
Economic Analysis of the Final Rule for 25 CFR Parts 502, et al.

For the
National Indian Gaming Commission



Submitted by:



August 25, 2008

Table of Contents

Executive Summary	i
Relation of this Analysis to Previous Analyses	i
Number of Affected Entities under Different Baselines	ii
Social Costs	iii
Social Benefits of the Regulation.....	v
Summary of Social Costs of Alternatives	v
Chapter 1: Introduction and Background to the Issue	1-1
Purpose of this Analysis	1-1
Summary of Statutory Framework	1-1
Regulatory History	1-2
Regulatory Alternatives	1-5
Economic Framework for this Analysis	1-6
Relation of this Analysis to Previous Analyses	1-8
Organization of the Analysis	1-9
Chapter 2: Provisions of the Regulation	2-1
25 CFR Part 502	2-1
25 CFR Part 546 (Referenced in Part 502)	2-2
25 CFR Parts 542 (Deleted) and 543	2-3
25 CFR Part 547	2-4
Summary of Incremental Changes.....	2-5
Chapter 3: Market and Regulatory Conditions for Affected Entities	3-1
Number of Affected Entities if Current Market Conditions Continue	3-1
Minimum Internal Control Standards.....	3-2
Technical Standards.....	3-2
Definition of Class II and Electronic Facsimile	3-3
Effects of Recent Compacts	3-5
Growth Rate of Class II Machines	3-6
Number of Class II Machines Affected by the Rule	3-9
Summary of Entities Affected under the Current Practices Baseline	3-9

Number of Affected Entities if Greater Enforcement Occurs	3-9
Legal and Regulatory Baseline	3-10
Factors Affecting Future Commission Activity and Market Activity without Regulatory Change	3-11
Projected Class II Machine Compliance Rate with Increased Enforcement	3-15
Summary of Entities Affected under the Greater Enforcement Baseline.....	3-15
Chapter 4: Social Costs	4-1
Social Costs for MICS and Technical Standards	4-1
Social Costs for the Classification Standards: Changes in Consumer Demand	4-2
Measuring Consumer Demand: Pre-Regulation Demand	4-2
Measuring Consumer Demand: Change in Game Duration.....	4-2
Measuring Consumer Demand: Net Gaming Revenue After Shift from Class III to Class II	4-3
Costs of Minimum Internal Control Standards.....	4-4
Promulgation of Tribal Rules	4-4
Increased Cost of Contracting Certified Public Accountants	4-5
Retraining Enforcement Officials and Operation Personnel	4-5
Security	4-6
Caveats.....	4-6
Total Cost of Revised MICS.....	4-6
Costs of Technical Standards	4-6
Cost of Modifying Machines	4-7
Contracting with a Laboratory to Conduct Certification Testing	4-8
Administrative Cost to NIGC.....	4-10
Costs of Definitions and Classification Standards	4-10
Alternatives Considered and Categories of Costs.....	4-10
Replacement and Reprogramming Costs	4-11
Effect of Grandfathering Provision	4-13
Direct Gaming Revenue Losses	4-15
Non-Gaming Revenue Loss	4-18
Potential Lost Jobs for Tribal Members	4-19

Loss in Bargaining Power	4-20
Summary of Social Costs of Alternatives	4-21
Summarized Comparison with February 2008 Analysis	4-21
Chapter 5: Social Benefits	5-1
Benefits of Minimum Internal Control Standards	5-1
Preventing Externalities from Fraud	5-1
Regulation as the Most Efficient Approach to Reducing Fraud	5-7
Benefits of the Definitions and Classification Standards.....	5-8
Avoidance of Litigation.....	5-8
Increased Legal Certainty Reduces Capital Costs.....	5-9
Protection of the Integrity of the Law.....	5-11
Appendix 1: Gaming Facilities with Class II Machines by State.....	6-1
Appendix 2: Summary of Opinions and Decisions Concerning the Scope of	
Class II and Class II Bingo	7-1
What Constitutes as Class II Gaming	7-1
Types of Bingo	7-1
Pull-Tab	7-2
What Does Not Constitute as Class II Gaming and Thus is Class III Gaming	7-2
Bingo.....	7-2
Pull Tab	7-2
Important Cases and Advisory Opinions	7-3

Tables and Figures

Table ES-1: Summary of Affected Entities	iii
Table ES-2: Estimated Non-Gaming and Employment Losses	v
Table ES-3: Summary of Costs for the Rulemaking Alternatives	vi
Table 2-1: Summary of Proposed Regulatory Changes and Affected Entities	2-6
Table 3-1: Total Number of Class II Machines in 2006	3-3
Table 3-2: Future Reduction in Class II Machines in States with Recent Compacts.....	3-6
Table 3-3: Growth in Class II Machines	3-8
Table 3-4: Predicted Number of Class II Machines.....	3-8
Table 3-5: Summary of Affected Entities in Current Market Scenario	3-9
Table 3-6: Hypothetical Decision Analysis of Choice to Install New Machine.....	3-12
Figure 3-1: Past and Projected NIGC Expenditures	3-13
Figure 3-2: Past and Projected NIGC Staffing	3-14
Table 3-7: Summary of Affected Entities in Greater Enforcement Scenario.....	3-15
Table 4-1: Cost of Certification to Part 547 Standards	4-8
Table 4-2: Budget Estimate for Machine Compliance Department	4-10
Table 4-3: Annualized Cost of Replacement and Reprogramming Costs Assuming 50 Percent Compliance Rate (in \$ millions)	4-15
Table 4-4: Comparison of Per Capita Income.....	4-17
Table 4-5: Lost Revenue Associated with Compliance with Revised Proposal	4-18
Table 4-6: Decrease in Gaming Revenue in the Greater Enforcement Scenario	4-18
Table 4-7: Estimated Non-Gaming and Employment Losses	4-20
Table 4-8: Summary of Costs for the Rulemaking Alternatives.....	4-21
Table 4-9: Comparison of Major Differences Between the Analyses	4-22
Table 5-1: Top Five Victim Organizations, by Frequency	5-3
Table 5-2: Selected Occupational Fraud Schemes in the Industry.....	5-3
Table 5-3: Median Loss Based on Presence of Anti-fraud Controls	5-4
Table 5-4: Breakdown of Primary Internal Control Weaknesses by Scheme Type	5-5
Table 5-5: Comparison of Regulatory and Litigation Transaction Costs	5-9

Table 5-6: Long-Term Debt Borrowing Rates for Multimedia Games 5-11

Table A2-1: Summary of NIGC Opinions Related to Bingo, Pull Tabs, and Similar Games 7-3

Executive Summary

The purpose of this analysis is to provide a comprehensive estimate of the social benefits and costs of possible final rule options that the National Indian Gaming Commission (NIGC) can take to address classification and technical issues of various gaming activities by Indian tribes.

Specifically, this analysis examines the benefits and costs associated with four regulatory sections proposed by the National Indian Gaming Commission in May 2006 and revised in October 2007¹ which include the following:

- the definition of “Electronic or Electromechanical Facsimile” in Part 502 of the existing regulations;
- the Classification Standards for Bingo, Lotto, other games similar to Bingo, Pull Tabs and Instant Bingo as Class II Gaming When Played Through an Electronic Medium Using “Electronic, Computer, or Other Technologic Aids” in Parts 502 and 546 of the existing regulations;
- the Minimum Internal Control Standards (MICS) for Class II gaming in Parts 542 and 543; and,
- a new Part 547 to the Commission’s regulations establishing technical standards for electronic, computer, or other technologic aids used in the play of Class II games.

This analysis examines the following three regulatory alternatives available to the NIGC:

- The first option is to take no action;
- The second alternative is to promulgate the 2007 proposal in total; or,
- The third alternative is for the NIGC to promulgate the proposed MICS and technical standards for Class II facilities and machines.

Relation of this Analysis to Previous Analyses

The goal of the analysis is to update and to supplement the analysis performed for the Commission in February 2008.² This update reflects important additions to that analysis:

1. **Affected Facilities.** This analysis adopts significant changes in the market, specifically the adoption of gaming compacts by states representing a substantial share of the recent Class II gaming market. In addition, this analysis considers several potential future scenarios from which to measure the costs and benefits of the final regulation.

¹ See 72 FR 60482.

² Meister, A. *The Potential Economic Impact of the May 2006 Proposed Class II Gaming Regulations*, Analysis Group, February 1, 2008.

2. **Costs.** The analysis reexamines some of the key assumptions regarding replacement cost and revenue losses used in the February 2008 analysis. In addition, it systematically attempts to examine the impact of the grandfathering provision on the cost of the rule. The analysis will also attempt to update the costs associated with the other parts of the rule in addition to the classification standard.
3. **Benefits.** Previous economic analyses were intended to be an analysis of potential costs and economic impact on tribes. As such, they considered primarily the worst-case cost impact and did not consider the social benefits of the regulation. This document describes and, where possible, quantifies the benefits of the regulation.

Number of Affected Entities under Different Baselines

When estimating the future effect of the regulation, the analysis must project the current and future number of affected entities. This projection requires predictions of not only how market forces will change the number of entities, but also how the regulation will affect them.

The Class II industry is expected to continue its growth. Where states and tribes have negotiated new compacts, the gaming operators are expected to convert their Class II machines rapidly into Class III machines. Under these conditions, this section estimates the number of gaming entities and tribal gaming authorities that must comply with MICS. It also estimates the number of entities that must comply with the technical standards. Finally, we present our estimated number of compliant and non-compliant Class II machines and the future growth rate of Class II machines.

There are two major issues in establishing the appropriate baseline for measuring the incremental benefits and costs of the classification standards. First, the size of the Class II market has changed dramatically in the past four years. Second, technology has moved faster than the regulatory system in this industry. As a result, under current practices in the industry, operators run a number of gaming machines that NIGC believes do not meet the definition of Class II under Indian Gaming Regulatory Act (IGRA), current regulations, or any previous case-by-case determination made by the NIGC. As a result, the baseline in practice may not represent the baseline under the current law as interpreted. Guidance for benefit-cost analysis recommends using different baselines when current practice is different than full regulatory compliance. We present both baselines (current practices or greater enforcement) to measure the effect of the final rule and its alternatives.

Table ES-1 below lists the entities which will have compliance costs with the proposed regulation, assuming NIGC increases enforcement and compliance oversight.

Table ES-1: Summary of Affected Entities

Provision	Number of Entities in 2006	Number of Entities in 2017
MICS	161	161
Tribal Regulatory Authorities	72	72
Tribal Regulatory Staff	900	900
Gaming Systems	25	25
Class II Machines - Current Practice	50,950	5,000 - 20,000
Class II Machines- Greater Enforcement	50,950	2,500 - 10,000

Social Costs

A change in the regulations that changes the types of gaming machines that are available, the gaming experience, or the revenue potential of gaming, imposes new costs on a variety of stakeholders. Casinos and tribes lose potential revenues; consumers lose entertainment value; game manufacturers potentially lose revenue; ancillary services (hotel, food service, etc.) lose revenue. In addition, although it is not a separate and independent cost traditionally considered in benefit-cost analysis, a reduction in gaming activity could result in fewer opportunities for employment (for both tribal and non-tribal individuals).

The various sections of the proposed rule impose costs on different stakeholders in different ways. Promulgation of the MICS would impose costs primarily on tribal regulators and gaming operators. The proposed rule requires that tribal regulatory authorities revise their existing regulations to incorporate the new control standards for paper bingo and electronic bingo and similar games. The resources expended by the tribes in revising their rules are social costs of the rule.

In addition to the costs to tribal regulators, gaming facility operators also face additional costs as a result of the rule. Gaming operators must devote resources to updating their own systems to ensure compliance with the revised regulations. Gaming operators must also ensure that their employees are properly trained to implement the revised control systems; such training involves a real expenditure of resources. Lastly, gaming operators may need to devote additional resources to the actual implementation of the revised MICS. The revised MICS require additional Certified Public Accountant's (CPA) time and may require the dedication of new staff to the performance tasks required by the revised MICS.

To comply with the technical certification requirements, operators must submit Class II gaming machines for testing and certification before they can be used in a Class II facility. The resources associated with conducting and documenting the results of such tests are social costs attributable to the rule.

In addition, if major changes in machines were required to meet the certification standards, the rule would also result in additional social costs through increases in development costs. Since game manufacturers are already familiar with the types of requirements contained in the technical standards due to their operation in other markets, we do not assign an increase in development costs to this rule. Since we also have no reason to believe that certifiable machines will be inherently more expensive than machines already on the market, we have not included a cost to account for increased manufacturing costs.

We do, however, account for accelerated upgrade of existing systems to meet the technical standards within five years of the effective date of the rule. In fact, we over account for these costs by assuming that in the absence of these standards, such upgrades would never occur. We calculate that operators will be required to spend \$25.5 million five years after the effective date of the rule to resolve any residual issues relating to the ability of existing capital stock to meet the technical requirements. This one time expenditure increases the annualized cost of the rule by \$2.6 million.

The social costs associated with a change in the standard for Class II games are less intuitive. While the rule requires some additional resources to be expended to convert games from non-compliant to compliant games, the primary measure of social cost is how consumers react to the change in the gaming experience. We use changes in net gaming revenue as the best measure of the change in consumer demand caused by the proposed Class II standards.

In addition to the lost revenue from changes in consumer demand, operators and gaming manufacturers may face additional costs associated with the proposed rule. Even though consumer demand is reduced, gaming operators may not be able to meet this reduced demand with the same machines. While Chapter 4 estimates conversion costs, the reduced consumer demand comprises the majority of social costs.

Unlike the MICS and the technical standards, for which the only alternative we examined was the proposed option relative to a baseline of not adopting new standards, we evaluate alternative scenarios in estimating the costs of changes to the classification standards. We evaluate the revised proposal baseline that includes increased enforcement of existing standards.

Tribes also derive revenue and consumers derive benefits from non-gaming activities at casinos, ranging from hotel services to entertainment. However, for the majority of these facilities, demand for these additional services did not exist before gaming was established. Therefore it is logical to assume that there is some connection between gaming revenue and non-gaming revenue, especially where the fall in gaming revenue is significant - probably indicating a drop in the number of consumers as well as consumption per consumer.

Gaming operators hire workers and invest capital to offer Class II gaming. Since the rule reduces consumer demand for Class II gaming as it currently is offered, operators will cut back on employment and their investments. In this way, the losses due to shifts in consumer demand already include the direct loss of wages.

Table ES-2 presents the estimated gaming and non-gaming revenue loss and the associated potential number of workers that could lose their jobs. Total job losses are estimated to be 280 to 920 positions. If employment reductions are equally applied to tribal members and non-tribal members, the employment impact for tribal members is estimated to be between 71 and 231 jobs on an annualized basis.

The estimates are created using national average values in several instances. This approach masks variations in job loss and nongaming revenue losses. If a tribe depends on the nongaming revenue for a more significant share of the operation's profitability or if the revenue per machine per day is much lower than the national average, the employment and revenue losses could be more significant.

Table ES-2: Estimated Non-Gaming and Employment Losses

Greater Enforcement Baseline Annualized Decrease in Gaming Revenue						
		Revenue Loss (mil \$2006)	Non-Gaming Revenue Loss (mil \$2006)	Total Gaming Organization Loss (mil \$2006)	Potential Lost Jobs	Lost Jobs for Tribal Members
Class II Only	Lower Bound (5%)	7.5	0.3	\$7.8	80	20
	Upper Bound (17%)	15.4	0.7	\$16.1	164	41
Class II and III	Lower Bound (5%)	19.3	0.8	\$20.1	206	52
	Upper Bound (17%)	47.5	2.0	\$49.5	506	127
Total	Lower Bound (5%)	26.7	1.1	\$27.8	284	71
	Upper Bound (17%)	62.9	2.7	\$65.6	670	168
Current Market Conditions Baseline Annualized Decrease in Gaming Revenue						
		Revenue Loss (mil \$2006)	Non-Gaming Revenue Loss (mil \$2006)	Total Gaming Organization Loss (mil \$2006)	Potential Lost Jobs	Lost Jobs for Tribal Members
Class II Only	Lower Bound (5%)	\$13.6	0.6	\$14.2	145	36
	Upper Bound (17%)	\$23.1	1.0	\$24.1	246	62
Class II and III	Lower Bound (5%)	\$31.5	1.4	\$32.9	336	84
	Upper Bound (17%)	\$63.3	2.7	\$66.0	674	169
Total	Lower Bound (5%)	\$45.1	1.9	\$47.0	480	120
	Upper Bound (17%)	\$86.5	3.7	\$90.2	922	231

Social Benefits of the Regulation

The social benefits accrue from reducing the externalities arising from preventable fraud, the increased public goods from more revenue available to promote tribal welfare, lowering unnecessary litigation, and strengthening of the Congressional process to resolve externalities outside of tribal boundaries.

Summary of Social Costs of Alternatives

Table ES-3 summarizes the social cost of the rule for the three alternatives. Without a regulation, there are no incremental changes in social benefits and costs. Promulgation of the MICS and technical

standards is estimated to cost \$7.8 million annualized over ten years at a seven percent real discount rate. Promulgation of all four components of the October 2007 proposed rule will have estimated social costs of between \$36 million to \$98 million (annualized over 10 years at a seven percent discount rate). Since these estimates likely overstate social costs, the expected value is toward the lower end of the range. Based on these estimates, promulgating the MICS and technical standards would not be a “major rule” under the Congressional Review Act.

Table ES-3: Summary of Costs for the Rulemaking Alternatives

Alternative	Costs under Current Practices Baseline (\$ mil 2006)	Costs under Greater Enforcement Baseline (\$ mil 2006)
No Regulation	0	0
MICS and Technical Standards	7.8	7.8
MICS, Technical Standards, Classification Standards, and Definitional Changes	55 - 98	36 - 73

Chapter 1: Introduction and Background to the Issue

Purpose of this Analysis

The purpose of this analysis is to provide a comprehensive estimate of the social costs and social benefits of possible final rule options that the National Indian Gaming Commission (NIGC) can take to address classification and technical issues of various Indian tribal gaming activities. The focus of the analysis is not exclusively on the benefits and costs to tribes, but seeks to examine the impact of the regulatory alternatives on society as a whole - both tribal and non-tribal entities.

Specifically, this analysis examines the implications associated with four new and revised regulatory sections proposed by the National Indian Gaming Commission in May 2006 and revised in October 2007.³ As proposed, these regulatory provisions would change four major sections of the existing regulations governing the operation of Class II games by Indian tribes:

1. The proposal would have updated the Minimum Internal Control Standards (MICS) applicable to the operation of bingo and bingo-like games.
2. The proposal would have added technical certification requirements for Class II systems and games similar to those that are in place in many non-tribal jurisdictions governing the operation of Class III gaming machines (e.g., slot machines).
3. The rule would have clarified the definition of electromechanical facsimile of a game of chance consistent with interpretations made by the Commission in individual cases.
4. The proposal also would have clarified the definition of bingo, lotto, pull tabs, other games similar to these, and "electronic or electromechanical facsimile" consistent with findings made by the Commission in individual cases.

In this chapter, we give the statutory background to Class II gaming and the history of these regulations. We also present the different alternatives for the final regulation analyzed in this document. We discuss how we apply economic theory and the practice of benefit-cost analysis to these regulations. Finally, we summarize how this analysis supplements and updates the February 2008 economic analysis of the proposed regulation. All of these topics are discussed in more detail in subsequent chapters.

Summary of Statutory Framework

Congress enacted the Indian Gaming Regulatory Act (IGRA) in 1988. The law established the National Indian Gaming Commission to oversee the regulation of certain types of gaming in Indian country. The Act divided Indian gaming into three classes, each with different levels of Federal regulatory oversight:

³ See 71 FR 30232 and 72 FR 60841.

Class I: Class I gaming is regulated exclusively by Indian tribes, i.e., it is outside of state and Federal jurisdiction. It is limited to social games played for prizes of minimal value and traditional forms of Indian games played in connection with tribal ceremonies or celebrations.

Class II: Class II games are regulated by the tribes with the NIGC providing oversight of tribal regulatory authorities. In addition, any card games (non-banked) operated at Class II facilities must be operated consistent with state laws governing card games offered elsewhere in the state. Class II includes games such as bingo, pull-tab, lotto, punch boards, tip jars, and instant bingo. Electronic or electromechanical aids may be used in the conduct of Class II games; however, if these aids encompass all of the relevant components of a game, they become “electronic or electromechanical facsimiles” and are expressly excluded from Class II. Class II also explicitly excludes slot machines and banked card games (e.g., blackjack and baccarat).

Class III: Class III games are all games, electronic and non-electronic, not defined as Class I or Class II. This category includes other “games of chance” most commonly associated with casino-type gambling such as slot machines, roulette, and banked card games (e.g., blackjack and wagering). Games that fall under this class are primarily regulated pursuant to a tribal-state compact and are illegal in the absence of such a compact. The NIGC has limited regulatory oversight role at Class III facilities.

As a result of this statutory framework and this rulemaking, this analysis focuses on Class II games and facility operations.

Regulatory History

After Congress defined the broad parameters for game classification in the IGRA, the Commission adopted regulations in 1992 that included definitions for many terms used in the statutory classification scheme, including “electronic or electromechanical facsimile” (25 CFR 502.7), “electronic computer or other technologic aid” (25 CFR 502.8), and “other game similar to bingo” (25 CFR 502.9).

In 1992, the NIGC adopted a definitional regulation that defined “technological aid” as:

A device such as a computer, telephone, cable, television, satellite, or bingo blower and which when used: is not a game of chance but merely assists a player or the playing of a game; and is readily distinguishable from the playing of a game of chance on an electronic facsimile; and is operated according to application Federal communications law.

The NIGC also set its initial facsimile definition in 1992, which defined it as a gambling device as defined by the Johnson Act. This approach raised problems since the Johnson Act’s definition of gambling devices includes almost all gaming related equipment including component parts and all Class II aids whether technological, electronic, mechanical or otherwise.

The Johnson Act defines gambling devices as those:

*Designed and manufactured primarily for use in connection with gambling, and (A) which when operated may deliver, as the result of the application of an element of chance, any money or property, or by the operation of which a person may become entitled to receive, as the result of the application of an element of chance, any money or property.*⁴

After the NIGC promulgated its 1992 definition of facsimile, much litigation ensued. The Justice Department followed the 1992 definition with efforts to advance the Johnson Act theory even further. One of their main arguments addressed the appearance of bingo machines. As technology advanced, gaming manufactures developed games that were more appealing to players, including electronic bingo terminals. These terminals consisted of cabinets containing a video screen that simulates slot machine imagery. Player terminals were linked together through a central computer allowing players to compete against each other. Other manufacturers created games with pull tab dispensers and readers, which also mimicked the appearance of a slot machine. While the government tried to reject games based on these characteristics, the courts consistently found that the use of electronic aids that stimulate appearance and operation of slot machines do not fundamentally alter the game of bingo as defined by IGRA.

For example, in *Seneca-Cayuga Tribe of Oklahoma v. NIGC*, the 10th Circuit Court determined that:

*Absent clear evidence to the contrary, we will not ascribe to Congress both the intent to carefully craft through IGRA this protection afforded to users of Class II technological aids and to simultaneously eviscerate those protections by exposing users of Class II technologic aids to Johnson Act liability for the very conduct authorized by IGRA.*⁵

The Federal courts also rejected the argument that the use of electronic aids that simulate the appearance and operation of slot machines fundamentally altered the classification of the game of bingo as defined by IGRA. Instead they held that bingo games are transformed into Class III games based on the speed with which they are played, the use of ante-up features, or the use of a retention ratio.⁶

In response to this situation, and all of the legal issues surrounding Class II gaming, NIGC revised the definition of Class II gaming devices in 2002⁷ based on the following foundations:

- So long as the equipment facilitates play between players, it is an aid permissible under IGRA and exempt from the Johnson Act.

⁴ 15 U.S.C. 1171 Johnson Act. Retrieved from: <http://www.nigc.gov/LawsRegulations/JohnsonAct/tabid/102/Default.aspx>

⁵ *Seneca-Cayuga Tribe of Oklahoma v. NIGC*, 2003

⁶ Case examples: *US v. 103 Electronic Gambling Devices*, 2000; *US v. 162 Mega Mania Gambling Devices*, 2000; *US v. Burns*, 1989

⁷ 67 FR 41116

- If the game is played in a wholly electronic format on a stand alone terminal in which the player is competing only against the machine and not other players, the equipment constitutes a Class III electronic facsimile.

The exact text is as follows:

Electronic or electromechanical facsimile means a game played in an electronic or electromechanical format that replicates a game of chance by incorporating all of the characteristics of the game, except when, for bingo, lotto, and other games similar to bingo, the electronic or electromechanical format broadens participation by allowing multiple players to play with or against each other rather than with or against a machine.⁸

This 2002 definition dropped the reference to the Johnson Act and provided the “except” clause for bingo like games to be played in an electronic format in an effort to broaden participation as long as players are still paying against each other. The NIGC rested their 2002 revisions on the notion that IGRA specifically provides for an electronic draw in bingo games and that greater freedom with regard to Class II games was intended by Congress.

The decade of litigation following the 1992 definition had created an unstable legal gaming market that may have discouraged manufacturers from investing in innovative new games and devices. After the 2002 definition clarification, gaming manufacturers started to develop new technology and invest substantial amounts in the growth of the Class II industry.

Since the NIGC’s promulgation of the 2002 definition, there have not been any Johnson Act prosecutions in Indian country for the unlawful possession or operation of gambling devices. After 2002 and as Class II gaming grew dramatically, it became clear that there was a great deal of interpretation and lack of clarity between Class II and Class III machines. Since the 2002 definition became effective, the NIGC’s Office of General Counsel has issued 41 game classifications opinions.⁹ Of those, 13 were related to card games, three were on Class II games that required virtually no analysis by the NIGC, and four were for modifications of previously approved games. The NIGC Office of General Counsel applied the 2002 definition of electronic or electromechanical facsimile to 21 cases that required analysis of whether a game was Class II or Class III.

