at limited-service restaurants are generally briefer than full-service restaurants. Data for the number of establishments, employment, and annual payroll for full-service restaurants (NAICS code^v: 722110 and 722511) for the state of Tennessee were obtained from the County Business Patterns database of the U.S. Census Bureau⁵⁵ for the time period 2001 to 2019. These data were examined for trends and compared before and after the NSPA to delineate the potential effects of SFPs on these economic indicators of restaurants in Tennessee. These data may inform the economic effect of 100% SFPs on other hospitality venues.

It should be noted that the implementation of the NSPA was shortly followed by the Great Recession of 2007-2009 that officially began in December of 2007 and lasted until June 2009. Key macroeconomic indicators such as number of business establishments, employment levels, and payroll are sensitive to economic downturns. For this reason, we compare the data for 2001-2007, i.e., before the enactment and implementation of the NSPA with 2010-2019, i.e., after the NSPA post-recessionary period.

2.1.1. Number of Restaurant Establishments, 2001-2019

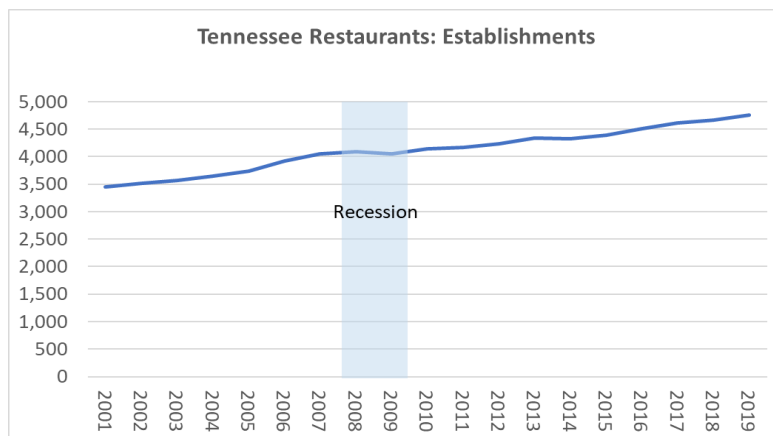


Figure 1.1.1: Trend in the number of restaurant establishments in TN, 2001-2019

ⁱⁱⁱ Full-Service Restaurants according to NAICS are defined as restaurants that are, "...establishments primarily engaged in providing food services to patrons who order and are served while seated (i.e., waiter/waitress service) and pay after eating. These establishments may provide this type of food service to patrons in combination with selling alcoholic beverages, providing carryout services, or presenting live nontheatrical entertainment."

^{iv} Limited-Service Restaurants according to NAICS are defined as "... establishments primarily engaged in providing food services (except snack and nonalcoholic beverage bars) where patrons generally order or select items and pay before eating. Food and drink may be consumed on premises, taken out, or delivered to the customer's location. Some establishments in this industry may provide these food services in combination with selling alcoholic beverages."

^v The NAICS code was revised to 722511 in 2012.

Figure 2.1.1 shows that the number of restaurants increased through the examined period. Specifically, the number of restaurant establishments grew by 14.76% between 2010 and 2019. While it's probable that many factors effected the growth in the number of restaurants during this period, the existence of SFPs did not curtail the increase of the number of establishments. In fact, SFPs provided several health benefits in terms of protecting nonsmoking Tennesseans like patrons and employees of these establishments from the deleterious health effects of SHS exposure (See Appendix A: Trend in Number of Establishments, Number of Employees and Average Annual Payroll for Full-Service Restaurants)

2.1.2. Employment in the Restaurant Sector, 2001-2019

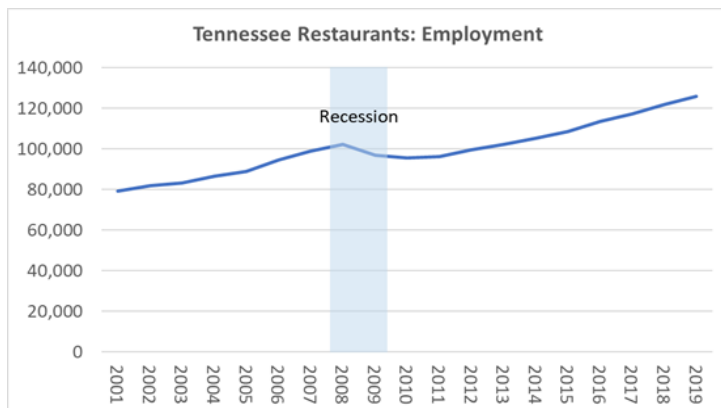


Figure 2.1.2: Trends in Restaurant Employment, 2001-2019

Figure 2.1.2. shows that the trend for total employment levels in restaurants increased over time, except for the 2007-2009 recession period. It should be noted that given the severity of the Great Recession, the labor market recovery was a lengthy process. Therefore, although the recession officially ended in June 2009, the unemployment rate for the U.S. economy did not show a downward trend until April 2010, with more noticeable declines beginning in January 2012.⁵⁶ Such labor market recovery patterns are apparent from Figure 2.1.2.

The overall growth in employment for the restaurant sector in Tennessee was 31.47% for 2010-2019. These results indicate that 100% SFPs for restaurant establishments did not impede the growth of employment in the restaurant sector. Further, a workplace environment that does not expose employees to SHS fosters a workforce that is likely to experience a decrease in absenteeism, as well as tobacco-related illness, and subsequently results in an increase in productivity.

