Review of Municipality of Anchorage
Chapter 16.65 – Prohibition of Smoking in Public Places

Prepared by

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Executive Summary

In July 2000 the Municipality of Anchorage (MOA) passed ordinance AO No. 2000-91(S) to establish the prohibition of smoking in public places and workplaces. As part of its passage, the Municipal Assembly required that the ordinance be reviewed during 2001. There are six aspects for the review that were listed in the ordinance:

1. Effectiveness of the continuing public education program and ongoing efforts to work with affected businesses and individuals
2. Effect on reducing secondhand smoke exposure
3. Practicality of enforcing the ordinance and any problems with enforcement
4. Number of violations and amount of penalties
5. Any needed revisions to the ordinance
6. Overall economic impact

The findings of the Research Team from the University of Alaska Anchorage are summarized as follows.

1. Effectiveness of the continuing public education program and ongoing efforts to work with affected businesses and individuals

The community wide effort of raising public awareness was conducted in collaboration with a number of public interest groups and through a variety of media. There was a direct mailing of information to every business license holder in the city. The awareness of businesses appears to be quite high in light of the number of citizen based complaints on lack of compliance to the ordinance.

2. Effect on reducing secondhand smoke exposure

While there was no way to quantify this reduction through pre and post air sampling tests, the number of facilities within the hospitality industry alone indicates that over 7,500 employees are no longer exposed to secondhand smoke while on the job. This number is larger if businesses in all industry types are considered. This also means patrons to these establishments are also no longer exposed to secondhand smoke.

3. Practicality of enforcing the ordinance and any problems with enforcement

There have been issues regarding some of the definitions and intentions within the ordinance. These appear to center on the equity of applying a Municipal tobacco smoking prohibition law through the use of full beverage dispensary licenses as provided by the State of Alaska.
4. **Number of violations and amount of penalties**

At the end of August 2001 there had been only one citation issued under this ordinance. It has been challenged and is awaiting a hearing. There has been no assessment of penalties.

5. **Any needed revisions to the ordinance**

The Research Team is recommending a number of revisions that deal with language clarification and making the application of the ordinance more specific for those charged with its enforcement. The Advisory Committee has provided thirteen suggestions that have been ordered to their level of support from the group. These also focus on language and process clarification.

6. **Overall economic impact**

The timing of the review has allowed for only a detailed assessment of one quarter of business specific economic data, and two quarters of composite industry specific information. The question that was critical for the Research Team to answer was: *Was there a significantly large, negative impact on the businesses that were required to move from allowing smoking to being non-smoking as a result of this ordinance?* There was no indication in the data that such an impact occurred.
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I. Overview

In July 2000 the Municipality of Anchorage (MOA) passed ordinance AO No. 2000-91(S) to establish the prohibition of smoking in public places and workplaces (see Appendix A). As part of its passage, the Municipal Assembly required that the ordinance be reviewed during 2001. This report has been prepared for consideration by the Health and Human Services Department (HHSD) and the Anchorage Police Department (APD). After their review, HHSD and APD are to make recommendations for any changes to the Mayor, the Health and Human Services Commission, and the Assembly. The University of Alaska Anchorage was contracted to conduct this review. The Institute for Circumpolar Health Studies (ICHS) is the lead organization, and the Institute for Social and Economic Research (ISER) is also engaged.

There are six aspects for the review that were listed in the ordinance:

1. Effectiveness of the continuing public education program and ongoing efforts to work with affected businesses and individuals.
2. Effect on reducing secondhand smoke exposure.
3. Practicality of enforcing the ordinance and any problems with enforcement.
4. Number of violations and amount of penalties.
5. Any needed revisions to the ordinance.
6. Overall economic impact.

ICHS met with the Municipality of Anchorage (MOA) Project Officer, Nancy Merriman, to discuss the scope of the research. Ms. Merriman has been kept apprised of all work and has supported all activities that have been agreed to for this review. This has been a Municipal project that they initiated to evaluate their ordinance.

In March, ICHS provided the Assembly with a work session summary of what was being proposed. At that presentation some of the limitations of the review were outlined. The key considerations were the amount of time available to collect data, and the limits of possible sources of data that could provide meaningful information for this review. ICHS was not charged to collect public opinion, but to technically review the ordinance.

ICHS requested an Advisory Committee for this evaluation and the Mayor appointed the group in April. A meeting was held on 18 April to foster discussion about their concerns and a research plan was developed. The Advisory Committee met on 30 May to review the evaluation plan and agree to the work (see Appendix B). Upon further investigation some aspects were found not to be practical and so were dropped, but no new components were added after the initial committee approval.

ICHS conducted key informant interviews with MOA staff members to quantify the six review aspects. These interviews took place on 22 August with the following individuals:
An interview was also conducted with Municipal Attorney William Greene on 15 October 2001.

ICHS obtained contact logs from the Municipality where citizens called in for either more information on the ordinance or to document a complaint since its implementation. The complaint and citation logs have been redacted of any personal or business identifiers. The logs were reviewed for numbers and the nature of the call as recorded in the notes. This information was then applied to both an understanding of the effectiveness of the public education efforts as well as the practicality of enforcement.

A summary of the interviews and other findings was presented to H&HS Director Jewel Jones on 29 August. This review included a summary of the approaches that were considered but that did not prove to be successful. These are listed in Appendix C. During this briefing a request was made for an additional interview with staff of the legal office of the Municipality. Director Jones arranged for an interview with the legal staff on 15 October.

Public data from the Department of Labor Statistics and various State licensing agencies have been compiled to provide an economic assessment by industry type. Establishments open to the public were called and asked if their current status was smoking, non-smoking, or if they restricted smoking to an area. This is a question that is public information and based on the decision of the business establishment. This summary was then used to sort the Department of Labor businesses for evaluation.

A literature search has been conducted for other studies on similar evaluations. A number of professional research articles on the impacts of restricting smoking in other communities have been secured and reviewed. A bibliography has been generated (see Appendix D) and copies of the articles are on file at the ICHS office. These articles represent studies that evaluated larger populations over longer time periods for health, consistent implementation and compliance, and economic impacts.

The Advisory Committee met on 26 September to hear a presentation on the Preliminary Draft report and to receive a review copy for their consideration. During this four-hour presentation, committee members were encouraged to ask questions about the work and the findings. On 3 October the Advisory Committee met for the fourth time. Each member was asked to bring to the meeting, or send in advance, suggestions for possible revisions to the ordinance. These were discussed at length and then voted on to determine which suggestions the group supported most. These are provided in Appendix E.
The full report will be completed and submitted to Nancy Merriman at the Municipality at the end of October 2001. Then it will be used by staff of the Health and Human Services Department (see Appendix G, available at a later date) and the Anchorage Police Department (see Appendix H, available at a later date) to conduct their review of the ordinance and to generate suggested revisions. The report will then be forwarded to the Mayor’s office. Finally, the Municipality will take the findings and revisions to the Health and Human Services Commission and the Anchorage Assembly for their action.

II. Results

A. Attempts to Collect Information for the Review

At the suggestion of the Advisory Committee, and from the professional backgrounds of the Research Team and the Municipal staff, a number of approaches were considered for the review of this ordinance. Before addressing each of the specific aspects of the Review it is necessary to state what was considered and why some of these approaches were not conducted or did not succeed.

While many of these ideas had merit and could have contributed to the overall review of the ordinance, there were some problems with using them. Some were restricted due to the time frame under which this review was being conducted. Others lacked a control or comparison to determine what was occurring before and after the ordinance. A few were not attempted since we could not get permission to replicate a previous effort. Still others were not attempted because the association was unclear about what could be measured in comparison to some specific impact that this ordinance may have had to a business.

All of the ideas that were considered, but found not to be successful, are listed in Appendix C.

B. Information Collected for the Review

1. Effectiveness of the continuing public education program and ongoing efforts to work with affected businesses and individuals

"Education and compliance are more important than enforcement on this type of ordinance." Mark Mew, APD

The Municipal Health and Human Services Department initiated meetings to discuss the pending implementation of the Smoking Prohibition Ordinance in the early fall of 2000. Representatives from a number of sectors within the Municipality were called together to map out a process. A means to provide consistent information to the public was devised as well as a means to log the types of inquiries that were being made for information on the ordinance.
A number of proactive educational tools were applied that worked with community groups, public and private media, and utilized existing professional staff within the Municipality. These efforts started during the summer and community groups took an active role in promoting the ordinance for the public. Staff of the Municipality participated in numerous public forums to raise the awareness of the ordinance and what it would mean for Anchorage businesses and citizens.

The Smokefree Anchorage Coalition worked collaboratively with the Municipality to provide this public education during the second half of 2000. Together they formed the Smokefree Anchorage Workgroup. The following is a listing of the activities that the Smokefree Anchorage Workgroup led.

<table>
<thead>
<tr>
<th>Date</th>
<th>Activities of the Smokefree Anchorage Workgroup</th>
</tr>
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<tbody>
<tr>
<td>July 2000</td>
<td>Initial contact with Workgroup’s co-chairs and potential members. One of the co-chairs was a supportive Assembly Member.</td>
</tr>
<tr>
<td>July-August</td>
<td>Researched five states with similar ordinances to determine best practices for providing education and implementation.</td>
</tr>
<tr>
<td>July-Dec.</td>
<td>Business Outreach to over 100 organizations/establishments via telephone, one-on-one, newsletters, and presentations. Forty-four establishments with over 18,000 employees were contacted. The Smokefree Anchorage Coalition provided paycheck stuffers, newsletters, technical assistance, and cessation resources.</td>
</tr>
<tr>
<td>August</td>
<td>Formation of the Smokefree Anchorage Workgroup</td>
</tr>
<tr>
<td>September</td>
<td>Development of educational brochure targeting the business community</td>
</tr>
<tr>
<td>Sept.-Oct.</td>
<td>UAA student nurses surveyed over 150 community members and 23 businesses and developed and distributed educational materials to those establishments</td>
</tr>
<tr>
<td>October</td>
<td>Technical Assistance telephone number was made public: 343-4141 option 3 (over 300 calls were received requesting information)</td>
</tr>
<tr>
<td></td>
<td>Development of web site: <a href="http://www.smokefreeanchorage.ak.org">www.smokefreeanchorage.ak.org</a></td>
</tr>
<tr>
<td></td>
<td>Development of &quot;The Air Clears on December 31, 2000&quot; poster</td>
</tr>
<tr>
<td></td>
<td>Mailing to 1,500 facilities permitted by the MOA Health and Human Services Department (including poster)</td>
</tr>
<tr>
<td>Oct.-Dec.</td>
<td>Three Smokefree Anchorage Workgroup meetings held to brief workgroup, discuss needs, and obtain feedback</td>
</tr>
<tr>
<td>November</td>
<td>Mailing to 19,620 business license holders (miniature poster with web site and phone number included)</td>
</tr>
<tr>
<td></td>
<td>Meeting with the Anchorage Business Alliance/CHARR</td>
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<tr>
<td></td>
<td>Meeting with the Anchorage Daily News Editorial Board</td>
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Prior to 1 January 2001 (the date of implementation), every business in the city (19,620) was sent direct mail information on the ordinance.

As of 22 August 2001, there were 353 calls logged by Municipal staff. These calls had to deal with information, clarification, or complaints about the ordinance.

As of 22 August 2001, there were a total of 139 valid complaints investigated since implementation.

As of 22 August each first call of complaint about an establishment resulted in the sending of a "first letter" with additional information on the public health issues and reasons for the ordinance. About 100 letters were sent.

As of 22 August each second or subsequent call of complaint about an establishment resulted in the sending of a "second letter" with a packet of information. Twenty letters were sent. Any complaint about a business not permitted by the Health and Human Services Department was followed by letters and packets of information. After a third complaint, they were referred to the Anchorage Police Department.

As of 22 August the Municipal Health and Human Services Department had issued only one citation under the ordinance, and that was to a business that stated it was planning to challenge an equity issue within the ordinance.

As of 22 August the Anchorage Police Department had not issued any citations under the ordinance, albeit two cases were under investigation.