Although the NIGC continues to issue individual opinions, it decided a rulemaking would be the quickest way to achieve greater clarity. The 2006 proposed changes (and the revised proposal issued in 2007) were developed through extensive consultation with the tribes.¹⁰ The proposed classification standards would incorporate the notion that an electronic or electromechanical facsimile must replicate a game of chance by incorporating the fundamental characteristics of the game to be an acceptable Class II device. The proposed rule now would affirm that bingo and bingo-related games are facsimiles if an element of the games’ format allows players to play with or against a machine rather than broadening participation among players.

⁸ See 57 FR 12392, Apr. 9, 1992, as amended at 67 FR 41166, June 17, 2002

⁹ <http://www.nigc.gov/ReadingRoom/GameClassificationOpinions/tabid/789/Default.aspx>

¹⁰ See 71 FR 30239-30241 for a full discussion of the consultation process used by the NIGC to seek tribal input on the design of the rule.

While there was extensive consultation with the tribes and the formation of a Federal-tribal advisory committee, no consensus was reached on all of the provisions of the proposal.¹¹ There were certain changes favored by the tribes that the Commission did not feel could be supported given the existing statutory language. These provisions of the rule have remained an area of contention.

Based on the extensive comments on the 2006 proposal, the Commission issued another proposal on October 24, 2007 to modify existing regulations applicable to the conduct of Class II games by Indian tribes. Specifically the NIGC proposed changes to:

- the definition of “Electronic or Electromechanical Facsimile” in Part 502 of the existing regulations;
- the Classification Standards for Bingo, Lotto, other games similar to Bingo, Pull Tabs and Instant Bingo as Class II Gaming When Played Through an Electronic Medium Using “Electronic, Computer, or Other Technologic Aids” in Parts 502 and 546 of the existing regulations;
- the Minimum Internal Control Standards for Class II gaming in Parts 542 and 543 of the existing regulations; and,
- add a new Part 547 to the Commission’s regulations establishing technical standards for electronic, computer, or other technologic aids used in the play of Class II games.

The content of the October 2007 proposed changes and their incremental effect on the existing market is discussed in Chapters 2 and 3 of this analysis.

Regulatory Alternatives

As it considers the final rule, the analysis examines several regulatory alternatives available to the Commission.

The first option is to take no action. Under this alternative, the existing MICS would remain in place for the operators of Class II facilities and for Class II operations at Class III facilities. For Class II machines, there would be no technical certification requirements. The classification standards, which include the definition of electronic facsimile, would be implemented through advisory opinions, enforcement action, and litigation based on the existing regulations. There are no incremental social benefits or costs of this alternative.

The second alternative is to promulgate the 2007 proposal in total. Under this alternative the proposed MICS would replace existing MICS for the playing of bingo at all facilities operating these games as Class II. This option would also institute technical certification requirements for Class II machines. Manufacturers and operators would have to adhere to the technical design standards. In comparison to the current practice, the classification standards could be more stringent for certain facilities. For example, games where the machine daubs the calls automatically, “one-touch machines” would not be allowed. Gaming facility operators would have to replace non-compliant machines by the effective date of the rule. A five-year grandfathering provision would allow for the transition of Class II to Class III machines and for the orderly replacement of non-compliant machines.

¹¹ See 72 FR 60486

The third alternative is to proceed with some portions of the four-part proposal. Specifically, in this alternative, the NIGC would promulgate the proposed MICS and technical standards for Class II facilities and machines. The classification standards and the additional definitions for electromechanical facsimile would remain as in current regulation. On June 5, 2008, NIGC Chairman Hogen announced that this alternative would be the one considered by the Commission for any upcoming final rule.¹²

Economic Framework for this Analysis

To evaluate the benefits and costs of these regulatory alternatives, we apply economic theory to this potential regulatory action. The regulations have an opportunity to mitigate inefficiencies in the Class II market. In doing so, the regulations generate social benefits.

Compliance with the regulations also imposes social costs. As a public agency and to fulfill its statutory obligations, the NIGC is primarily concerned with social benefits and costs. Congress requires agencies to estimate the social benefits and costs of "major" rulemaking under the Congressional Review Act.¹³ At the same time, the NIGC fulfills an important role in the special relationship between the Federal government and recognized tribes. For that reason, the analysis also identifies when tribal members or tribal organizations bear the compliance costs. Because of this dual focus, the analysis will distinguish between social and private costs.

Difference Between Social and Private Costs

Social benefits and costs are different from private benefits and costs. Social costs are the full resources society spends for an economic activity. Private costs are the costs each private consumer or producer pays for a good or service. Adding up all private costs for an economic activity may or may not equal the social cost. In the classic example, as a factory produces 100 shoes, it releases a puff of smoke that soils the laundry on a nearby wash line. The private cost of the activity is the labor, capital, and materials to produce the 100 pairs of shoes. The social costs include all of these private costs and the resources necessary to rewash the soiled laundry. As discussed above, the uncompensated costs of the soiled laundry is an externality. In general, the social costs are the sum of all real resource costs and the costs of any and all externalities.

Not all changes in private costs are social costs of a regulation. Regulations that change Class II game play have two effects. They can decrease attractiveness of Class II games and they can raise the cost of manufacturing and operating a Class II game. Players who decrease their Class II play due to regulation spend their money on substitutes such as Class III games or bowling. The private costs to Class II operators include the loss in revenue. However, this revenue is not lost; private Class III and bowling alley operators would enjoy increased revenue. The social cost of the regulation are the net reduction in consumer spending across Class II gaming and all substitutes.

Economic theory suggests that government intervention - through regulation or otherwise - could generate net benefits to society if there is some systematic failure that prevents the market from responding to address the problem itself. Classic market failures include the existence of

¹² See <http://www.nigc.gov/ReadingRoom/PressReleases/PR92062008/tabid/839/Default.aspx>.

¹³ See PL 104-121, Congressional Review Act. Under the CRA, a major rule is defined, in part, as a rule that will have an annual effect on the economy of \$100 million or more. (Section 804(2)(A)) Since Congress defers to the Administrator for the Office of Information and Regulatory Affairs for interpreting this provision, the effect is usually interpreted as \$100 million or more of social costs or benefits to be consistent with Executive Order 12866 as amended.

externalities¹⁴, the inability to properly allocate resources to the production or protection of public goods, asymmetric information in the market, and the existence of monopolies.¹⁵ The Indian gaming market has elements of all of these market failures. In addition, because the Indian gaming market is already regulated, there is a possibility that the existing regulatory structure creates additional distortions in the market and thus additional economic inefficiency.¹⁶

The regulations proposed by the NIGC address these potential market failures and one issue related to improving the efficiency of the regulatory system itself. We discuss each of these economic justifications for regulation below.

The Indian Gaming Regulatory Act circumscribed the sovereignty of tribes by establishing a process to address potential costs to the state in which tribes are located and by prescribing the allowable uses of gaming revenues. In limiting tribal authority to the operation of Class I and Class II games in the absence of a compact with the state, Congress recognized that casinos could impose uncompensated costs (“externalities”) on the communities in or near where casinos were located.¹⁷ By requiring a compact for Class III operations, which tend to be larger and with greater potential to impose externalities, Congress mandated a process designed to allow potentially affected outside parties to negotiate with the tribes to address concerns (and to receive compensation in exchange). By protecting a meaningful distinction between Class II and Class III, the NIGC upholds the protections against externalities provided by this mandated process.

Congress also sought to promote tribal gaming operations as a public good for members of the tribe. The following language from the IGRA highlights Congress’ intent that revenues from tribal gaming are to be viewed as a common property resource that is to be protected:

The Congress finds that...(4) a principal goal of Federal Indian policy is to promote tribal economic development, tribal self-sufficiency, and strong tribal government¹⁸

The purpose of this chapter is— (1) to provide a statutory basis for the operation of gaming by Indian tribes as a means of promoting tribal economic development, self-sufficiency, and strong tribal governments¹⁹

Economic theory suggests that, because these revenues are essentially the property of everybody (in the tribe), fewer resources may be devoted to the protection of these revenues than is socially optimal.²⁰ As a result, the Federal government can increase the revenues devoted to tribal public purposes by requiring tribal regulatory authorities to increase oversight through financial controls and effective tribal regulatory programs.

¹⁴ “Externalities” are actions by one party that cause uncompensated losses or gain by another party.

¹⁵ OMB Circular A-4 pp. 4-5.

¹⁶ Zeckhauser, R. and Stokey, E. *A Primer for Policy Analysis*. New York: W.W. Norton & Company, 1978

¹⁷ See Public Law 100-497 Section 2702 Purposes. (2) to provide a statutory basis for the regulation of gaming by an Indian tribe adequate to shield it from organized crime and other corrupting influences, to ensure that the Indian tribe is the primary beneficiary of the gaming operation, and to assure that gaming is conducted fairly and honestly by both the operator and players; and

¹⁸ § 2701 Findings. U.S.C. Title 25 Chapter 29. Retrieved from http://www.law.cornell.edu/uscode/25/usc_sec_25_00002701----000-.html

¹⁹ § 2702 Declaration of Policy. U.S.C. Title 25 Chapter 29. Retrieved from http://www.law.cornell.edu/uscode/25/usc_sec_25_00002702----000-.html

²⁰ See for example, Office of Management and Budget, *Circular A-4 Regulatory Analysis*, September 2003.

The regulations may also address an issue of asymmetric information. Small tribal gaming operations may have less experience with gaming industry best practices than their larger competitors. Even with ample experience, small operations may not have the capital to invest in the most current technology or in the most skilled personnel. In addition, tribal regulators may have less familiarity with appropriate control systems than the contractors the tribe may hire to operate its gaming facilities. The MICS attempt to address all of these issues by creating a level playing field regarding the use of industry best practices to avoid losses through fraud or error.

The proposed classification standards also address an inefficiency introduced by the regulatory system itself. The NIGC has historically implemented the enforcement of Class II determinations through individual opinions or through enforcement action. As is discussed in Chapter 3, there has been extensive litigation over the distinction between Class II and Class III machines. By replacing case-by-case decisions with a bright line regulatory definition (that is essentially the same as that which is implemented through enforcement), the Commission may reduce the cost to the regulated community of implementing the standard (i.e., "transaction costs").

Our framework for the analysis is to compare the final rule to current regulation and market conditions to estimate the incremental effect of the rule. As owners and operators spend real resources to comply and as consumers react to the regulatory changes, these resource expenditures are the incremental social costs. As the regulatory provisions reduce the market failures identified above, the rule also generates social benefits for the United States. The analysis calculates, compiles, and compares the total social benefits and costs created by the final rule and its alternatives.

Relation of this Analysis to Previous Analyses

The goal of the analysis is to update and to supplement the analysis performed for the Commission in February 2008.²¹ This analysis updates a previous paper that analyzed the impact of the Commission's May 2006 proposal. This update reflects important additions to the February 2008 analysis:

1. **Affected Facilities.** This analysis adopts significant changes in the market, specifically the adoption of gaming compacts by states representing 76 percent of the recent Class II gaming market. In addition, this analysis considers several potential future scenarios from which to measure the costs and benefits of the final regulation.
2. **Costs.** The analysis reexamines some of the key assumptions regarding replacement cost and revenue losses used in the February 2008 analysis. In addition, it systematically attempts to examine the impact of the grandfathering provision on the cost of the rule. The analysis will also attempt to update the costs associated with the other parts of the rule, other than the classification standard.
3. **Benefits.** Previous economic analyses were intended to be an analysis of potential costs and the potential future economic impact on tribes. As such, they considered primarily the worst-case cost impact and did not fully consider the social benefits of the regulation. This document describes and, where possible, quantifies the benefits of the regulation.

²¹ Meister, A. *The Potential Economic Impact of the May 2006 Proposed Class II Gaming Regulations*, Analysis Group, February 1, 2008.

4. *Linkage Between Incremental Costs and Benefits.* Where possible, the analysis will link the incremental costs and benefits to the corresponding provisions of the rule. Specifically, there are three broad sections of the regulation:
- Sections 502 and 546 provide the definitions necessary to distinguish between a gaming aid to bingo and an electronic facsimile of a game of chance (and by extension, Class II and Class III games). Because these definitions are mirror images (one describes what Class II is and the other describes what it is not), we analyze these provisions as one.
 - Section 543 is the Minimum Internal Control Standards (MICS) and involves physical and communications security. It regulates the control of money and operational systems, but not the machines themselves.
 - Section 547 contains the Technical Standards. These regulations govern certification of the machines themselves. There are two broad areas of certification: (1) that the games and related systems operate properly and are resistant to tampering; and, (2) the games must be certified compliant with the definitions of a Class II machine (i.e., consistent with Sections 502 and 546). This second certification is analytically indistinguishable from those earlier sections - although it will reduce the cost of enforcing those standards. Since we do not believe that this second certification adds significantly to the cost of Section 547, its benefits are included in the benefits of 502 and 546. As a result the analysis of this provision is largely the same whether or not the certification includes reference to 502 and 546.

In Chapter 4, we provided a more detailed comparison between this analysis and previous ones to highlight similarities and differences in data sources, methodologies, and results.

Organization of the Analysis

Chapter 2 analyzes the proposed regulation, comparing it to currently promulgated rules for Class II gaming operations. The purpose is to identify the new or changed regulatory requirements so that the incremental social benefits and costs of the rule can be calculated. In Chapter 3, we identify market changes that are reducing the number of Class II machines. We also project continued growth in the market, reflecting the very large growth that has occurred in the past decade. At the same time, there is evidence of a wide range of interpretation of the current classification standards for Class II and Class III machines. This potential non-compliance, or uncertainty of what is compliance, can be resolved in the future through litigation and enforcement actions. Further legal action will reduce the number of non-compliant machines subject to future regulation. Chapter 3 lists the number of entities that will bear the direct costs of the rule. In Chapter 3, we construct an alternative estimate of Class II machines subject to the standard based on a reduced percentage of non-compliant machines.

Chapter 4 estimates the incremental costs of the regulatory alternatives. Chapter 5 is the counterpart to Chapter 4 and estimates the social benefits of the final rule and its alternatives. The benefits arise from reducing fraud, reducing litigation costs, and strengthening the IGRA process for states and tribes to resolve any externalities with Class III gaming.

Chapter 2: Provisions of the Regulation

The purpose of this chapter is to delineate clearly the incremental effects of the final regulations. For the purpose of this analysis, we assume the final rule promulgates the October 2007 regulatory language unchanged. With the incremental changes identified, the subsequent chapters estimate the benefits and costs of those changes.

This chapter summarizes the main requirements for the following:

- Definition and Classification of Class II Games and Machines;
- Minimum Internal Control Standards; and,
- Technical Standards for Machines and Systems.

25 CFR Part 502

The proposed rule would have revised two of the definitions in Part 502 related to Class II gaming. Section 502.8 defines “electronic or electromechanical facsimile” and §502.9 defines “other games similar to bingo.”

Congress explicitly excluded electronic or electromechanical facsimiles of games of chance from the definition of Class II gaming (i.e., classifying them Class III). The NIGC clarified these terms in 1992 and revised these regulatory definitions in 2002. Courts have taken a plain meaning approach to defining “facsimile,” finding that facsimiles are exact copies or duplicates.²² Courts have also recognized that facsimiles of Class II games would be considered a Class III game under the IGRA.²³ It has likewise been affirmed that facsimiles of games of chance including bingo would be violations of the IGRA.²⁴ Lastly, courts have been determined that, even if a player is playing against another player and not simply the machine, the game may nonetheless be a facsimile.²⁵

The proposed revision of §502.8 further would have clarified that machines that incorporate all of the fundamental elements of a game of chance (including bingo) are facsimiles and, therefore, Class III machines. The proposed revision also references Part 546 which clarifies the standards applicable to the conduct of bingo and other games similar to bingo as Class II games. The reference to Part 546 is a revision to the language proposed in 2006 that explicitly defined when a machine used to play bingo became a Class III facsimile.

²² *Sycuan Band of Mission Indians v. Roach*, 54 F.3d 535 (9th Cir.1995); *U.S. v. 162 Megamania Gambling Devices*, 231 F.3d 713, 724 (10th Cir. 2000).

²³ *Diamond Game v. Reno*, 230 F.3d 365, 366 (D.C. Cir 2000).

²⁴ *U.S. v. 103 Electronic Gambling Devices*, 223 F.3d 1091, 1102 (9th Cir. 2000).

²⁵ *Sycuan Band*, 54 F.3d at 542–43 (concluding that an electronic pull-tab game in which one player played with a machine, though not against it, was a class III electronic facsimile thereof).

The proposed change to §502.9 would remove the phrase “provided that such game is not house banked” from the definition of other games similar to bingo. Given that the prohibition on house banking applies primarily to the playing of cards, this change would not seem to have a significant impact.

25 CFR Part 546 (Referenced in Part 502)

The proposed Part 546 would clarify standards applicable to electronic aids used to play bingo or games similar to bingo as Class II games. It distinguishes how a game of bingo or lotto, “other games similar to bingo,” or a game of pull-tabs or “instant bingo,” when played electronically, primarily through an “electronic, computer or other technologic aid” differs from a Class III “electronic or electromechanical facsimile.” Finally, the proposal would institute a process for the determination of a Class II gaming machine before that game is placed in a Class II gaming facility. This proposed process would require a tribe’s gaming regulatory authority to require that all games/aids, or modifications to games/aids, be submitted to a qualified, independent testing laboratory for review and analysis. The laboratory would provide a written certification and report of its analysis and conclusions both to the tribal gaming regulatory authority for its approval of the game or aid and to the Commission for its review.

In order to help clarify the distinctions between the Class II gaming and Class III gaming, the October 2007 proposed regulation would change a number of aspects of the definition of an allowable Class II machines. For example:

- The proposal would clarify that players must interact with the machine to initiate play and to claim their prize if they are the winner. This proposed standard would result in one-touch bingo machines - a machine with no requirement that the player take action to daub his/her card to declare a winner - being classified as Class III. Requiring daubing slows the game by a minimum of two seconds relative to a one-touch machine.
 - This change represents a modification of the 2006 proposal that would have required a minimum of two daubing rounds, with a minimum time requirement between the two rounds. The 2006 proposal would have slowed the play of electronic bingo by a minimum of six seconds relative to a one-touch machine.
- Players in an electronic game must be linked through a networked system. Each game must be played by multiple players, with a minimum of two players. Unless six players join the system must wait at least two seconds to begin from the start of the first player. The game may have more than six players. For a win, a player must take overt action after numbers are released by touching a screen or designated button. Under the proposed rule, the electronic bingo games which currently give a player an “automatic” win would have to be changed in order to comply. Many games currently also have an auto-covering; operators would have to remove or disable auto-covering under the proposed rule.
- The proposed regulation would also require machines to prominently display the message “This is a Game of Bingo” or “This is a Game Similar to Bingo,” but does not define the size or method of the term “prominently.”
- Bingo cards must be at least 2” by 2” and have 25 spaces in a 5” by 5” grid. Free spaces could exist but must be in the same location on all cards. Electronic cards would be permissible but must be at least two inches by two inches squared.

- Pull tabs must be in a tangible medium and have at least three equally sized spaces. Free spaces in pull tabs would be allowed as long as there are at least other spaces.
 - Progressive and bonus prizes would be permissible, but limited. A bonus or progressive prize could be awarded based on pre-designated patterns and based on the play of bingo, lotto, or other games similar to bingo in the same manner as the game-winning prize. If there is a bonus prize, it is awarded at random draw and after a game-winning pattern. A progressive prize could only be awarded if the game provides a game-winning prize. All prizes, whether game-winning, bonus, or progressive would be awarded based on outcome of the game of bingo.
 - Gaming devices must be certified by a testing laboratory approved by the tribal gaming regulatory authority in order to ensure compliance with the regulations found in Part 546 before the device can be placed on the gaming floor.
 - The proposed rule includes a grandfathering period which would allow all current Class II systems to remain in use for up to five (5) years. Under the proposed rule, all new Class II gaming devices entering the market would have to comply with the regulations within 120 days. Machines that do not meet the qualifications listed in this part would have to either be adapted to meet the qualifications or would have to be removed after the five (5) year grandfathering period.

25 CFR Parts 542 (Deleted) and 543

The proposed rule would clarify the specific MICS for Class II gaming and would therefore affect tribes, tribal regulatory authorities, and gaming operations. The proposed rule would also combine requirements from various sections of the existing MICS codified in Part 542 into sections more related to function than specific game. These organizational changes were made in response to suggestions made by a tribal advisory group.

Tribes generally use the current MICS for live bingo and for electronic bingo as well. Technological changes in Class II gaming necessitates new MICS to standardize electronic practices in the industry. Therefore, the Commission proposed a new Part 543 that would apply to both live and electronic Class II gaming. The Commission felt it was necessary to structure, in phases, the migration of many of the controls currently contained in Part 542 into new Part 543. These controls were addressed first so that the current MICS would not conflict with the new proposed technical standards (Part 547). As would be expected, many of the MICS found in Part 543 are very similar to the subparts in 542 which were deleted.

Since instituting a new MICS would have disproportionately greater burden on small gaming facilities, the proposal it would raise the MICS exemption threshold from revenue of \$1 million to \$2 million for small and charitable gaming operations. Although these gaming operations would be exempt from the MICS, they would still be held accountable to create, prepare, and maintain records in accordance with Generally Accepted Accounting Principles (GAAP).

The proposed MICS would require a number of different measures to be put in place to prevent unauthorized access, theft, or fraud. The number of changes which need to be made as a result of the proposed rule would entirely depend on the level and method of security most tribes currently practice. Some of the major requirements of the MICS include (but are not limited to the following):

- Gaming facilities would be required to revise their internal control standards to include the new requirements proposed in Part 543. While the existing standards in Part 542 require tribes to engage an independent certified public accountant (CPA) to audit the facility and ensure MICS compliance, the checklist associated with audit functions is longer as a result of the proposed requirements - requiring more auditor time.
- While MICS for the security of bingo cards and transactions already exist in Part 542, the proposal would increase verification procedures. The MICS of manual payouts and short pays expand on the MICS for machine games in the existing Part 542. The rule provides multiple security provisions (e.g., multiple signatures) by at least two authorized agents to ensure that fraudulent payouts or other illegal activities are avoided.
- The proposed MICS would establish control standards for the use of voucher systems as well as cashless systems or patron accounts. These changes are required to remain current with technology advances in gaming that allow the use of vouchers, smart cards, patron accounts, and other electronic media. Such systems can be more secure than cash provided sufficient protections of these systems are in place. To this end, the proposed MICS specifically ban smart cards (i.e., cards that possess the means to electronically store or retrieve data) that provide the only source of account data. According to the preamble of the October 2007 proposal, the present definition of smart cards contained in Part 542 is unclear and essentially not all smart cards are prohibited by the MICS.²⁶ Accordingly, the proposed MICS would specify which smart cards would be prohibited and essentially only those smart cards that possess the sole source of patron account data would be prohibited.
- The proposed MICS would update user controls for all information systems such as mandating that each individual with access to the system have individual user identification and passwords. The proposed MICS for access of records could add an additional compliance cost when the “system shall record unsuccessful log on attempts” if a computer system cannot deny access after a predetermined number of unsuccessful attempts to log on.
- Part 543 proposes that a random sample of Class II gaming devices be tested to ensure accurate accounting and logging of transaction events. This proposal requirement would also ensure security regarding the number of identifiers of propriety gaming equipment, and periodic check of the equipment.
- All MICS established by tribal authorities and subsequently gaming facilities must equal or exceed those set forth in the proposed rule. Tribal authorities may not, however, adopt alternative procedures to those set forth by the new part.
- Tribal regulatory authorities must ensure that tribal internal control standards meet the standards set forth in this part within sixty days of the implementation of the rule unless they seek and receive an extension. Tribal regulatory authorities must submit their control standards to the NIGC.

25 CFR Part 547

This proposed rule would add specific technical standards to the Indian Gaming Regulatory Act’s standards for Class II games that are played using “electronic, computer, or other technologic aids.” It also would institute a process for establishing the integrity of a Class II gaming machine before its

²⁶ 72 FR 60497

placement in a Class II tribal gaming operation. The purpose of this proposed rule is to increase the integrity and security of Class II games and ensure the accountability of gaming revenue.

Currently, there are no uniform, national technical standards that govern the implementation of electronic, computer, and other technologic aids used in the play of Class II games. The intent of this part is to establish regulations which allow for flexibility in the implementation and the advancement of future technology.

A central challenge in writing technical standards is how to address all the manners in which a Class II game is played. The language seeks to be sufficiently narrow to prevent tampering, yet general enough to cover the different mechanisms of Class II gaming. This part describes “financial instrument acceptors” and the standards they must meet. It also explicates minimum standards for the security of financial instruments that facilities accept. Even though there is a broad range of standards that address different types of Class II games, the Class II machines must only adhere to the standards that are applicable.

The proposed technical standards would control all of the electronic standards of the Class II game. The technical review must show that the game is fair, that it does not draw too much electrostatic discharge (electricity), and also that it has a demonstration mode. The game must also be able to recall the last game. The machine has to have accurate accounting systems and have system events in the occurrence of system faults or errors.

Under the proposal, a tribal gaming authority could establish and implement additional technical standards as stringent as, or more stringent than, those set out in Part 547. Class II gaming systems shall meet only applicable standards with fairness, approved equipment and software, and proper functioning.

These proposed standards are not intended to stand alone but rather stand in conjunction with the proposed MICS. In addition, like the MICS, the level of current compliance with these regulations may vary. Many states and tribes already require testing and certification of Class III gaming machines.²⁷

Summary of Incremental Changes

The following table summarizes the October 2007 proposed rule requirements and the affected entities in the market that may bear incremental costs or benefits from the regulatory change. The next chapter examines these affected entities in more detail.