2.1.3. Total annual payroll for Restaurant Establishment, 2001-2019

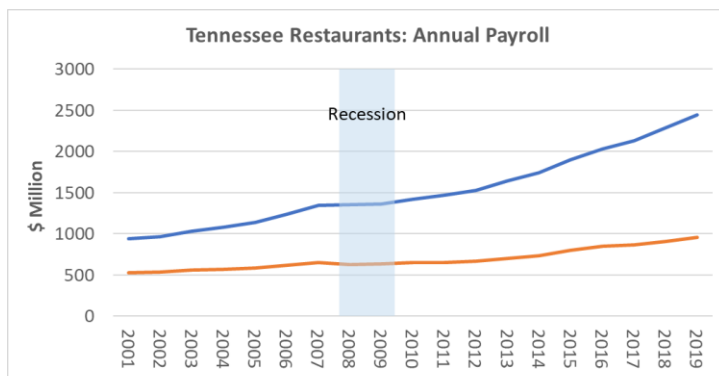


Figure 2.1.3: Total Annual Payroll for Restaurants in Tennessee, 2001-2019

Figure 2.1.3 displays the total annual payroll for restaurants. This captures the economic strength of the sector by accounting for the combined effect of number of establishments, number of workers employed by these establishments and earnings of the workers. The blue trend line represents the nominal annual payroll that displays an upward trend except for during the recession period. The orange trend line controls for inflation and, therefore, represents annual payroll in constant 1982-84 dollars. Both the nominal and real payroll show a sharper increase after the 100% SFPs. Many economic factors contribute to the growth in payroll and, therefore, it suggests that 100% SFPs do not adversely affect the increase in payroll across the restaurant sector. Specifically nominal, and real payroll increased by 72.58% and 47.20%, respectively, during the 2010-2019 period.

2.2. Assessments of Economic Effects at the Metropolitan Statistical Area (MSA) Level

Trends in economic data at the Metropolitan Statistical Area (MSA) level for the four largest MSAs in Tennessee, Nashville, Memphis, Knoxville, and Chattanooga were examined.^{vi} Overall, the economic indicators display an upward trend for these four largest MSAs in Tennessee for the period that was examined, 2001-2019, even after accounting for the 2007-2009 macro-economic recession (Figures 2.2.1 to 2.2.4).

^{vi} It should be noted that data was not available at the MSA levels for certain years