The Smoking Ordinance Contact Log that was kept by the MOA Health and Human Services Department, Environmental Services Division employees during the last quarter of 2000 was reviewed for the content of each call. From 112 records with written notes, 94 were about the classification of businesses, about which had to comply with the ordinance, or about information on how they should comply. The next highest groupings among the 112 were seven calls on ventilation system.
requirements, five calls for inspections, and three about license types. Overall, the calls focused on businesses gaining information so they could adequately and appropriately comply with the ordinance.

The Health and Human Services Department instituted a new category in the Municipal on-line complaint system for the smoking ordinance as of 1 January 2001. The Environmental Services Division customer service representatives were trained to record complaints that had to deal with citizen observations of perceived non-compliance with the ordinance. These became the base for sending out compliance information letters, site visits, and if necessary, leading to citation under the ordinance. From those records, 137 had sufficient written notes to classify, and 80 were about businesses that continued to allow smoking. It was found that some of these businesses were allowed to have smoking. Those that were not permitted smoking were sent the "first letter" of compliance information. If there was a subsequent complaint about the same business then the "second letter" of compliance was sent. The next highest groupings were 36 calls about drifting smoke, and 15 about people smoking too near businesses.

It is interesting to note that, over time, the nature of calls received by Health and Human Services staff has changed. During the fall of 2000 the predominant nature of the calls was about understanding which business types had to comply and what actions they needed to take. With the implementation of the ordinance, the nature of calls shifted from business inquiries for information to citizen complaints. In January and February the predominant nature of the calls was about people still smoking in establishments. By spring, the calls had a larger percentage of complaints about the drifting of smoke from outdoor or smoking sections into enclosed non-smoking public areas.

From October 2000 to mid-August, the number of calls centered on the months of December (85) and January (98). This was expected since the ordinance was passed in July, telephone log records began in October, and implementation was on 31 December 2000. For March, April, and May the number of calls per month had dropped and stayed below twenty, and for June, July, and August the number was consistently below 5 per month.

In summary, the enforcement of this ordinance is based on citizen complaints. Very little direct enforcement by MOA staff has been required in light of the number of businesses involved. One year after the passage of the ordinance to prohibit smoking in public places, it appears that there is virtually 100% compliance. Therefore, the effectiveness of the public health education campaign, in working with the impacted businesses, appears to be complete success.

It is important to note that there is a significant difference among "complaint," "compliance," and "enforcement" actions. The absence of complaints does not necessarily imply uniform or widespread compliance. There is likely high compliance in "public" establishments where customers are most likely to spend time, observe,
and complain if the business are not following the ordinance. In establishments that have little contact with the public, are small, or where all employees may agree to continue to allow smoking then, even though there are no complaints, there may not be compliance.

In order for this ordinance to function, there needs to be a citizen complaint that is appropriately registered with the Municipality. That complaint is then investigated for compliance and whether the establishment may be legally allowed to permit smoking. The Municipality has taken the approach of fostering education for increased compliance. Only in one situation thus far has an enforcement action taken place. Therefore, the data that are available indicate broad compliance with little need of enforcement. However, this is solely based on a small number of citizen complaints in light of the total number of businesses.

While the proactive education of businesses has been very positive, it must be taken in perspective. The implementation of the ordinance is new. Public education may need to continue in order to maintain compliance. After a few years, in other states, the level of compliance to similar smoking prohibition laws has decreased. In these other states there has been limited funding for tracking compliance. In some areas citizens are now taking it upon themselves to take the offending businesses to small claims court for each smoking complaint since they have received no support for enforcement from local government.

In addition, this review has taken place during a mild winter, and a warm spring and summer. The weather has been conducive to smoking out of doors. As colder and more inclement weather approaches in the fall and winter, there may be more complaints about both entrained smoke as well as for smoking in facilities.

Finally, the Health and Human Services Department is charged with a "continuing program to explain and clarify the purposes and requirements of this chapter to the citizens affected by it and to guide owners, operators and managers in their compliance with it." There has previously been great collaboration with public health interest groups. It is anticipated that such efforts will continue in an ongoing fashion.

2. Effect on reducing secondhand smoke exposure

In July 2000, at the time of the passage of the ordinance, there were an estimated 19,600 businesses in Anchorage that may have allowed smoking, depending on building restrictions and individual proprietor decisions.

As of 22 August 2001, 17 food and beverage establishments met the legal requirement and voluntarily submitted letters to the Municipality to allow smoking in their facilities.
As of 22 August 2001, 55 food and beverage establishments have designated smoking areas within their facilities based on a review of their industry types and a telephone survey.

An unknown number of businesses have fewer than four employees and therefore are not regulated under this ordinance. There are also other exemptions for some business such as retail tobacco stores.

As of 22 August 2001, it is therefore roughly assumed that about 15,000 businesses in Anchorage provide smoke free facilities.

Of the detailed assessment that this review provides, we know that there were 218 full service restaurants where smoking was eliminated for 4,360 employees; 12 major fast food companies at 70 locations where smoking was eliminated for 2,755 employees; and 59 limited service eating places where smoking was eliminated for 453 employees. This means that a total of 7,568 employees are no longer exposed to secondhand smoke at 437 locations in Anchorage just in this one sector of business in the city.

In summary, the compliance with this ordinance removes workers and patrons from secondhand smoke. An estimated 19,600 businesses have been informed about the requirements of this ordinance. Therefore, there has been a significant reduction to the pubic and non-smoking workforce to secondhand tobacco smoke through the implementation of this ordinance. While there is no proof of full compliance, there are no strong indications through citizen complaints to the contrary.

Next year, the data from the Alaska Behavioral Risk Factor Survey for 2001 will be available. The Municipal Health and Human Service Department will make a comparison of 2000 data to 2001 data on secondhand smoke exposure for a follow-up report to the Assembly.

It is noted that in the review of the citizen complaint records there appears to be a shift in the type of concerns being reported. During the early months of the year the calls were predominated by specific concerns about people smoking in particular establishments that were perceived by the public to fall within the non-smoking prohibition. In later months there were more frequent calls about the movement of secondhand smoke. The noses of citizens are actively conducting the assessment of the "filtering" or "entering" of smoke into non-smoking areas, or what is a "reasonable distance" from entrances to public buildings. It appears that the percentage of calls about the "air quality" aspects of the ordinance is growing.

Although the overall numbers appear very positive, there continue to be concerns over the movement of smoke from designated areas to prohibited areas. The issue of the entrainment of smoke into buildings from those standing outside and what is a "reasonable distance" from a building will need clarification. There appears to be a growing debate about how much "smoke" should be cause for a complaint. A citizen
may complain whenever they smell tobacco smoke in a public building. Clarifying the source may be a challenge to MOA staff who are not trained ventilation technicians, and eliminating the cause may not be practical under the current structure of the ordinance.

3. Practicality of enforcing the ordinance and any problems with enforcement

The most frequently cited challenge to the enforcement of the ordinance was that definitions need to be clarified. The terms that need clarification include:

- Private residence, private function
- Public place, common areas
- Twenty-five percent of hotel and motel rooms rented to guests
- Reasonable distance
- Tobacco smoke cannot filter into any other area
- Ensure that tobacco smoke does not enter the area
- Enclosed space
- Bar
- Bowling facilities and pool halls
- Bingo halls and pull tab establishments (with internal smoking space when other businesses cannot have internal smoking areas)

Other terms that caused concern related to the review of the ordinance, including those from the language of the instructions. The terms that could have used additional clarification include:

- Effectiveness of the continuing public education program:
- Effect on reducing secondhand smoke exposure
- Practicality of enforcing
- Overall economic impact

In addition, the action of how enforcement is initiated is not clear.

It was also noted that there was a lack of any MOA master list of businesses where smoking may not be regulated, and to what level smoking may be allowed. As of 22 August, the list of 17 businesses that have identified themselves as "bars" under the ordinance has been checked and confirmed for all of the appropriate licenses. However, that does not mean all "legal smoking" establishments have voluntarily requested to be listed through the submission of a letter to the MOA. What this means is the MOA does not know with certainty which businesses should have a complete prohibition on smoking, and which may allow smoking under this ordinance. Compliance is based entirely on complaints filed by citizens and subsequent investigation by municipal staff.

Another aspect of the definitions was the misinformation about what was really in the ordinance. This included multiple interpretations of the ordinance's "legalese." While
the public and public servants were attempting to learn to work under the new ordinance there were changes in legal interpretations, as well as the need for further refinement of definitions. This led to confusion. Prime examples were concerns over the limitations for ventilation systems and the ability to have interior non-smoking enclosures in smoking establishments.

Another cited deficiency was that the process to develop the ordinance had not included Municipal staff who would later be charged with its implementation or interpretation. The feeling was that if those who are most familiar with the issues involved had been engaged early in the process, then the structure and wording of the ordinance would have been more clear. None of the Municipal staff interviewed for this report was engaged in the development of the ordinance’s language.

Through the Research Team’s search for related materials we found a draft ordinance on a web site for the Americans for Nonsmoker’s Rights. Upon review, it was found to be virtually identical to the 13 June 2000 ordinance language that was submitted by Assembly members Teshe, Abney, Taylor, Tremaine, and Von Gemmingen. Although this "Model Ordinance Eliminating Smoking in Workplaces and Public Places (100% Smokefree) was very likely the source for the current Municipal law, it did not receive the same type of internal review and development as other ordinances.

Those interviewed commented on not having been involved in the development of the ordinance for the Municipality. A standard practice for ordinance development is the production of the Summary of Economic Effect that outlines the anticipated costs to both the Municipality and the public. This document was not prepared for this ordinance, making subsequent evaluation of its overall economic impact less responsive or specific.

It is suggested that the data from Health and Human Service Department Environmental Services inspection reports be reviewed on an annual basis for the number of observations of businesses not in compliance with the smoking prohibition ordinance. This information is not part of the regular inspection form, but staff has been requested to note issues of non-compliance on supplemental sheets that are often utilized. In addition, these findings should be compared with the continuing collection of citizen complaints about smoking in public places.

It has been suggested that the Fire Marshal be requested to incorporate the criteria of this ordinance within regular business inspections. This aspect would include checking for appropriate signage, the existence of smoking paraphernalia, and a review of the business’ written smoking policy.

There are some unrealistic expectations for this ordinance. One example is the removal of "all ashtrays and other smoking paraphernalia." This appears straightforward, but when it comes to built-in ashtrays that are parts of buildings or vehicles this can be an expense. The ordinance states that employers are not required to incur any expense to make physical modifications to comply. It appears...
that built-in ashtrays are exempt under the ordinance, as their removal would cost money. However, the clarity of this message was delayed in being made public, contributing to mixed messages and confusion.

All businesses should now have modified their policies to reflect the prohibition of smoking at their facilities. While no cost was to be incurred, this work should be done. It is unknown how often businesses update and revise their policies. There is currently no practical way to check on this level of compliance. It is anticipated that this did not receive a high priority with business owners or managers. There is no way to assess if the new smoking policies were communicated to all employees within three weeks of its adoption that was required to occur prior to 21 January 2001.

Equity in the application of the ordinance was mentioned as a concern to implementation. The use of a separate system that provides licenses for the selling of particular alcoholic beverages has been adopted as the benchmark for tobacco use. There is concern about this process and if this creates a "level playing field" for all businesses, be they new or old.

In addition, a broader equity concern is that businesses that are regularly inspected by the Health and Human Services Department potentially can be assessed for compliance more frequently than other types of establishments. While this is the nature of facilities that are considered important to overall public health, there should be considered some means to regularly assess the majority of businesses that have been affected by this ordinance. This concern may be addressed by having the Fire Marshal take on this expanded role.

The inequitable application of the ordinance to some sub-populations in the community has also been raised. One of these populations is 19 and 20 year olds. People in this age group may legally purchase tobacco products and smoke, albeit they are limited in where they can do this in public. The only public establishments regularly available to smokers are only open to those over 21 years due to the liquor license requirement. These young people can rent one of the 25% of hotel rooms or attend a private function that allows smoking at a hotel. In general though, this group has greater limitations on their ability to consume tobacco products. The motion to adopt this ordinance states that it is to protect the public from secondhand smoke. This ordinance addresses this goal; however, the ordinance structure works to limit where these young people may legally smoke.