²⁷ See for example, http://www.wsgc.wa.gov/egl/appendix_y.pdf

Table 2-1: Summary of Proposed Regulatory Changes and Affected Entities

Provision Section/ Subsection	Differences between Proposal and Current Regulation	Who is Potentially Affected
§ 502.8 Definition of electronic or electromechanical facsimile	<p>The proposal clarifies that machines are facsimiles and Class III if they incorporate all of the fundamental characteristics of a game of chance including bingo. The key components of an electronic aid to bingo - Class II machine are:</p> <ul style="list-style-type: none"> ▪ Broadens participation by allowing multiple players to play with or against each other rather than with or against a machine; and, ▪ Requires competitive action or decision making on the part of the player. <p>Games that are not networked or that only require a single action by the player, i.e., one-touch machines, are electronic or electromechanical facsimiles.</p>	<p>Tribes operating one-touch and/or stand-alone machines. These machines would be Class III and only allowed under a compact.</p> <p>Manufacturers leasing or selling non-compliant machines. Manufacturers would need to replace these machines where they cannot legally be operated. Manufacturers who do not produce a compliant alternative would be forced to develop one or leave the Class II market.</p> <p>Requiring multiple players and multiple actions can slow the game, making the game less attractive and less profitable. Manufacturers, tribes, and players all lose value if games are less attractive.</p> <p>Bright line standard makes future design, financing, and other business decisions less speculative by reducing the threat of enforcement.</p>
502.9. Other games similar to bingo	No substantive change.	
Part 546	This part establishes the standards for differentiating between a Class II machine and a Class III machine when used to play bingo or a game like bingo (e.g., pull tabs).	<p>Tribes operating one-touch and/or stand-alone machines. These machines would be Class III and only allowed under a compact.</p> <p>Manufacturers leasing or selling non-compliant machines. Manufacturers would need to replace</p>

Provision Section/ Subsection	Differences between Proposal and Current Regulation	Who is Potentially Affected
		<p>these machines where they cannot legally be operated. Manufacturers who do not produce a compliant alternative would be forced to develop one or leave the Class II market.</p> <p>Requiring multiple players and multiple actions can slow the game, making the game less attractive and less profitable. Manufacturers, tribes, and players all lose value if games are less attractive.</p> <p>Bright line standard makes future design, financing, and other business decisions less speculative by reducing the threat of enforcement.</p>
546.1 What is the purpose of this part?	Not a substantive provision.	
546.2 What is the scope of this part?	Limits scope of standards to electronic games.	
546.3 What are the definitions for this part?	<p>Clarifies that the regulatory definition of bingo is the same as the common understanding of bingo - random determination of numbers that players check against a pre-designated pattern on cards (or electronic cards) held by players.</p> <p>Implies that other games, even if centrally determined (e.g., centrally-determined slots) or played against others, are not bingo and, therefore, not Class II games.</p>	<p>Manufacturers and tribes operating machines playing something other than bingo or a game similar to bingo would be required to reprogram or replace such machines or reclassify them as Class III.</p> <p>Manufacturers and tribes operating machines that do play bingo or a game similar to bingo would have certainty regarding the compliance of the machine (if the other standards are also met).</p>
546.4 What are the criteria for meeting	Establishes criteria for the format and display of electronic cards and for player interaction with the cards. Game must display	Manufacturers and tribes operating games that do not meet these standards would be required

Provision Section/ Subsection	Differences between Proposal and Current Regulation	Who is Potentially Affected
<p>the first statutory requirement that the game of bingo, lotto, or other games similar to bingo be played for prizes, including monetary prizes, with cards bearing numbers or other designations?</p>	<p>player's winning or closest to winning card at the end of game.</p> <p>Cards must be purchased before a game begins. Players must be able to see all of their cards.</p> <p>Establishes criteria for the awarding of other prizes (bonus and progressives). Such prizes must be awarded based on the outcome of the game of bingo.</p> <p>Prizes must be known or predictable.</p> <p>Alternative displays must be able to be disabled by the player.</p> <p>Machine must prominently display a notice that the game is bingo or a game similar to bingo.</p>	<p>to modify or replace them.</p> <p>The analysis assumes that systems exist that meet all of the requirements. To the extent that no single system meets all of the requirements the costs of modification could be understated.</p> <p>All tribes operating Class II machines that are not labeled will incur costs associated with notification.</p> <p>Bright line makes demonstration of compliance easier to determine for regulators and tribes.</p>
<p>546.5 What are the criteria for meeting the second statutory requirement that bingo, lotto, or other games similar to bingo be games in which the holder of the card covers such numbers or other designations when objects similarly numbered or designated are drawn or electronically determined?</p>	<p>Clarifies that players must take overt action to cover spaces (daub) to claim a prize.</p> <p>All players must daub whether or not they are the winning player.</p> <p>Only one overt daub is required by players. A two-touch machine, where players hit a button to start and a button to end the game or claim a prize, would meet the requirements of 546.5. A one-touch machine would not comply with 546.5.</p>	<p>Manufacturers and tribes operating one-touch machines will be required to modify or replace such systems.</p> <p>Players will have to pay closer attention to the game.</p> <p>Games may be marginally slower than some current offerings.</p>
<p>546.6 What are the criteria for meeting the third statutory requirement that</p>	<p>The game must have multiple players.</p> <p>The game cannot start until two seconds after two players have joined or until six players have joined, whichever is sooner.</p>	<p>Manufacturers and tribes operating stand-alone machines would be required to replace them with a networked system.</p>

Provision Section/ Subsection	Differences between Proposal and Current Regulation	Who is Potentially Affected
bingo, lotto, or other games similar to bingo be won by the first person covering a previously designated arrangement of numbers or designations on such cards?	<p>Events outside of bingo may not be used to determine any prize.</p> <p>Every game must generate a game winning prize.</p> <p>If only one player remains in a game, results are void and wagers are returned.</p>	<p>Potential for a delay in the start of some games that trigger the minimum delay.</p> <p>Players have to stay until the end of game for a prize to be awarded.</p>
546.7 What are the criteria for meeting the statutory requirement that Class II pull-tabs or instant bingo not be electronic or electromechanical facsimiles?	<p>Pull-tabs or instant bingo cards must exist in a physical medium. Electronic aids can be used to read cards and display prizes.</p>	<p>Manufacturers and tribes operating pull-tabs or instant bingo will have to comply with this requirement.</p> <p>There is a marginal increase in the cost of pull-tabs (electrons are cheaper than paper), however this cost is not quantified in the analysis.</p>
546.8 What is the process for approval, introduction, and verification of electronic, computer, or other technologic aids under the classification standards established by this part?	<p>Requires certification of a game as meeting the substantive requirements of Part 546 as part of the technical certification required in Part 547.</p>	<p>We assume that this provision does not significantly add to the cost of the certification required under Part 547.</p> <p>The purpose of this provision is to facilitate enforcement of the substantive provisions of Part 546. Therefore, all other benefits and costs are incorporated in the analysis of the substantive provisions themselves.</p>
546.9 What are the steps for a compliance program administered by a tribal gaming	<p>Requires that tribal regulators have a compliance program to ensure that machines operated in casinos in their jurisdiction comply with the classification standards.</p>	<p>Costs of developing and implementing a general program are contained in the analysis of the MICS.</p>

Provision Section/ Subsection	Differences between Proposal and Current Regulation	Who is Potentially Affected
regulatory authority to ensure that electronic, computer, or other technologic aids in play in tribal gaming facilities meet the Class II certification requirements?	Requires keeping a list of all machines in operation at facilities in their jurisdiction. Requires periodic random tests of system and games.	To the extent that periodic testing is not part of the tribal MICS, this requirement is a new cost to tribes. However, it is not quantified in the analysis.
546.10 When must a tribe comply with this part?	New machines and systems must comply within 120 days of the effective date. Machines and systems currently in place can remain in operation for five years.	Manufacturers with systems that do not comply with Part 546 would be unable to sell these systems into the market after 120 days and could have stranded capital. All non-compliant systems will have to be modified or replaced in five years.
546.11 What is the effect on this part if a section is declared invalid?	Severability provision, not substantive.	
543.1 What does this part cover?	Clarifies that MICS contained in new Part 543 apply to the operation of Class II games. Not a substantive provision.	
543.2 What are the definitions for this part?	Not a substantive provision.	
543.3 How do I comply with this part?	Tribal regulatory authorities must adopt MICS at least as stringent as those set forth in Part 543. Gaming operators must comply with the tribal internal control standard.	Tribes with no existing MICS (should be a null set) and those with MICS less stringent than Part 543 will be required to adopt new rules. The analysis assumes that all Class II gaming tribes will be required to adopt the new rules.

Provision Section/ Subsection	Differences between Proposal and Current Regulation	Who is Potentially Affected
	Annual CPA audit of internal control procedures is required.	CPA audit of MICS is required under existing Part 542. The analysis assumes that new audits will be more costly.
543.6 Does this part apply to small and charitable gaming operations?	<p>MICS do not apply to small and charitable gaming operations with revenues below one million dollars per year. This threshold is not a change from the existing rule.</p> <p>All small and charitable gaming operations must create, prepare, and maintain records in accordance with Generally Accepted Accounting Principles.</p>	Small and charitable gaming organizations will need to keep records in accordance with GAAP. The analysis does not attribute any incremental costs to this requirement.
543.7 What are the minimum internal control standards for bingo?	<p>This section describes the MICS for bingo cards, draws, manual payouts and short pays, operational controls, gaming equipment, voucher systems, patron accounts and cashless systems, promotions, and accounting.</p> <p>The provisions of 543.7 update and consolidate provisions from multiple sections of Part 542.</p>	A number of the updated requirements contain additional requirements to bring the MICS up to industry standards. Since the actual cost of these marginal changes is hard to estimate, the analysis does not assign a cost to these provisions.
543.16 What are the minimum internal controls for information technology?	<p>Substantially similar to requirements currently contained in 542.16.</p> <p>Some specific new requirements are added, e.g., requirement to remove access for terminated employees within 72 hours of termination.</p> <p>Some terms used in 542.16 are clarified, e.g., what "offsite storage" means with respect to backup data.</p>	These MICS are sufficiently similar to those already applicable to tribal gaming facilities that the analysis does not estimate either costs or benefits associated with these provisions.
Part 547 - Technical Standards for Electronic, Computer, or Other Technologic Aids Used in the Play	<p>Part 547 establishes the minimum technical standards governing the use of electronic aids to bingo.</p> <p>This part covers gaming machines (player interfaces), the gaming system, as well as systems used to handle cash or cash</p>	

Provision Section/ Subsection	Differences between Proposal and Current Regulation	Who is Potentially Affected
of Class II Games 547.1 What is the purpose of this part?	equivalents and player information. This set of provisions is entirely new.	
547.2 How do these regulations affect State jurisdiction?	This provision states that nothing in this part shall be construed to grant to a state jurisdiction in Class II gaming or to extend a state's jurisdiction in Class III gaming. Not a substantive provision.	
547.3 What are the definitions for this part?	No substantive requirements independent of other sections.	
547.4 How do I comply with this part?	New systems must comply within 120 days of the effective date of the rule. All systems must be submitted within the first 120 days (including those that will be operating under the grandfathering period provision). Replacement of individual components or changes that move the system closer to compliance with applicable standards do not constitute violations of the grandfathering period. Tests must be performed by independent laboratories.	All tribal gaming operators will be required to determine whether the systems they use have been submitted to an independent laboratory for certification. Game manufacturers will have to design new systems to comply with technical standards. All systems must be upgraded to compliant systems within five years of the effective date of the rule.
547.5 What are the rules of interpretation and of general application for this part?	Administrative provisions of the 547 with the exception of 547.5(c) which defines fairness to include a minimum probability of winning a prize - 1 in 50 million for a progressive prize and 1 in 25 million for any other prize.	No substantive effect included in analysis.
547.6 What are the minimum technical	(a) General requirements. Class II gaming systems shall provide a method to:	Administrative provision -- does not affect costs or benefits of rule

Provision Section/ Subsection	Differences between Proposal and Current Regulation	Who is Potentially Affected
standards for enrolling and enabling Class II gaming system components?	<ol style="list-style-type: none"> 1. Enroll and unenroll system components; and, 2. Enable and disable specific system components. <p>(b) Specific requirements. Class II gaming systems shall:</p> <ol style="list-style-type: none"> 1. Ensure that only enrolled and enabled system components participate in gaming; and, 2. Ensure that the default condition for components shall be unenrolled and disabled. 	
547.7 What are the minimum technical hardware standards applicable to Class II gaming systems?	<p>Systems certified under this part must:</p> <ol style="list-style-type: none"> 1. Comply with FCC regulations regarding interference with communications; and, 2. Be certified by a safety laboratory regarding dangers associated with electricity e.g., spills and electrostatic shock. <p>Circuit boards that can affect the outcome of the game must be identified and any switches or jumpers that can affect function must be sealable. The electronic components must be able to resist malfunction due to electrostatic shock.</p> <p>The physical structure of the system or machine must be robust and resistant to attempted forced entry.</p> <p>The player interface must display information to the player and allow the player to interact with the game.</p> <p>The account access system, financial instrument storage, and financial instrument dispensers must be secure and resistant to tampering.</p>	<p>All manufacturers will need to incorporate these requirements into future systems. If doing so increases the cost of such systems, these costs will be passed on to the tribes or be borne by the manufacturers.</p> <p>All of the technologies to meet these standards are currently available, but we do not know if they are all present on any or all systems currently in operation or design.</p> <p>The analysis does not explicitly associate any costs with these provisions as most of them seem consistent with industry practice.</p> <p>These standards assist in protecting against losses to tribes through theft and tampering.</p>

Provision Section/ Subsection	Differences between Proposal and Current Regulation	Who is Potentially Affected
	<p>Financial instrument acceptors must be secure and allow communication with the gaming accounting system.</p> <p>The door that protects all other components of the system must have an open door sensor that cannot be disabled.</p> <p>This provision is not included in the current regulation.</p>	
<p>547.8 What are the minimum technical software standards applicable to Class II gaming systems?</p>	<p>Defines minimum information that must be provided to the player and information that must be available in recall mode.</p> <p>Requires that the software play the game per the posted rules.</p> <p>Requires that players affirmatively enter a game.</p> <p>Player interface may not accept money or wagers when it is registering a fault condition.</p> <p>Establishes minimum audit data requirements (for components of the system that are involved in the audit mode).</p> <p>Requires that games not be playable during test, diagnostic, or demonstration modes and that these modes create no permanent modification to game or financial records. (Note: Test, diagnostic, and demonstration modes are not required by this provision.)</p> <p>Establishes minimum standards for interfaces offering multiple games.</p> <p>Establishes minimum standards for operation of progressive controllers.</p> <p>Defines data that must be stored in critical memory and minimum procedures and protections associated with critical memory.</p>	<p>Game designers will be required to incorporate these elements into their systems. To the extent that this adds additional cost, these costs will either be passed on to tribes or borne by the manufacturer.</p> <p>None of these standards appear onerous although all of the standards may not be met by all current systems. The grandfathering provision should allow any inconsistencies to be addressed in systems that will remain in operation after the end of the grandfathering period.</p> <p>The analysis attributes no incremental cost to these provisions.</p> <p>These standards will assist regulators and operators in the oversight of machine operation.</p> <p>These standards will also protect players from losses through error and potential confusion.</p>

Provision Section/ Subsection	Differences between Proposal and Current Regulation	Who is Potentially Affected
547.9 What are the minimum technical standards for Class II gaming system accounting functions?	Establishes minimum standards for accounting functions (tracking of player credit and amount in and amount out data).	New systems must be designed to comply with these standards. Costs of doing so should be negligible.
547.10 What are the minimum standards for Class II gaming system critical events?	This section provides standards for addressing and documenting events such as system critical faults, deactivation, door open or other changes of status, and lockup within the Class II gaming system.	Manufacturers will be required to design these protections into new game systems. Players and tribes will benefit from protection of the integrity of the game in the event of unexpected events.
547.11 What are the minimum technical standards for money and credit handling?	Standards for validating, tracking, and protecting the handling of cash or cash equivalents by game systems.	Manufacturers will be required to design these protections into new game systems. Players and tribes will benefit from protection from error and fraud.
547.12 What are the minimum technical standards for downloading on a Class II gaming system?	Standards for secure downloading of programs or data to Class II systems. Also requires that downloading not interfere with accounting information stored in the system.	Ability to change programming or content through downloading reduces costs to manufacturers and tribes.
547.13 What are the minimum technical standards for program storage media?	Standards to protect program storage media (e.g., EROMs, CDs, DVDs, etc) from tampering or inclusion of foreign code.	No discernable cost. Protection from fraud and theft.
547.14 What are the minimum technical standards for electronic random	Requires that output of random number generator be random, unpredictable, and non-repeating.	No discernable cost for new systems. Costs for verification included in the cost of independent laboratory testing of a system.

Provision Section/ Subsection	Differences between Proposal and Current Regulation	Who is Potentially Affected
number generation?		
547.15 What are the minimum technical standards for electronic data communications between system components?	Requires secure communications between system components and documentation of attacks on, or failures of, a communication system.	No discernable cost for new systems. Costs for verification included in the cost of independent laboratory testing of a system.
547.16 What are the minimum standards for game artwork, glass, and rules?	Rules and information necessary for player to understand the game must be provided in artwork or electronically.	No discernable cost for new systems. Costs for verification included in the cost of independent laboratory testing of a system.
547.17 How does a gaming operation apply for a variance from these standards?	Tribal regulatory authority may grant a variance from the standard if the same amount of protection will be provided. NIGC reviews tribal regulatory determination.	Provides additional flexibility to tribes and manufacturers. Neither costs nor benefits of this provision are included in analysis.

Chapter 3: Market and Regulatory Conditions for Affected Entities

Tribal gaming organizations, tribal regulatory authorities, and other entities must carry out the incremental changes identified in Chapter 2. They will implement these changes in the course of navigating through changing market conditions. When estimating the future effect of the regulation, the analysis must also project how dynamic conditions will change the market. Future market conditions are the baseline from which the incremental benefits and costs are measured.

There are two major issues in establishing the appropriate baseline for measuring the incremental benefits and costs of the final rule and alternatives. First, the size of the Class II market has changed dramatically in the past four years. Second, technology has moved faster than the regulatory system in this industry. As a result, under current practices in the industry, operators run a number of gaming machines that NIGC believes do not meet the definition of Class II under IGRA, the proposed regulations, or previous case-by-case determinations made by the NIGC. As a result, the baseline in practice may not represent the baseline under the current regulation as interpreted. Guidance for benefit-cost analysis recommends using different baselines when current practice is different than full regulatory compliance.²⁸ We present both baselines (i.e., current market conditions and “full compliance”) to measure the effect of the final rule and its alternatives.

For both the current market conditions and the full compliance scenario, the analysis constructs different paths for the industry - with or without the regulation. These paths become the two baselines against which we measure the incremental benefits and costs of the final regulation and alternatives. Also, as market conditions change in the future, the size, number, and financial conditions of gaming organizations change. For each future path, this chapter estimates the annual number of operating entities, the number of Class II machines, and other market characteristics needed for the analysis.

Number of Affected Entities if Current Market Conditions Continue

In this baseline scenario, NIGC maintains its current level of enforcement. The current estimated non-compliance rate with the classification standards persists into the future. The Class II industry is expected to continue its growth. Where states and tribes have already negotiated new compacts, the gaming operators are expected to convert their Class II machines rapidly into Class III machines. We do not assume any new states to become Class III or tribes to rescind their compacts. Under these conditions, this section estimates the number of gaming entities and tribal gaming authorities that must comply with MICS. It also estimates the number of entities that must comply with the technical standards. Finally, we present our estimated number of compliant and non-compliant Class II machines and the future growth rate of Class II machines and revenue.

²⁸ OMB, *Circular A-4 Regulatory Analysis*, pp. 4-5.

Minimum Internal Control Standards

In October 2006 the United States Court of Appeals for the District of Columbia (*Colorado River Indian Tribes [CRIT] v. NIGC*) found that the National Indian Gaming Commission did not have jurisdiction to require MICS at Class III facilities.²⁹ As a result, the MICS standards currently found in §542 no longer apply to such facilities.

To avoid confusion regarding the applicability of the provisions of the current Section 542, the Commission is proposing to promulgate a new Section 543 that clarifies the MICS applicable to Class II operations. Most of the requirements in the revised MICS are merely restatements of existing Section 542 requirements. However, as discussed in Chapter 2, there are some changes being proposed as part of the repromulgation.

The MICS will apply to Class II activities at any facility operating Class II games above a revenue threshold. In 2006, there were eleven facilities operating solely Class II games and an additional 150 facilities that operate Class II games in facilities that also offer Class III gaming. These facilities are listed in Appendix 1. Since the MICS implement the existing best practice in the industry, some of these incremental requirements may already be in place at facilities with Class II operations. However, we have limited data to estimate which practices are in place at which facilities. This analysis assumes that all 161 facilities will incur some incremental costs and generate benefits associated with implementation of the final rule's MICS. In the short term, this approach will include tribes operating facilities in Florida, Oklahoma, and California. Over time Florida and most Oklahoma facilities are expected to become fully Class III facilities. All but one California facility is also likely to complete the conversion to offering only Class III games.

Tribal gaming authorities are also affected by the final MICS. They must update their regulations and then oversee compliance with their revised regulations. Thus, they will have training and administrative costs due to the final rule. According to a 2000 survey of the National Indian Gaming Association, tribal regulatory authorities employed 2,800 workers.³⁰ However, tribal regulators will only require training if their tribe operates Class II games. There are 225 tribes that are involved in gaming. Of these 72 are, or have been, involved with Class II gaming. If we assume that regulators are distributed roughly evenly across these tribes, then roughly 900 of these regulators would be associated with tribes that could be affected by the revised MICS.

Technical Standards

Class III machines, such as slot machines, are subject to testing and certification in states (such as Nevada and New Jersey) where casino gambling is allowed.³¹ Testing verifies that the hardware and software achieves the minimum required payout, is resistant to tampering, and meets other safety and security requirements. Whether tribes require proof of such certification before deploying is subject to the determination of the particular tribal regulating authority. However, the tribe and its patrons benefit from requirements in other jurisdictions because game manufacturers tend to design their machines to meet the most stringent state or tribal standard.

²⁹ 383 F Supp: 2d 123 (D. DC 2005)

³⁰ See http://www.viejas.com/vbki/html/tg_game-reg.htm, accessed July 25, 2008.

³¹ See http://www.state.nj.us/lps/ge/tsb_enforce.htm

However, there are no such requirements for Class II machines or operating systems. According to its most recent information collection request (ICR) under the Paperwork Reduction Act, NIGC estimates that there are 25 unique Class II gaming systems in use today.³² The proposed testing requirements would apply to the 25 current operating systems and any new systems developed in the future.

Definition of Class II and Electronic Facsimile

Although promulgated as two separate parts of the final rule, these two definitions are inextricably linked. Those machines that are not Class II, or that are electronic facsimiles, are Class III machines and may not be operated as Class II. The final standards only impose costs, or generate benefits, at those facilities operating a given game or machine as Class II that will not meet the final classification standard as Class II.

To start estimating the machines affected, Table 3-1 reviews states with Class II machines to estimate the total number of Class II machines in operation in 2006. For states with Class II and III machines, we researched the state-tribal compacts to determine if there are limits on Class III machines. In states with limits, the number of Class II machines may continue to grow if the tribes have already installed the maximum allowed.

Table 3-1: Total Number of Class II Machines in 2006³³

State	Class II, or II & III	Number of Class II Machines	Number of Class III Machines	Cap on Class III Gaming Machines (if applicable)
Alabama	II only	2,101	0	N/A
Alaska	II only	30	0	N/A
Arizona	II & III	56	12,770	According to the state compact, Class II machines count towards a tribe's cap. Operating as a Class III machine is thus a viable alternative for all 56 machines.
California	II & III	4,215	61,657	N/A
Colorado	III	N/A	1,128	Cap not reached
Florida	II & III	8,615	26 ³⁴	Tribes in Florida are expected to shift to the operation of Class III games in the future. The recent Florida state

³² National Indian Gaming Commission, *Supporting Statement for Information Collection Request 3141-0009, Minimum Internal Control Standards*, October 17, 1998.

³³ Much of this data is taken from the February 2008 report. The data has not been updated for changes since there was no more recent data available at the time of this report. The data on Class III limits on compacts, if any, is taken from a review of applicable tribal-state compacts.

State	Class II, or II & III	Number of Class II Machines	Number of Class III Machines	Cap on Class III Gaming Machines (if applicable)
				compact does not limit the number of Class III gaming devices, but does limit them to seven sites. The compact also does not limit Class II gaming.
Minnesota	II & III	113	20,822	The state does not allow "mechanical" versions of Class III gaming machines in the state compacts. This restriction leaves a residual demand for Class II games. ³⁵
Montana	II & III	535	806	While the gaming market may not be "saturated," Class II gaming machines have been installed to supplement Class III machines in some facilities. These Class II machines will be affected by the rule.
Nebraska	II only	314	0	N/A
New York	II & III	1,287	9,620	The gaming facilities with compacts are not limited by the compact. All 1,287 Class II devices reside on tribal land without compacts.
Oklahoma ³⁶	II & III	30,044	11,727	Many tribes in Oklahoma are already shifting to Class III gaming. There is no cap on Class III games and Class III games are subject to revenue sharing.
South Dakota	II & III	64	2,145	There is a cap on Class III gaming devices. Class II devices in the state are used by facilities to supplement their Class III devices.
Texas	II only	1,325	0	N/A

³⁴ This number is outdated as the Florida Seminole Tribe has begun installing Class III gaming machines and has ordered 15,000 more. <http://www2.tbo.com/content/2008/may/01/bz-vegas-style-slots-officially-launch/>. However, the compact with the Seminole tribe and Gov. Crist is being challenged by the state legislature.

³⁵ <http://sec.edgar-online.com/2004/11/30/0000950134-04-018366/Section11.asp>

³⁶ The total number of machines increased from 31,000 in 2005 and 27,000 in 2004. We expect the number of Class III machines to continue to increase rapidly as many tribes in Oklahoma switch from Class II to Class III gaming.