2.2.1 Nashville

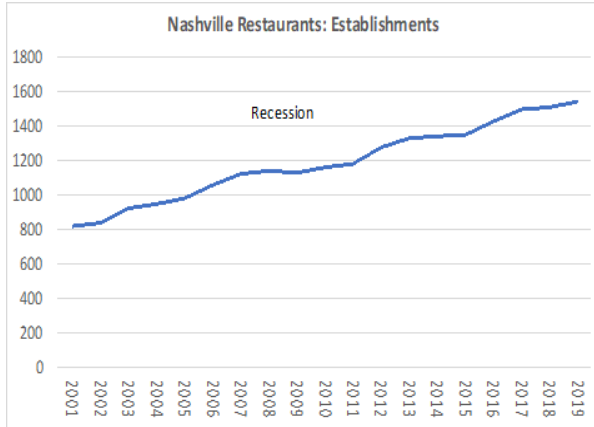


Figure 2.2.1a: Trend in number of Restaurants in Nashville MSA

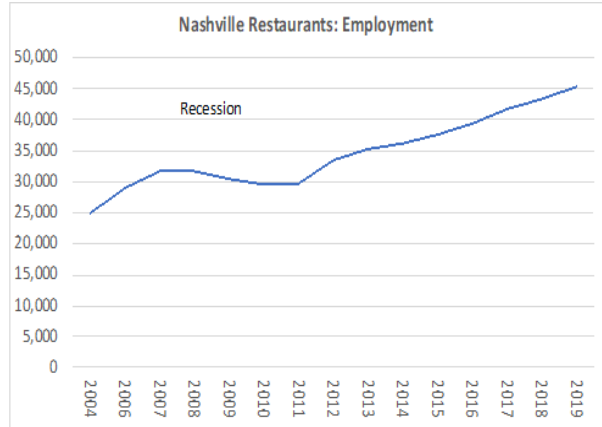


Figure 2.2.1b: Trend in Restaurant employment in Nashville MSA

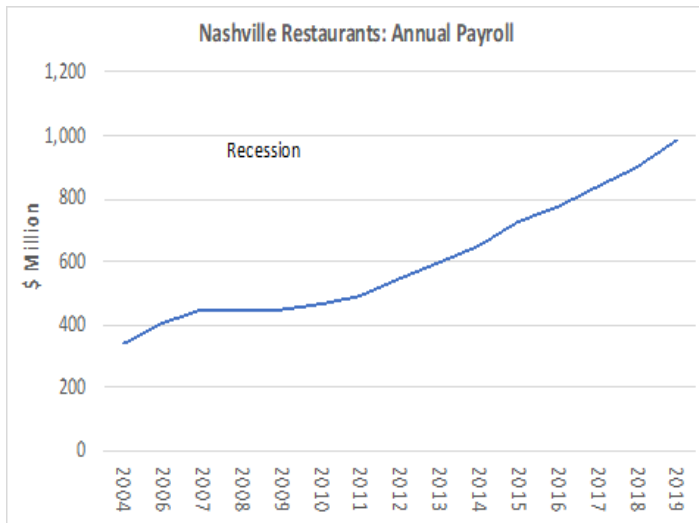


Figure 2.2.1c: Trend in Restaurant annual payroll in Nashville MSA

2.2.2 Memphis

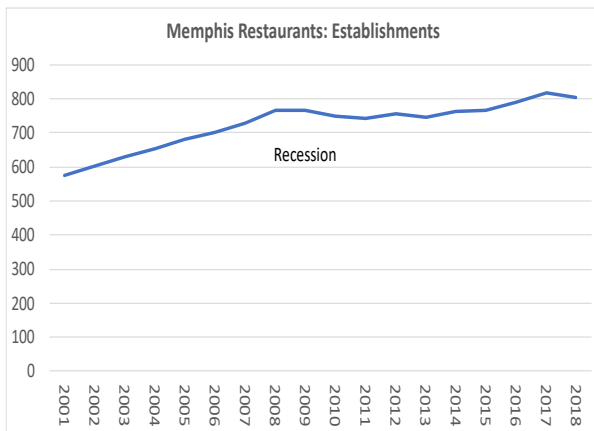


Figure 2.2.2a: Trend in number of Restaurants in Memphis MSA

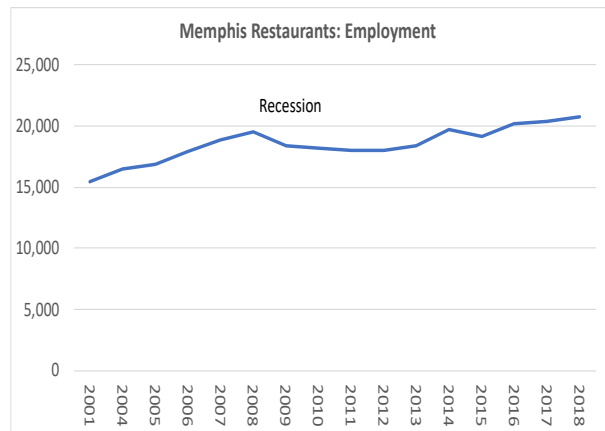


Figure 2.2.2b: Trend in Restaurant employment in Memphis MSA

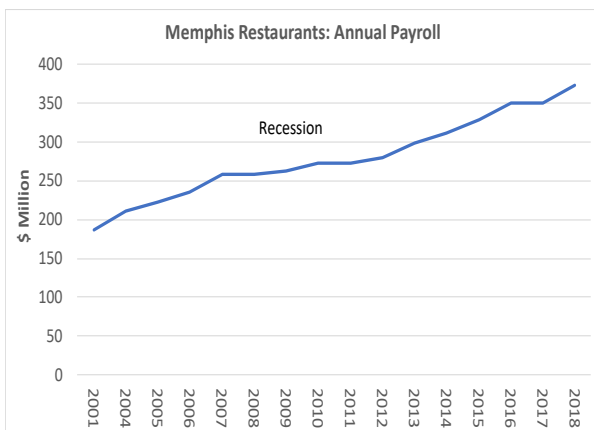


Figure 2.2.2c: Trend in Restaurant annual payroll in Memphis MSA

2.2.3 Knoxville

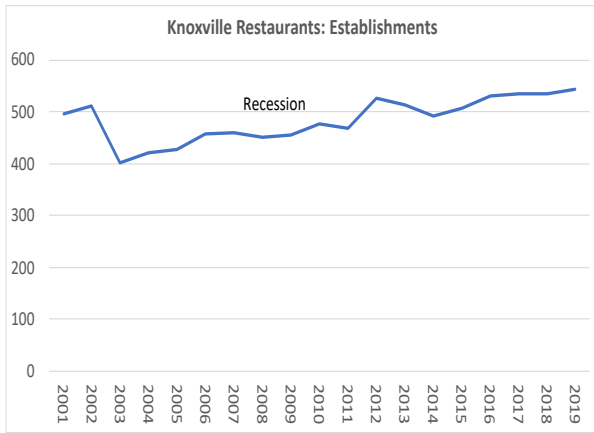


Figure 2.2.3a: Trend in number of Restaurants in Knoxville MSA



Figure 2.2.3b: Trend in Restaurant employment in Knoxville MSA

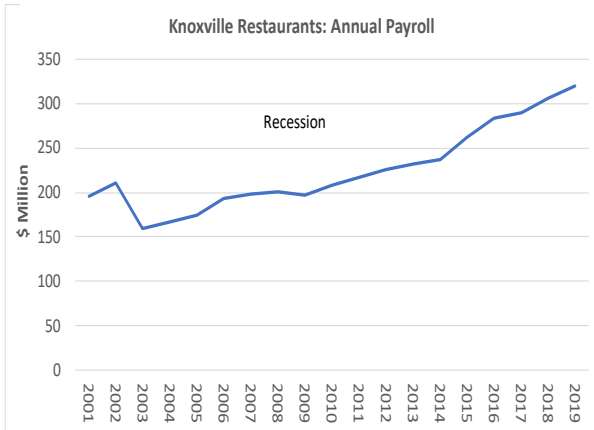


Figure 2.2.3c: Trend in Restaurant annual payroll in Knoxville MSA

2.2.4 Chattanooga

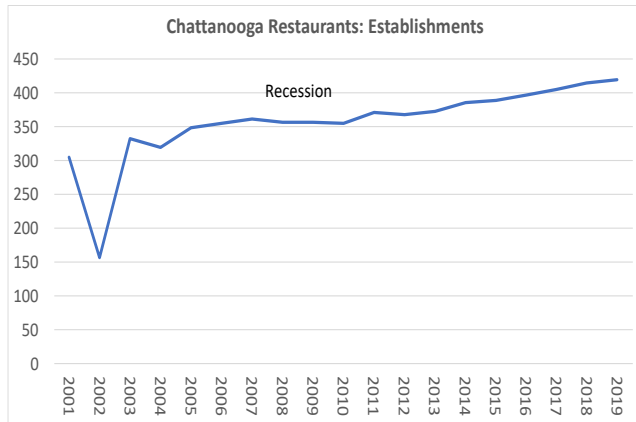


Figure 2.2.4a: Trend in number of Restaurants in Chattanooga MSA

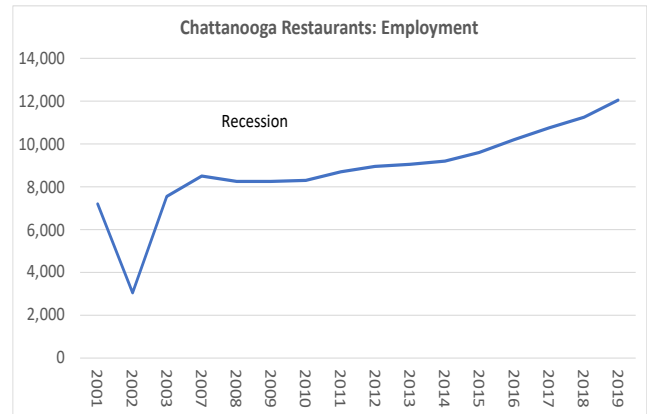


Figure 2.2.4b: Trend in Restaurant employment in Chattanooga MSA

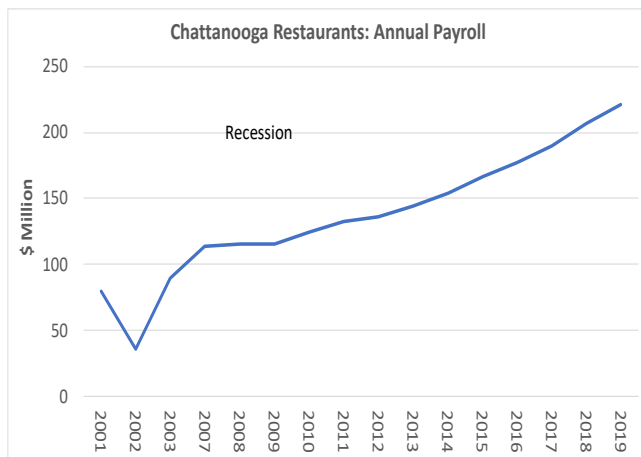