Another sub-population raising questions is the adult non-alcohol consumer, or the adults who desire to consume non-hard liquor in adult establishments but desire to smoke. This equity issue appears to be central to the one citation that has been issued and the pending hearings on this point.

There were new policies developed to implement this ordinance. The Health and Human Services Department Environmental Services Division provided training for their staff as well as for Police officers on basic interpretation of the ordinance and
basic implementation. This was complicated by multiple interpretations of the "legalese" of the ordinance. Definitions used, and the process for exemption, need to be very clear for ease of implementation and the practicality of enforcement.

Key informant interviews with Health and Human Services and Anchorage Police Department staff resulted in numerous comments about the need for legal interpretations of the wording in the ordinance. In light of these comments a request was made to schedule an interview with staff of the legal office of the Municipality. Director Jones arranged for an interview with the legal staff to attempt to clarify some of the above stated issues.

The Municipal Attorney felt that this ordinance has taken more of his staff's time than other similar documents. This was due to the definitions of terms used, the nature and types of exemptions, and the structure of the ordinance. His interpretation of the ordinance matched the concerns of the terms that had been questioned by others who were interviewed.

The practicality of the enforcement of the ordinance is closely linked to legal interpretations. Staff members need to have consistent training and support for their actions, as well as for educating the public as to the nature of the ordinance. Without the ability to go into further detail with those who provide legal interpretations on this ordinance, it was not possible to fully assess the hurdles the Municipality may have faced or will be facing in its implementation.

There are no standards to assess the movement of smoke. The Health and Human Services staff has devised a "smoke-test" used during inspections. There is no formal ventilation test for either smoke drifting during regular business or entrainment of smoke from outside the building. There are also no recommendations for a "reasonable distance" from the doors.

The people providing site visits for the Municipality, be they from the Health or Police Department, are not ventilation experts. With some facilities being allowed to have smoking areas adjacent to non-smoking areas there are bound to be different opinions as to how much smoke drift is too much. The movement of smoke may become a larger problem as cold weather causes outdoor smokers to move closer to the entrances of buildings, or causes ventilation systems to modify the mix of air. There is interest in having some means for those who must assess the level of smoke to have a guideline or process upon which to base their actions.

Creative MOA staff has come up with a simple test to monitor the movement of smoke by using some burning incense. This is done during a standard health inspection or for following up on a complaint. It does not fully assess the total air movement during peak business hours, but provides some indication of the general drift of smoke.

Nowhere in the ordinance are parameters to quantify the movement or dispersion of tobacco smoke listed. This is of particular concern in establishments that have both
smoking and non-smoking requirements, including hotels with smoking rooms and required smoke-free adjacent public hallways. In the case of an enforcement question, it may be necessary to have such measurable factors.

In addition, to date there are no means to support investigations into quantifying the movement of tobacco smoke. That is, in the event of a complaint, there is no structure or staff within the Municipality to assess and measure the accuracy of the citizen’s perception of smoke. So, while there may be a complaint, there appears to be no means to prove guilt through the measurement of the physical movement of tobacco smoke.

Although there is a section in the ordinance that provides for the rights of employees to complain about working in a smoke filled environment, there is no mention of the process one has to go through to make such a complaint. Upon investigation it was learned that the Alaska State Department of Labor will deal with the compliance of this ordinance as it does with other workplace safety and health concerns. The worker would have to contact the State Compliance office within the Department of Labor.

In summary, the meanings of terms used, the means to assess the levels of compliance in all businesses, and the mechanism to determine the amount of tobacco smoke in the air are critical to the practicality of this ordinance. These were not clear at implementation and remain in question at this time.

4. Number of violations and amount of penalties

The Health and Human Services Department has issued only one citation. The Anchorage Police Department has issued none. The one citation has been appealed and is awaiting a hearing.

There have been no penalties assessed as of 22 August 2001.

5. Any needed revisions to the ordinance

This section was completed by a number of groups. The recommendations for each is listed in a separate appendix:

- Appendix E - Advisory Committee
- Appendix F - Research Team from UAA
- Appendix G - Health and Human Services Staff
- Appendix H - Anchorage Police Department

The Mayor is responsible for reporting to the Assembly and the Health and Human Service Commission on the review of this ordinance.
6. Overall economic impact

Public relations have taken time and resources, but this has been essential for voluntary compliance. This was not budgeted for the Health and Human Service Department or for the Anchorage Police Department. Therefore, there has been a cost to the Municipality for the implementation of the ordinance. It appears the most time staff has spent on this work has been in educating the public about the ordinance and, since implementation, in responding to citizen complaints about smoking in public places. Although this effort is required under the ordinance to be continuing, it will have to be budgeted for future years.

The Municipal Attorney's office commented that this ordinance has taken more of his staff time in interpretation than others. This is due to the need for a number of legal interpretations of terms that were not well defined or clear in the original language. It was felt that more time is being required for the legal responses because the ordinance was not developed in a way that fully engaged the Municipal staff.

It was also noted that the Summary of Economic Effect report was not completed for this ordinance. This report is usually produced as a Municipal ordinance is moved forward for Assembly consideration. Without this report, the Research Team was unable to compare what costs were expected for the implementation of the ordinance. In addition, the lack of the Summary of Economic Effect report, which is usually produced when an ordinance is moved forward for consideration, has left a gap in the Municipal assessment of what its proposed costs might have been. Its presence would have assisted in targeting the assessment of the overall economic impact to the public.

The American Lung Association produced a list of smoke free restaurants in Anchorage in 1999. This guide was used to revisit smoking policies under the ordinance and provide an indication of a potential sub-set of businesses that the Research Team would assess if trends in economic growth had indicated the need for a greater review. In addition, the list of community education efforts about this ordinance that were provided by non-profit, non-governmental organizations was significant. The cost of this public relations effort has not been assessed.

There has been no attempt to assess the economic impact of possible reductions in sick leave time or the improvement of future health in employees because there were no measures that would indicate these changes during the duration of this review. It may be possible to assess these economic factors in the future, if there were some standardized measures that were regularly collected. Without an agreed upon evaluation strategy it is unlikely that such information will be available in the future.

Alaska State Corporate Income Tax figures for 2001 will be available from the Alaska Department of Revenue after July 2002. Therefore, the data needed to measure the impact on income would not be available for more than a year. This may be considered a future source of information for evaluating the overall economic impact.
III. Economic Impact of the Anchorage Smoking Ordinance

One part of the evaluation of the Anchorage smoking ordinance is an assessment of the “overall economic impact.” Major preliminary findings are the following:

- Based on Alaska Department of Labor estimates of employment for the first seven months of 2001, there was no detectable impact on total employment in the Anchorage hospitality industry as a whole after the smoking ban took effect.¹

- Based on employment data for individual establishments for the first quarter of 2001, some types of establishments within the hospitality industry in Anchorage may have grown faster than other types after the smoking ban took effect.

These are preliminary findings of the direct short-term effects of the smoking ordinance on local businesses. Due to likely seasonal fluctuations during the summer tourist season, continued adaptations by businesses, employees, and customers, and the likelihood of broader, indirect economic impacts, these findings do not encompass the full, long-term economic impacts of the ordinance.

A. Impact on Total Employment for Whole Industries

As shown in Figure 1 (next page), during the first seven months of 2001, total employment for all industries in the Anchorage economy grew at an annual rate of 1.4% relative to the first seven months of 2000. During the same period, total employment in all “Eating and Drinking Places” grew at the annual rate of 2.4%.²

The eating and drinking industry continues to grow at a faster rate than the Anchorage economy. This pattern of growth is typical of the last few years. On average, over the past six years employment in the eating and drinking industry has grown about one-half percent faster than the economy as a whole.³

Because the hospitality industry continues to grow at a historically typical rate, the employment data do not support the claim that the smoking ban had an impact on total employment in the eating and drinking industry as a whole. Furthermore, based on results from statistical regressions, the smoking ban had no statistically significant impact on total employment for the eating and drinking industry, as a whole, during the first seven months of 2001.⁴
The annual growth rate of employment in “Hotels and Lodging Places” was 1.1% during the first seven months of 2001. The growth rate of employment in hotels and motels is so highly variable across years and seasons, that we cannot draw meaningful conclusions from the limited data.\(^5\)

Keep in mind that these calculations rely on seven months of estimated employment data that the Alaska Department of Labor may revise. In addition, the growth rates for most industries in Anchorage are substantially different for the first and second quarters of 2001.\(^6\) The best use of available data is to calculate the average growth rate for the entire first half, but keep in mind that there are substantial seasonal fluctuations. We would need at least one year of data to control for the effects of these seasonal variations.

These findings are consistent with previous studies that use sales tax to measure changes in the eating and drinking industry in other areas that have enacted smoking bans.\(^7\) These earlier studies have consistently found that smoking bans do not have a detectable effect on total sales tax revenues in the eating and drinking industry as a whole. These studies have refuted the claim that there was a large negative impact on all eating and drinking places, as reported in other studies of smoking bans.\(^8\)
B. Impact on Particular Types of Establishments

In order to look more closely at the impacts on particular types of establishments within the hospitality industry, we created a database of individual establishments most likely affected by the ordinance. The database included employment data for all 522 establishments in the Anchorage hospitality industry and selected amusement services industries that reported employment to the Alaska Department of Labor during the first quarter of 2000 or 2001.9

In addition, business license data from the Alaska Department of Community and Economic Development provided more specific information about establishments’ activities.10 To determine the smoking status of individual establishments both before and after the smoking ban, we gathered information from Municipality of Anchorage records, Alaska Alcohol Control Board files, published lists, and about one hundred telephone calls to establishments.11

1. Eating and Drinking Establishments

Using this combined database, we investigated how the smoking ban affected different types of establishments. The largest component of the hospitality industry likely affected by the ordinance is the eating and drinking industry.12 As shown in Figure 2, the eating and drinking industry is composed of several types of establishments:

![Figure 2: Percent of Establishments by Activity and Smoking Status among all Eating and Drinking Places in Anchorage during the First Quarter of 2001](image)

Source: ISER tabulations of employment data from Alaska Department of Labor. Business License records from Alaska Department of Community and Economic Development determine whether the establishment is a limited-service eating place. Smoking status is from liquor license records from Alaska Alcohol Control Board, Municipality of Anchorage records, and American Lung Association publications, and telephone interviews conducted by the University of Alaska Anchorage.
Eating and drinking places that did not change smoking status: include restaurants that were non-smoking before the ordinance and remained non-smoking after the ordinance. In addition, some restaurants with beverage dispensary licenses chose to remain smoking after the ban. Other restaurants with beverage dispensary licenses continued to restrict smoking to particular areas within their establishments. Nearly all bars (drinking places) allowed smoking before and after the ban.\textsuperscript{13} The ordinance is less likely to directly affect these types of establishments because they did not change their smoking status after the smoking ban took effect.

Limited service eating places and fast food chains: The remaining eating and drinking establishments are limited-service eating places with drive-through service, take-out service, or limited seating with no table service. Since many customers do not go inside these establishments or do not stay as long, the smoking ban likely did not affect them as directly as other eating places.\textsuperscript{14}

In order to compare how employment in each group of establishments changed after the smoking ban, we calculated the percent change in total employment for each group from the first quarter of 2000 to the first quarter of 2001. As shown in Figure 3 (below) and Table 1 (next page), employment grew in every group. However, the groups may have grown at different rates.\textsuperscript{15}

Source: Special ISER tabulations of employment data from Alaska Department of Labor, business license information from Alaska Department of Community and Economic Development, and smoking status from Municipality of Anchorage records, published lists, and telephone surveys.
The most important comparison is between eating places that changed their smoking status to those that did not. Those establishments that changed their smoking status to non-smoking after the ban grew at 10%. Various groups of establishments that did not change their smoking status grew at rates both greater and less than 10%. Those restaurants that remained smoking grew at 15%. In contrast, the restaurants that continued to allow restricted smoking grew at only 6%. Those that were non-smoking both before and after the ban grew at 14%. Bars that allowed smoking before and after the ordinance grew only 4%.

These relative rates do not provide consistent evidence that the ordinance had an impact on employment at establishments that changed their smoking status to non-smoking. On the one hand, these establishments grew less than restaurants that either continued to allow smoking or never allowed smoking in the first place. On the other hand, these same establishments (that changed their smoking status to non-smoking) grew more than restaurants that continued to allow restricted smoking, and more than bars that continued to allow smoking.