State	Class II, or II & III	Number of Class II Machines	Number of Class III Machines	Cap on Class III Gaming Machines (if applicable)
Washington	II & III	1,771	18,235	Washington has a cap on Class III gaming machines that was recently modified.
Wisconsin	II & III	361	15,321	There is room for expansion in Class III gaming devices in all of the facilities except one operated by the Ho-Chunk tribe. Numerous hurdles prevent that tribe from creating a compact. ³⁷
Wyoming	II & III	94	385	There is no limitation to Class III gaming machines.
Total		50,925		

Effects of Recent Compacts

In 2006 Oklahoma and Florida possessed 59 percent and 17 percent of the national Class II gaming market, respectively. California constituted eight percent of the machines in that year. Since 2006, the applicable legal situation for Class II and III gaming in these states has changed. For example, new compacts in California will result in the replacement of 3,140 Class II machines with Class III machines. It has become clear that tribal gaming operators in Oklahoma are shifting from Class II to Class III operations. A recent compact in Florida temporarily cleared the way for Class III machines in that state.³⁸ Due to the additional revenue from Class III games, these conversions are expected to be complete before the expiration of the final rule's five year grandfather provisioning. As a result of these changes, the number of machines and facilities potentially affected by the new NIGC rules is much smaller than previously estimated.

Table 3-2 shows how we estimate the conversion to occur in each of the major states. Based on recent experience, operators remove virtually all of their Class II machines when they have the legal option to install Class III machines. Computer control of gaming allows fairly rapid conversion of properly-equipped machines. We do not expect all Class II machines to be eliminated in Oklahoma. The large number of existing machines suggests that there may be a long-term market for Class II play.³⁹ In addition, since the legislature instituted Class III games without a formal compact with affected tribes, the terms of the Class II/III market may be revisited. For these reasons, we assume 25 percent of the number of 2006 Class II machines remain at the end of the grandfathering period. For Florida, the recently-overturned compact allowed the affected tribes to replace 75 percent of its Class II machines in the first two years and then the remaining 25 percent over the subsequent three years. We continue

³⁷ For a description of the dispute, see <http://www.indianz.com/IndianGaming/2008/009570.asp> for example.

³⁸ *SC07-2154 Florida House of Representatives, et al., v. The Honorable Charles J. Crist, Jr.*, decided July 3, 2008.

³⁹ For example, in July 31, 2008 filing, *Multimedia Games Reports Installed Base of Player Terminals and Product Mix at July 31, 2008*, the company reports over 300 "legacy" units, meaning non-electronic consoles and pre-2002 units.

assuming Florida will convert to Class III machines, recognizing that this assumption may understate the costs of the rule if a new compact and conversion is not concluded before the end of the grandfathering period. Finally, all but one of the tribes in California has rapidly converted to Class III machines since 2006.

The Oklahoma estimate for the future is first based on the annual rate of decline in the number of machines from 2006 to mid 2008.⁴⁰ The number of Class II machines has fallen rapidly, by nearly 40 percent in less than two years. In the future, the rate is expected to decline at a constant rate equal to the annualized rate experienced from 2006 to mid-2008.

As a practical matter of compliance with this rule, all of the Class II machines in Florida are expected to be converted by the end of the grandfathering period. Therefore, only the 1,060 machines in California and the 7,500 machines in Oklahoma would be subject to the classification standards from these three states.

Table 3-2: Future Reduction in Class II Machines in States with Recent Compacts⁴¹

State	2006	2007	2008	2009	2010	2011
Oklahoma	30,044	24,122	18,200	10,300	7,500	7,500
Florida	8,615	9,583	10,600	6,600	2,600	880
California	4,215	4,215	1,060	1,060	1,060	1,060

Growth Rate of Class II Machines

In addition to shifts to Class III gaming, the Class II gaming market is expected to expand. To estimate effect on tribal gaming facilities over the next ten years, the growth of the industry is projected. Potential future growth is difficult to estimate; there is no certainty. However, in recent years Class II gaming has grown very quickly. In 1992, the Indian gaming industry generated revenue of \$1.6 billion. Industry revenues exceeded \$25 billion of gross gaming revenues in 2006. The industry currently has 423 gaming operations in 28 states. These operations are owned, operated, or licensed by 228 tribal governments. Annual growth rates for the industry have been over ten percent a year for many years.

In the four states in which only Class II gaming is available, the industry has been growing on average by over 40 percent per year in the last five years. Even states with larger and more mature Class II industries like Oklahoma and Florida were experiencing double digit percentage growth in Class II gaming devices before transitioning to the Class III market. Therefore it is not unreasonable to expect rapid growth to continue in other solely Class II states.

⁴⁰ Email from Derek Campbell, CPA, CIA, Gaming Compliance Lead, Office of State Finance, State of Oklahoma dated July 11, 2008.

⁴¹ Numbers are rounded to two significant digits.

In those states with only Class II gaming, the growth of Class II games is estimated by averaging the number of new machines installed per year over the last five years (2002-2006). This past five-year average is used as the estimate for the annual average number of machines expected to be installed for the next ten years as shown in Table 3-3. This assumption may underestimate the rapid growth of the market since it is lower than the annual percentage growth rate. Using the states' annual growth rate in the number of machines, sometimes 50 percent or more, leads to a potentially unrealistic number of machines. However, using the five-year average growth in the number of machines could lead to an underestimate in the number of new devices in certain states, especially in Alaska, which are new to the Class II gaming market. Tribes in Alaska installed 30 devices in the past two years, but may experience strong and rapid growth if the venture is profitable.

To estimate the future of the Class II gaming market in states with tribes that have gaming compacts, using the recent growth of Class II machines may be inaccurate. Class II machines in these states are part of the entire Class II and Class III market and must be evaluated in that context. Rather than install more Class II machines, tribes in these states may re-negotiate their gaming compacts to allow more Class III machines, effectively capping the growth of Class II in that state. Other tribes in states like Washington have used Class II gaming machines to supplement Class III machines until the state decided to re-negotiate. Wisconsin has a tribe which does not have a compact for reasons unrelated to the negotiation of compacts with other tribes in their state.

Because of the interrelated markets for Class II and Class III, this analysis assumes that the number of Class II gaming devices will remain steady in the next ten years in states with both Class II and Class III machines. This assumption introduces an unknown error in the analysis. As some tribes add more Class II machines to supplement their compacted maximum limits, other tribes may have less Class II machines when caps are extended or lifted. Since Class III machines can be more lucrative for both states and tribes, we assume that states and tribes eventually recognize the advantages of lifting caps to meet growing demand for gaming. This political process can be time-consuming, creating an continuous opportunity for some unrestricted Class II machines to exist in these states. In the February 2008 report, there were 5,341 Class II gaming machines in 11 states with both Class II and Class III machines in 2006.⁴² We use that number as the estimated average of the number of machines in mixed Class II and III states over the next ten years.

Tables 3-3 and 3-4 presents our assumed net growth for Class II machines from 2006-2017 for the states with Class II machines. States with only Class II machines will continue to experience growth, while states with both classes of machines will have a steady number of machines throughout the period. In summary, the Class II market declines from over 50 thousand machines in 2006 to an estimated 29,900 in 2017.

⁴² Meister, A. *The Potential Economic Impact of the May 2006 Proposed Class II Gaming Regulations*, Analysis Group, February 1, 2008.

Table 3-3: Growth in Class II Machines

State	Number of Class II Devices in 2006	Growth in Class II Machines Per Year	Growth in Number of Class II Machines in 2017
Alabama	2,101	393	6,400
Alaska	30	15	200
Nebraska	314	62	1,000
Texas	1,325	285	4,500
All others	47,155	----	5,300
Total	50,925	----	17,400⁴³

Table 3-4: Predicted Number of Class II Machines

Year	State				Total
	Oklahoma	Florida	Class II Only States	All Other States	
2006	30,044	8,615	3,770	8,496	52,931
2007	24,122	9,583	4,525	8,496	46,726
2008	18,200	10,551	5,280	5,300	39,331
2009	10,304	6,600	6,035	5,300	28,239
2010	7,500	2,600	6,790	5,300	22,190
2011	7,500	880	7,545	5,300	21,225
2012	7,500	880	8,300	5,300	21,980
2013	7,500	880	9,055	5,300	22,735
2014	7,500	----	9,810	5,300	22,610
2015	7,500	----	10,565	5,300	23,365
2016	7,500	----	11,320	5,300	24,120
2017	7,500	----	12,075	5,300	24,875

⁴³ Estimate, rounded.

Number of Class II Machines Affected by the Rule

Not all of the Class II machines in Tables 3-3 and 3-4 face incremental costs due to the regulation. The final classification standards are largely a codification of the opinions used by the Commission to guide its ongoing inspection and enforcement activities. Some tribal operations and gaming systems have already been evaluated using these standards and found to be compliant. While the baseline of current market conditions may not be fully consistent with the classification standard, systematic data is not available to inform a determination of the baseline level of compliance. We then considered expert opinion on this question. Public statements by the Commission give an estimate that 50 percent of current Class II machines would not be in compliance with the classification and definitional standards.⁴⁴ Since this estimate was given a few years ago and since the market has changed, we use a range of values. We base our calculations of incremental costs and benefits on assumed baseline levels of compliance of 20 percent, 50 percent, and 80 percent for the current market scenario. This range provides a reasonable means of characterizing the uncertainty related to the baseline level of compliance.

Summary of Entities Affected under the Current Practices Baseline

Table 3-5 lists the entities which will have compliance costs with the proposed regulation, assuming current market and enforcement conditions continue into the future.

Table 3-5: Summary of Affected Entities in Current Market Scenario

Provision	Number of Entities in 2006	Number of Entities in 2017
Tribal Regulatory Staff	900	900
Gaming Systems	25	25
Class II Machines	50,950	5,000 - 20,000

Number of Affected Entities if Greater Enforcement Occurs

If the National Indian Gaming Commission did not promulgate these regulations, it is still likely that Class II Indian gaming would look significantly different in ten years than it does now. Taking no regulatory action does not guarantee (or even imply) that the *status quo* (current market conditions) is the most likely future market condition. To measure the incremental benefits and costs, we project another baseline where greater enforcement reduces the number of non-compliant machines by the end of the grandfathering period.

⁴⁴ "Hogen estimated that Class II games make up only about 10 percent of the Indian gaming industry. The more lucrative Class III machines make up 80 percent. Another 10 percent are machines that are marketed as Class II devices but are closer to slot machines," *DOJ Proposes major change in Indian gaming law Friday*, September 16, 2005, www.Indianz.com

In the absence of a new regulation, existing classification definitions would be enforced through greater inspection, administrative fines, and litigation. Both the NIGC and the Department of Justice have brought enforcement actions against alleged non-compliant tribal gaming operations in the past. Such enforcement will continue in the future with or without promulgation of a bright-line standard defining Class II gaming. However, litigation costs, and other costs of remedying non-compliance, such as machine replacement, are likely to be higher in the absence of such a standard - particularly in the absence of a grandfathering provision that eases transition to full compliance.

We assume that there is no difference in the compliance rate with the MICS and technical standards between the two baselines. The new regulations are implementing requirements that the Commission could not enforce through application of current regulation. For the purpose of this analysis, we are interested in the likelihood that the estimated 50 percent non-compliance rate with the Class II machine classification standards under current market conditions will increase or decline in the near future. This rate will be determined by market forces and NIGC enforcement activity. As for market forces, gaming operators have an incentive to blur the distinction when they face increase competition, declining consumer demand, or increased consumer interest in Class III games. These incentives are present and strong in Class II markets. Added to these existing incentives is the increasing power of technology - a resource that can be used more fully in the Class III market due to the absence of the classification and definitional constraints. We assume these forces and incentives remain constant in the future and neither increase or decrease the non-compliance rate.

The NIGC, however, can alter the non-compliance rate through its level of enforcement activity. Therefore, to create an estimate of the number of Class II machines that will require modification by the end of the grandfathering period, we must estimate the effect of NIGC's future activity on the number of non-compliant machines. We project the effectiveness of future NIGC activity by examining the current enforcement process and examine the influences that may signal greater or lesser enforcement in the next five years. We then apply this information to judge the likely level of non-compliance by the end of the grandfathering period.

Legal and Regulatory Baseline

The NIGC has enforcement authority for the IGRA. NIGC can carry out inspections, conduct reviews of gaming devices, and institute enforcement actions against non-compliant Class II machines. While the current MICS are carried out through detailed regulation, the classification standards are based on relatively little regulatory text. Determining what constitutes Class II gaming versus Class III gaming relies on a factual determination and a careful assessment of Commission opinions and court cases. The NIGC's guide or "NIGC Classification Rulings" encompasses more than seventy opinions and court rulings. The decisions relevant to the proposed classification standards are summarized in Appendix 2.

The NIGC devoted significant effort from 2002 to 2004 to establish a clear division between Class II and Class III machines through regulation. The Commission continues these efforts. Since the 2002 definition became effective, the NIGC has issued 41 game classifications opinions. Of those, three pertained to Class II games that required virtually no analysis by the NIGC. Four opinions evaluated modifications of already approved games. In the remaining 34 opinions that required analysis of whether a game was Class II of Class II, the Commission applied its interpretation of the 2002 definitions and classifications.

The current enforcement process has elements relevant to estimating future enforcement activity. First, it requires NIGC staff to initiate action. A gaming operation does not have to seek NIGC approval before installing a new, potentially non-compliant game. Second, the legal analytic framework that

has arisen is based on the physical features of the game. Determining these features requires NIGC to spend resources for each case. It also necessitates that decisions are made on a case-by-case basis, giving opportunities for recalcitrant operators to make cosmetic changes and then claim compliance. Third, the NIGC opinions are not legally binding on the tribal gaming authority. The NIGC must affirmatively act against the gaming operator to enforce its opinions. Finally, in the past, some Federal courts have not given deference to NIGC opinions, raising the question of whether a NIGC opinion is definitive. In summary, achieving greater compliance can only occur if NIGC has a greater level of resources to inspect, decide case-by-case situations, and successfully defend these decision through multi-year litigation in Federal courts.

Factors Affecting Future Commission Activity and Market Activity without Regulatory Change

Given these resource demands, we believe it is unlikely that 100 percent all of all machines in the future will comply into the NIGC's current Class II framework through enhanced enforcement efforts. There are several reasons to expect some continued rate of non-compliance:

Shifting Priorities of NIGC and DOJ

Increased enforcement in the future is not a certainty since the NIGC's leadership will change. Although a principal mission for any commissioner is administration and enforcement of the Act, different commissioners may pursue alternative means of compliance in the future.

Success of Tribal and Manufacturers' Legal Challenges

As NIGC issues future compliance determinations, tribal authorities and manufacturers retain the right to challenge these administrative actions in court. In the recent past, it appears that several judicial districts have given little deference to NIGC's determinations and framework for distinguishing Class II and Class III machines. Therefore, in the face of increased NIGC enforcement activity, owners/operators of contested machines may pursue judicial remedies. If they are successful, the future boundary between Class II and Class III will shift. What is viewed as non-compliance today could be legally allowed at least in some jurisdictions in the future if courts rule against the Commission. From the standpoint of what machines are viewed as compliant today, court decisions rejecting NIGC challenges would expand the number of compliant machines.

Strong Financial Incentives for Non-Compliance

Operators and manufacturers have strong financial incentives to seek out the boundary between Class III and Class II machines. As shown in the next chapter, Class III machines produce greater revenue per machine per day than Class II machines. If an operator's sole goal is profit maximization, he or she will weigh the risks and costs of litigation against the increased revenue gained during the period the game is under review. Specifically, a profit-maximizing operator will compare the certain legal costs against the expected value of two possible outcomes:

- The NIGC finds the machine non-compliant with Class II and requires it to be shut down; and,
- The NIGC finds it compliant or a challenge to a NIGC opinion is successful.

An example can illustrate the financial incentives to maximize the scope of Class II permissibility, even at the risk of an adverse decision. In the table below, a simplified example of the two options available to an operator are shown. Suppose the difference in revenue between a new machine and a known Class II machine is \$30 per day. The annual revenue from that machine is approximately \$11,000. The operator is contemplating adding 11 new machines.

The operator then considers his or her options. Installing the machine will trigger an inspection or litigation from the NIGC that will cost \$200,000 to administer, defend, and challenge. Resolving the litigation is assumed to require two years. During those two years, the operator can receive the \$11,000 per machine. If the operator successfully defends against NIGC's challenge, the operator can gain the \$11,000 payout for the assumed five-year life of the machine.

The operator then estimates the probability of winning the challenge. In this case, the operator predicts that there is a 95 percent chance that NIGC will rule the new machine a Class III device and that the NIGC position will be upheld. For this scenario, the expected value of the total revenue from the 11 machines is \$218,000, while the litigation costs is \$200,000. Even with a low probability of litigation success, the operator can gain more revenue by installing the new machines.

Most operators are likely to have more machines, believe their chance for litigation success is greater, or expect to prolong their case more than the value given in this example. All of these factors increase the expected revenues and support the decision to install the new machines and risk an adverse NIGC or court finding. This simplified example illustrates why there is a strong financial incentive to continually introduce new machines that push the boundaries of Class II compliance.

Table 3-6: Hypothetical Decision Analysis of Choice to Install New Machine

	Install Machine; Lose Challenge	Install Machine; Win Challenge
Difference in Hold per Machine Per Day	30	30
Revenue Per Year Per Machine	\$10,800	\$10,800
Number of Machines at Facility	11	11
Years of Operation	2	5
Present Value of Option	\$206,182	\$450,345
Probability of Outcome	0.95	0.05
Expected Value	\$218,390	
Total Litigation Costs	\$200,000	

We note that this example simplifies many important factors that cause operators not to install machines with a low probability of compliance. First, reputations matter. An operator may have many matters subject to NIGC review and would recognize the adverse effect a pattern of non-compliance would have on those other matters. Second, manufacturers that are public companies also would be concerned with a pattern of adverse rulings. Investors and gaming regulatory authorities in other jurisdictions would question the company's financial stability and integrity. These and other factors limit the incentives to install machines that have a very low probability of being ruled a Class II machine.

In spite of these institutional obstacles and market incentives, we expect NIGC to apply site-specific enforcement and compliance determinations more frequently in the future in the absence of regulation. There are several reasons to believe the NIGC can take more administrative action in the future:

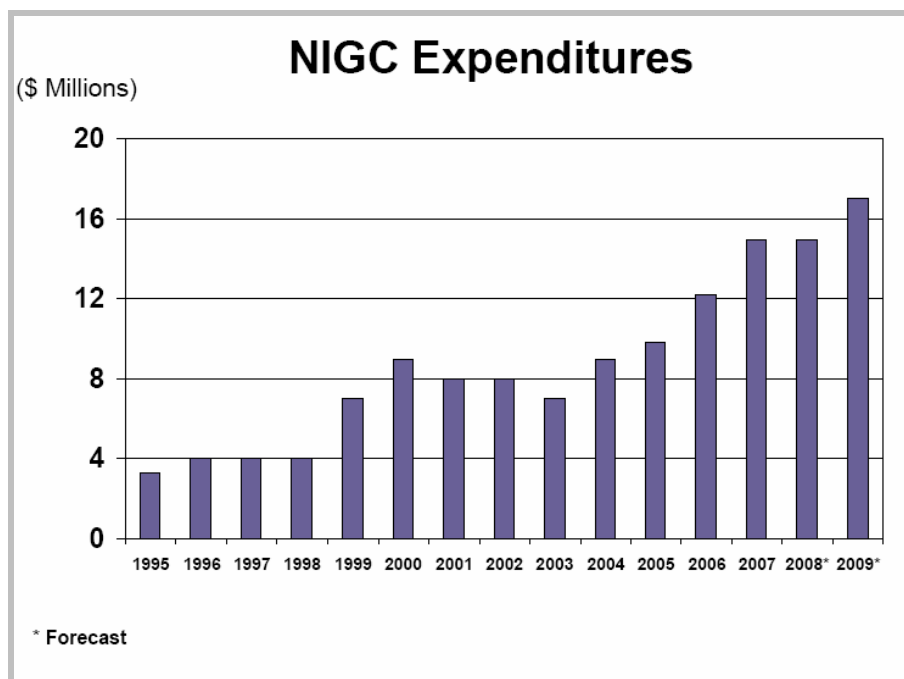
Fewer Class II Machines and Facilities

Because the Class II universe has decrease substantially with the compacts in Oklahoma and California the number of potentially non-compliant machines has declined. NIGC's resources will be spread across fewer Class II locations in the future, allowing more concentrated oversight.

Greater Commission Funding

Prior to 1997, the Commission was legislatively prohibited from collecting fees in excess of \$1.5 million per year.⁴⁵ The 1998 Interior Appropriations expanded the fee to include Class III gaming revenue and raised the limitation on annual fee collections to \$8 million. From 2003 to 2006, Congress increased the limit to \$12 million. On May 12, 2006, the Native American Technical Corrections Act of 2006 was enacted. This law replaced the annual limit with a formula allowing fees up to 0.08 percent in any fiscal year of the gross gaming revenues of all regulated gaming operations. As the chart shows, the NIGC forecasts that this fee structure will allow substantial growth in its budget.⁴⁶ Compared to the last period of numerous Class II classification decisions, 2002-3, funding levels in the next few years are expected to be double the 2002-3 levels.

Figure 3-1: Past and Projected NIGC Expenditures



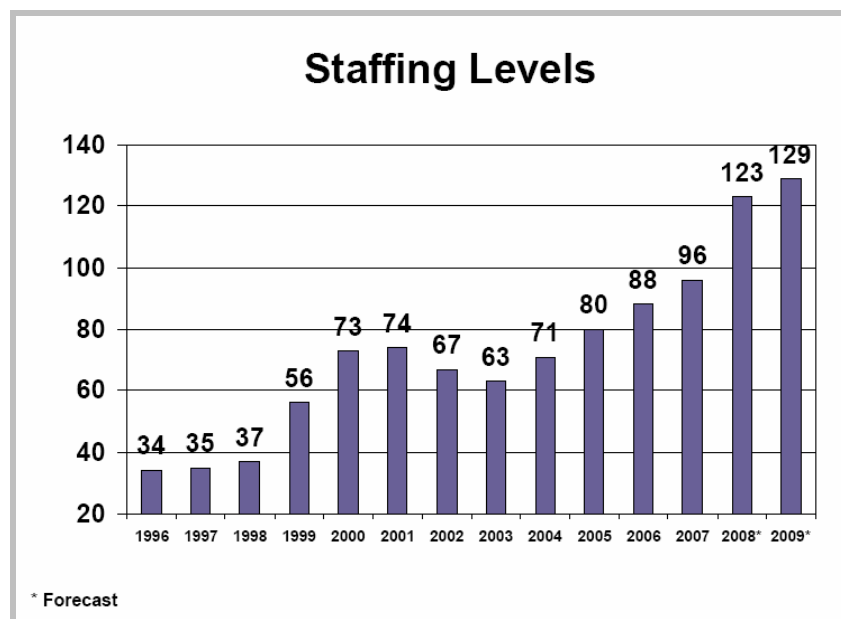
⁴⁵ U.S. Department of Interior, *Budget Justifications Fiscal Year 2009 National Indian Gaming Commission*, pg. 7.

⁴⁶ Ibid.

Increased Number of Field Personnel

The NIGC is investing these increased funds in enforcement and inspection personnel. In its FY 09 budget justification, NIGC is requesting six new positions to respond to the expanding Indian gaming industry.⁴⁷ Three of these positions are field auditors to examine gaming operations for criminal influences, fraud, and compliance with the MICS. NIGC seeks three other full-time enforcement officials. In addition to processing background investigations of gaming facility employees, enforcement officials monitor gaming operations for compliance with current regulations. As shown in the Figure 3-2 below, NIGC staff levels are expected to be nearly double the number during the 2002-2004 time period.

Figure 3-2: Past and Projected NIGC Staffing



More Attention to Class II Due to Court Decision

In the 2006 *Colorado River Indian Tribes [CRIT] v. NIGC* decision, a court held that Congress did not give the NIGC the authority to promulgate MICS for Class III gaming.⁴⁸ In some manner, this reduction in the NIGC's regulatory scope allows the agency's resources to be more concentrated on Class II operations.

⁴⁷ Ibid. pg. 13.

⁴⁸ 383 F Supp: 2d 123 (D. DC 2005)

Projected Class II Machine Compliance Rate with Increased Enforcement

As discussed in the previous section, generating compliance under the current regulations and procedures is a fact-based, resource-intensive, and lengthy process. It does appear that NIGC has greater resources to engage in these enforcement activities than in the past. Moreover, since the Commission can now set its own fee rate and control its budget to a large measure, the Commission can sustain increased efforts. Therefore, in the absence of regulation, we expect the non-compliance rate to be lower than the current estimated rate of 50 percent, but not to be zero.

Any quantitative estimate is speculative since it is a statement about the future. In our judgment, a reasonable estimate for the long-term non-compliance rate is 25 percent, or half of the current rate. We derive this estimate from the increased concentration of oversight on Class II machines. Compared to recent years, the NIGC will bring twice as many staff backed by a doubled budget to oversee a Class II market half the current size. The NIGC's resource intensity may bring the rate even lower; however, the financial incentives, the cumbersome process to shut down non-compliant machines, and the uncertainty over judicial backing of NIGC's opinions will dilute the effectiveness of these resources.

Summary of Entities Affected under the Greater Enforcement Baseline

Table 3-7 lists the entities which will have compliance costs with the proposed regulation, assuming NIGC increases enforcement and compliance oversight.

Table 3-7: Summary of Affected Entities in Greater Enforcement Scenario

Provision	Number of Entities in 2006	Number of Entities in 2017
MICS	161	161
Tribal Regulatory Staff	900	900
Gaming Systems	25	25
Class II Machines	50,950	2,500 - 10,000

Chapter 4: Social Costs

A change in the regulations that changes the types of gaming machines that are available, the gaming experience, or the revenue potential of gaming, imposes new costs on a variety of stakeholders. Casinos and tribes lose potential revenues; consumers lose entertainment value; game manufacturers potentially lose revenue; and, providers of ancillary services (hotel, food service, etc.) lose revenue. In addition, although it is not a separate and independent cost traditionally considered in benefit-cost analysis, a reduction in gaming activity could result in fewer opportunities for employment (for both tribal and non-tribal individuals).