Figure 2.2.4c: Trend in Restaurant annual payroll in Chattanooga MSA

Figures 2.2.1 – 2.2.4 demonstrate that regardless of the economic variables examined, restaurants across these MSAs in Tennessee were not adversely affected by the creation of 100% SFPs. Employees and patrons benefitted by eliminating exposure to SHS. Table 2.1 in the Appendices depicts the annual percentage changes across these MSAs.

2.3. Assessment of Economic effects by the Size of Establishment

A major concern of any government regulation is the differential impact on local businesses.⁵⁷ As such, in this section, trends in the number of restaurants in Tennessee by establishment size (number of employees) were examined. The size of the establishment was aggregated into five size categories – 1 to 9 employees, 10 to 19 employees, 20 to 49 employees, 50 to 99 employees and 100 and above employees.

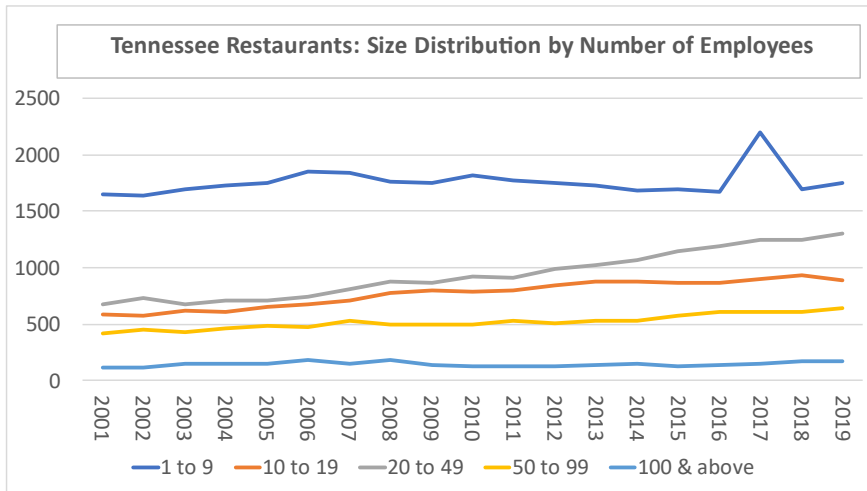


Figure 2.3.1: Trend in number of Restaurants in Tennessee by establishment size

Figure 2.3.1 depicts that the number of small and intermediate sized establishments were not impacted by the implementation of 100% SFPs; they have either increased in numbers over time or have remained the same.