Table 1: Preliminary Estimates of Employment During the First Quarter 2000 and First Quarter 2001 in Anchorage For Establishments Most Likely Affected by Smoking Ordinance

<table>
<thead>
<tr>
<th>Category</th>
<th>Smoking Status Before Ordinance</th>
<th>Smoking Status After Ordinance</th>
<th>Number of Establishments</th>
<th>Total Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drinking Places</td>
<td></td>
<td></td>
<td>49</td>
<td>47</td>
</tr>
<tr>
<td>Eating Places</td>
<td>Non Smoking</td>
<td>Non Smoking</td>
<td>19</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Restricted Smoking</td>
<td>Non Smoking</td>
<td>209</td>
<td>218</td>
</tr>
<tr>
<td></td>
<td>Restricted Smoking</td>
<td>Restricted Smoking</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Smoking</td>
<td>Smoking</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Large Fast Food Chain Companies</td>
<td></td>
<td></td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>Limited Service Eating Places</td>
<td></td>
<td></td>
<td>55</td>
<td>59</td>
</tr>
<tr>
<td>Bowling</td>
<td></td>
<td></td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Bingo</td>
<td></td>
<td></td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Hotels and Motels</td>
<td></td>
<td></td>
<td>51</td>
<td>55</td>
</tr>
</tbody>
</table>

Source: Special ISER tabulations of employment data from Alaska Department of Labor, business license information from Alaska Department of Community and Economic Development, and smoking status from Municipality of Anchorage records, published lists, and telephone surveys conducted by the Institute of Circumpolar Health, University of Alaska Anchorage.
Aside from this inconsistent evidence, statistical tests show that the relative growth rates of different groups are not statistically significantly different. Because of the small group sizes and substantial variation in growth rates within each group, we could not detect any statistically significant difference in growth rates between the groups.\textsuperscript{16}

We investigated whether the size and activities of establishments could help clarify these results, calculating the growth in employment for both small establishments (with fewer than twenty employees) and large establishments (with twenty or more employees). The growth rate of bars that have food services were also investigated.

It is important to note that these calculations necessitated dividing establishments into very small groups that, in some cases, included fewer than ten establishments. Because the groups were so small, estimates of their growth rates were not statistically precise, and conclusions on statistical significance could not be drawn. We can only present preliminary hypotheses that will require additional quarters of data to verify.

Based on the very limited data currently available, small restaurants that changed their status to non-smoking, and large restaurants that continued to allow restricted smoking, may have grown more slowly than other types of restaurants. Large restaurants that changed to non-smoking and small restaurants that remained smoking may have grown faster than other establishments. In addition, bars (which typically hire fewer employees than restaurants) may have grown more slowly than most eating places. Small bars, as a group, actually experienced a decline in employment. Bars that offer some food service may have grown faster than bars that did not.

One plausible hypothesis that partially explains these observations is that large eating and drinking establishments, as a group, grew faster than small establishments -- independently of the smoking ban. Aside from this independent shift to larger establishments, the smoking ban may have encouraged a redistribution of smoking customers away from small restaurants that no longer allow smoking and toward both small restaurants that allow smoking and toward bars that serve food. As mentioned above, these are preliminary hypotheses that will require additional quarters of data to verify statistically.\textsuperscript{17}

2. Other Types of Establishments

Aside from eating and drinking places, several other types of establishments likely affected by the ordinance were investigated, including hotels and lodging places, bingo parlors, billiard parlors, and bowling alleys.

**Hotels and Lodging Places:** According to Alaska Department of Labor revised estimates, employment in this industry grew at 5.2\% during the first quarter of 2001 and declined by \(-2.1\%\) during the second quarter of 2001. On average, for the first half of 2001, employment grew by 1.3\%. Municipality of Anchorage hotel bed tax
receipts confirm that the industry grew strongly during the first quarter of 2001 when bed tax receipts increased by 18% relative to the first quarter of 2000.18

The growth rates of both employment and bed tax receipts for hotels and lodging places vary substantially across years and quarters. In addition, many hotels and lodging places report total employment for the entire establishment and do not separate the employment for bars, restaurants, and other services within the hotel.19 For these reasons, with the available data, it is impossible to accurately describe the impact of the smoking ban on hotels and lodging places.

**Bingo:** Most bingo parlors now allow smoking and have a separate, restricted area for non-smoking. The four Anchorage bingo parlors that reported employment to Alaska Department of Labor experienced an 11% increase in employment during the first quarter of 2001. However, the small number of establishments reporting employment in this industry makes it impractical to draw conclusions about how much of their growth was attributable to their smoking status.

**Billiard Parlors:** Several of the major billiard parlors in town hold beverage dispensary licenses (full liquor licenses). They have the option to allow smoking if they meet certain requirements in the ordinance. Billiard parlors likely attract similar customers as bars that have separate rooms with billiard tables. Billiard parlors with full beverage dispensary licenses were included in the analysis of drinking places described above. A few of the remaining billiard parlors are part of larger amusement centers where various types of entertainment are available. With available data, it is impossible to separate out the employment for just the billiard operations of these establishments.

**Bowling Alleys:** Most, but not all, of the bowling alleys in town have separate bars, and some still allow smoking. These separate bars were included in our analysis of drinking places described in the previous section. There are four bowling alleys that report employment for the bowling alley operations separately from their bar. These bowling alleys experienced a 2% increase in employment during the first quarter of 2001.

C. **Conclusions**

Based on revised estimates of employment from the Alaska Department of Labor, the smoking ban had no detectable impact on total employment in the hospitality industry as a whole in Anchorage during the first seven months of 2001. Based on detailed employment data for over 500 establishments during the first quarter of 2001, some specific types of establishments may have grown faster than other types after the smoking ban took effect.

These results are preliminary and subject to revision for the following reasons:

1. The results rely on just a few months of data that do not include the entire summer tourism season.
2. Employment in the Anchorage economy grew at substantially different rates during the first and second quarters of 2001. At least one year of data are needed to control for these seasonal fluctuations.\(^{20}\)

3. Businesses, employees, and customers likely continue to adapt to the smoking ban.

4. Long-run, indirect economic impacts, such as cost savings from improved employee and customer health, may have not yet occurred.

**IV. Acknowledgements**

This report would not have been possible without the assistance of a number of individuals.

Nancy Merriman the Project Officer within the Municipality of Anchorage, Health and Human Services Department Planning Office, was consistently supportive of the review process and helpful in making the entire process move forward smoothly.

Jewel Jones, Director of the Health and Human Services Department, was critical in facilitating several important discussions that brought to light important considerations for this review.

This report would also not have been possible without the assistance of a number of other Municipal staff members. Everyone with whom we dealt freely and helpfully offered information and assistance during this review. This openness and willingness to provide information contributed significantly to the completion of this review in a timely fashion.

Particular thanks must be given to the Advisory Committee members who were appointed by Mayor Wuerch. These individuals participated in some very intense discussions, reviewed a number of documents, and provided broad insight and commentary on the workings of this ordinance. Without their active participation this review would not have the practicality of public engagement that was necessary.

External from the primary review process but integral to its success were Neal Fried and others of the Alaska State Department of Labor who provided key data for the economic assessment. These individuals and those who provide and manage these data must be thanked.

This review has addressed the criteria set forward by the Assembly. All the comments and suggestions are offered for the improvement of health of the people of Anchorage and to make the ordinance in question practical.
Endnotes for Economic Impact Analysis

1 Four other measures of economic activity were investigated, but employment data were determined the best available: 1) Many previous studies of the economic impact of smoking bans have relied on sales tax revenues to measure changes in business activity. However, neither the Municipality of Anchorage nor the State of Alaska collects a sales tax. 2) The Alaska Department of Revenue collects the state alcohol tax from wholesale distributors. Because the tax is collected from wholesalers, it is not possible to separately measure how much of the alcohol tax is paid by retail establishments located in Anchorage and how much is paid by retail establishments outside Anchorage. 3) State corporate income tax figures for 2001 will not be available from the Alaska Department of Revenue until after July 2002. 4) Building permits issued by the Municipality do not provide sufficient detail to determine whether a firm made renovations in response to the ordinance.

2 “Eating and Drinking Places” include all establishments with four-digit SIC (Standard Industrial Classification) codes 5812 or 5813 and “Hotels and Lodging Places” include all establishments with SIC code 7011. All growth rates reported in this section were calculated using the following formula:

\[
\text{Percent Change in average monthly employment} = \frac{( \text{Avg. monthly employment from Jan 2001 to July 2001} - \text{Avg. monthly employment Jan 2000 to July 2000})}{\text{Avg. monthly employment Jan 2000 to July 2000}}
\]

This formula uses “revised estimates” of average monthly employment from the Alaska Department of Labor at their web site http://www.labor.state.ak.us/research/region/anc.htm. Notably, these are not final numbers and are subject to revisions by the Alaska Department of Labor. In early October 2001, the Alaska Department of Labor also provided “preliminary” estimates of average monthly employment for August 2001. These “preliminary” estimates are less reliable than the “revised” estimates and more likely subject to revision. When we included the “preliminary” estimates for August 2001 in our calculations, our findings did not change.

All employment growth rates were adjusted to remove new employment attributable to the Special Olympics 2001 World Winter Games held in Anchorage during March 2001. These employment estimates are based on a surveys conducted by the Institute of Social and Economic Research for the 2001 World Winter Games Organization Committee.

3 For the purposes of this report, the eating and drinking industry includes all establishments with four-digit SIC code 5812 or 5813.

Table 2 summarizes the annual percent change in average monthly employment for the first seven months of each year using the same formula described in endnote two. Only in 1998 did the eating and drinking industry grow more slowly than the economy as a whole. In all others years since 1995, the eating and drinking industry grew faster than both the economy as a whole and all of retail trade (which includes eating and drinking places).
Table 2:
Annual Percent Change in Average Monthly Employment
For the First Seven Months of each Year
Relative to First Seven Months in the Previous year
For Select Industries in Anchorage

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>All Industries in Anchorage</td>
<td>0.0%</td>
<td>2.3%</td>
<td>4.0%</td>
<td>1.9%</td>
<td>2.5%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Total Retail Trade (including Eating and Drinking Places)</td>
<td>-0.4%</td>
<td>4.5%</td>
<td>1.4%</td>
<td>1.6%</td>
<td>1.5%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Eating and Drinking Places</td>
<td>0.4%</td>
<td>5.3%</td>
<td>2.5%</td>
<td>2.6%</td>
<td>2.5%</td>
<td>2.4%</td>
</tr>
<tr>
<td>Hotels and Lodging Places</td>
<td>-4.2%</td>
<td>2.8%</td>
<td>3.8%</td>
<td>11.9%</td>
<td>-1.4%</td>
<td>1.1%</td>
</tr>
<tr>
<td>All Industries other than Eating and Drinking Places and Hotels and Lodging Places</td>
<td>0.1%</td>
<td>2.1%</td>
<td>4.1%</td>
<td>1.6%</td>
<td>2.6%</td>
<td>1.3%</td>
</tr>
</tbody>
</table>

Source: Alaska Department of Labor revised estimates of employment from http://www.labor.state.ak.us/research/region/anc.htm.

Statistical tests were conducted to see if the growth in employment during the first eight months of 2001 is significantly different from the growth rate in previous years. We did an Ordinary Least Squares time series regression using eighty observations of monthly employment data from Alaska Department of Labor.

The dependent variable in the regression was the natural logarithm of the ratio employment in eating and drinking industry to employment in the Anchorage economy as a whole. Several alternative specifications of the dependent variable were also investigated. The first alternative was the natural logarithm ratio of eating and drinking employment to total employment in all industries other than eating and drinking. The second alternative was the natural logarithm of the ratio of eating and drinking employment to total retail employment.

The three independent variables in the regression were a time trend variable and two fixed effect variables. The time trend variable is equal to one in the first period and incremented by one in each succeeding period. The first fixed effect variable is equal to one in March 2001 and zero otherwise and controls for the effect of the Special Olympics. The second fixed effect variable is equal to one for January through August 2001 and is equal to zero in all months before January 2001. This fixed effect variable controls for the effect of the smoking ban that took effect in January 2001.