Social Costs for MICS and Technical Standards

As discussed in Chapter 2, the various sections of the proposed rule would impose costs on different stakeholders in different ways. Promulgation of the MICS would impose costs primarily on tribal regulators and gaming operators. The proposed rule would require that tribal regulatory authorities revise their existing regulations to incorporate the new control standards for paper bingo and electronic bingo and similar games. The resources expended by the tribes in revising their rules are social costs of the rule.

In addition to the costs to tribal regulators, gaming facility operators also face additional costs as a result of the rule. Gaming operators must devote resources to update their own systems to ensure compliance with the revised regulations. Gaming operators must also ensure that their employees are properly trained to implement the revised control systems; such training involves a real expenditure of resources. Lastly, gaming operators may need to devote additional resources to the actual implementation of the revised MICS. The revised MICS require additional CPA effort and may require dedicating new staff to perform the required tasks.

To comply with the technical certification requirements, manufacturers must submit Class II gaming machines for testing and certification before they can be used in a Class II facility. This requirement applies to titles and systems, rather than individual machines. The resources associated with conducting and documenting the results of such tests are social costs attributable to the rule. It does not matter for purposes of the analysis whether these costs are borne by manufacturers or passed on to the tribes; the costs still represent real expenditures of society's resources.

In addition, if major changes in machines were required to meet the certification standards, the rule would also result in additional social costs through increases in development costs. Since game manufacturers are already familiar with the types of requirements contained in the technical standards due to their operation in other markets, we do not assign an increase in development costs to this rule. Since we also have no reason to believe that certifiable machines will be inherently more expensive than machines already on the market, we have not included a cost to account for increased manufacturing costs.

Social Costs for the Classification Standards: Changes in Consumer Demand

The social costs associated with a change in the classification standard for Class II games are less intuitive. While the rule requires some additional resources to be expended to convert games from non-compliant to compliant games, the primary measure of social cost is the shift in social resources spent on Class II gaming. This shift is determined by consumers and how they react to the regulations. If the regulations reduce consumer demand, supplies of Class II gaming will decrease also. Measuring how consumers react to the change in the gaming experience is the starting point for tracking shifting resources.⁴⁹

Example of Private Costs vs Social Costs

An example can help illustrate why tracking consumer demand is essential to measuring the social cost of a regulation accurately. Suppose a regulation requires certain shoe manufacturers to spend \$5 per pair to change their shoe design and also reduces the attractiveness of the shoes to consumers. Before the regulation, consumers were willing to pay six dollars per pair and bought 100 pairs of shoes; after the regulation consumers only were willing to buy ten of the regulated pairs at the new price of \$11 dollars. The social costs of the regulation are not the additional manufacturing cost of \$500 to produce the same 100 pairs of unwanted shoes. Rather the estimate starts with the reduced consumer demand of the regulated shoes - i.e., ten pairs. The social costs include the additional manufacturing cost required by the regulation to meet the reduced demand - \$50 (10 x \$5) - for a total of \$50. The other 90 consumers still have choices besides unattractive shoes or walking barefoot. These consumers turn to a substitute, their second most favorite type of shoe. If their second favorite style of shoe costs seven dollars a pair, then the 90 consumers pay \$630 after the regulation instead of \$540 before the regulation. So, after the regulation, consumers meet their demand (i.e., they have shoes) for a total cost of \$740 (\$110 + \$630). Thus the social costs are equal to \$190, the additional resources spent by consumers (\$140 + \$50). Manufacturers of the regulated shoe have a real resource cost of \$50, but suffer a much greater loss as revenue (\$490) from their sales shift to another shoe manufacturer. However, these losses are not social costs since the revenue loss by one manufacturer is largely offset by revenue gains by other manufacturers.

Measuring Consumer Demand: Pre-Regulation Demand

The example shows that it can be an overestimate to assume that a regulation's cost is the incremental compliance cost multiplied by the pre-regulatory demand. By ignoring how a regulation changes consumer demand, an analysis can substantially overstate estimated compliance costs. The primary change of the regulation for the player is the increased length of the game. However, slowing of a game may make the game alternatively both more attractive to some players and less attractive to others. There are a number of adaptive behaviors available to both players and operators to mitigate the effects of a slowing of game play.

Measuring Consumer Demand: Change in Game Duration

Another approach to estimate changes in consumer demand is to link consumer demand to the increased length of the game. First, players get some pleasure out of playing the game itself and seek to maximize the amount of time they spend playing with a given bankroll. If this were not the case, players would be indifferent between going to a casino and

playing a single game for \$100 and losing \$100 over the course of a number of hours playing a series of \$1 games. Actually, given the value of their time, we would expect the single bet to be more attractive. In fact the opposite is true. Payouts are proportionally lower on lower denomination

⁴⁹ See for example, OMB, *Circular A-4 Regulatory Analysis*, September 2003.

machines and per machine; revenues do not increase proportionally to bet size (i.e., revenue from dollar machines do not earn four times as much as the revenue from quarter machines on a per machine basis).⁵⁰ Based on this consumer behavior, we would expect to see a slowing of play to result in a greater willingness to play. The question is whether the increase in demand is sufficient to offset the reduction in the number of games playable over a given time period due to the regulation's slowing of play.

Second, there are a number of adaptive behavior changes available to both player and operator that would mitigate any effect from a slowing of game play. For example, a player can increase bet size, play more cards/machines simultaneously, play for a longer period, or any combination of such changes. This behavior modification will allow the player to risk (and presumably lose) the same amount of money with a slower machine. The combined effect of these behavioral changes compensate to some degree for the slowing of game play.

To understand these opposing possibilities, consider two scenarios. If consumers stop playing Class II games because they run out of time, then the effect of the regulation to slow down games will decrease their satisfaction and the revenue of operators. In this scenario, consumers on a bus trip to a casino have only a limited amount of time or must wait to use a limited number of machines. If they must leave before they are satisfied, then slowing down the pace of the games may decrease revenue.

If, on the other hand, consumers stop playing Class II games because they reach their internal limit of losses (or gains), slowing down the pace of the games through the rule will not change gaming revenue. On the same bus trip, players may reach their limit at 1 pm instead of noon. If their bus doesn't leave until 4 pm, consumers and the casino have still exchanged the same amount of money as prior to the rule.⁵¹

As a result, physical throughput of the gaming machine (dollar-in/dollar-out) is, at best, an imperfect measure of the consumer demand to potential changes in the gaming experience. Using reduced physical throughput as a proxy for net gaming revenue loss or other costs measures also assumes that all machines are running at full capacity at maximum bet amount, and that the only variable that affects revenue is the speed of the game (rather than bet size, budget of players, etc.). Clearly, assuming games are fully used is too strong of an assumption and will overstate social costs.

Measuring Consumer Demand: Net Gaming Revenue After Shift from Class III to Class II

We use net gaming revenue as a way to measure how consumer demand changes. The difference between the amount wagered and the prizes paid is the net gaming revenue. It is a measure of the amount players are willing to pay for the gaming experience.⁵² Actually, net revenue understates the

⁵⁰ See for example, <http://www.revenue.state.co.us/Gaming/documents/FY08.xls>

⁵¹ The gaming operator may lose other ancillary revenue from food, beverages, or other sales since the consumer has one less hour of non-gaming time.

⁵² Another characteristic that is peculiar to the gaming market is the degree to which price discrimination is possible. Unlike goods where there is a market clearing price that results in surplus to producer and consumer (except for the marginal purchase), gaming allows consumers to

total value to the consumer of gaming since it does not include the value of their time and their costs to travel to the casino.⁵³ However, if we assume that this regulation does not change any of these consumers' costs changes, net gaming revenue is a good estimate of the incremental change in consumer demand before and after the regulation.

Using net gaming revenue we look for actual market experiences to observe how consumer demand shifted as a non-compliant machine was replaced with a compliant machine. By observing the change in net gaming revenue at the same gaming facility with roughly the same consumers, who have the same choices of substitute forms of entertainment, we isolate the consumer response to the regulation as much as possible.

The net gaming revenue reduction approach also overstates social costs. Consumers weigh the incremental change as part of the total value they enjoy from Class gaming and against the total value of substitutes (e.g., Class III experiences or other travel/entertainment options). The resources consumers shift from Class II gaming becomes gains for other entertainment suppliers.

Costs of Minimum Internal Control Standards

Based on this framework, we estimate the increased social resources necessary to comply with the rule. The MICS reflect industry-best practices intended to reduce the possibility of theft or fraud from gaming facilities. Estimating costs for this section is somewhat difficult since different facilities currently have a variety of internal control procedures. In addition, many of the specific provisions of the proposed revisions to the MICS are being repromulgated from other parts of the existing MICS. Other provisions are clarifications of requirements that already exist in §542.7 or elsewhere in Part 542. Therefore, the incremental costs may be relatively small. This analysis focuses on those requirements that are new to the MICS for Class II facilities and those that require action on the part of tribal regulators or operators.

Promulgation of Tribal Rules

The MICS create a requirement that tribal authorities promulgate new MICS rules. Using the rulemaking costs for a small rule and a non-controversial procedural amendment in the State of Minnesota as a proxy, the promulgation of new tribal rules to comply with Part 543.3 may range from \$7,754 - \$30,320 per tribe.⁵⁴ There are eight gaming tribes (operating eleven gaming facilities) with only Class II gaming and 64 others who can or currently operate Class II gaming devices (but are also compacted) for a total of 72 tribes. We assume all of the tribes will have to promulgate a rule to change at least one aspect of their internal controls. This MICS requirement creates a one-time burden

continue to spend all the way to their personal point of indifference. This feature allows each player to effectively set her own market clearing price. The producer therefore is able to capture more of the consumer's demand as revenue.

⁵³ The total consumer cost of the experience includes a number of items that are not included in the price of the game. For example, the price does not include the opportunity cost of the players' time, the costs incurred in traveling to the gaming facility, and any ancillary costs such as food and lodging associated with visiting the facility.

⁵⁴ Minnesota Rulemaking Manual: A Reference Book For The Practitioner Issued: September 18, 2007 pages: 201-203

of between \$500,000 and \$2 million. Annualized over ten years at a seven percent interest rate, the social costs are between \$70,000 and \$285,000 per year.⁵⁵

Increased Cost of Contracting Certified Public Accountants

The MICS also require that the gaming facilities hire an independent CPA to audit compliance. However, since gaming facilities are already required to hire CPAs for the current internal controls by Part 542, the marginal increase in burden is the additional checklist which the CPAs are required to certify as a result of these provisions. Audits of Indian gaming facilities tend to be performed by a fairly small group of CPAs. In discussions with some of these auditors, the Commission's financial compliance staff determined that the additional audit requirements imposed by the revisions to the MICS could add \$15,000 per year to the cost of audit services. The maximum number of affected facilities is the 161 gaming facilities that can offer Class II games, including eleven facilities that offer only Class II games. If all 161 gaming facilities were required to comply with this portion of the Class II MICS, we estimate an incremental compliance cost of \$2.5 million per year for this requirement. However, since not all 150 facilities offer Class II games and, since we expect the number offering Class II games to fall over time, this estimate overstates the likely compliance costs.

Retraining Enforcement Officials and Operation Personnel

Once the revised MICS are adopted as tribal law, tribal enforcement officials must be trained in their implementation. There are roughly 2,800 tribal gaming regulators associated with tribes operating gaming within the borders of the United States.⁵⁶ However, tribal regulators will only require training if their tribe operates Class II games. There are 225 tribes that are involved in gaming. Of these 72 are, or have been, involved with Class II gaming. If we assume that regulators are distributed roughly evenly across these tribes, then roughly 900 of these regulators would be associated with tribes that could be affected by the revised MICS. If all of these regulators received additional training on the new MICS requirements (keeping in mind there is no need for such training for tribes in states where no Class II gaming is taking place) at a cost of \$100 per person - to account for materials and the time of the regulator, such training would add \$90,000 to the first year cost of the proposed rule.

Employees of Class II gaming facilities (or Class II portions of Class III facilities) would also require training on the new procedures. There are approximately 178,000 Indian gaming employees nationwide.⁵⁷ However, most of these employees are working in Class III facilities not affected by the revised MICS. Class II gaming revenue earned \$3.6 billion in 2006. The February 2008 report estimated that Class II tribal gaming operations would employ one worker for every approximately \$98,000 in revenue.⁵⁸ If we apply this ratio of revenue to the number of employees, we calculate an estimated 37,000 people employed in Class II facilities.

⁵⁵ All future benefits and costs are annualized at a real discount rate of seven percent, corresponding to OMB's recommended social discount rate.

⁵⁶ <http://www.gaminglawmasters.com/layman/regulated.html>

⁵⁷ *The Economic Impact of Indian Gaming in 2006*. The National Indian Gaming Association. Retrieved from http://www.indiangaming.org/info/pr/press-releases-2007/NIGA_econ_impact_2006.pdf

⁵⁸ Meister, A. *The Potential Economic Impact of the May 2006 Proposed Class II Gaming Regulations*, Analysis Group, February 1, 2008.

If we again assume a training cost of \$100 per employee, we calculate a training cost of \$3.7 million in the first year. There would also be costs associated with the training of new employees. We conservatively assume that gaming facilities will bear an additional annual cost of \$1.6 million in the future to train new workers and provide refresher training to existing employees; the annualized cost is equal to \$1.9 million.

Security

Section 543.7 lists all of the new procedures necessary for the MICS. Some of these requirements are clarification of authorities already in parts of 542. Others may be similar to or consistent with standards already applicable through tribal regulation. While many of them have the potential to impose additional costs, we do not have sufficient information to develop a reasonable approximation of the total marginal effect of these changes. In addition, these provisions represent industry best practice. There is no guarantee that they will prevent all fraud, theft, or error (in fact, we are certain that they will not). As a result, we discuss the MICS more fully with respect to their potential benefits and leave it to the reader to determine whether the costs of these provisions are likely to greatly exceed the benefits.

Caveats

The MICS are based on best industry practice. Some tribes may currently use everything in the MICS; all tribes may be doing some of what is in the MICS. For those areas where the MICS merely codify existing practice, the regulations will have neither marginal costs nor benefits.

Total Cost of Revised MICS

The quantified costs of the proposed revisions to the MICS are estimated as an annualized cost over ten years (using a discount rate of seven percent) of \$4.7 million.

Costs of Technical Standards

The technical standards potentially impose two sets of costs. The first is any actual changes that will be required to certify to the standards themselves. For example, if a game is being run on a machine that does not have a door open sensor, the cost of installing such a sensor would be attributable to the rule. We do not have sufficient information on the physical properties of games currently in operation to definitively describe the baseline. However, with the exception of bingo specific requirements that reference Part 546, most of these requirements mirror either the existing MICS for machines or requirements in other gaming jurisdictions. Therefore, we assume that the technologies necessary to meet the minimum standards are readily available and will be applied to existing machines to varying degrees. As is the case with conversion costs, discussed elsewhere in this chapter, the cost of meeting the technical standards can never exceed the full cost of replacing the machine with a compliant system.

The second set of costs is the transaction costs associated with obtaining a certification to the technical standards. These costs are estimated based on the information provided in the Information Collection Request (ICR) accompanying the proposed rule.

Cost of Modifying Machines

As mentioned above, we do not have reliable information on the baseline level of compliance with the substantive requirements of the minimum technical standards. However, the substantive requirements fall into three broad categories: Physical requirements; Software requirements, and; Accounting requirements. We assume that software and accounting requirements will be addressed through the frequent and routine updates required as part of normal operations during the grandfathering period. However, we assume that physical requirements, including structural security, money handling, and other requirements that could require physical modification of a machine could take longer to implement through normal turnover and maintenance.

There is always some level of turnover and upgrade of existing physical stock. Operators upgrade their systems to better compete in the marketplace. Leases of equipment expire and are renegotiated. Machines break and are repaired or replaced. All of these events offer the opportunity to upgrade system components to comply with the technical standards. As a result, it is not appropriate to attribute the entire cost of upgrading these systems to the rule, since these changes would eventually occur anyway. The appropriate measure of social cost is the loss in value associated with the acceleration of these modifications relative to the baseline. However, in the interest of both simplicity and conservatism, we attribute the entire cost of modification of systems in year five to the rule.

For purposes of this analysis, we assume that 50 percent of the machines covered by the rule at the end of the grandfathering period would have become compliant with the technical standards through replacement or upgrade during the grandfathering period. This estimate likely understates the true level of compliance since the numbers of machines are dominated by a few operations and tribes and states with very active markets. Those markets are likely to have newer equipment and replace it more frequently. Older machines that may require more modification to come into compliance are likely to be concentrated in smaller markets with less competition driving change. In addition, the rule is specifically written to facilitate marginal change moving toward compliance by allowing modifications and maintenance to systems and machines without triggering a violation of the grandfather period. To the extent that the true level of compliance is understated, our estimated costs of the rule will be overstated.

It is important to note that the baseline compliance assumption here is slightly different from the assumption used in estimating the effects of the classification standard. For purposes of the classification standard, it is assumed that all systems are compliant at the end of the grandfathering period. This is because the changes necessary to comply with the classification standard tend to be software changes that occur more frequently than changes in hardware.

We assume that the remaining machines (approximately 12,000) will require some degree of modification in year five to meet all of the technical requirements. We assume that 6,000 of these machines will be nearly compliant, but will require minor modification to be 100 percent compliant. This assumption reflects the fact that the hardware associated with many of the minimum technology standards has become available over time and machines may already have some, but not all of the required hardware installed. For example, such a machine may meet all of the other standards, but require an installation of a door sensor, an upgrade of the money handling hardware, or sealing of the motherboard. For these systems we assume costs of \$500 per machine including parts and labor to make required modifications.

We assume that 2,500 of the machines represent antiquated systems that are simply incompatible with full compliance with the technical standards. We are not certain that such systems exist, but at some point it becomes cheaper to replace a system than to upgrade. We assume a cost of \$6,000 per machine for a full replacement (see discussion of the classification costs for a full description of this estimate). This amount represents the cost of a player interface as well as potential replacement of some or all of the gaming system itself.

The remaining 3,500 machines are assumed to fall somewhere in the middle of these two extremes. Such machines may require multiple upgrades to become compliant, but not so many as to justify full replacement of the system. For these systems we assume a cost of \$2,500 per machine.

The total cost of upgrading and replacing systems to comply with the technical standards, therefore, is \$25.5 million. All of these costs occur in the fifth year after the effective date of the rule. The annualized cost at a discount rate of seven percent is roughly \$2.6 million.

Contracting with a Laboratory to Conduct Certification Testing

The technical standards will be implemented in two phases. In the first phase, the 25 existing systems will be submitted to independent laboratories for review and certification. Systems that comply with the technical standards will be certified compliant. Systems that do not meet all of the standards will receive a report certifying that the system was submitted. Under the rule, the system can then be operated for five years after the effective date of the rule before changes must be made to bring the system and its components up to the technical standards. This initial submission will take place in the 120 days following the effective date of the rule.⁵⁹

The second phase will involve the testing of new machines and systems that manufacturers wish to place in Class II facilities (including those designed to replace non-compliant systems in operation during the grandfathering period). The cost estimate of this second phase is based on the historical rate of introduction of new games of five per year.

Table 4-1: Cost of Certification to Part 547 Standards

Provision	Respondents	Hours Per Collection, 1 st 120 days	Total Hours	Total Cost	Hours Per Collection, Day 121 Forward, Per Annum	Total Annual Hours	Annual Cost
25 C.F.R. 547.4	Laboratories	10	250	\$25,000	5	1500	\$150,000
25 C.F.R. 547.4	Manufacturers	8	200	\$8,000	4	1200	\$48,000
25 C.F.R. 547.4	Tribal gaming regulatory authorities	0.5	12.5	\$500	0.1	30	\$1,200

⁵⁹ National Indian Gaming Commission, *Supporting Statement for Information Collection Request 3141-0009, Minimum Internal Control Standards*, October 17, 1998.

Costs to Independent Labs

Laboratories perform certification testing for gaming machines used in non-tribal and Class III jurisdictions. The ICR estimated that five laboratories will be responsible for writing reports analyzing the 25 grandfathering submissions. Each such analysis and report is estimated to take between five and ten hours on average. The average hourly charge for performing these services is \$100.00.

Proposed 25 C.F.R. §547.4(f) requires a determination of suitability for each testing laboratory. This determination can include financial information, qualification of engineering staff, information and/or inspections of their facilities, and personal information from principals. Tribal facilities typically use only one gaming laboratory. Since existing laboratories are already licensed in numerous jurisdictions, the ICR estimates that 90 percent or 203 tribes would accept suitability determinations from other jurisdictions. Thus the submission by a testing laboratory of an existing suitability determination amounts to writing a letter. For the remaining ten percent of the tribes (23), the labs will need to spend 20 hours preparing this information. In total this represents a burden of 561.5 hours and a cost of \$25,000 per year.

Costs to Manufacturers

The 25 games currently in operation are produced by 20 manufacturers. The manufactures are responsible for preparing, reviewing, and submitting documentation and descriptions of their games and aids to the laboratories. The ICR estimates a cost of \$8,000 for each of these initial reports.

The ICR estimates that subsequent reports will take less time (four hours rather than eight) for manufacturers to prepare. Such a reduction is consistent with increased familiarity with the system as well as the fact that such documentation can be developed as part of system design. In addition, future submissions are likely to be smaller in scope, representing components of systems as well as entire systems.

The commission estimated 300 submissions, covering new systems and modifications would be submitted each year (after the first 120 days). Using the same \$40.00 per hour of technical expert time used in the estimate of preparing the initial reports, results in an annual estimated cost of \$48,000 for manufacturers.

Costs to Regulators

Tribal gaming regulatory authorities will be responsible for issuing grandfathering certificates and gaming system descriptions. This function has a total estimated cost of \$500 (25 certificates x 0.5 hrs x \$40.00). After the first 120 days of the adoption of the rule, the total cost is estimated at \$1,200 (30 hours at a rate of \$40.00) per year.

Cost of Preparing and Processing Variance Requests

Proposed 25 C.F.R. §547.14 allows gaming operations to apply for a variance from these standards. The annual cost of compliance to gaming operators for making variance requests is \$1,200 to \$9,600.

This range assumes four variances per year, and the difference depends on the complexity of the variance requests. The total costs of certifying to Part 547 standards, therefore, are expected to be approximately \$250,000 in the first year leveling off to \$200,000 per year in future years. This cost does not account for the fact that manufacturers selling into non-tribal markets may already be required to submit machines for certification pursuant to other regulatory authorities (e.g., Nevada does have technical standards for electronic bingo equipment).

Administrative Cost to NIGC

The NIGC will create a new Machine Compliance Department that will be responsible for day-to-day work in implementing the rule, including the information collections for the agency that result. The proposed budget for the new department is as follows:

Table 4-2: Budget Estimate for Machine Compliance Department

	Position	Budget
It is anticipated that the Machine Compliance Department will maintain the information provided under proposed 25 C.F.R. § 547.4 and the marginal cost for doing so is nominal. Therefore, the total cost of implementing the requirements of Part 547, including certification, testing documentation and NIGC oversight is estimated at approximately \$500,000 per year.	Supervisor	\$102,000
	Specialist	\$74,000
	Travel	\$65,000
	Rent, Communications & Utilities	\$55,000
	Printing & Reproduction	\$3,000
	Supplies, Materials & Equipment	\$15,000
	Other Services	\$0
	Misc.	\$0
	Total	\$314,000

The total cost of all of the provisions of Part 547 is, therefore, estimated at \$3.1 million per year.

Costs of Definitions and Classification Standards

Alternatives Considered and Categories of Costs

Unlike the MICS and the technical standards, for which the only alternative we examined was the proposed option relative to a baseline of not adopting new standards, we evaluate three separate alternative scenarios in estimating the costs of changes to the classification standards. We evaluate the revised proposal, a version of the revised proposal without the grandfathering provision, and a baseline that includes increased enforcement of the existing regulation. These three alternatives are discussed in more detail in Chapter 3.

Replacement and Reprogramming Costs

In the event that tribes are operating non-compliant machines, the tribe is faced with a variety of alternatives, each with different costs:

1. Replace or reprogram Class II machines with compliant alternatives over time during the five-year grandfathering period;
2. Operate existing non-compliant Class II machines, without modification, as Class III machines under an existing, new, or renegotiated compact;
3. Replace Class II machines with Class III machines pursuant to a new or renegotiated compact; or,
4. Cease operations.

The February analysis assumes that 100 percent of facilities must replace their machines with compliant machines. It further assumes that replacement involves either complete replacement of an entire system or extensive software reprogramming to achieve compliance. As discussed earlier, the analysis combines these costs along with an estimate of lower gaming revenue.

This approach provides a worst-case estimate of the potential costs to tribal gaming operators. However, as a measure of the social costs of the proposed rule, this estimate of private costs to game operators overstates social costs because of the ability for consumers to adapt their behavior in response to a change in game play.

We adopt different assumptions to simulate how rational operators would behave to find the lowest cost of compliance.

First, it is an overstatement to assume that all gaming operators are currently operating fully non-compliant systems that could require substantial upgrades. The standards established in the rule are consistent with Commission in its current enforcement, inspection, and opinions. Machines determined by the courts and the NIGC Office of General Council to be Class II machines are installed and operating at gaming facilities. As discussed in Chapter 3, it may be that 50 percent of the machines in operation at Class II facilities are already essentially compliant with the proposed requirements.⁶⁰ We use a 50 percent rate of compliance in the baseline in calculating our estimate of the incremental costs and benefits for the proposed standards. We also conduct sensitivity runs at baseline rates of compliance of 80 percent and 20 percent.