2.4. Retail Sales from Eating and Drinking Establishments



Figure 2.4: Trend in Monthly Retail Sales of Eating and Drinking Establishments

The results of the trend analysis show that 100% SFPs had no discernible adverse effects on the restaurant industry in terms of number of establishments, employment levels, and annual payroll. These findings are further substantiated by Figure 2.4, which shows data from Tennessee Department of Revenue on monthly retail sales of eating and drinking establishments in the state. In aggregate, the annual retail sales of eating and drinking establishments grew at a rate of 62% from 2010-2019. This trend suggests that overall retail sales remained flat or slightly declined in the immediate months following the passage of the NSPA as the economy entered a recession. As the economy recovered from the recession, retail sales grew (See Appendix B: Trend in Number of Establishments, Number of Employees and Average Annual Payroll for Eating and Drinking Places)

2.5. Supplemental Analysis: Results of the Qualitative Data^{vii}

As already indicated, economic assessments of tobacco control policies do not exist for Tennessee and this White Paper is the first attempt to delineate any economic effects of 100% SFPs across several economic indicators. For this reason, the quantitative data gleaned from NAICS, U.S. Census Bureau, and Tennessee Department of Revenue were supplemented with semi-structured interviews of owners of establishments not covered by the NSPA and who voluntarily transitioned to a smokefree environment. A total of 7 such establishments with occupancy capacities ranging from 50 to over 69,000 people and number of employees ranging from 6 to over 1300 were interviewed. The major themes that emerged, along with supporting quotes, are:

- ***Increase new customers and attract prospective customers to increase revenues***

- Wanted to increase revenues by making a more family friendly environment after being shut down by COVID.

- ***Health concerns (including COVID-19 transmission concerns)***

- Health of guests and employees
- Concern over respiratory health during COVID for employees and customers

- ***Respond to customer and employee complaints***

- The bar wanted to market and sell food and found customers were more likely to order when there was no smoking.

- ***SHS exposure and equity***

- Didn't want the bar to smell like smoke anymore
- Former smoking sections were located on vertical transport (disability) ramps, since there are limited elevators in the stadium, patrons had to walk through smoking sections to get to the different levels of the stadium

Paraphrase: I think local laws would benefit smokers instead of businesses that don't want it in their bars. Owner feels there is less maintenance and cleaning needed because of moving to smokefree regulation.

^{vii} The information from the interviews has been paraphrased; they are not verbatim as the interviews were not recorded. Instead, copious notes were taken during the interviews.

Table 2.5 Interview Questions and Findings

Table 2.5: Responses of establishments that voluntarily became smokefree (N =7)		
Indicators and opinion	Yes	No
After going smokefree did you experience lower cleaning and maintenance costs?	4	3
After going smokefree did you experience lower energy utilization (HVAC, gas/electricity) and costs?	3	4
*Do you support all age-restricted venues to become smokefree (in your area)?	7	0
*Do you support all age-restricted venues to become smokefree (in the state)?	6	1
§Would you support a local law that would allow your city to regulate smoking inside age-restricted venues?	6	1
*-Proxy measures for removing exemptions to smokefree policy (i.e., the NSPA)		
§-Proxy measure for repealing preemption		

The results from this small pilot study show that although responses on the economic effects were mixed, respondents were overwhelmingly in support of removing exemption clauses from SFPs in Tennessee and permitting local jurisdiction to pursue 100% SFPs. This entails removing preemption of tobacco regulation in the state from the NSPA to facilitate local tobacco control. Interviews are ongoing.

Food sales increased revenue by 50% in the year following the implementation of 100% SFPs. Most other businesses in the neighborhood voluntarily went smokefree during the 2020 COVID-19 pandemic shutdown (Respondent #7)

2.6. Conclusion

These Tennessee-specific data show that in addition to health benefits, SFPs do not adversely affect local business and economy, and in fact produce healthcare cost savings. Cost savings are represented by a decrease in health care expenditures and increased productivity. These findings can be extrapolated to support the argument in favor of 100% SFPs for other venues such as bars, entertainment, and sport venues. After examination of economic indicators, 100% SFPs do not adversely affect economic growth. The qualitative data from the interviews reinforce these findings, although more research is still needed.

3.0. RECOMMENDATIONS

3.1. Evidence-based Strategies

Extensive evidence about the effectiveness of tobacco control measures such as 100% SFPs,^{13-16,31,58,59} strengthens the Tennessee-specific data presented in Section 2.0. Healthy People 2030 objectives,³² and national^{60,61} and international^{18,58,62} trends toward 100% SFPs further reinforces the following recommendations:



3.1.1. Amend the NSPA to remove all exemptions from state SFPs:

Research involving venues exempted from SFPs such as bars⁶³⁻⁶⁵ demonstrates that measures of air quality such as PM_(2.5) and cotinine levels are higher in nonsmokers who work in these venues. Because they are exposed to deleterious levels of SHS than those in venues covered by SFPs, patrons and employees are at higher risk of adverse health outcomes such as cardiovascular and respiratory diseases. Equal and equitable protection under the law means that patrons and employees of all workplaces have the same access to smokefree environments as those currently protected under the limited 100% SFPs. Safeguarding everyone from the health dangers of exposure to SHS is a public health imperative.