Table 3 summarizes the regression results. The fixed effect variable for 2001 was not statistically significant at the 95% confidence level. These results imply that the smoking ban did not have statistically significant impact on total employment in eating and drinking places during the first eight months of 2001.
### Table 3:
**Time Series Regressions of the Employment Share**
Of the Eating and Drinking Industry in the Anchorage Economy

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Independent Variables</th>
<th>Coefficient</th>
<th>Std Error</th>
<th>Fixed Effect Variable for Special Olympics</th>
<th>Fixed Effect Variable for 2001</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ln (Employment in Eating and Drinking / Total Anchorage Employment)</td>
<td>Coefficient</td>
<td>-2.7038</td>
<td>0.0234</td>
<td>-0.0269</td>
<td>-0.0023</td>
<td>0.32</td>
</tr>
<tr>
<td></td>
<td>(Std Error)</td>
<td>(0.0007)</td>
<td>(0.00001)</td>
<td>(0.0250)</td>
<td>(0.0107)</td>
<td></td>
</tr>
<tr>
<td>Ln (Employment in Eating and Drinking / Total Anchorage Employment - Employment in Eating and Drinking)</td>
<td>Coefficient</td>
<td>-2.6345</td>
<td>0.0251</td>
<td>-0.0290</td>
<td>-0.0025</td>
<td>0.32</td>
</tr>
<tr>
<td></td>
<td>(Std Error)</td>
<td>(0.0008)</td>
<td>(0.00001)</td>
<td>(0.0268)</td>
<td>(0.0115)</td>
<td></td>
</tr>
<tr>
<td>Ln (Employment in Eating and Drinking / Total Employment in Retail Trade)</td>
<td>Coefficient</td>
<td>-1.0639</td>
<td>0.0231</td>
<td>-0.0176</td>
<td>0.0165</td>
<td>0.51</td>
</tr>
<tr>
<td></td>
<td>(Std Error)</td>
<td>(0.0009)</td>
<td>(0.00001)</td>
<td>(0.0247)</td>
<td>(0.0105)</td>
<td></td>
</tr>
</tbody>
</table>

Regressions used Ordinary Least Squares and 80 observations of average monthly employment data from January 1995 through August 2001 from Alaska Department of Labor. “Ln” indicates the natural logarithm of the specified ratio.

5 “Hotels and Lodging Places” includes all establishments with the four-digit SIC code 7011. See the table in endnote 3 for the annual rates of growth of employment in “Hotels and Lodging Places” over the past six years.

6 During the first quarter of 2001, employment in “Eating and Drinking Places” grew at 4.8%, Hotels and Lodging Places grew at 5.2%, and the economy as a whole grew at 2.4% relative to the first quarter of 2000. In contrast, during the second quarter of 2001, the economy as a whole and most industries grew more slowly relative to the second quarter of 2000. During the second quarter, employment in the economy as a whole and “Eating and Drinking Places” industry remained nearly constant, while “Hotels and Lodging Places” contracted by –2.1%.


8 For example, see Peat Marwick, LLP (1998). This study surveyed a sample of bars in California. Of those surveyed, they perceived an average decrease in sales of 26.2% after smoking ban in bars went into effect.

Some previous studies have compared the impact of smoking bans across different communities. For example, see Lilley (1996) for a comparison of the impact of smoking bans across cities in Massachusetts. They found that cities in Massachusetts with the most restrictive smoking bans experienced a decline in employment. See Glantz (1994) and Glantz (1997) for a comparison of the
impact of smoking bans across towns in California and Colorado. These two studies by Glantz found that smoking bans did not have a detectable impact.

Some previous studies have conducted surveys of customers asking specific questions about how they would adapt (or how they actually adapted) to smoking bans. For example, see CCG Consulting Group Limited (1995 and 1996) and Corsun (1996). These studies found that smokers and non-smokers respond differently to smoking bans.

Alaska Department of Labor provided the names and number of people employed in each establishment in the Municipality of Anchorage with four-digit SIC (Standard Industrial Classification) code 5812, 5813, 7011, 7933, or 7999. They included all establishments that reported employment in Anchorage during January, February, or March in either 2000 or 2001. From SIC industry 7999 (Miscellaneous Amusement Services), we included only bingo halls and billiard parlors and excluded all other types of amusement establishments. These employment figures are from final data submitted by the establishments to the Alaska Department of Labor. The final data for individual establishments for the first quarter of 2001 were available in August 2001. Final data for the second quarter 2001 were not available in early October 2001.

Business license records from the Division of Occupational Licensing in the Alaska Department of Community and Economic Development list the primary and secondary activities of individual establishments. This information enabled us to separate “Eating and Drinking Places” into groups of bars, bars with food service, full service restaurants, fast food companies, and limited service eating places. The names of owners and addresses in the business license files were useful when matching employment and liquor license files. The business license files contained many businesses that were not in operation but still had active business licenses. Business licenses last for two years and the licenses remained in effect even after some of the businesses closed and no longer reported employment. In addition, business licenses include many establishments that do not have any employees. Notably, hundreds of bed and breakfasts have business licenses, but do not report employment. All businesses that did not report employment to the Alaska Department of Labor were excluded.

The names, owners, and addresses of establishments with one of the following types of full beverage dispensary licenses were extracted from the State of Alaska Alcohol Control Board master file of all liquor licenses in the state: Beverage Dispensary, Beverage Dispensary Tourism-Seasonal, Beverage Dispensary-Duplicate, Beverage Dispensary-Seasonal, Beverage Dispensary-Tourism AS 04.11.400(d), and Beverage Dispensary-Tourism Duplicate. Only information from those liquor licenses that had “Anchorage” as their “city code” or an Anchorage address were extracted. Liquor licenses issued for Anchorage but used in establishments located outside Anchorage were excluded. The remaining full beverage dispensary licenses were matched to the business license files and employment files described above.

For this analysis, it was necessary to determine the smoking status of each establishment both before and after the smoking ban. It was assumed that establishments complied with the ordinance and were non-smoking if required by the ordinance, as well as that all bars were smoking before and after the ordinance. It was also assumed that hotels were restricted smoking before the ordinance, and non-smoking after the ordinance. The reliability of these assumptions depends critically on whether or not establishments complied with the smoking ban. Evidence from site visits, citations, and complaints to the Municipality suggests that public establishments such as eating and drinking places, hotels and lodging places, and amusement places have complied with the ordinance. To supplement these assumptions, all restaurants with full beverage dispensary licenses were telephoned and asked whether they still allow smoking and whether it was restricted to a particular area.

As mentioned above, for the purposes of this report, the eating and drinking industry includes all establishments with SIC code 5812 or 5813.
For the purposes of this report, “drinking places” includes all establishments that have a four digit SIC code of 5813. Eating places includes all establishments with SIC code 5812. Notably, these classifications by SIC code in the Alaska Department of Labor database are not always consistent with the self-reported industry designation in the Alaska Department of Community and Economic Development business license database. When there was an inconsistency, the Alaska Department of Labor SIC classification was used to group establishments by industry.

The count of fast food “establishments” reported in the figures and tables is a total number of companies (such as McDonalds, Burger King, Subway, and Taco Bell). Each of these companies operates numerous locations within the Municipality. There are about twelve major fast food companies operating a total of over on hundred fast food locations in Anchorage. Employment data available from the Department of Labor do not always clearly distinguish the different locations for a single company. However, it is possible to calculate employment for all locations operated by a particular company. Notably, even though fast food companies comprise only 3% of establishments, these large companies employ about 30% of all workers in the Anchorage eating and drinking industry.

These counts of establishments and employment include most, but not all, establishments in Anchorage. The numbers in this section of the report are samples rather than a complete census of all establishments. About 90% of all drinking places and 70% of all eating places are included in the sample. Reasons establishments were excluded from the sample are not related to their smoking status or their rate of growth in employment. As a result, for the purposes of the statistical tests in this analysis, the samples are unbiased and representative. Establishments were excluded from the samples for a number of different reasons:

- Some establishments do not report employment because they are proprietorships and do not have any employees.
- Some establishments have headquarters located outside Anchorage and report a single comprehensive count of total employment for all of their locations. The employment for these types of establishments is reported in the city where the headquarters are located rather than in Anchorage.
- Some establishments have headquarters in Anchorage and report a single total employment at those headquarters. Some of these companies include employment for locations both inside and outside Anchorage. In particular, some fast food companies that report employment at their Anchorage headquarters include in these totals some employees at locations in both Anchorage and the Matanuska-Susitna Borough.
- A few establishments changed ownership or mailing addresses, so employment data from 2000 and 2001 cannot be reliably matched to calculate the growth rate.

The mean and the standard deviation of the percent change in employment within each group of establishments were calculated. These statistics were used to test the hypothesis that the mean growth rates of different groups are different. Because of the very small sample sizes (sometimes fewer than ten establishments) and large variation in growth rates within each group, it was impossible to detect any statistically significant difference in growth rates between most groups. Only the growth rate of fast food restaurants was statistically significantly greater than other groups. Larger groups of establishments or more quarters of data are needed to reliably test these hypotheses.

These conjectures are comparable, but not identical, to results reported in Applied Economics (1996a). With only two months of sales tax data, this study investigated the impact on different types of establishments in Mesa Arizona. Their preliminary findings were that sales in bars grew while sales in bowling alleys, billiard parlors, and restaurants declined after the smoking ban. Applied Economics (1996b) conducted extensive interviews with businesses in Mesa and developed hypotheses about how the smoking ban affected different types of businesses.
Over two hundred bed and breakfast lodging places have business licenses in Anchorage. Nearly all are proprietorships that do not report employment to the Department of Labor. As a result, it is impossible to measure the impact of the smoking ban on this group of lodging places using employment data. However, the Municipality does report hotel bed tax receipts collected by “Other” types of lodging, including bed and breakfasts. This group of “other” lodging places experienced a 29% increase in bed tax receipts during the first quarter of 2001 relative to 2000. Some of this increase may be attributable to the Special Olympics.

When a hotel reports employment for a bar or restaurant separately from employment for the rest of the hotel, these bars or restaurants were included in the analysis of eating and drinking places.

A full year of final employment data would likely be available from the Alaska Department of Labor by fall 2002. State corporate income tax receipts for both 2000 and 2001 would also likely be available by fall 2002.
Appendix A

Anchorage Municipal Code Chapter 16.65
Prohibition of Smoking in Public Places

(See the Institute for Circumpolar Health Studies)
Appendix B

Research Plan for Review of Municipality of Anchorage Chapter 16.65 Prohibition of Smoking in Public Places
Research Plan for Review of Municipality of Anchorage
Chapter 16.65 Prohibition of Smoking in Public Places

(underlined words are key and need clarification)
(italicized sections will not be available due to the timing of review)

1. Effectiveness of the continuing public education program and ongoing efforts to work with affected businesses and individuals

- Public health education before implementation
  - Who provided what when and to whom
- Local Document Review - What has been done
  - MOA 1986 Smoking ban in its own facilities
  - Assembly transcripts of ordinance
- Pre-implementation H&HS call log for compliance
- Review of issues from "Anchorage Daily News"
  - Articles
  - Letters to the editor
- Review of Chamber of Commerce 2000 Survey and potential to replicate it in 2001
- H&HS education materials and programs
- APD education materials and programs
- Workplace employee messages and policies
  - Focus groups and Key Informant Interviews
- Definitions in need of clarification
  - Purpose of ordinance
  - Ventilation requirements or limits
  - Building modification requirements or limits
  - Others from the Advisory Committee?