Second, there are actions short of complete replacement that would allow a game to be converted into a compliant game. An electronic aid to bingo consists of roughly six main components, a cabinet, a user interface (buttons or touch screen), a display (may be same as user interface), a computer (for graphics processing and communication), a central system (to process the conduct of the game), and the game software. There is no reason the cabinet would require wholesale replacement as a result

⁶⁰ We recognize that it is unlikely that a machine will meet all of the provisions of the proposed rule, especially the labeling requirement that a machine is a game of bingo. However, the changes necessary to bring some machines into compliance are nominal compared to a fundamental redesign of software programming.

of the rule. User interfaces and displays would only be required to be replaced if, for some reason, there was no game software that could be made compatible with these components. It is possible that the internal computer would need to be replaced with one that runs a compliant game. However, these upgrades may already be scheduled as part of the normal operation. Future systems are also more likely to be fully networked where the computer at the player terminal merely receives and sends information to and from the central computer.⁶¹ In a networked system, most changes can take place at the central computer with little need to even send technicians into a gaming facility. The software and some property of the central computer will need to be changed in order to come into compliance in these instances.

Third, the fact that there is a baseline rate of compliance strongly suggests that there are already systems in the market that essentially comply with the proposed requirements as well. In fact, the Commission's Office of General Council has issued seven decisions since 2002 affirming systems as Class II games, including both new and modified systems. As a result, there would be no need to develop a new Class II system to replace those that are non-compliant; a gaming operator can purchase a system off-the-shelf. Because these systems are available, the cost of replacing a non-compliant system cannot exceed the cost of producing (i.e., the price) a compliant, off-the-shelf Class II gaming system.

This insight is important to evaluate how a rational gaming operator will minimize compliance costs. Operators will first ask their current manufacturer to modify their existing gaming equipment to come into compliance with the standards. In the best case this modification will involve changing the software on the central server to an already existing compliant alternative. If the operator's game manufacturer charges too high a price for this change (reflecting the need for more extensive upgrades to terminals, cabinets, software, etc.), the operator will simply switch to an off-the-shelf compliant alternative. In other words, the maximum price an operator would be willing to pay for conversion of an existing system is the price of a brand-new compliant game system. This rule would not require the ground-up redesign of a new system or very costly modifications to every game in the Class II market now.

To validate this understanding of gaming systems, we used a real case of machine conversion as the basis for our estimate of the replacement and reprogramming cost. In 2002 the Commission challenged the Class II status of one of Multimedia Games, Inc.'s (MGMA) bingo games, MegaNanza. Multimedia also had a compliant alternative system called Reel Time. As part of its agreed upon remedy with the Commission, the company replaced all of its MegaNanza machines with Reel Time Bingo machines.⁶² This process involved sending technicians into the field to make conversions to the game and replace some glass and other components as necessary to change the game.

Before undertaking the modification, one of the financial officers provided a worst-case estimate of the cost of conversion to investors. He estimated that the cost to convert 4,000 machines and the relevant servers, software, and glass could cost the company three million dollars. This cost is equivalent to an average of \$750 per installed terminal.⁶³

There are a number of factors that could affect the reasonableness of this number as an estimate of conversion cost for all Class II machines. First, MGAM had a readily available alternative that was

⁶¹ See for example, <https://www.igt.com/Content/base.asp?pid=8.17.36.15&bhcp=1>

⁶² Multimedia Games Inc, 10-K filing with the Securities and Exchange Commission, December 12, 2004, pg. 26.

⁶³ Conference call for investors see <http://www.multimedialogames.com/Investors/ConfCalls/StatusUpdateJune2002.htm>

compatible with its current equipment. The reprogramming costs could be lower than for a manufacturer without a compliant alternative. Second, the company's representative had an incentive to report an overestimate of the actual costs so as to provide the company with some margin of error or a good news story for the next investor call. Third, the system was server-based, which would have allowed some portion of the upgrades to be made from a central location (even though the company apparently chose not to take advantage of this option).⁶⁴ Nevertheless, we use this number as a reasonable estimate of a lower-bound cost of conversion of non-compliant machines to compliant machines.

As an upper-bound, we use the cost of producing a new Reel Time Bingo machine. This machine is available and has been determined to be compliant. The cost of producing such a machine was \$5,000 in 2003.⁶⁵ Inflating this to current dollars we get an upper bound replacement cost of about \$5,400. We increase the estimate to \$6,000 to account for other potential costs, such as training for tribal facility operators. Other alternatives may cost slightly more or less. If an operator chooses a more expensive alternative, the additional cost is a business decision, not a consequence of the rule. If alternatives cost less, we have overstated our upper bound estimate by using this single system.

Effect of Grandfathering Provision

The February analysis made the assertion that the grandfathering provision of the rule did not reduce costs to the tribes, merely delay them.⁶⁶ While this claim is the case for any net gaming revenue losses, routine replacement of machines with compliant alternatives as part of the natural capital replacement cycle does reduce any costs associated with the premature replacement of capital. In its proposal, the Commission estimated that systems have a five year useful life. Some commenters suggested that this five year estimate is too short for Class II systems.⁶⁷ However the commenter did note that this estimate is reasonable for the software component of games. Other than the glass, we cannot identify a provision in 546 that would require replacement of the hardware component of games. Since the classification standards can be met with mostly software changes, the grandfathering provisions should obviate most, if not all, costs associated with reprogramming or replacement.⁶⁸

Companies are upgrading the game software on shorter cycles than five years to take advantage of the lower costs, increased reliability, and increased flexibility offered by advances in electronics, computers, and networked information systems. In the recent five year period, for example, companies have introduced several new operating systems for their machines. These upgrades provide a low-cost means to incorporate the regulatory changes. In addition to lower their operating costs, competitive forces provide another incentive to upgrade systems frequently. Hardware and software upgrades can introduce new titles, more graphics, and create side bet opportunities. These changes

⁶⁴ <http://www.multimediasgames.com/investors/RothCapitalPartnersGrowthStockConf031803.htm>

⁶⁵ Ibid.

⁶⁶ Meister, A. *The Potential Economic Impact of the May 2006 Proposed Class II Gaming Regulations*, Analysis Group, February 1, 2008, pg. 15.

⁶⁷ NIGC-2007-0010-0038, NIGC-2007-0010-0041, NIGC-2007-0010-0046 (Kickapoo Traditional Tribe of TX, Absentee Shawnee Tribe of OK, Comanche Nation) "The NIGC assumes a 20 percent turnover rate in games per year and a useful life of 2 to 5 years. While this might not be unreasonable for the software component of the game, it vastly underestimates the useful life and turnover rate of the hardware. Because both rules impose a fundamentally new set of standards that will take effect all at once, they will likely lead to significantly higher number of games and gaming systems being turned over all at once and thereby impose a much more significant burden than has been estimated by the NIGC." Retrieved from <http://www.regulations.gov/fdmspublic/component/main?main=DocketDetail&d=NIGC-2007-0010>

⁶⁸ Provisions of Part 547, such as tamper proof cash boxes, could require hardware changes, but the provisions of 547 are considered elsewhere.

can reduce the perceived differences between Class II and Class III games and can encourage more Class II customers to patronize a certain facility.

With these competitive forces in mind, it is useful to envision the characteristics of a gaming operation that would not benefit from the grandfathering provision. First, this facility would have to own its gaming equipment and thus not have an opportunity to have them replaced during the five-year period. Second, the equipment is durable and does not reach the end of its natural life during the five year period. It is possible that well-maintained electronics could persist for long periods of time. It is more likely that some equipment will have to be replaced during the five year period. Third, the gaming facility would not have much Class II or Class III competition in its market area. Like other monopolies, it would tend to under-invest in capital since it did not have the same incentive to stay competitive. Examining the distribution of Class II gaming nationally, these conditions are more likely to exist in places with relatively few Class II machines (e.g., Alaska) rather than in places with relatively more competition (e.g., Oklahoma). However, we do not have specific information that these conditions exist.

Without the grandfathering clause, the situation is quite different. Non-compliant machines would need to be converted in the first year. The MegaNanza to Reel Time transition demonstrates that it is possible to transition a large number of machines to a compliant alternative over the course of a single year. However, it does not give us an indication that the industry is capable of transitioning 50 percent or more of its machines in a similar time period.

To calculate conversion costs in the absence of the grandfathering clause we rely on our estimate of installed Class II games in 2009. We estimate that there will be just over 28,000 Class II machines operating in 2009 including those still in place in Oklahoma and Florida awaiting conversion to Class III. We assume that 50 percent of these machines are non-compliant, meaning 14,000 would need to be replaced. As discussed above, the costs of such a conversion range from \$750 to \$6,000 per machine.

However, we cannot attribute all of the costs of conversion in Florida or Oklahoma to the rule, since some machines in those states are already being replaced with Class III alternatives. The social costs of the rule are not the full conversion costs, but the time-value of capital that now is spent in 2009 as opposed to a few years later. On the other hand, the rule would require acceleration of the replacement and that does increase costs. To account for these countervailing effects, we make the simplifying assumption that all Oklahoma and Florida conversions can be accomplished at our lower bound cost estimate. Machines outside of Florida and Oklahoma could fall anywhere in the range between \$750 and \$5,400 per machine.

Under these assumptions, the cost of conversion without the grandfathering provision range from \$10.5 million to \$40 million. All of these costs are incurred in 2009. The annualized costs over ten years at seven percent range from \$1.5 to \$5.3 million. Table 4-3 shows the difference in reprogramming costs with and without the grandfathering period.

**Table 4-3: Annualized Cost of Replacement and Reprogramming Costs
Assuming 50 Percent Compliance Rate
(in \$ millions)**

	Lower Bound	Upper Bound
Revised Proposal with Current Market Conditions	Minimal	Minimal
Revised Proposal Without Grandfathering Provision and Current Market Conditions	1.5	5.3
Baseline with the Greatest Enforcement Scenario	0.3	2.8

These numbers are based on the assumption of a current 50 percent rate of compliance. If, we assume a greater or lesser degree of compliance in the baseline, it has a significant effect on the estimated costs of the rule in the absence of the grandfathering provision. If we assume that only 20 percent of current systems could comply with the new standards, the conversion costs in 2009 increase to between \$17 million and \$65 million. If, on the other hand, we assume a greater level of compliance in the baseline, say 80 percent, the costs fall to between \$4 million and \$16 million.

If NIGC does not proceed with a regulation to change the classification standards, tribes will also face conversion costs as enforcement actions lead to forced conversion to compliant machines. To estimate the cost of such conversions, we make the following assumptions:

- NIGC (and DOJ) will successfully reduce the level of non-compliance from 50 percent to 25 percent over a period of 10 years.
- Such improvement will occur evenly over time (e.g., five percent improvement per year).
- Enforcement will focus on states other than Florida and the 75 percent of machines in Oklahoma where Class III conversion there is already underway.

Under this set of assumptions, the annualized cost of conversion ranges from \$350,000 to \$2.8 million.

Direct Gaming Revenue Losses

As stated previously, the incremental social cost of the regulation change is reflected in the reduction in net gaming revenue from a switch to a Class III to Class II machine. Ideally, we would be able to observe this change in the same facility over a relatively short time to avoid confounding variables such as changes in economic conditions, the demographics of consumers, and in the relative availability of substitutes. By examining the change in consumer demand for the new game relative to its predecessor, we would be able to estimate the reduced value consumers place on Class II gaming.

Fortunately, this experiment occurred in 2002 and 2003. In 2002 the NIGC Office of General Counsel challenged the classification of one of Multimedia Games Incorporated's games. Multimedia entered into a settlement agreement with the Commission under which it replaced its non-Class II machines -

MegaNanza - with a compliant alternative - Reel Time. The Commission has issued several opinions that Reel Time is a Class II game.⁶⁹ In fact, Multimedia claims to have designed Reel Time as a compliant fall back machine in the event that MegaNanza was not accepted by the Commission.⁷⁰

The result of this situation was that both machines were in operation in significant numbers (about 3,000 of one machine and 1,000 of the other machine) in roughly the same market at the same time.⁷¹ Therefore, by looking at the relative revenues of these two systems over the same time period, we should be able to determine how large the net revenue difference between compliant and non-compliant bingo machines might be. In its 8-K filed with the SEC on April 29, 2003, Multimedia makes the following statement:

For the quarter ended March 31, 2003, the net revenue per player station per day for Reel Time Bingo and MegaNanza was approximately \$40 and \$41,⁷² respectively. The Company's net revenue per player station per day represents gross revenues, less amounts allocated to the Tribal facility or casino, divided by the average number of player stations and the number of days in the period. The lower net revenue per player station per day for Reel Time Bingo compared to MegaNanza in the March 2003 quarter is primarily attributable to the Company's converting larger numbers of lower-performing MegaNanza units while higher performing units remain in operation. On a casino-to-casino comparison, where MegaNanza player stations have been converted to Reel Time Bingo, those units have generally performed better than or equal to the MegaNanza units following a familiarization period." [emphasis added]⁷³

Therefore, the net loss in revenue associated with the replacement of these non-compliant machines with a compliant alternative is somewhere between zero percent and 2.5 percent. We examined recent history to find other examples of conversions using machines similar to those in the market today. We could not find any reported in public financial disclosures in sufficient detail to perform the analysis.

Because we only have one observed case (although with many observations), we will use a five percent revenue loss as a conservative estimate of direct losses due to slower machines.

This revenue loss, however, may not account for all costs associated with transition from non-compliant to compliant machines. For example, it is clear that there is a learning curve that players must climb before the games reach parity. If one looks at the same two machines over the year prior to the filing of the 8-K referenced above, it is clear that there was a period during which revenues from Reel Time were lower (per machine) than those of MegaNanza. This early period of depressed revenue brought the annual average daily revenue per Reel Time machine down to \$35 (or a 15 percent reduction in revenue).⁷⁴ Although this transition period is temporary and brief, this 15 percent reduction in revenue may be another potential level of revenue losses.

⁶⁹ <http://www.nigc.gov/ReadingRoom/GameClassificationOpinions/tabid/789/Default.aspx>

⁷⁰ See for example, Multimedia Games, Inc. Form 8-K, April 29, 2003.

⁷¹ Multimedia Games, Inc. Form 8-K, April 29, 2003.

⁷² These numbers represent revenue to the manufacturer.

⁷³ Multimedia Games, Inc. Form 8-K, April 29, 2003

⁷⁴ Multimedia Games, Inc. Form 10-K for 2003

While the MegaNanza and Reel Time example provide us with evidence that a conversion from Class III to Class II need not result in significant revenue losses, it may not account for machines that have a higher pre-regulatory daily revenue. Revenue per machine is likely to be greater in states with a higher per capita income. As the table below shows, Oklahoma had a comparable, if lower, per capita income in 2003 than other Class II-only states.

Table 4-4: Comparison of Per Capita Income

	Per Capita Income - 2003 ⁷⁵
Oklahoma	\$26,457
States with Class II Only Machines	
Alabama	\$26,371
Alaska	\$32,543
Nebraska	\$30,778
Texas	\$29,404

To account for this possibility, we compare the revenues from Reel Time machines reported in 2006 to the average revenue per day for all Class II machines in Class II only states. Tribes in these states along with Oklahoma will comprise the majority of Class II games in the future. We used Reel Time's revenues as a proxy for the 50 percent of machines that are assumed to be compliant and calculated the average revenues of non-compliant machine revenues necessary to achieve the average revenues per day in Class II States.

We calculate Reel Time revenues per machine per day based on information contained in the 10-K filed by Multimedia in 2006. That document indicated revenues of \$89 million from the placement of 8,400 machines, or approximately \$29 per machine per day. Previous data from Multimedia indicate that their revenues reflect 30 percent of the net gaming revenue generated by their machines.⁷⁶ If we assume this experience is representative of current contracts, then the total net gaming revenue per machine per day is \$97. We use this value as an estimate for all Class II compliant machines.

From the data provided by the Commission, we calculate the average net gaming revenue per day from Class II operations in the four Class II only states at \$107 per machine in 2006. If we assume 50 percent of the machines are compliant, then the average daily revenue per non-compliant machine is \$117 in these states. The reduction in revenue associated with switching from the average non-compliant machine to a compliant machine would therefore be \$20 per day - a 17 percent reduction in revenue.

To calculate the revenue loss associated with the proposed regulation, we assume that there would be no loss in gaming revenue associated with the first five years due to the grandfathering provision. After five years, we assume that all machines become compliant with the classification standards. For those already operating compliant machines, there will be no change in revenue. For the 50 percent of machines that are not assumed to be compliant, we calculated losses in net revenue of five and 17 percent.

In Class II only states, tribes operating Class II machines are expected to sustain an annualized net gaming revenue loss of between \$14 million and \$23 million. In states with Class II and Class III gaming (including Oklahoma), the annualized net gaming losses are greater, ranging from \$32 million to \$63 million. The total estimated change in Class II gaming revenue is between \$45 million and \$87 million, annualized over ten years at a seven percent discount rate. For reasons stated above, the net revenue

⁷⁵ US Department of Commerce, Bureau of Economic Analysis, *State Annual Personal Income*. Retrieved from: www.bea.gov/region/spi/.

⁷⁶ SEC Info - Multimedia Games Inc - S-3 - April 2, 2002 - EX-10.2.htm

loss could be at the low end of the range due to consumers' willingness to adapt to compliant machines. It is also important to recall that this net gaming revenue loss overstates the loss in consumer welfare and social costs. Some of this predicted net revenue loss shifts to other activities. The net revenue loss is most appropriate as a measure of the economic impact of the regulation on tribes offering Class II games.

Table 4-5: Lost Revenue Associated with Compliance with Revised Proposal

Current Market Conditions Baseline Annualized Decrease in Gaming Revenue		Revenue Loss (mil \$2006)
Class II Only	Lower Bound (5%)	\$14
	Upper Bound (17%)	\$23
Class II and III	Lower Bound (5%)	\$32
	Upper Bound (17%)	\$63
Total	Lower Bound (5%)	\$45
	Upper Bound (17%)	\$87

Just as conversion costs are still incurred in the absence of the rule due to greater enforcement, revenue losses associated with these enforcement actions also occur. Using the same assumptions regarding machine population and rate of enforcement, we calculate revenue losses for the greater enforcement scenario and present the results in the table below.

Table 4-6: Decrease in Gaming Revenue in the Greater Enforcement Scenario

Greater Enforcement Baseline Annualized Decrease in Gaming Revenue		Revenue Loss (mil \$2006)
Class II Only	Lower Bound (5%)	\$7.5
	Upper Bound (17%)	\$15
Class II and III	Lower Bound (5%)	\$19
	Upper Bound (17%)	\$48
Total	Lower Bound (5%)	\$27
	Upper Bound (17%)	\$63

Non-Gaming Revenue Loss

Tribes derive revenue and consumers derive benefits from non-gaming activities at casinos, ranging from hotel services to entertainment. Since demand for most of these additional services did not exist

before gaming was established, there is a direct connection between gaming revenue and non-gaming revenue.

For small changes in gaming revenue, non-gaming revenue may not be affected. A one or two percent change in willingness to pay for gambling does not mean that a consumer will stay fewer nights or eat fewer meals. These transactions are inherently “lumpier” than spending on gambling.

While it is not certain that non-gaming revenues are directly proportional to gaming revenues, we will use that assumption for the purposes of this analysis. The non-gaming facilities were put in place to service the customers drawn by gaming. So, any gaming revenue losses will be multiplied by an additional factor to account for losses in non-gaming revenue.

As noted in the February 2008 report, and confirmed by examination of Class II facility financial reports, the non-gaming revenues associated with Class II facilities are lower, as a percentage of total revenue, than they are at Class III facilities. Non-gaming revenues average between four and five percent for Class II facilities. We use five percent to calculate non-gaming revenue losses associated with the proposed change in the classification standards for machines. Using this methodology we estimate annualized non-gaming revenue losses at between \$1.9 million to \$3.7 million in Table 4-7.

Potential Lost Jobs for Tribal Members

Gaming operators hire workers and invest capital to offer Class II gaming. Since the rule reduces consumer demand for Class II gaming as it currently is offered, operators will cut back on employment and their investments. In this way, the losses due to shifts in consumer demand already include the direct loss of wages. However, we estimate potential employment effects for three reasons:

- Jobs provide other benefits besides wages, including self-esteem and skills that an individual can use in later employment.
- In most cases, jobs are not costs since workers are not “lost” - they can move to other jobs. However, in areas of extreme high unemployment as is found in some tribal lands, the labor resource may not find other employment and could effectively be lost.
- As part of NIGC’s mission to assist the social welfare of tribal members, this information is important for the Commission’s consideration.

The February 2008 report estimated that Class II tribal gaming operations would employ one worker for every approximately \$98,000 in 2008 revenue. In Table 4-7 we divide the estimated gaming and non-gaming revenue loss to estimate the potential number of workers that could lose their jobs. Total job losses are estimated to be 280 to 920 positions. If employment reductions are equally applied to tribal members and non-tribal members, the employment impact for tribal members is estimated to be between 71 and 231 jobs on an annualized basis.

The estimates are created using national average values in several instances. This approach masks variations in job loss and nongaming revenue losses. If a tribe depends on the nongaming revenue for a more significant share of the operation’s profitability or if the revenue per machine per day is much lower than the national average, the employment and revenue losses could be more significant.

Table 4-7: Estimated Non-Gaming and Employment Losses

Greater Enforcement Baseline Annualized Decrease in Gaming Revenue						
		Revenue Loss (mil \$2006)	Non-Gaming Revenue Loss (mil \$2006)	Total Gaming Organization Loss (mil \$2006)	Potential Lost Jobs	Lost Jobs for Tribal Members
Class II Only	Lower Bound (5%)	7.5	0.3	\$7.8	80	20
	Upper Bound (17%)	15.4	0.7	\$16.1	164	41
Class II and III	Lower Bound (5%)	19.3	0.8	\$20.1	206	52
	Upper Bound (17%)	47.5	2.0	\$49.5	506	127
Total	Lower Bound (5%)	26.7	1.1	\$27.8	284	71
	Upper Bound (17%)	62.9	2.7	\$65.6	670	168
Current Market Conditions Baseline Annualized Decrease in Gaming Revenue						
		Revenue Loss (mil \$2006)	Non-Gaming Revenue Loss (mil \$2006)	Total Gaming Organization Loss (mil \$2006)	Potential Lost Jobs	Lost Jobs for Tribal Members
Class II Only	Lower Bound (5%)	\$13.6	0.6	\$14.2	145	36
	Upper Bound (17%)	\$23.1	1.0	\$24.1	246	62
Class II and III	Lower Bound (5%)	\$31.5	1.4	\$32.9	336	84
	Upper Bound (17%)	\$63.3	2.7	\$66.0	674	169
Total	Lower Bound (5%)	\$45.1	1.9	\$47.0	480	120
	Upper Bound (17%)	\$86.5	3.7	\$90.2	922	231

Loss in Bargaining Power

The tribes argue that the inability for them to operate competitive Class II gaming machines reduces their bargaining power during the state compact renewal process. While this situation may be the case, unless the renegotiated compact fundamentally reduces the level of gaming activity (which would not be in the interest of the state from a revenue perspective), the shift of resources from the tribe to the state represents an economic transfer, not an economic cost. To the extent that this is a cost of the rule - not an underlying statutory requirement - its magnitude is difficult, if not impossible, to estimate. Factors other than the availability of Class II gaming are likely to play a large role in compact negotiations. Teasing out the value of this bargaining chip to the tribes is beyond the scope of this analysis. Nevertheless, this effect is important in the context of the mission of the NIGC to protect viable gaming as a public resource for tribes relative to other participants in the gaming industry.

Summary of Social Costs of Alternatives

Table 4-8 summarizes the social cost of the rule for the three alternatives. Without a regulation, there are no incremental changes in social benefits and costs. Promulgation of the MICS and technical standards is estimated to cost \$7.8 million annualized over ten years at a seven percent real discount rate. Promulgation of all four components of the October 2007 proposed rule will have estimated social costs of between \$36 million to \$98 million (annualized over 10 years at a seven percent discount rate). Since these estimates likely overstate social costs, the expected value is toward the lower end of the range. Based on these estimates, promulgating the MICS and technical standards would not be a “major rule” under the Congressional Review Act.

Table 4-8: Summary of Costs for the Rulemaking Alternatives

Alternative	Costs under Current Practices Baseline (\$ mil 2006)	Costs under Greater Enforcement Baseline (\$ mil 2006)
No Regulation	0	0
MICS and Technical Standards	7.8	7.8
MICS, Technical Standards, Classification Standards, and Definitional Changes	55 - 98	36 -73

Summarized Comparison with February 2008 Analysis

This analysis supplements a previous analysis prepared for the Commission. The purpose of this analysis was to compare the incremental social benefits and costs to fulfill the Commission’s statutory obligation under the Congressional Review Act. Since the analytic focus of this report is estimating social benefits and costs, it is reasonable that the two analyses may have different results.

While this report uses the same data and approaches as the February report, there are important differences. These differences have a substantial impact on the final estimates of economic impact on Class II facilities. While Table 4-9 below highlights some of the similarities and differences, the major differences are the following:

- The reports use different units to present costs. Both reports must present costs that occur in different years in a common measuring system. The February 2008 report presents discount costs occurring in the future and presents a present value estimate in current dollars. This report annualizes the flow of benefits and costs over a ten-year period using a seven percent real discount rate. Based on our interpretation of the February 2008 results for Scenario 2A in that report, the net gaming revenue loss is estimated to be \$1.2 billion in current dollars. Assuming these losses occurred within 10 years, the equivalent annualized amount is \$160 million. Based on this interpretation, Scenario 2A in the February report estimates 1.8 to six times more net revenue loss than this analysis.