3.1.2. Amend the NSPA to remove preemption to tobacco regulation:

Preemption of tobacco regulation has undermined the progress of SFPs in local jurisdictions in Tennessee.^{7-9,60,61} Louisiana and Mississippi have jettisoned preemption clauses since the 1990s.^{12,66-68} As of September 2021, Tennessee is one of only 12 states that have laws, case precedence and court decisions that explicitly preempt tobacco regulation.⁶⁸ Healthy People 2030⁶⁹ calls for removal of state preemption as part of efforts to reduce tobacco use nationwide. This recommendation is consistent with Tennessee-specific data that reinforce demand from communities that preemption be removed to allow communities to pursue 100% SFPs.^{7,9}

3.1.4. Enforcement of SFPs

Research evidence shows that SFPs have strong public support across all population subgroups,⁷⁰ including smokers.^{28,29} Further, research suggests that once SFPs have been implemented in bars and restaurants, for example, people voluntarily comply.^{70-76,72,74,76} Noncompliance and lack of enforcement of SFPs occurs in various settings. One study from Tennessee, for example, showed that approximately 81% of respondents reported observation of noncompliance with school SFPs.²⁹ Noncompliance and lack of enforcement of SFPs foster continuous exposure to SHS. Therefore, sustained efforts to monitor and enforce SFPs by implementing NSPA agencies like the Departments of Health and Agriculture is critical.

3.2. The rationale for these recommendations

This aim of this White Paper is to promote equal and equitable protection of all Tennesseans from exposure to the deleterious effects of SHS. Rationale for the above recommendations are:

- **Cost-effectiveness of SFPs:** Tobacco control policies such as SFPs are considered public health “best buys” because they are highly cost-effective, feasible, and appropriate to implement.^{77–80} Further, having a single SFP with no exemptions will relieve regulatory burden of processing and enforcing exemptions.
- **Economic benefits of SFPs:** 100% SFPs do not adversely affect Tennessee’s economy (see section 2.5). Removing exemptions from the NSPA and passing 100% SFPs allows Tennesseans to work and patronize establishments that protect their health through eliminating exposure to SHS.⁷
- **Health effects of SHS Exposure:** The deleterious health effects of SHS exposure has been well-documented.^{14,15,22,40,81} Extensive evidence shows that 100% SFPs are the only means to protect all nonsmokers.
- **Equal and equitable protection from SHS exposure (health equity³⁸):** Significant disparities exist in SHS exposure in the U.S.^{38,82–86} Health equity is achieved with 100% SFPs as anyone patronizing a covered venue is fully protected from exposure to SHS. The NSPA, with its several exemptions of certain types of venues, does not provide equal opportunity for this protection.
- **Protection of nonsmokers:** Research shows that the issue of protection of the nonsmoker generated a legal breakthrough in tobacco control in the 1980s.^{14,87} Prior to that, people who smoke could claim that any harm done by smoking was confined to themselves; thus, it was ‘my body, my choice’ and I have the liberty to smoke. However, with the scientific discovery of harm to people who do not smoke, this individualistic argument was replaced by the social context one that smoking was not just an individual choice but in fact had consequences for others. Vulnerable populations such as children, people experiencing disability and innocent bystanders are disproportionately affected by the consequences of SHS exposure.¹⁵ Therefore, smoking by an individual was a collective act, not simply an individual choice.
- **Externalities produced by SHS exposure (Cost of smoking):** There are several economic externalities produced by SHS exposure. The price of tobacco products is undervalued because the costs of externalities are not considered. In economic terms, smoking produces negative externalities (SHS) that harm people who do not smoke (cost). The direct economic costs to people who smoke are less expensive because the cost of a pack of cigarettes, for example, does not include the costs of the ensuing healthcare expenditures related to disease that result in lost productivity, and the related costs incurred to address the addiction to nicotine. These costs distort free market principles by artificially making tobacco products cheaper than the true market value.⁸⁸ Instead, the costs of externalities produced by people who smoke in Tennessee are imposed upon people who do not smoke. If the costs of these externalities were included in the purchase price of tobacco

products, then access to tobacco products would be cost prohibitive and would likely reduce tobacco use.

- **Higher demand for smokefree environments:** Consistent with the evidence from studies in Tennessee, ^{7,28,89,90} health concerns of SHS exposure and attracting new and prospective customers were key reasons for establishments becoming voluntarily smokefree. Customer and employee complaints were also key indicators. Establishments were driven by desire to improve annual revenue.

3.3. Counter Arguments

It is expected that the tobacco industry and affiliated groups, and political allies will seek to undermine the proposed recommendations in this White Paper as they have done in the past.^{7,11,12,91,92} Support of evidence-informed recommendations will meet with the following counter arguments from tobacco industry lobbyists, their political allies, and front groups.