2. Effect on reducing secondhand smoke exposure

- American Cancer Society - review nicotine air monitoring efforts and potentially replicate them
- Focus Groups of employees and employers
- Peer reviewed academic studies published in professional journals
  - Health Impacts (measurable and positive)

*Alaska Behavioral Risk Factor Survey - 2001 data may be available in 2003 as it runs 2-3 years after it is collected on a monthly basis. This lag may improve but clearly at this time the early 2001 data is more than a year away.*

3. Practicality of enforcing the ordinance and any problems with enforcement

- Review of Ordinance for specific objectives
- Pre-implementation H&HS call log for compliance
- Review of Chamber of Commerce 2000 survey comments (pro and con), potential to replicate in 2001
- Peer reviewed academic studies published in professional journals
  - Enforcement Assessments (practicality)
- Focus Groups of employees and employers
- Interviews of H&HS and APD staff
- Ordinance Review
  - Time period - less than one year
  - Six criteria for report - how to measure

4. Number of violations and amount of penalties

- H&SS and APD logs of complaints and actions
- Walk through assessments
  - Signs, designated spaces, indicators

5. Any needed revisions to the ordinance

- To be developed in October by the Advisory Committee
- The research team will provide a list of ambiguities in the ordinance that need clarification for any subsequent review

6. Overall economic impact

a. Literature Review

We are collecting previous academic studies of the economic impact of smoking ordinances published in peer-reviewed professional journals. We propose to review this literature and summarize the results.

b. Available Data

To measure the overall economic impact, we investigated four alternative indicators of business activity in Anchorage:

1. Alcohol tax revenues
2. Corporate income tax
3. Building permits
4. Employment

1. The Alaska Department of Revenue collects the state alcohol tax from wholesale distributors, so it is not possible for the State to measure how much of the alcohol tax is paid by individual retail establishments (such as bars or restaurants).
2. State Corporate Income Tax figures for 2001 will be available from the Alaska Department of Revenue after July 2002, so the data needed to measure the impact on income would not be available for more than a year.

3. Building permits are available from the Municipality. We will need to know specifics of work to determine how much building was done in response to ordinance and how much for other reasons. For example, the Hilton lobby work included renovations to the bar area, but it is unknown what part, if any, was in association with this ordinance.

4. Alaska Department of Labor employment data for individual establishments for 1\textsuperscript{st} Quarter 2001 will be available by September 2001. 
\textit{Data for 2\textsuperscript{nd} Quarter 2001 will be available by December 2001.}
\textit{Data for the full year of 2001 will be available by July 02.}

c. Recommendations

We propose to use the employment data as follows to estimate the economic impact of the ordinance:

- Classify the most likely affected establishments into four groups based on their smoking status: 1) Smoking Allowed, 2) Restricted smoking, 3) Non-smoking, and 4) Undetermined.

  Each of these groups will also be subdivided into small and large businesses based on employment numbers.

  We would rely on telephone calls (up to 1,400), cross list comparisons (business and liquor licenses), and assistance from the advisory board members to make these classifications. Ideally, we would determine the smoking status of each establishment both before and after the ordinance went into effect.

- We would classify only establishments in select industries most likely affected by the ordinance, including “Eating and Drinking Places,” “Hotels and Lodging,” “Amusement Services,” "Hair Salons."

- Due to limitations of the data, we will not be able to classify \textit{all} establishments in these industries. Notably, some establishments report only a single total employment for all of their locations in town. For example, all McDonalds are listed as one, and the Captain Cook hotel is listed as one so Fletcher’s bar employees cannot be identified.

- We would calculate the change in employment in each group of establishments from 1\textsuperscript{st} Quarter 2000 to 1\textsuperscript{st} Quarter 2001. By comparing the change in employment between groups of establishments with different smoking status, we could calculate a preliminary estimate of the economic impact of the ordinance.
Notably, the Special Olympics came to town in the 1st Quarter 2001 and may affect the results. From a separate study, we have estimates of visitor spending in specific industries attributable to the Games and could account for its effects.

Proposed Focus Group and Key Informant Process

The Advisory Committee requested at its 18 April meeting that clusters of people be used for the focus groups. There was no clear indication from the Advisory Committee on how to select groups of patrons. Due to the lack of a sampling frame, funding, and time, ICHS has proposed that the review focus on two general groups, the employees, and the employers/owners. The intent is to have participants who have been with the business for the past two years gain historic perspective and annual cycle comparisons. These two groups will be clustered into six types of focus groups:

- Employees from food and beverage facilities that are subject to the ordinance
- Employees from food and beverage facilities that are not subject to the restrictions of the ordinance (bars)
- Employees from other types of businesses that are subject to the ordinance
- Employers and owners from food and beverage facilities that are subject to the ordinance
- Employers and owners from food and beverage facilities that are not subject to the restrictions of the ordinance
- Employers and owners from other types of businesses that are subject to the ordinance.

Proposed Focus Group or Key Informant Questions

(These are suggestions open for comment and change. Not all of these may be used, since it is common to limit the questions to about six. Please comment on ones you would not use, or propose ones that should be included.)

- How has your business been doing since the implementation of the Municipality’s ordinance prohibiting smoking in public places?
- What changes have there been to the general make up of the patrons to your business since the beginning of the year?
- What changes have you or your patrons noticed in the air quality of your business since the implementation of the ordinance?
- Describe the employment level in your business since implementation. That is, are there more or less workers needed to cover the level of activity, or has the level of staff turnover changed as compared to last year?
• What education or enforcement actions regarding smoking have you had to take within your business? For example, as a server have you had to ask patrons to change their behavior?

• How were personnel policies revised and reviewed since the implementation of the ordinance?

• What changes have you noticed in your business, or been made aware of, regarding smoking policies, signs, or designated areas?

• Do you have any recommendations on how this ordinance should be changed when it comes up again for Municipal Assembly review?

Suggestions for how best to select employees or employers to participate in 90 minute Focus Groups or twenty-minute Interviews would be greatly appreciated. Due to the need to conduct this work during the busy summer season, finding the times and people to volunteer for this component may be difficult. Ideas and recommendations are appreciated to address this logistical problem. At this time the research team is considering conducting individual interviews with selected representatives. These people would be drawn from the various business classifications. Employer support will be needed to allow for the interviews to take place on site and during normal working hours while on a break or immediately before or after work.
Appendix C

Attempts to Collect Information for the Review
Attempts to Collect Information for the Review

At the suggestion of the Advisory Committee, and from the professional backgrounds of the Research Team as well as Municipal staff, a number of approaches were considered for the review of this ordinance. Before addressing each of the specific aspects of the Review it is necessary to state what was considered and why some of these approaches were not conducted or did not succeed.

**Interviews**

Focus groups of employees, employers, and patrons were considered but dropped. Under research that engages individuals it is critical to assess the feasibility of acquiring the number of participants needed. Part of any assessment is assuring that the recruitment procedures ensure equitable distribution across the entire impacted population. Focus groups would have required a mixture of employees from a number of business types all of whom would have needed to work for their employer since at least January 1, 2000 to be able to provide information on the change in business from the previous year. In addition, securing a time for employees to take hours off of work to participate did not appear practical.

Likewise, there did not appear to be an objective method of finding "typical patrons" for particular business types. In addition, to find a similar group of business owners, sorted by business type, who represented a random sampling of their industry did not appear practical. Therefore, the selection of participants made the research tool of focus groups impractical for this review. Without adequate depth of penetration of the target population, the information from this type of assessment would have provided not much more than a social barometer and not quantifiable data for this review on secondhand smoke levels and overall economic impact.

In a similar manner, the Research Team was interested in conducting Key Informant interviews. These initially fell into two groups: public officials and business owners or managers—since again it would not be possible to find key employees or key patrons. Within the University of Alaska there is an Institutional Review Board. Although interviewing public officials for such a review is generally exempted from IRB review, similar interviews with private business representatives would need to have some consideration by the IRB.

In addition, the Research Team was faced with who would be selected from the population of business owners to be interviewed. An aspect that was considered was how to select businesses for a random sampling by business type. This process would have produced a large sample and therefore too many interviews to be conducted in this review time period.

It was felt that it was not appropriate to interview representatives of business organizations. Both the Alaska Restaurant and Beverage Association (ARBA) and the
Anchorage Cabaret, Hotel, and Restaurant and Retailers Association (CHARR) have representation on the Advisory Committee. In addition, there are also representatives from a union, a business, and the Chamber of Commerce on the Advisory Committee. Each has had multiple opportunities to voice his/her concerns and bring forward issues during the planning meetings.

In the end, only the public officials were interviewed for the practicality of enforcement aspects and to secure insights on the collection of Municipal data on inquiries, complaints, compliance, and violations. The Advisory Committee brought many issues and ideas to the planning meetings. The Review Team’s review of the requests for information and complaint logs was entirely consistent with the comments from the Advisory Committee.

**Surveys**

A community wide survey was suggested and considered. This was not implemented due to cost and the ultimate quality of the data to address the Assembly’s requirements. Such a survey would have asked for public opinion on the aspects of this ordinance. While knowing how the citizens of Anchorage felt about the smoking ordinance is important to its application, it would not provide the type of information that the Assembly was specifically requesting in the six required items of this review. In addition, it was felt that the citizen complaint nature of the implementation of the ordinance is an active means to assess the community’s concerns about smoking in public places. That is, rather than asking people generally what they think about smoking, we could actually count the number of complaints received and actions taken under the ordinance.

The Anchorage Chamber of Commerce sent out a "Blast FAX" to their members in 2000 asking for their opinions of the ordinance shortly after its approval. The Research Team requested permission to replicate this effort to assess changes in attitudes or particular perceptions on the practicality of the implementation of the ordinance. The Chamber was not interested in participating in the replication of the original "Blast FAX" effort on the smoking ordinance.

An assessment of the "Anchorage Daily News" was proposed. This would have calculated the amount and importance of the coverage of the passage and implementation of the ordinance. The method measures the number of column inches of coverage and location of the stories within the newspaper over time. In addition, a survey of letters to the editor was proposed that would have measured numbers and content. The Advisory Committee felt that this was not an objective nor random process. The Research Team did learn that virtually all letters to the editor are published and so this would be a barometer of the community’s opinions on the ordinance. In the end this approach was not conducted.


**Air Quality Issues**

In order to assess the levels of secondhand smoke, ICHS looked for possible previous air sampling that could be replicated. The American Cancer Society had conducted air-sampling studies with nicotine monitors in three locations in 2000. The Research Team requested permission to replicate this study as a Pre-Post assessment of air quality. The establishments in question were not interested in participating in this replication endeavor.

"Puff-tests" or lung capacity tests were mentioned as a means to assess the impact of the ordinance on employees. In order for an assessment of pre and post lung capacity to be measured, these tests would have needed to have been conducted either before or immediately after implementation. Other similar studies have shown lung improvement in people removed from tobacco smoke within a few weeks. These tests were not conducted because the ordinance would have been in place for nearly a half year by the time this review would have applied the examination. Had this type of test been conducted in January and then in August some indication of impact may have been possible. However, with many months of implementation already passed, this process would not have yielded beneficial information. An additional confounding factor is the need to control for other personal behaviors within the study population. This requires a large sample size in order to assure that there are not other environmental or behavioral factors related to overall lung function.

It was also suggested that perhaps autopsy reports could be reviewed to see if there were less chemical traces of tobacco smoke residues in non-smokers who died in Anchorage. While this was an interesting concept, this assessment would have required a large number of samples, and the analysis would be expensive. In addition, it would still be unclear if the secondhand smoke exposure to these individuals occurred on the job, while visiting businesses in the Anchorage area, in private homes, or through other sources.

**Compliance**

In order to confirm compliance, and to assess the practicality of enforcement, a series of "walk-throughs" was planned. The intent was to prepare a standard check-off sheet of the basic requirements for businesses under the ordinance. This would have included looking for appropriately placed no-smoking signs, designated smoking areas, and ashtrays in facilities. The establishments were to have been selected randomly from our master list of Anchorage businesses.

A question of the legal liability to report non-compliance and the potential ability to identify individual businesses was raised. A request to do this work was sent to the University of Alaska Anchorage's Institutional Review Board for their opinion. Although the data would be a composite, and no individual establishment would be identified in the report, the ICHS data would identify which facilities were randomly sampled. In order to address particular identification, the check-off sheets were to be designed so
as not contain identifiers. This was done so that if violations were found, then our data could not be used for any form of enforcement against the individual business visited.

Upon IRB approval to proceed with this component of the evaluation, the master list of Anchorage businesses permitted under the Health and Human Services Department was reviewed. What was learned was that in order to obtain information that would have statistical significance, virtually all establishments would need to be visited. This was not possible within the time frame or budget of this review. If a sample were taken, and with a limited number of items for testing with either a yes or no response, the resulting statistics, with their confidence intervals, would not yield much valuable information for the public. Not only did we want to have comparability among business types, we also hoped to be able to make broad statements about overall compliance. This scale of assessment was not possible within the confines of the review process.