- For one measure of net gaming revenue loss, the February report uses a similar approach as this report. However, the assumed compliant game is an older offering from Multimedia that had lower revenues than the Reel Time game used in this analysis. In this report, we assume that tribal gaming operators will chose the Class II game that gives the highest possible net revenues and that complies with the regulation. This difference led to the substantial difference in the reduction in Class II gaming revenue in the two analyses.
- The February report estimates that all machines and titles will undergo conversion, reprogramming, and replacement costs. For Scenario 2 in the February report, these costs equate to roughly \$20,000 per Class II player interface. In this report, we assume operators will not pay for (and thus suppliers will not provide) reprogramming that exceeds the cost of a new compliant system (estimated to be \$6,000). In addition, this analysis finds that the grandfathering provision will reduce compliance costs substantially.
- The February report assumes all current Class II machines are noncompliant. While it may be unlikely that current machines are in full compliance with every provision of the classification and technical standards, many machines that have opinion letters deeming them Class II may only require nominal upgrades. We use the Commission's estimate of compliance rate as the basis for this analysis.

Table 4-9: Comparison of Major Differences Between the Analyses

Data/Assumption	February 2008 Report	This Analysis
Data Year	2006	2006
Number of Affected Class II Machines	15,765 (Scenario 2A)	5,000 to 20,000
Growth Rate of Class II Market	10-yr compound annual growth rate of Indian gaming (14.6 percent)	State-specific growth rate. For Class II only states, annual average of machine growth in the past five years.
Estimated Change in Gaming Revenue	42 percent (range of 21-64)	5-17 percent
Compliant Game Used to Model Gaming Revenue Loss	MegaMania	Reel Time
Basis for Change in Class II gaming revenue	Both observed revenue loss from current Class II revenue per game to MegaMania and measured increase in game time	Market observation of the difference in Reel Time and MegaNanza's net revenue
Baseline Compliance Rate	0	20 - 80 percent
Effect of Grandfathering	No change; costs are just shifted in time	Substantial
Classification Costs	1.2 billion (current \$ for Scenario 2A)	27 - 87 million (annualized \$)
Estimated Replacement/Reprogramming	\$350 million (current \$ for Scenario 2A)	\$1.5 to \$5.3 million (annualized \$)

Data/Assumption	February 2008 Report	This Analysis
Costs		
Estimated Nongaming Revenue Loss	\$127 million (current \$ for Scenario 2A)	\$1.1 - \$3.7 million (annualized \$)
Estimated Potential Tribal Member Job Losses	3,336	71 - 231
Benefit Estimate	None or qualitative	Partially Quantified

Chapter 5: Social Benefits

As a companion to Chapter 4, this chapter discusses, and estimates when possible, the social benefits of the final rule. Since they are not revealed in day-to-day market transactions, the social benefits are harder to quantify.

The social benefits accrue from reducing the externalities arising from preventable fraud, the increased public goods from more revenue available to promote tribal welfare, lowering unnecessary litigation, and strengthening of the process established in statute to resolve externalities outside of tribal boundaries.

All of the provisions also provide benefits through the streamlining of the current oversight and enforcement system. By standardizing the process and creating certainty, costs are reduced for operators, gaming manufactures, and the Commission and other regulators.

Benefits of Minimum Internal Control Standards

Both the MICS and the technical standards potentially have financial benefits that accrue to tribal operators and tribal members. These flow from greater efficiency, lower capital costs, and smaller losses associated with facility operation and cash handling. As was the case in estimating the costs of the MICS, the benefits are limited to those facilities that are not already operating with such procedures in place.

Preventing Externalities from Fraud

In any organization, fraud does occur. As these examples indicate, Indian gaming operations can fall victim to thieves:

*Fifteen people have been arrested in Ontario in connection with a ring that allegedly scammed millions of dollars from casinos across North America by bribing dealers and rigging card games. Among those arrested were four employees of Casino Rama – located north of Toronto near Orillia – who are accused in a scheme that swindled the casino out of more than \$2 million, police said Friday.*⁷⁷

*Two years ago, a former Pechanga casino executive was sentenced to four years in prison for embezzling \$500,000 from the casino to fuel an online gambling addiction.*⁷⁸

⁷⁷ <http://www.cbc.ca/canada/toronto/story/2007/05/25/casinos-scam.html>, referenced July 8, 2008.

⁷⁸ Carvajal, J. (2006, March 25). Former Pechanga controller-turned-embezzler speaks out on his compulsive gambling. The Californian. Retrieved July 30, 2008, from http://www.nctimes.com/articles/2006/03/26/news/californian/22_10_113_25_06.txt

In addition, the NIGC has issued notice of violations in several instances where gaming operators failed to follow current requirements for internal financial controls:

A tribe was accused of allowing individual members of the tribal council and the tribal council itself to award complimentary items to themselves at the tribe's gaming operation. Awarding complimentary items to tribal Council members for personal use does not fall within the authorized uses of net revenues.⁷⁹

A tribal casino issued credit cards to each member of the tribal Council and to the General Manager. For several years, these cards were used for personal expenditures, expenditures that had already been provided by the Casino through other means, and tribal government business. The Casino accounting department and the tribe lacked an effective system of internal controls necessary to track gaming revenues.⁸⁰

The respondents unlawfully managed blackjack and gaming machine operations and did not provide supporting documentation necessary to effectively evaluate the validity of the reported blackjack figures and internal control procedures were not followed.⁸¹

These examples are not meant to identify weaknesses in any specific organization, but to highlight that financial losses from fraud are prevalent and significant.

In addition to these occurrences at tribal gaming operations, a major study gives a national overview of the threat from fraud, the level of risk faced by organizations like gaming facilities, and the importance of internal controls. The Association of Certified Fraud Examiners prepares a bi-annual report with estimates on the costs and effects of occupational fraud.⁸² Occupational fraud is defined in the report as "the use of one's occupation for personal enrichment through the deliberate misuse or misapplication of the employing organization's resources or assets." While the results of the study do not directly address potential occupational fraud occurring in the Indian gaming industry, it provides useful data to put the potential fraud losses in perspective.

This report constitutes one of the most complete sources available on business fraud. The results of the study are based on data compiled from 959 cases of occupational fraud that were investigated between January 2006 and February 2008 by the association's members. In general, the report estimates that a typical US organization loses seven percent of its annual revenues to fraud.⁸³ In the 959 cases of occupational fraud that were part of this study, the median loss of fraud was \$0.175 million per case. In addition, more than 25 percent of all cases studied involved losses of at least \$1 million.

⁷⁹ NIGC, Notice of Violation: NOV-00-09; Amendment to Settlement Agreement: SA-00-09, Confederated Tribes of Siletz Indians of Oregon

⁸⁰ NIGC, Settlement Agreement (SA) Coyote Valley Band of Pomo Indians and NIGC

⁸¹ NIGC, Proposed Civil Fine Assessment: CFA-07-02, Ivy Ong and Carlo World Wide Operations, LLC

⁸² Association of Certified Fraud Examiners (2008). *2008 Report to the Nation on Occupational Fraud & Abuse*.

⁸³ This percentage is based on the opinions of the association and is not derived from any specific data or a statistical sample of US organizations.

The study examines three main types of occupational fraud:

- **Asset misappropriation:** Fraud in which the perpetrator steals or misuses an organization's resources. The median loss in 2008 for this type of fraud was \$0.15 million.
- **Corruption:** Refers to schemes in which fraudsters use their influence in business transactions to obtain a benefit. The median loss in 2008 for this kind of fraud was \$0.38 million.
- **Financial statement fraud:** Intentional misstatement or omission of material information from the organization's financial reports. The median loss in 2008 for this kind of fraud was \$2 million.

Notably, the study revealed that, in the banking and financial services Industry, theft of cash maintained on the premises was much more common than in other industries (see Tables 5-1 and 5-2). Banking and retail establishments lost much more cash than manufacturing for example. As shown in the table below, banking and retail are among the top five most victimized types of organization. The median loss in a cash-on-hand case was \$35,000 (28 percent of total cases of fraud in the industry). Corruption costs were significant in the industry as well, with a median loss of \$375,000 (33 percent of total cases of fraud in the industry). Considering that Indian gaming operations handle significant amounts of cash in their daily operations, it is reasonable to assume that fraud levels could be similar to those in the banking/financial services sector.

Table 5-1: Top Five Victim Organizations, by Frequency

Industry	Number of Cases	Percentage of Cases	Median Loss
Banking and Financial Services	132	14.6%	\$250,000
Government and Public Administration	106	11.7%	\$93,000
Healthcare	76	8.4%	\$150,000
Manufacturing	65	7.2%	\$441,000
Retail	63	7.0%	\$153,000

Table 5-2: Selected Occupational Fraud Schemes in the Industry⁸⁴

Industry	Corruption	Cash Larceny	Cash on Hand
Banking and Financial Services Industry	33.3%	11.4%	28%
Government and Public Administration	26.4%	9.4%	14.2%

⁸⁴ The sum of percentages exceeded 100 in the source data because several cases involved schemes in more than one category.

Industry	Corruption	Cash Larceny	Cash on Hand
Healthcare	26.3%	15.8%	9.2%
Manufacturing	29.2%	1.5%	7.7%
Retail	22.2%	14.3%	19%
Average (all Industries in the Study)	26.9%	10.3%	12.6%

The study also reviews how the fraud was detected and evaluates which detection methods proved effective. In the study, 46 percent of the cases analyzed were detected by a tip or complaint from an employee, customer, vendor, or other source. However, 19 percent of the cases were detected by internal audits, 23 percent by internal controls, and 9 percent by external audits. This study suggests that effective audits and internal controls can prevent over 50 percent of the cases of fraud.

The following table presents the importance of having internal controls in place and how they help reduce fraud. The most effective control was to perform surprise audits, which reduced fraud losses by up to 66 percent. The report and Table 5-3 below also show that fraud prevention benefits from a variety of procedures, not just one approach. Many of the MICS in the proposed rule are similar to the controls listed below.

Table 5-3: Median Loss Based on Presence of Anti-fraud Controls

Control	% of Cases Implemented	Yes	No	% Reduction
Surprise Audits	25.5%	\$70,000	\$207,000	66.2%
Job Rotation / Mandatory Vacation	12.3%	\$64,000	\$164,000	61.0%
Hotline	43.5%	\$100,000	\$250,000	60.0%
Employee Support Programs	52.9%	\$110,000	\$250,000	56.0%
Fraud Training for Managers / Executives	41.3%	\$100,000	\$227,000	55.9%
Internal Audit / FE Department	55.8%	\$118,000	\$250,000	52.8%
Fraud Training for Employees	38.6%	\$100,000	\$208,000	51.9%
Anti-Fraud Policy	36.2%	\$100,000	\$197,000	49.2%
External Audit of ICOFR	53.6%	\$121,000	\$232,000	47.8%
Code of Conduct	61.5%	\$126,000	\$232,000	45.7%
Management Review of IC	41.4%	\$110,000	\$200,000	45.0%
External Audit of F/S	69.6%	\$150,000	\$250,000	40.0%
Independent Audit Committee	49.9%	\$137,000	\$200,000	31.5%
Management Certification of F/S	51.6%	\$141,000	\$200,000	29.5%
Rewards for Whistleblowers	5.4%	\$107,000	\$150,000	28.7%

Table 5-4 shows how the lack of internal controls is the most important weakness contributing to the types of fraud for which tribal gaming operations are most vulnerable.

Table 5-4: Breakdown of Primary Internal Control Weaknesses by Scheme Type

Most Important Contributing Factor	Financial Statement Fraud (% of Cases)	Corruption (% of Cases)	Asset Misappropriation (% of Cases)
Lack of Internal Controls	29.3	27.8	36.8
Lack of Management Review	6.1	14.1	18.6
Override of Existing Controls	15.2	19.0	16.8
Poor Tone at the Top	19.2	15.6	7.8
Lack of Competent Oversight	8.1	6.8	6.8
Lack of Independent Checks / Audits	11.1	4.9	5.9
Lack of Employee Fraud Education	2.0	1.5	1.2
Lack of Clear Lines Of Authority	0.0	1.1	0.9
Lack of Reporting Mechanism	0.0	0.0	0.2

If this study's findings hold true for gaming operations, the final rule will reduce the amount of funds diverted from the gaming organization. Although preventing criminal activity has clear benefits, the question is who gains these benefits? The MICS regulations provide a mix of both social and private benefits (i.e., "transfers"). As a matter of public policy, the NIGC is primarily concerned with the social benefits of regulation. In addition, since the NIGC's mission is to ensure that the tribal gaming enterprises are operated to promote the public welfare of tribal members, the NIGC has an interest in promoting private benefits gained by tribes.

To understand the distinction between private and social costs for the MICS, it is useful to realize that the MICS are analogous to an insurance policy. Operators incur daily costs for the procedures, audits, and extra paperwork whether or not any fraud occurs. In contrast, fraud attempts occur with some random, unpredictable frequency. As with all insurance policies, operators determine the probability of fraud and the associated consequences to estimate whether investing in the financial controls will produce net benefits.⁸⁵ It is economically rational not to insure very rare risks; few operators have insurance against the risk of a meteor strike on their facility. Although the consequences would be severe, the risk is so low that the expected value (the annual risk multiplied by the value of damages) does not equal the annual premium.

However, if operators take too narrow a view of their exposure to fraud or underestimate the consequences to others, their choices could impose costs on other parties. Growing research suggests that many people have cognitive difficulty estimating rare risks. In cases where the private choice is

⁸⁵ A similar argument can be made to assess the potential financial benefits of the Technical Standards. However, errors in the context of machines represent a transfer from casino to player or from player to casino, not a true economic cost or social benefit.

different than the choice that is best for society as whole, government requiring owners to have enough insurance to lower the third-party impact can produce social benefits.

An everyday example illustrates how requiring insurance can have both private and social benefits. Virtually all states require car owners to have auto insurance. Even without regulation many drivers estimate the risk and the potential financial and physical losses and purchase insurance. However, other drivers either underestimate the chances of having an accident or prefer to spend their money on other items, underestimating the losses they and others may suffer in a crash. If this underinsured driver injures someone else and cannot pay the resulting costs, the third party suffers an uncompensated loss. States intervene through regulation to require a minimum amount of coverage, especially for third-party damages. If states set the optimal level of insurance, the externality is eliminated.

In the case of internal controls, operators tailor internal controls to their perceived level of risk. If they misjudge and suffer a major loss due to fraud, their operations could fail financially, have increased insurance costs or financing costs, or scale back operations. Operators may then fire workers and scale back purchases from other businesses, potentially leading to social costs if the surplus labor and goods are not productively used elsewhere in the economy. Therefore, the externalities arise when an operator fails to invest in a sufficient level of financial controls to contain the potential social loss from fraud.⁸⁶

In this framework, the next question is what are the specific private and social benefits of the final rule's MICS standards? As with the social costs, the social benefits of the MICS standards in the final rule are the incremental benefits above current regulations. There then are several conditions for the rule to have incremental social benefits. First, the MICS must require an internal control that the gaming operator does not already have in place. Second, for those controls added by the MICS, they must have some ability to detect and mitigate the consequences of fraud. Third, the type of fraud must not be so rare that the control will not yield positive net benefits.

We did not have adequate data to prepare a full quantitative assessment of the potential incremental social benefits of the MICS. Primarily, we do not have organization-specific information on the effectiveness of existing MICS. Therefore, we do not have quantitative data on the incremental change in internal controls provided by the final rule. However, to illustrate the likelihood to social benefits, we can use the national data on fraud to show that, as an insurance policy, the MICS would only need to prevent a small number of cases of fraud to pay for themselves.

The 2008 Report to the Nation on Occupational Fraud and Abuse⁸⁷ reported that US organizations lose seven percent of their annual revenues to fraud. The study also states that approximately 20 percent of all fraud and theft can be detected by internal control standards. The other 80 percent are identified through other controls and from tips. If a gaming organization had very few existing controls, the new MICS may only prevent approximately 20 percent of theft and fraud. Since

⁸⁶ In economic terms, the theft is a transfer from the casino operator to a criminal. It can be argued that this transfer is likely to have social costs in the strict economic sense. Criminals rarely invest in socially productive activities, but rather typically consume their gains. Since tribal operations invest their revenues in programs to improve overall tribal welfare and/or pay dividends to individual members of the tribe, they are much more likely to generate positive externalities (e.g., increases in labor and capital productivity) than consumption of exotic cars or designer clothing.

⁸⁷ Association of Certified Fraud Examiners (2008). *2008 Report to the Nation on Occupational Fraud & Abuse*. Retrieved from: <http://www.acfe.com/documents/2008-rttn.pdf>

operations are required to have internal controls by the existing regulation, the marginal reduction in fraud due in this rule is likely to be lower than 20 percent.

Because of frequent transfers of currency, the gaming industry is a particular target of corruption as compared to other sectors. Corruption cases typically involved ten times as much financial loss as occupational fraud (an average of \$375,000 as compared to \$35,000).

Class II gaming annual revenue is estimated to generate \$3.6 billion at gaming facilities. Assuming a seven percent fraud and corruption rate, gaming facilities could lose approximately \$250 million per year. This estimate understates the social costs of fraud because it does not include third-party damages (e.g., loss of wages to laid-off employees). At an effectiveness rate of 20 percent, internal controls could identify \$50 million of that corruption and fraud.

In Chapter 4, we identified that annual cost of implementing the MICS at between \$1.3 million and \$1.9 million, plus the costs of implementing the redundancies and retraining tribal gaming authorities. In other words, the regulations require gaming operations to spend an additional \$2 million across the industry that has some percentage chance of reducing a total of \$50 million per year. In other words, if the MICS in the final rule increase the effectiveness of existing internal controls by four percent or more, they are a good investment and pay for the quantified private costs. Put another way, if the changes in the MICS across the eleven Class II gaming facilities detect five additional cases of fraud, the regulation will have net social benefits. While we do not know the actual incremental effectiveness of the MICS over current practice and regulations, it would appear that the changes to the MICS standards in the final rule are likely to generate net social benefits.

Regulation as the Most Efficient Approach to Reducing Fraud

Other forms of intervention besides regulation could encourage private parties to align their actions with the public interest. Since the MICS represent the standard in the industry for best practice and since the tribes have varying degrees of access to personnel with extensive gaming industry experience, some tribal gaming operators (and tribal regulatory agencies) may be unfamiliar with these procedures even though they could provide a positive return on investment. As an alternative to regulation, the NIGC could distribute the MICS as voluntary guidelines to educate and train those tribes that require assistance in their implementation. If most gaming operators already have adequate internal controls and only a few do not, education and training those few operations could be more cost-effective than imposing new, routine costs on every operation.

There are several reasons to believe that regulation may be more cost-effective than voluntary programs in the long run. First, since fraud is unpredictable and random, it can strike at any time. A gaming operation with good controls today could lapse. Education and training would have to be very responsive to shore up operations whenever they might need it. Second, regulation and training do not prevent fraud; potential is built when the gaming operation adopts and maintains the controls in its day-to-day operations. The MICS require tools such as independent audits, certifications, and reporting to the NIGC that incentivize an operation to follow their own internal controls. Therefore, while the incremental social benefits of the MICS depend on how well organizations comply with them and incorporate them into the day-to-day operations, it is likely that regulation could be the most efficient mechanism to align private actions with the choices best for society as a whole.

Benefits of the Definitions and Classification Standards

Avoidance of Litigation

Virtually all economic change has transaction costs. They are the economic equivalent to friction, the price paid for movement. Markets work to minimize transaction costs as producer and consumers exchange goods and services. Where governments intervene through regulation, the social goal is the same - to minimize transaction costs so that we spend as much of our resources as possible on items we value.

A regulation can have net social benefits if it has less transaction costs than alternatives.⁸⁸ Standardization can save time and resources. Many voluntary standards (e.g., keyboard layouts) arise without government intervention.

In the current situation, to reduce non-compliance with NIGC's interpretation of the law and its definition, the agency can pursue case-by-case litigation or promulgate a regulation and then enforce compliance with the new requirement. In the path of case-by-case litigation, each case requires resources. On a regulatory path, NIGC and stakeholders invest resources to agree to a final rule. Enforcing the rule is in theory less costly than case-by-case litigation since compliance standards are clearer and fewer stakeholders will remain non-compliant. If both paths receive the same destination, zero non-compliance, the path with the least total transaction costs is best.

NIGC determined that case-by-case litigation was not the least costly path to compliance. Switching to regulation it finds is likely to have lower transaction costs for the agency, tribal gaming operations, tribal regulatory authorities, game manufacturers, and other stakeholders. Table 5-5 below gives an illustration of why regulation could have lower transaction costs than litigation.

In this example, all stakeholders pay \$3 million to achieve a final regulation. This cost includes NIGC's direct and indirect costs, the costs of consultation and outreach meetings, and the costs commenters spend to respond to the rule. As discussed in Chapters 3 and 4, if 50 percent of machines are non-compliant in the future, then approximately 4,000 non-compliant machines exist over the next ten years. By promulgating clear rules, there is less uncertainty for litigation - once the rule are upheld and the major disagreements settled, enforcement is straightforward. Litigation costs in this case are assumed to average to \$50,000 per machine. For the purposes of comparison, we assume NIGC initiates on average 13 enforcement actions a year, each one affecting 10 machines. The net present value over ten years to eliminate the number of non-compliant machines is \$4.6 million. The total costs of this option are upfront regulation development costs and the net present value of the stream of future litigation costs for a total of \$7.6 million.

As an alternative, if NIGC forgoes the regulation and pursues case-by-case litigation, there are no upfront costs. However, each instance of litigation is on average more expensive since the definition

⁸⁸ This proposition holds true under the condition that the outcome is valuable and will happen under both scenarios. There is no value in doing something well that is not worth doing in the first place.

of compliance is more uncertain. In this example, we assume the average litigation costs all parties a total of \$0.2 million. Assuming the same number of cases to reach 100 percent compliance over 10 years, the net present value is \$18.2 million. Since there are no upfront costs, the total cost of this approach is \$18.2 million.

In this example, case-by-case litigation is more than twice as expensive as regulation. In this scenario, by switching to regulation, NIGC is reducing transaction costs in society. Thus, it is very plausible that this regulatory process could save social resources in the long-run.

Table 5-5: Comparison of Regulatory and Litigation Transaction Costs

	Rulemaking Costs (\$ mil)	Litigation Costs Per Case (\$ mil)	Cases (Per Year)	NPV (7%) (\$ mil)	Total Costs (\$ mil)
Regulation	3	0.05	13	4.6	7.6
Case-by-Case	0	0.2	13	18.2	18.2

Increased Legal Certainty Reduces Capital Costs

Without clear standards, both facility operators and game manufacturers are operating in an uncertain legal environment. Enforcement action could result in the seizure of gaming equipment and the revocation of the license to operate both for the facility and the gaming manufacturer. This uncertainty will be reflected in the cost of capital. Lenders calculate a risk premium above the rate of return on capital, increasing borrowing cost for both tribes and manufacturers. The additional financing cost will be reflected in the price of gaming machines, whether financed directly by the tribes or jointly through a lease or revenue sharing agreement. By reducing the perceived compliance risk through effective and clear regulation, the Commission reduces the risks in lending. Lower risks can translate into lower financing costs, allowing more gaming to satisfy unmet consumer demand. By meeting more of consumers' demand for Class II gaming, the rule would provide incremental benefits.

The impact of even a small reduction in the risk premium could be significant. The gambling industry has relatively low operating and labor costs compared to other industries. Capital expenditures are needed to build the facility and to buy the Class II machines. If financing costs in the gaming industry are ten percent of the \$20 billion in operating costs, reducing the effective borrowing rate by even 0.1 percent saves \$2 million per year. Many tribes lease their machines from the manufacturer, creating an opportunity for a direct link between the risk premium and the tribe's annual revenue. Holding everything else the same, the effective interest rate for the lease for a machine more likely to be ruled a Class III machine should be different than the lease rate for a compliant Class II machine.

Unfortunately, finding empirical evidence to quantify this benefit is difficult. Lenders apply many criteria to an organization to assess the risk of a loan or investment. Since many gaming manufacturers and tribal gaming operations are private companies, financing costs are often not available. There are also many other terms of a loan, including call options and tiered financing. Comparing just interest rates alone between two transactions can be potentially misleading. Organization ownership also changes frequently in this fast-growing industry. As a smaller firm is acquired, it may gain the lower borrowing costs of its larger parent company.

We examined two regulatory changes to determine if they affected the costs of capital for gaming firms. One example is Australia's regulation of internet gaming. Many countries have tried to deter the detrimental effects of online gambling transactions by either enacting blanket prohibitions (e.g., the United States), or choosing to regulate online gambling by allowing some, but not all forms, of internet gambling.

Australia is one country which has decided to address the matter by regulating to allow certain forms of internet gambling, while banning others. Consequently, Australia is the market leader in online gambling. In 2001, the Australian legislature passed the Interactive Gambling Act of 2001. This act banned certain forms of interactive online gambling, while still allowing for online wagering (e.g., wagering on horse races, sporting events) and online lotteries subject to certain regulations. The relevant question for the analysis is did the online casinos see their capital costs decline when the Australian gaming legislation passed.

Even prior to this legislation, which sought to distinguish different types of internet gambling activities, Australia had regulations in place which addressed safety and privacy concerns, which augmented the country's success in the internet gambling field. As reviewed in a 1999 Australian senate report:

One reason for the success of Australian-based operations is that gamblers are attracted to the credibility associated with Australian regulation. Regulation is the responsibility of the States and Territories, which have developed a world class reputation in this field. Mr. Desmond McKee, Manager, Taxation Services, Department of Treasury and Infrastructure, Australian Capital Territory Government, stated that 'Australia has a first-class reputation for regulation of gambling industries. Australia's entrance into this arena is known worldwide, and the rest of the world [is] watching us to see how we perform. If Australia does it properly, and that is certainly the intention, then I believe we will get a fair share of that marketplace.'

For example, Centrebet, an Australian gambling website that is regulated is regarded as one of the top five gambling websites in the world.