- **“Slippery slope”:** The proposed recommendations involve creating a tobacco regulatory regime where there are no exemptions for SFPs, and local jurisdictions have the flexibility to develop 100% SFPs with the NSPA as the foundational legislation. The tobacco companies and their interests will argue that if the Tennessee heeds to the demands of public health regarding tobacco regulation such as 100% SFPs and removing exemptions, that this produces a “slippery slope” for extension of such demands to other areas such as alcohol and the food industries. This is a traditional argument of the tobacco industry.^{11,92–95} It must be noted that tobacco use is the leading preventable cause of diseases and deaths in Tennessee, and tobacco is the only legal consumer product that kills up to half of its regular users if used as intended by the manufacturer, with the tobacco industry as the main “vector” for that.^{14,96} Additionally, tobacco companies have purposefully promoted and marketed their products to vulnerable populations, including youth and young adults.^{97,98} In this regard, tobacco is a unique addictive product, unlike other consumable product.
- **Declining tobacco use in Tennessee:** The prevalence of tobacco use in Tennessee in the past 20 years has been declining in line with the nation, so why do we need to change the status quo? While this is true, tobacco use in Tennessee has simultaneously and continuously remained higher above the national average (19.5% vs. 15.5%, 46 of 50 in 2020). Should Tennessee be satisfied with maintaining an excessively high rate of smoking when the health of Tennesseans is severely compromised? Tennessee’s Strategic Health Plans consistently indicate^{33,99} that improving its health status, by reducing tobacco use in the state, benefits all Tennesseans.
- **Adverse economic impact of SFPs:** The tobacco industry will argue ^{11,92} that 100% SFPs will adversely impact Tennessee’s economy despite the evidence in this White Paper to the contrary. Further, the overwhelming scientific evidence of the positive health benefits of evidence-based tobacco control interventions such as 100% SFPs further negates this argument because there is a direct relationship between reduced tobacco use and SHS exposure and less healthcare expenditures and increase productivity.^{14,15,19,22,40,81}

- **Potential of weaker local SFPs with removal of state preemption:** Tobacco companies and their allies will argue that state preemption of regulation of tobacco products creates uniform and standardized policies across states thereby providing clarity and avoiding policy confusion. However, research suggests that preemption was a strategy introduced by the tobacco industry and allies to thwart progress in the proliferation of local smokefree ordinances in the 1990s,¹² which is why most states have repealed preemption.⁶⁸ Additionally, research studies,^{100–102} including those conducted in Tennessee,^{7,9} have shown that preemption has negative implications for advancement of tobacco control given that local jurisdictions serve as places for tobacco control policy innovation and are most responsive to the needs of the local population. As such, amending the preemption of tobacco regulation is a central objective of *Healthy People 2030*.³²
- **Voluntary SFPs:** The tobacco companies and allies will argue that the current NSPA does not prevent private entities from taking voluntary actions to become smokefree environments. However, such voluntary actions are rare and evidence in Tennessee indicates that establishments do not become smokefree without government regulation. Further, 100% SFPs would establish a single standard, which would mean that patrons and employees of any covered restaurant or bar would have the same expectation of a smokefree environment. The Restaurant Association agreed and took a similar position as health based advocacy groups involved in the development of the NSPA.⁷ Relying on voluntary actions on the part of private establishments, who may not choose to be smokefree, does not equitably protect patrons and employees of age-restricted venues from SHS exposure in Tennessee.
- **The state population covered by the NSPA:** The tobacco companies and allies will argue that the NSPA extended the population covered by smokefree venues and establishments; therefore, there is no need for spending additional resources to make changes to the NSPA to extend it further to the exempted venues. This point, however, loses sight of the fact that these exempted venues are utilized by nonsmoking patrons and employees with rights to smokefree environments and deserve equal and equitable protections under the law. Both the quantitative and qualitative data have shown that with 100% SFPs, customers would continue to patronize smokefree establishments and would comply.

3.4. Section conclusion

The health burden of exposure to SHS costs Tennessean's billions of dollars annually. 100% SFPs are cost-effective and reduce the economic impact of exposure to SHS. Further, these policies do not adversely affect the economy of the State. Failure to extend 100% SFPs to include age-restricted venues such as bars, entertainment, and sport venues creates inequities in the protection of all Tennesseans from exposure to SHS, particularly those who patronize and work in these venues. The tobacco industry's historical approach to undermining sound public health practice cannot be a deterrent from Tennessee lawmakers pursuing 100% SFPs.

4.0. OVERALL CONCLUSION

The evidence from the Tennessee-specific data aggregated with evidence from the literature supports:

- Removal of exemptions such as age-restricted venues in the NSPA supports adoption and implementation of 100% SFPs to ensure equal and equitable protection of all Tennesseans from SHS exposure,
- Amendment of the NSPA state preemption of tobacco regulation clause to facilitate the development of local 100% SFPs, and
- Monitoring and enforcement for compliance to existing tobacco control policies and programs, including 100% SFPs

Tennessee has demonstrated strong leadership in addressing youth access to tobacco products since the U.S. Supreme Court decision in *Austin vs. Tennessee* (1900).^{103,104} Through the passing of the 1994 Prevention of Youth Access to Tobacco Act, the 1995 Children's Act for Clean Indoor Air, and currently the 2021 Prevention Youth Access to Tobacco, Smoking Hemp, and Vaping Act, youth in Tennessee have limited access to purchase, use and possess tobacco products. Tennessee legislators now have the opportunity and capacity to equitably protect all Tennesseans from SHS exposure by implementing these recommendations that will improve the health and well-being of its population without any adverse impact on the economy.