**Economic**

In order to assess the economic impacts of the ordinance, a number of ideas were proposed. There is no sales tax in Anchorage, so those records could not be used. The Alaska Department of Revenue collects the state alcohol tax from wholesale distributors. It is not possible for the State to measure how much of the alcohol tax is paid by individual retail establishments, such as bars or restaurants. Therefore, alcohol sales could not be used to reflect an impact on smoking in facilities that hold liquor licenses. In addition, if patrons move from non-smoking facilities to ones that allow smoking, the overall level of alcohol consumption may not change but the impact to individual businesses may be significant. It was concluded that such an indirect measure would not lead to answers about the overall economic impact of the ordinance.

Likewise, tobacco tax records would not provide information on the overall economic impact other than the overall consumption of tobacco products. People outside of Anchorage may be purchasing some of these tobacco products in the city. In addition, the objective of the ordinance was not to reduce tobacco consumption, but to reduce the exposure of the public and employees to secondhand tobacco smoke.

Businesses were requested to voluntarily provide their financial records for 2000 and 2001. This was initiated through inquiries to the Alaska Restaurant and Beverage Association (ARBA) and the Anchorage Cabaret, Hotel, and Restaurant and Retailers Association (CHARR). However, to be statistically sound, a random sample of these would have been virtually impossible to collect in light of the voluntary nature of the request and the size of some of the impacted business groups. The discussions with these groups resulted in the fact that securing a random sample of business reports was not a practical way in which to assess overall economic impact. Although some businesses were willing to share their financial records, the statistical validity of the sample could not be assured.
A number of indirect economic data sources were considered. Hotel bed taxes were not seen as indicative of the impact of the smoking ordinance, since 25% of rooms were exempted, and the link between hotel stays and smoking was not associated. Restaurant sales and supply businesses were mentioned but there was no way to obtain their total sales records and to see if those sales were to smoking or non-smoking establishments.

Commercial real-estate turnover and business license applications were suggested. Again, due to the timing of the potential influence and the ability to link any change in numbers to the implementation of the smoking ordinance, this was not possible.

Building permits are available from the Municipality. There was interest in whether there were more permits issued in late 2000 to comply with the ordinance. The ordinance does not require the spending money to come into compliance. It was felt that some businesses might have wanted to make modifications. What was unknown was the specifics of the work to be done in order to determine how much building, modification or remodeling was done in response to the ordinance and how much for other reasons. For example, a downtown hotel renovated its lobby, but it is unknown what part, if any, was associated with aspects of this ordinance. In the end, it was not believed that building permit numbers would provide significant evidence for or against overall economic impact.

**Time**

Time for this review was considered. However, as a group the Advisory Committee decided not to take action to extend the timeframe at its May meeting. The Assembly was requested to consider two alternatives to the review during July. One was to extend the time for review by an additional year. The other was to drop the "overall economic impact" review item. Neither proposal was approved by the Assembly, so the Research Team continued on the original work plan.

The time curve of this ordinance's implementation was also considered. The enforcement of this ordinance is based on multiple citizen complaints. It takes time to receive a compliant, respond to it in writing, receive another complaint, respond to it in writing, and perhaps schedule a physical visit—all prior to a citation being filed. Therefore, the activity curve of implementation has been occurring during the first few months of this year. The review of the ordinance was beginning at the time when citizen complaints were dropping off and compliance appeared to be nearly complete. However, the Research Team cannot report here on the impact of the ordinance, since it had not yet become part of regular business patterns. It has not been in place long enough for such assessments. The implementation and compliance may vary with changing seasons, since cold weather drives smokers closer to buildings, and modifications are made to ventilation systems. In addition, compliance may vary in the future as implementation and public awareness campaigns fade.
Another time consideration was that during the first quarter of 2001 the World Special Olympics was held in Anchorage. This may have modified the economy of the city and therefore impacted the ability to detect impacts from this ordinance. A city filled with young athletes may have impacted businesses that were adjusting to the new smoking prohibitions. The economic data presented in this report were adjusted for the measurable impacts of the Special Olympics. However, the public attitudes may have also been affected by this event.

Another time consideration was that the baseline to which comparisons are being made is the first quarter of 2000. That quarter may not have been a "normal" baseline, since there was a great deal of buying at the end of 1999 in preparation of the "millennium bug" and its potential impact to computers, as well as on the ability to purchase. In order to correct for this factor, the changes in impacted businesses were compared to the overall economic health of the city, and then groups were compared to each other. This cross evaluation should have reduced the specific influence of the baseline.

**Process**

Process has been mentioned repeatedly as a factor in this review. The Advisory Committee members voiced concerns about the process that was used to review and evaluate the draft ordinance before it was approved. Municipal staff reported not being as involved in the development of this ordinance as they typically are. The typical report for an ordinance, Summary of Economic Effect, was not produced. The lack of involvement of those who would be charged to interpret and enforce the ordinance prior to its passage has resulted in more of their time being taken after its implementation.

For this review there was no way to measure the actual costs to staff time in light of the process that put this ordinance into action. The comments received do indicate that this was a concern, but there was no way to assess its effects during this review.
Appendix D

Bibliography for Economic Impact Analysis


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Appendix E

Suggestions from the Advisory Committee on Needed Revisions to the Ordinance
Suggestions from the Advisory Committee on
Needed Revisions to the Ordinance

On 26 September the Advisory Committee was presented with a preliminary draft report of the Research Team’s findings. On 3 October the Advisory Committee met to discuss possible “needed revisions” to the Ordinance as provided for under item #5 of the review criteria.

The discussion led to 15 suggested changes. Two were withdrawn, leaving 13. Of the 13, a number dealt with the clarification of language or the possible expansion of Municipal protocols that would not necessitate actual revisions to the ordinance itself. All 13 are listed in this section as suggested “needed revisions” to the ordinance, but some are points that may only need some investigation, clarification, or the development of administrative solutions. Each of these items was discussed in turn, the intent being to produce suggestions for further consideration and the most appropriate Municipal action.

After a great deal of debate, the eleven Advisory Committee members or their proxies who were present used a secret ballot to respond to 13 questions. The ballots were taken unopened to the ICHS office where two staff members, who have not been involved with the review process, were requested to independently tally the results. Their tallies were compared and found to agree.

The wording of all suggestions was standardized by the Research Team and linked to specific sections of the ordinance. In addition, some of the issues that were mentioned as supporting reasons for the suggested changes are included in italic. These are provided to give examples of the types of concerns that need to be considered for the proposed revision investigation, clarification, modification of process, or language change to the ordinance.

The following is a listing of the 13 suggestions as possible revisions to the ordinance, in the order of their support through the balloting process. Those receiving the most support are listed first.

Consensus

11 Yes 0 No - Section 16.65.030 A 3 - "Should the definition of "Twenty-five percent of hotel and motel rooms rented to guests" be clarified?

The issues deal with specifically and consistently designated smoking rooms, an annual average of rooms rented, or a means to have establishments identify their process so that complaints, compliance, and enforcement actions can be appropriate. This should be investigated and clarified.
Majority Support

10 Yes 1 No - Section 16.65.030 A 5 - "Should the ordinance be reviewed to clarify the language "Restaurants, hotel, and motel conference or meeting rooms and public and private assembly rooms while these places are being used for private functions"?"

The issues deal with defining private functions, private clubs, private space, half-way houses, and similar establishments or situations, as well as the specific application of the ordinance to such facilities. This should be investigated and clarified.

10 Yes 1 No - Section 16.65.035 C - "Should the ordinance be revised to provide for an exemption for the removal of "ashtrays and other smoking paraphernalia" (built in ashtrays and lighter outlets) in business vehicles"?

The issues deal with costs incurred to fleet vehicles that may limit their resale, and for which the trays and lighters may be regularly used for other legitimate purposes.

10 Yes 1 No - Section 16.65.045 C - “Should the ordinance language be clarified as to the application of civil or criminal enforcement of this ordinance for both violations and threatened violations?”

The issues deal with which standards to apply for APD actions as H&HS uses only civil enforcement actions. This should be investigated and clarified.

9 Yes 2 No - Section 16.65.045 - "Should language be added to the ordinance to clarify definitions of compliance and enforcement?"

The majority recommends that there should be clarification of the section to differentiate between a lack of voluntary compliance and the act of legal enforcement as it currently states that it is "unlawful…to fail to comply." The issues deal with future complaint followups or inspections and if enforcement should be initiated for each time there is an identified failure to comply. This should be investigated and clarified.

9 Yes 2 No - Section 16.65.005 "Bar" - "Should some other criteria/definition or system be used to determine the ability to allow smoking in facilities other than full beverage dispensary licenses?"

The majority recommends that there should be consideration to the fact that a major aspect of this tobacco smoking prohibition ordinance is based on businesses having a full beverage dispensary license as provided under AS 04.11.090. The issues deal with the definition of an adult area where smoking may be allowed that is limited to and associated with a State Statue on the ability to legally sell "spirits." Is this equitable for those who do not consume "spirits" and those aged 19 and 20? Consideration should be given to develop another way to identify "adult" establishments where smoking is not regulated for those legally allowed to purchase tobacco. This should be investigated and clarified for equitability.
9 Yes 2 No - Section 16.65.005 "Bar" - "Should the ordinance be revised to define "bar" as those licenses interpreted by the Alaska Beverage Control Board as falling under Alaska State Code AS 04.11.090, which includes the Tourism License."

Municipal code should agree with State Statutes so there is no need for local legal interpretation. The definition used should assure total agreement to any referenced citation. If this is not the case then there should be a specific definition of what is intended under a “full beverage dispensary license.” This should be investigated and clarified.

8 Yes 3 No - Section 16.65.030 A 8 - "Should the ordinance be revised to specify doors as a requirement in order to make the enclosed spaces that separate non-smoking areas from smoking areas, for bingo halls and pull tab establishments?"

The majority recommends that there should be language inserted to this item that requires that the non-smoking section of bingo halls and pull tab establishments include a fully enclosing physical barrier, including doors, from the balance of the facility in order to reduce smoke entrainment. This is due to how smoke disperses into clean air and the non-smoking area being surrounded by a smoking area. The issues deal with the situation in which a non-smoking area is entirely incorporated within a smoking area. The definition of "enclosed area" should be modified in 16.65.005 or a new term should be defined and used for the situation when a non-smoking area is established within a facility that allows smoking. This should be investigated and clarified.

7 Yes 4 No - Section 16.65.025 - "Should the definition of "reasonable distance" be clarified?"

The majority recommends that there should be some guidance in this section to suggest what is meant or intended by "reasonable distance" with a means to assess this if there are complaints. The issues deal with the need for those who must assess compliance and enforce the ordinance to have some standards or guidelines that assist them in determining the practicality of a recommended physical separation from smoker to non-smoking area. This should be investigated and clarified.

Items that Failed to Obtain Majority Support

4 Yes 6 No 1 Abstention - Section 16.65.030 A - "Should the ordinance be revised to expand the exemptions if sophisticated ventilation systems are in place?"

The issue was if there should be a new section added that allows for an engineering solution. That is, if a business owner wants to install, operate, and have inspected a Heating Ventilation and Air Conditioning system that would adequately remove tobacco smoke products from the air such that it would be found suitable for safe consumption, that they may be allowed to do so. The issues deal with alternative
technical solutions to provide acceptable air quality in other facilities, and that the implementation would be provided voluntarily by the business owners. The standard of air quality would have to be established using the best available technology.

3 Yes 7 No 1 Abstention - Section 16.65.005 "Bar" - "Should the ordinance be revised to expand the definition of "bar" to include "beer & wine licenses"?"

The issues deal with equity on what businesses may allow smoking.

2 Yes 9 No - Section 16.65.025 - "Should language be added to the ordinance to assure that when there are multiple uses in one facility with a common ventilation system that "no business may introduce tobacco smoke into another business"?"

The issues deal with limiting compatible business types in facilities if they have single ventilation systems. The question is the existing compatibility of businesses in multiple use buildings, or ones in such close proximity that entrainment of air laden with smoke is possible.

1 Yes 10 No - Chapter 16.65 - "Should the ordinance stand as it is, without revision?"

The issues deal with perceptions of how well the ordinance has worked as designed.
Appendix F

Suggestions from the UAA Research Team on Needed Revisions to the Ordinance
A. Equity in the application of the ordinance

The ordinance was implemented to remove minors, patrons, and employees from exposure to secondhand tobacco smoke. In order to do this, a particular type of business alcohol dispensary license was used to define adult establishments. The concern of equity has been raised in light of using a specific alcohol related definition that may not be appropriate or equitable to the targeted audience. Adult non-drinkers, and those 19 and 20 years of age, may all legally purchase tobacco products but they do not have the same opportunity to smoke in public as those over 21 who visit establishments that sell spirits.

There are exemptions within the ordinance that also do not utilize the alcohol license definition for adult establishments such as bingo halls and pull tab establishments. Likewise, private functions at hotels may allow smoking no matter what alcohol license they may hold. Conversely, there are public places for adults only that do not serve alcohol. There are also public places for adults that serve some alcohol but do not serve "spirits."

Pool halls are not permitted to have smoking, while Bingo halls are. Pull tab establishments are allowed to have smoking, while other stores are not. Bingo halls and pull tab establishments are allowed to have enclosed non-smoking sections, while no other business is permitted such a structure. The objective review of these places where smoking is not regulated does not appear to be equitable.

These exemptions and inequities have caused confusion about the ordinance. Some see this as unfair and inequitable. The one citation that has been given under this ordinance is being challenged based on the inequitable nature of how it is designed.

The following suggestions are offered in numerical order.

- **Suggested Revision - Section 16.65.005 "Bar"** - It is recommended that there be new language to make this definition more equitable. There should be consideration that a major aspect of this tobacco smoking prohibition ordinance is based on businesses having a full beverage dispensary license as provided under AS 04.11.090. The issues deal with the definition of an adult area where smoking may be allowed that is limited to and associated with a State Statue on the ability to legally sell "spirits." This does not appear equitable for those who do not consume "spirits" and those of the ages of 19 and 20. Another definition of an "adult" establishment should be outlined for those legally allowed to purchase tobacco that is not a "bar" as defined in the ordinance.
• **Suggested Revision - Section 16.65.030 A 8** - This item should be eliminated, thereby ending the exemption to the smoking prohibition to bingo halls and pull tab establishments. Bingo halls and pull tab establishments should be listed within 16.65.005 "Business" or "Public place."

  *If this item is not eliminated, then new language should be added. It should require the business to have a smoking section separate from the non-smoking section in the same fashion as is defined under "Bar" within 16.65.005 "where smoke cannot filter into any other area," but without the required license under AS 04.11.090.*

**B. Practicality of enforcement**

There are aspects of this ordinance that are not practical for any regular enforcement. There was no means to assess if written personnel policies were changed by the time of the implementation of the ordinance, or if these were communicated to all employees within the first three weeks. There is no means to assess if more than 25 percent of hotel or motel rooms are rented as smoking rooms or if guests are smoking in those rooms. There are neither means nor guidelines to determine what is meant by the "smoke cannot filter into", "to ensure that tobacco smoke does not enter" or a "reasonable distance" to prevent entrainment.

The concept of privacy in public facilities needs to be clarified. If hotels may have private functions that allow smoking, then it needs to be clear how minors working there are to be protected. If a person is living in a business owed facility it should be clear if they have privacy in their own room that would permit smoking. There should be clarification that better defines a "public place" and a "private residence" or "private function."

Overall the practicality of enforcing the ordinance is directly related to its clarity and process. There are a number of terms and conditions that need to be clearly defined. There also needs to be more information on the process of enforcement. At this time the ordinance functions through citizen observation and the reporting of a complaint. That report to the Municipality then triggers an investigation as to the appropriateness of the complaint. The status of the business as to prior complaints as well as subsequent actions is assessed. If needed an on site visit is conducted.

Municipal employees are not actively going to businesses to enforce this ordinance. It is investigated when there are citizen complaints. In addition, during Health and Human Services business inspections compliance to this ordinance will be noted. The Advisory Committee suggested during discussions that compliance become part of regular inspections by the Fire Marshal. In addition such compliance checks could become part of any regular Municipal health, fire or building inspection.

The following suggested revisions are offered in numerical order.
• Suggested Revision - Section 16.65.005 "Bar" - It is recommended that this should be modified so that the definition is in full agreement with all aspects and sections of AS 04.11.090. Municipal code should agree completely with State Statutes when they are referenced so there is no need for local legal interpretation.

It is also recommended that some additional guidance should be provided to assess what is meant for enforcement to determine that "tobacco smoke cannot filter into any other area where smoking is prohibited."

• Suggested Revision - Section 16.65.005 "Public place" - It is recommended that "public place" be modified to better define the distinction between public and private. Defining private functions, private clubs, private space, half-way houses, and similar establishments or situations should be done. The private act of placing smoke into commonly used air should be considered. The ordinance is in place to protect public health by prohibiting smoking in public places. While the focus is on enclosed areas of businesses, it also addresses the movement of smoke into facilities and within buildings.

• Suggested Revision - Section 16.65.025 - It is recommended that there should be guidance in this section to suggest guidelines for measuring the intent "to ensure that tobacco smoke does not enter the area." Likewise, there should be guidance to assess a "reasonable distance" when there are complaints or the need for enforcement. Those who assess compliance and enforce the ordinance need standards or guidelines that assist them in determining the effectiveness of a physical separation between a smoker and a non-smoking area.

• Suggested Revision - Section 16.65.025 - It is recommended that there should be new language inserted to expand this section "to ensure that tobacco smoke does not enter the area through entrances, windows, ventilation systems, or any other means" when there are multiple uses in one facility with a common ventilation system. There should be some guidance as to how to assure that no business introduces tobacco smoke into another business. Language should be considered that requires limiting compatible business types when moving into facilities if they have single ventilation systems. The existing compatibility of businesses in multiple use buildings, or ones in such close proximity that entrainment of air laden with smoke is possible, should be considered and addressed in this section as well.

• Suggested Revision - Section 16.65.030 A 3 - It is recommended that the phase "twenty-five percent of hotel and motel rooms rented to guests" be modified to better quantify how this percent was selected, as well as how it is to be assessed for compliance. The definition could include specifically and consistently designated smoking rooms, an annual average of rooms rented, or a means to have establishments identify their process so that complaints are understood, and compliance as well as enforcement actions can be appropriate.
This section should also consider requiring that each hotel and motel report to the Municipality on how they select their smoking rooms. In addition, they should report how they intend to assess their own compliance as well as deal with patron complaints about tobacco smoke. This could include requiring that information on this ordinance be kept at the front desk and provided to those requesting assistance.

- **Suggested Revision - Section 16.65.030 A 5** - It is recommended that “restaurants, hotel and motel conference or meeting rooms and public and private assembly rooms while these places are being used for private functions” be modified to better define the distinction between public and private. Defining private functions, private clubs, private space, half-way houses, and similar establishments or situations is needed. The private act of placing smoke into commonly used air needs to be considered. The ordinance is in place to protect public health by prohibiting smoking in public places. While the focus is on enclosed areas of businesses, it also addresses the movement of smoke into facilities and within buildings.

- **Suggested Revision - Section 16.65.030 C** - It is recommended that there should be a new item C that requires a report to be submitted to the Municipality by all businesses that intend to allow smoking in their facility. This would go beyond the current voluntary letter from businesses that have been submitted stating their understanding that allows them to permit smoking. This requirement would then provide a master list from which the Municipality could initiate compliance and enforcement actions.

- **Suggested Revision - Section 16.65.035 C** - It is recommended that there should be an exemption in this section for the removal of business vehicle ashtrays and lighter outlets. This would reduce any costs incurred to fleet vehicles that may limit their resale. It would also allow for ashtrays and lighters to be regularly used for other legitimate purposes (i.e. trash receptacle or auxiliary power socket).

- **Suggested Revision - Section 16.65.040** - It is recommended that there should be language added that this ordinance sets Municipal workplace standards that can and will be enforced through the Alaska Department of Labor's Occupational Safety and Health Compliance Office. There currently is no indication for how this section is to be enforced.

- **Suggested Revision - Section 16.65.45 new** - It is recommended that there should be a new section that provides for continuing and regular ordinance compliance checks to be carried out during routine municipal health, fire, and building inspections of businesses.

- **Suggested Revision - Section 16.65.045** - It is recommended that there should be clarification of the section to differentiate between a lack of voluntary compliance and the act of legal enforcement. It currently states that it is "unlawful…to fail to
comply." During the early months of implementation, businesses were allowed to correct their compliance even after several complaints. There, however, should be a clear statement of how to deal with future complaint follow-ups or inspections and if enforcement should be initiated each time there is an identified failure to comply.

- **Suggested Revision - Section 16.65.045 C** - It is recommended that there should be clarification for when civil or criminal codes are applied for the enforcement of this ordinance for either "a violation or threatened violation." This needs to be clarified so it is known which standards to apply during police enforcement actions.

### C. Practicality of review

The Research Team was challenged from the very beginning of the review process due to pre-existing research design weaknesses. Since the formal review period started after the ordinance went into effect, the Research Team could not reliably measure conditions prior to the implementation. Without this baseline data, the Team could not make direct comparisons between conditions before and after implementations. These comparisons would have been the most reliable and scientific method for estimating the impact of the ordinance.

It is unfortunate that the Summary of Economic Effects for this ordinance apparently was not produced. Had the Municipal Assembly completed this regularly produced report on the expected public and private costs to implementation, then the Research Team and others interested in the review of this ordinance would have had a prepared document with which to compare.

The nature and scope of the review that was required was not clear. A major consideration was how to define "overall" when the economic impact was assessed. Had the Summary of Economic Effects been available there would have been some guidance for review. Without it, the Research Team was left to consider economic reports that ranged from individual business records to projections of the possible reduction in cancer treatment costs in ten years.

Likewise, "effectiveness" was not defined in a measurable way for the education efforts or for the ordinance to reduce secondhand smoke. Without a prior evaluation of the educational tools that were to be used, it is not possible to evaluate how effective they have been individually. If the total public education campaign is considered it is unclear as to the total cost effectiveness as many materials were contributed by local and national health promotion organizations. Without air sampling prior to implementation, it was not possible to quantify any direct reduction in exposures to secondhand smoke.

Time and timing were also two critical aspects that made the review difficult. The duration of the time to collect data was short. The time period for the collection was dictated by the starting date of the contract and the deadline for submitting the report so it could make its way to the Assembly by the end of the year. This required all data
to be gathered during a few months over the summer. This is a time when tourism is high and many non-residents are in businesses. This is a time when schools are closed and older students are taking summer jobs. It is also a time when family schedules are modified and business-use patterns are shifted.

It was a time when the newness of the ordinance was beginning to fade. Businesses had been given nearly a year’s worth of marketing and encouragement. It was a time when compliance should have been becoming routine. It was a time when, if there were multiple complaints, enforcement actions would be taken. The one citation issued occurred during this time and it is still pending a hearing while this report was written in October.

In order for this report to make Assembly review by the end of December it must be written in October. In order to have the Advisory Committee comment on the review plan they had to be appointed in March. The Research Team, albeit working to assess data quality and availability, could not work in earnest on the collection of specific information until June. The one-year review time period for assessing the impacts of this ordinance was too short in light of the data that could be obtained.

- **Suggested Revision to the Municipal Process** - Any ordinance passed by the Municipal Assembly that is to be reviewed should contain clear measurable objectives. It is recommended that program evaluators be included in the planning stages of all ordinances that will or may require an evaluation. The review process should be established in such a manner so that resources are available so that work could be started prior to implementation. This is needed in order to establish baselines prior to any impact from implementation. It is also needed to assess the tools that will be used in public education and implementation. The review process should be defined to run for a specified and adequate length of time to allow the collection of appropriate data. The evaluation process needs to have adequate support throughout its life in order to collect and evaluate the data required for the review.
Appendix G

Suggestions from the Health and Human Services Staff on Needed Revisions to the Ordinance
Appendix H

Suggestions from the Anchorage Police Department on Needed Revisions to the Ordinance