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APPENDICES

Appendix A

Year	Levels				Year to Year % Change			
	Number of Establishments	Number of Employees	Average Annual Payroll (Million; \$)	Average Annual Payroll in Constant Dollars (Million; \$)	Number of Establishments	Number of Employees	Average Annual Payroll	Average Annual Payroll in Constant Dollars
2001	3,453	79,195	938	530				
2002	3,512	82,002	971	539	1.71	3.54	3.47	1.86
2003	3,573	83,412	1,031	560	1.74	1.72	6.26	3.89
2004	3,649	86,464	1,081	572	2.13	3.66	4.82	2.11
2005	3,740	89,070	1,141	584	2.49	3.01	5.54	2.08
2006	3,921	94,503	1,241	616	4.84	6.10	8.80	5.40
2007	4,049	98,884	1,345	649	3.26	4.64	8.32	5.32
2008	4,095	102,259	1,351	628	1.14	3.41	0.49	-3.22
2009	4,052	96,889	1,367	637	-1.05	-5.25	1.15	1.51
2010	4,146	95,700	1,419	651	2.32	-1.23	3.83	2.15
2011	4,172	96,205	1,473	655	0.63	0.53	3.83	0.66
2012	4,239	99,482	1,532	667	1.61	3.41	3.99	1.89
2013	4,342	102,411	1,641	704	2.43	2.94	7.10	5.55
2014	4,328	105,136	1,740	735	-0.32	2.66	6.02	4.33
2015	4,394	108,686	1,900	802	1.52	3.38	9.20	9.07
2016	4,514	113,627	2,034	848	2.73	4.55	7.06	5.72
2017	4,610	117,254	2,134	870	2.13	3.19	4.90	2.71
2018	4,660	121,860	2,289	912	1.08	3.93	7.29	4.7
2019	4,758	125,818	2,449	958	2.10	3.25	6.98	5.08

Table A.2: Trend in Number of Establishments, Number of Employees and Average Annual Payroll for Full-Service Restaurants (NAICS Code: 722110 from 2002-2011 and 722511 from 2012 onwards) in Tennessee

Appendix B

Year	Levels				Year to Year % Change			
	Number of Establishments	Number of Employees	Average Annual Payroll (Million; \$)	Average Annual Payroll in Constant Dollars (Million' \$)	Number of Establishments (%)	Number of Employees (%)	Average Annual Payroll (Million; %)	Average Annual Payroll in Constant Dollars (%)
2002	368	3,276	39	21	-	-	-	-
2003	319	3,312	34	18	-13.32	1.10	-12.13	-14.09
2004	350	4,039	41	22	9.72	21.95	20.68	17.55
2005	357	3,440	42	22	2.00	-14.83	3.59	0.19
2006	344	3,829	46	23	-3.64	11.31	8.92	5.51
2007	358	3,699	48	23	4.07	-3.40	3.44	0.58
2008	346	3,808	51	24	-3.35	2.95	6.61	2.66
2009	356	3,681	51	24	2.89	-3.34	-0.83	-0.47
2010	335	3,394	53	25	-5.90	-7.80	5.58	3.88
2011	339	3,298	56	25	1.19	-2.83	5.55	2.32
2012	334	3,266	63	27	-1.47	-0.97	11.42	9.16
2013	323	3,643	68	29	-3.29	11.54	8.53	6.96
2014	331	3,909	76	32	2.48	7.30	10.98	9.21
2015	336	3,960	82	35	1.51	1.30	8.17	8.04
2016	345	4,711	101	42	2.68	18.96	23.23	21.69
2017	335	4,937	111	45	-2.90	4.80	10.22	7.92
2018	348	4,888	115	46	3.88	-0.99	3.31	0.84
2019	343	4,938	123	48	-1.44	1.02	6.75	4.85

Table A.3: Trend in Number of Establishments, Number of Employees and Average Annual Payroll for Drinking Places (NAICS Code: 72241) in Tennessee

Table 2.1: Comparison of growth rates in Restaurant establishments, employment, and annual payroll for top four MSAs in Tennessee during pre-NSPA and post-NSPA period

MSA	Series	Period	Growth Rate (%)
Nashville	Number of Establishments	2001-2007	37.41
		2010-2019	32.79
	Employment	2004-2007	26.93
		2010-2019	53.12
	Annual Payroll	2004-2007	33.01
		2010-2019	112.34
Memphis	Number of Establishments	2001-2007	27.18
		2010-2018	7.49
	Employment	2001-2007	22.10
		2010-2018	13.84
	Annual Payroll	2001-2007	38.42
		2010-2018	36.87
Knoxville	Number of Establishments	2001-2007	-7.44
		2010-2019	14.05
	Employment	2001-2007	-8.61
		2010-2019	22.38
	Annual Payroll	2001-2007	1.20
		2010-2019	53.15
Chattanooga	Number of Establishments	2001-2007	18.36
		2010-2019	18.03
	Employment	2001-2007	18.11
		2010-2019	45.30
	Annual Payroll	2001-2007	42.96
		2010-2019	77.33