The Australian Bureau of Statistics noted that from 2000-2001, the Australian internet gambling service providers received \$73.1 million (Australian) from online gambling. In 2004-2005 the net gains for Australian internet gambling services providers increased to \$114.3 million (Australian). Thus, in this timeframe, during which the Interactive Gambling Act was passed, revenue received by Australian internet providers increased by 11.8 percent. However, with respect to individual companies in Australia that enjoy a steady stream of gamblers and revenue, little historical information is available that would indicate the effect of the Interactive Gambling Act of 2001, thus the aforementioned aggregate is the best reference as to the impact of the Act on companies that provide gambling services.

In addition to the Australian experience, there is one publicly-traded firm that has specific exposure to Class II regulatory decisions. Multimedia Games, as discussed in Chapter 4, offers a good case study for the effects of classification decisions. The NIGC rulings on the company's games in 2002 were material events for the company and were disclosed to investors. The company also has a series of long-term capital investors who, from the questions asked during analysts' quarterly calls, were very familiar with the company's exposure to NIGC's classification decisions. If regulatory certainty reduces borrowing costs, this company's financing may reveal the effect.

We examined the company's annual financial results filed with the Security and Exchange Commission for the three years before and after the MegaNanza/Reel Time classification decisions, or 2001-2003. The reported amounts and interest rate for the company's long-term debt is our indicator of financing costs. Table 5-6 gives the results.

Table 5-6: Long-Term Debt Borrowing Rates for Multimedia Games

Year	Amount of Long-Term Debt (\$ millions)	Interest Rate
2001	5.2	9 % or Prime + 1.75%, whichever is greater
2002	0.6	6%
2003	9.4	Prime + 1.25% (= 5.5% at the time)

In 2001, the company was expanding and developing its new line of gaming machines. There was substantial uncertainty as to their legality at noncompact tribal gaming operations. By the end of their 2003 fiscal year, the legal uncertainty was mostly resolved. Comparing the price of borrowing in 2001 and in 2003, the interest rate declined by one-half of a percent. On an annual basis, the interest rate reduction saved the company \$0.045 million in financing costs. The company was also growing substantially during this period; banks may have been offering more favorable terms since the company had more collateral and net income. However, there is at least an indication that regulatory certainty over the company's main products, Class II games, reduced the risk premium charged by lenders. Regulatory certainty across the industry could benefit both tribes and manufacturers. As these organizations have lower costs, society benefits as these organizations offer more games to meet consumer demand.

Protection of the Integrity of the Law

The rule helps maintain differentiation between Class II and Class III so as to maintain the meaning of the IGRA. While history reveals that some laws do not provide optimal benefits and can actually have negative social benefits, promotion of law abiding activity does foster a sense of fairness and community cohesion. Fostering cohesion between US residents, whether or not they are members of tribes, has some social value.

For tribal members, regulatory clarity and a well-functioning process under the IGRA for tribes and states to negotiate compacts have benefits. Congress is less likely to not feel compelled to revisit the Act to either restrict tribal Class II or Class III gaming or, at a minimum, change current practices. Tribes and gaming operators have made billions of dollars in capital investments based on the IGRA's statutory system regulating Indian gaming. While there may be a reduction in revenue resulting from these regulatory changes, the tribes could stand to lose more if Congress passes legislation that impacts other parts of tribal gaming. Again, this consideration is a private benefit that could accrue to tribes, not society as a whole.

Appendix 1: Gaming Facilities with Class II Machines by State

State	Tribe	Gaming Facility
Class II Only		
Montana	Crow Tribe	Little Bighorn Casino
Texas	Kickapoo Traditional Tribe of Texas	Kickapoo Lucky Eagle Casino
California	Lytton Rancheria of California	San Pablo Lytton Casino
Alaska	Metlakatla Indian Community	Metlakatla Indian Community Bingo
Wyoming	Northern Arapaho Tribe	Little Wind Casino
Wyoming	Northern Arapaho Tribe	Wind River Casino
Alabama	Poarch Band of Creek Indians	Creek Entertainment Center
Alabama	Poarch Band of Creek Indians	Riverside Entertainment Center
Alabama	Poarch Band of Creek Indians	Tallapoosa Entertainment Center
Nebraska	Santee Sioux Tribe of Nebraska	Ohiya Casino & Bingo
Oklahoma	Thlopthlocco tribal Town	Golden Pony Casino
Total Number of Tribes		8
Total Number of Facilities		11
Class II and III		
Oklahoma	Absentee Shawnee Tribe of Oklahoma	Thunderbird Wild Wild West Casino
Arizona	Ak Chin Indian Community	Harrah's Phoenix Ak-Chin Casino Resort
Oklahoma	Apache Tribe of Oklahoma	Silver Buffalo Casino
Montana	Assiniboine and Sioux Tribes of the Fort Peck Indian Reservation	Silver Wolf Casino
Montana	Blackfeet Tribe	Discovery Lodge Casino
Montana	Blackfeet Tribe	Glacier Peaks Casino
Oklahoma	Cherokee Nation	Cherokee Casino - Fort Gibson
Oklahoma	Cherokee Nation	Cherokee Casino - Roland
Oklahoma	Cherokee Nation	Cherokee Casino - Sallisaw
Oklahoma	Cherokee Nation	Cherokee Casino - West Siloam Springs
Oklahoma	Cherokee Nation	Cherokee Casino Resort
Oklahoma	Cherokee Nation	Cherokee Nation Outpost Tobacco Shop

State	Tribe	Gaming Facility
Oklahoma	Cherokee Nation	West Siloam Springs Smoke Shop
Oklahoma	Cherokee Nation	Cherokee Casino Tahlequah
Oklahoma	Cheyenne-Arapaho Tribes of Oklahoma	Feather Warrior Casino
Oklahoma	Cheyenne-Arapaho Tribes of Oklahoma	Lucky Star Casino - Clinton
Oklahoma	Cheyenne-Arapaho Tribes of Oklahoma	Lucky Star Casino - Concho
Oklahoma	Chickasaw Nation	Ada Gaming Center
Oklahoma	Chickasaw Nation	Ada Travel Stop
Oklahoma	Chickasaw Nation	Black Gold Casino
Oklahoma	Chickasaw Nation	Cash Springs Gaming Center
Oklahoma	Chickasaw Nation	Chisholm Trail Casino
Oklahoma	Chickasaw Nation	Davis Trading Post
Oklahoma	Chickasaw Nation	Gold Mountain Casino
Oklahoma	Chickasaw Nation	Goldsby Gaming Center
Oklahoma	Chickasaw Nation	Madill Gaming Center
Oklahoma	Chickasaw Nation	Newcastle Gaming Center I
Oklahoma	Chickasaw Nation	Riverwind Casino
Oklahoma	Chickasaw Nation	Texoma Gaming Center
Oklahoma	Chickasaw Nation	Thackerville Travel Plaza
Oklahoma	Chickasaw Nation	Treasure Valley Casino
Oklahoma	Chickasaw Nation	Washita Gaming Center
Oklahoma	Chickasaw Nation	WinStar Casino
Montana	Chippewa-Cree Indians of the Rocky Boy's Reservation	Bear Paw Casino and Four C's Cafe
Oklahoma	Choctaw Nation of Oklahoma	Choctaw Casino - Broken Bow
Oklahoma	Choctaw Nation of Oklahoma	Choctaw Casino - Grant
Oklahoma	Choctaw Nation of Oklahoma	Choctaw Casino - Idabel
Oklahoma	Choctaw Nation of Oklahoma	Choctaw Casino - McAlester
Oklahoma	Choctaw Nation of Oklahoma	Choctaw Casino - Pocola
Oklahoma	Choctaw Nation of Oklahoma	Choctaw Casino - Stringtown
Oklahoma	Choctaw Nation of Oklahoma	Choctaw Casino Bingo
Oklahoma	Choctaw Nation of Oklahoma	Choctaw Inn - Durant
Oklahoma	Choctaw Nation of Oklahoma	Choctaw Casino Too

State	Tribe	Gaming Facility
Oklahoma	Choctaw Nation of Oklahoma	Choctaw Coliseum
Oklahoma	Choctaw Nation of Oklahoma	Durant Travel Plaza East
Oklahoma	Choctaw Nation of Oklahoma	Durant Travel Plaza West
Oklahoma	Choctaw Nation of Oklahoma	Idabel Travel and Smoke Shop
Oklahoma	Choctaw Nation of Oklahoma	Pocola Travel and Smoke Shop
Oklahoma	Citizen Potawatomi Nation	Baby Grand Casino
Oklahoma	Citizen Potawatomi Nation	FireLake Casino
Oklahoma	Citizen Potawatomi Nation	FireLake Grand Casino
Oklahoma	Comanche Nation	Comanche Nation Casino
Oklahoma	Comanche Nation	Comanche Red River Casino
Oklahoma	Comanche Nation	Comanche Spur Smoke Shop and Casino
Oklahoma	Comanche Nation	Comanche Star Casino and Smoke Shop
Montana	Confederated Salish & Kootenai Tribes	Best Western KwaTaqNuk Resort
Washington	Confederated Tribes and Bands of the Yakama Nation	Yakama Nation Legends Casino
Washington	Confederated Tribes of Colville Reservation	Coulee Dam Casino
Washington	Confederated Tribes of Colville Reservation	Mill Bay Casino
Washington	Confederated Tribes of the Chehalis Reservation	Lucky Eagle Casino
South Dakota	Crow Creek Sioux Tribe	Lode Star Casino and Hotel
Oklahoma	Delaware Nation	Gold River Casino
Oklahoma	Eastern Shawnee Tribe of Oklahoma	Border Town Casino
Oklahoma	Eastern Shawnee Tribe of Oklahoma	Eastern Shawnee Travel Plaza
South Dakota	Flandreau Santee Sioux Tribe	Royal River Casino & Hotel
Oklahoma	Fort Sill Apache Tribe of Oklahoma	Fort Sill Apache Casino
Wisconsin	Ho-Chunk Nation	Dejope Bingo and Entertainment
Washington	Jamestown S'Klallam Tribe	7 Cedars Casino
Oklahoma	Kaw Nation	Kaw Southwind Casino
Oklahoma	Kickapoo Tribe of Oklahoma	Kickapoo Casino
Oklahoma	Kickapoo Tribe of Oklahoma	Kickapoo Conoco Station
Oklahoma	Miami Tribe of Oklahoma	Miami Tribe Entertainment
Florida	Miccosukee Tribe of Indians of Florida	Miccosukee Resort & Gaming Center
Oklahoma	Modoc Tribe of Oklahoma/Miami Tribe of	The Stables Casino

State	Tribe	Gaming Facility
	Oklahoma	
California	Morongo Band of Mission Indians	Casino Morongo
California	Morongo Band of Mission Indians	Morongo Casino Resort & Spa
California	Morongo Band of Mission Indians	Morongo Travel Center
Washington	Muckleshoot Indian Tribe	Muckleshoot Casino
Oklahoma	Muscogee (Creek) Nation	Bristow Indian Casino
Oklahoma	Muscogee (Creek) Nation	Checotah Indian Community Bingo
Oklahoma	Muscogee (Creek) Nation	Creek Nation Casino Eufaula
Oklahoma	Muscogee (Creek) Nation	Creek Nation Casino Okemah
Oklahoma	Muscogee (Creek) Nation	Creek Nation Casino Okmulgee
Oklahoma	Muscogee (Creek) Nation	Creek Nation Casino Tulsa
Oklahoma	Muscogee (Creek) Nation	Creek Nation Casino Muscogee
Oklahoma	Muscogee (Creek) Nation	Creek Nation Travel Plaza
Oklahoma	Muscogee (Creek) Nation	Duck Creek Casino
Oklahoma	Muscogee (Creek) Nation	Muscogee Travel Plaza
Washington	Nooksack Indian Tribe	Nooksack River Casino
Montana	Northern Cheyenne Tribe	Charging Horse Casino & Bingo
Nebraska	Omaha Tribe of Nebraska	Lucky 77 Casino
Oklahoma	Osage Nation	Osage Million Dollar Elm Casino - Hominy
Oklahoma	Osage Nation	Osage Million Dollar Elm Casino - Sand Springs
Oklahoma	Osage Nation	Osage Million Dollar Elm Casino - Pawhuska
Oklahoma	Osage Nation	Osage Million Dollar Elm Casino - Tulsa
Oklahoma	Otoe-Missouria Tribe of Indians	7 Clans Paradise Casino
Oklahoma	Otoe-Missouria Tribe of Indians	Lil Bit of Paradise Casino
Oklahoma	Ottawa Tribe of Oklahoma	High Winds Casino
California	Pechanga Band of Luiseno Mission Indians	Pechanga Resort & Casino
Oklahoma	Peoria Tribe of Indians of Oklahoma	Buffalo Run Casino
Oklahoma	Peoria Tribe of Indians of Oklahoma	Peoria Gaming Center
Oklahoma	Ponca Tribe of Oklahoma	Blue Star Gaming and Casino
Washington	Puyallup Tribe of Indians	BJ's Bingo

State	Tribe	Gaming Facility
Oklahoma	Quapaw Tribe of Oklahoma	Quapaw Casino
Washington	Quinault Indian Nation	Quinault Beach Resort and Casino
California	Rincon Band of Luiseno Mission Indians	Harrah's Rincon Casino and Resort
Oklahoma	Sac & Fox Nation of Oklahoma	Sac and Fox Casino
Oklahoma	Sac & Fox Nation of Oklahoma	Sac and Fox Casino - Stroud
California	San Manuel Band of Serrano Mission Indians	San Manuel Indian Bingo & Casino
Florida	Seminole Tribe of Florida	Big Cypress Casino
Florida	Seminole Tribe of Florida	Seminole Casino Brighton
Florida	Seminole Tribe of Florida	Seminole Casino Coconut Creek
Florida	Seminole Tribe of Florida	Seminole Casino Hollywood
Florida	Seminole Tribe of Florida	Seminole Casino Immokalee
Florida	Seminole Tribe of Florida	Seminole Hard Rock Hotel & Casino Hollywood
Florida	Seminole Tribe of Florida	Seminole Hard Rock Hotel & Casino Tampa
Oklahoma	Seminole Nation of Oklahoma	Mystic Winds Casino
Oklahoma	Seminole Nation of Oklahoma	Seminole Nation Trading Post
New York	Seneca Nation of Indians	Seneca Gaming and Entertainment
New York	Seneca Nation of Indians	Seneca Gaming and Entertainment 1
Oklahoma	Seneca-Cayuga Tribe of Oklahoma	Grand Lake Casino
Washington	Shoalwater Bay Indian Tribe	Shoalwater Bay Casino
Washington	Skokomish Indian Tribe	The Lucky Dog Casino
Washington	Squaxin Island Tribe	Little Creek Casino Resort
New York	St. Regis Mohawk Tribe	Mohawk Bingo Palace
Washington	Stillaquamish Tribe	Angel of the Winds Casino
Washington	Suquamish Tribe	Clearwater Casino
Washington	Swinomish Indian tribal Community	Swinomish Northern Lights Casino
California	Sycuan Band of the Kumeyaay Nation	Sycuan Casino & Resort
Arizona	Tohono O'odham Nation	Golden Ha:sa- Casino
Washington	Tulalip Tribes	Tulalip Bingo
Washington	Upper Skagit Indian Tribe	Skagit Valley Casino Resort
Minnesota	White Earth Band of Chippewa Indians	Berry's Bar
Minnesota	White Earth Band of Chippewa Indians	Callaway Municipal Liquor Store

State	Tribe	Gaming Facility
Minnesota	White Earth Band of Chippewa Indians	Cedar Crest Resort
Minnesota	White Earth Band of Chippewa Indians	D & G Lounge
Minnesota	White Earth Band of Chippewa Indians	Doc's Den
Minnesota	White Earth Band of Chippewa Indians	Elbow Lake Store
Minnesota	White Earth Band of Chippewa Indians	M & W Service Center
Minnesota	White Earth Band of Chippewa Indians	Mahnomen American Legion Bingo
Minnesota	White Earth Band of Chippewa Indians	Naytahwaush Village Store
Minnesota	White Earth Band of Chippewa Indians	Ogema Fire House
Minnesota	White Earth Band of Chippewa Indians	Pinehurst Resort
Minnesota	White Earth Band of Chippewa Indians	Shooting Star Casino and Hotel
Minnesota	White Earth Band of Chippewa Indians	Tulably Lake Inn
Minnesota	White Earth Band of Chippewa Indians	Wild Rice Lounge
Nebraska	Winnebago Tribe of Nebraska	Native Star Casino
Nebraska	Winnebago Tribe of Nebraska	Iron Horse Bar & Casino
Oklahoma	Wyandotte Nation	Lucky Turtle Casino
Total Number of Tribes		64
Total Number of Facilities		150
<p>Source: Class II listing from Meister, Alan (2008). <i>The Potential Economic Impact of the October 2007 Proposed Class II Gaming Regulations. Indian Gaming Facilities that Operated Class II Machines in 2006</i>. Appendix C, page 66. This list was then compared and triaged to delete any gaming facilities that have state compacts (which indicates that a tribe is authorized to operate Class III gaming) with the National Indian Gaming Commission. 2008. <i>Compacts</i>. Retrieved from http://www.nigc.gov/ReadingRoom/Compacts/tabid/760/Default.aspx</p> <p>The remaining facilities have state compacts and operate Class III gaming.</p>		

Appendix 2: Summary of Opinions and Decisions Concerning the Scope of Class II and Class II Bingo

Determining what constitutes Class II gaming versus Class III gaming relies on a factual determination and a careful assessment of Commission opinions and court cases. The “NIGC Classification Rulings”⁸⁹ encompasses more than seventy opinions and court rulings. Although not all of the decisions are reviewed below, the ones that are highlighted are those were the Commission developed tests for determining how to classify a game and discussed criteria and factors applied in assessing the games. In this appendix, we concentrate on the opinions and decisions concerning games subject to the proposed classification standard.

What Constitutes as Class II Gaming

Types of Bingo

For a bingo game to classify as Class II gaming, it must meet the criteria defined in the IGRA and NIGC regulations. These criteria are: (1) system must allow for and encourage multiple players and require a minimum of two players; (2) the winning pattern or arrangement must be known before the game begins; (3) players must obtain a card before numbers are drawn; (4) electronic cards are permissible but must be readily visible on the screen (to determine readily visible consider whether prominently sized and displayed, readable font, and contrasting colors); (5) the numbers are randomly drawn or determined electronically, and (6) numbers drawn are used in real time and not stored for later use. (Mystery Bingo, 9/26/2003). In Rocket Fast (10/18/2004), NIGC articulated a similar test where they looked at whether: (1) the cards bear numbers, (2) the holder of the card covers when objects are drawn, (3) if game is won by first person covering previously designated pattern, and (4) whether the technological device is used as an electronic aid or facsimile.

In the Mystery Bingo decision the Commission held that the game met the aforementioned requirements, and in particular highlighted that there was a predetermined winning pattern and that selected numbers were used in the sequence that they were drawn. The Commission also looked at the prize structure, and in Mystery Bingo, since the winner was determined by the play of the bingo game and not an element of chance, the way the winner was awarded complied with Class II gaming requirements.

In the Triple Threat Bingo Decision (12/23/2004), NIGC also held that the game classified as Class II gaming because it met the aforementioned criteria. Triple Threat Bingo is a game played on a computer graphic with individual player stations which involve cards with numbers on them. Additionally to conclude the game multiple draws are necessary, thus meeting the requirement defined by the IGRA that the game may not be won with just one draw to qualify as Class II gaming.

⁸⁹ The NIGC Enforcement Actions and Classification Opinions discussed in the NIGC Classification Rulings document come from two online sources: <http://www.nigc.gov/ReadingRoom/EnforcementActions/tabid/124/Default.aspx>, and <http://www.nigc.gov/ReadingRoom/GameClassificationOpinions/tabid/789/Default.aspx>

Furthermore, here the Commission highlighted that the game met the criteria for Class II gaming because Triple Threat Bingo allowed for participation of multiple players and allowed more than the minimum two seconds for players to join in (it allowed for three seconds). NIGC stated that the broad time frame was a critical reason as to why "Triple Threat Bingo" was classified as a Class II game.

In the NOVA Bingo decision (4/4/2005), NIGC also held that the activity classified as Class II gaming, highlighting that the game is won by the first person who acquires the pre-determined pattern, and that the electronic device used was an electronic aid and not a facsimile.

Pull-Tab

NIGC determined that Play Away Pull-Tab (8/26/2006) was a Class II game played with technological aids, rather than an electronic facsimile, because: (1) PlayAway cards are pull tabs, (2) the website used to reveal the results of the PlayAway pull tab cards is not an electronic facsimile, (3) the website met the Commission's definition of "technological aid," and (4) the gambling is not done over the internet and the website clearly states that the winning ticket must be redeemed at the casino where it was purchased.

What Does Not Constitute as Class II Gaming and Thus is Class III Gaming

Bingo

Bingo in which the players do not experience real time player interaction does not count as bingo for the purposes of Class II gaming according to the decision in National Indian Bingo (8/9/1999). In this case, when a player purchases a ticket but then has to return to the gaming site to collect his winnings, that does not qualify as real time play, and thus can not be categorized as Class II gaming.

Pull Tab

If the electronic device used in Pull Tab is an electronic facsimile instead of a technological aid, then the game is classified as a Class III game.

The electronic game "Break the Bank" was deemed to classify as a Class III game because the electronic device incorporated the entire game of paper pull-tabs, rather than just being a technological aid to facilitate play of the game (5/31/2001). This determination was further affirmed in Class II Pull-Tab system (6/24/2004) when the Commission also determined that that this game was an electronic facsimile of paper pull-tab because the machine replicated the game of paper pull-tabs in an electronic form.

In Play pull tab (3/30/1999) the Commission determined that when the device "performs all the actions that a player of the traditional pull-tab game would have performed, including selecting a pull-tab ticket, disclosing the hidden symbols on the ticket and determining whether a particular pull-tab ticket is a 'winner,'" the machine is a facsimile of the traditional game and thus a Class III game.

Important Cases and Advisory Opinions

In *U.S. v. 162 Megamania Gambling Devices*, 231 F.3d 713 (10th Cir. 2002) the court considered what kind of bingo classifies as a Class II game. In this case, the court held that Megamania was a class II game because it met the three statutory criteria for bingo, and highlighted that “electronic cards for participants in bingo games,” as used in Megamania, were examples of technological aids that are allowable for class II games under 25 C.F.R. §502.3(a).

In *Cabazon Band of Mission Indians v. National Indian Gaming Commission*, 14 F.3d 633, 636 (D.C. Cir. 1994) (*Cabazon II*) the court held that when the electronic/video version of a pull-tabs game is the same as the paper version, then that game does not qualify as a Class II game, because it is a facsimile, exact copy or duplicate, of the original game. Noting, “by definition, a device that preserves the fundamental characteristics of a game is a facsimile of the game.” *Sycuan Band of Mission Indians v. Roach*, 788 F. Supp. 1498 (S.D. Cal. 1992). “Although there may be room for a broader interpretation of “facsimile,” the video version of pull-tabs falls within the core meaning of electronic facsimile. It exactly replicates the paper version of the game, and if that is not sufficient to make it a facsimile, we doubt...that anything could qualify.” *Cabazon Band of Mission Indians*, 14 F.3d at 636. In *Cabazon* the court also discusses the three distinct gaming categories that the IGRA defined for Indian land, which are subject to different levels of Federal and state regulation.

But in *Diamond Game Enterprises v. Reno*, 230 F.3d 365 (D.C. Cir. 2000), the court held that the gaming device, Lucky Tab II, which was used for pull-tabs did qualify as a technological aid to paper pull-tabs and thus met the criteria for Class II gaming. In Lucky Tab II, the electronic device was used to scan the paper roll of pull-tabs and display the contents of the paper pull-tabs on the screen, thus the electronic device facilitated the play of the paper game instead of replacing it.

In *Gaming Corp. of America v. Dorsey & Whifney*, 88 F.3d 536, 544 (8th Cir. 1996) the court noted that “states can influence class II gaming on Indian lands within their borders only if they prohibit those games for everyone under all circumstances.”

In the Blackjack Advisory Opinion that the Commission issued on January 15, 2003, they emphasized that the key question in determining whether a blackjack game classifies as class II gaming is whether “[blackjack] is being played a legitimate card tournament...[and] [t]he key question is how the game play actually functions. A fundamental point is that all play-every hand must be played as part of the tournament and in a tournament format. Further, the revenue from tournament entry fees, the only revenue to the gaming establishment from these events, should be treated as gaming revenue in the normal course and accounted for as such, and not placed into a separate player pool account.”

Table A2-1: Summary of NIGC Opinions Related to Bingo, Pull Tabs, and Similar Games

Game	Highlighted Characteristics that Make Game a Class II	Highlighted Characteristics that Make Game a Class III
Mystery Bingo	<ul style="list-style-type: none"> ▪ a predetermined winning pattern ▪ selected numbers were used in the sequence that they were drawn ▪ prize structure - winner was 	

Game	Highlighted Characteristics that Make Game a Class II	Highlighted Characteristics that Make Game a Class III
	determined by the play of the bingo game and not an element of chance	
Triple Threat Bingo	<ul style="list-style-type: none"> ▪ allowed for participation of multiple players ▪ allowed more than the minimum two seconds for players to join in (three seconds) ▪ technological aid, not electronic facsimile - played on a computer graphic with individual player stations which involve cards with numbers on them ▪ multiple draws are necessary to win the game 	
NOVA Bingo	<ul style="list-style-type: none"> ▪ game is won by the first person who acquires the pre-determined pattern ▪ electronic device used was an electronic aid and not a facsimile 	
Wild Ball Bingo	<ul style="list-style-type: none"> ▪ game is played in "real time": (1) the real-time or the near real-time selection of the winning number in the bingo blower drawn compared to the display of the winning number, and (2) that the players are playing against each other in real time 	<p>In the decision the Commission distinguishes what characteristics of a game would make it a Class III game:</p> <ul style="list-style-type: none"> ▪ if the game is a non-traditional design ▪ if there is a secondary progressive jackpot feature ▪ if there is a house-bank aspect ▪ if the device is an electronic facsimile.
National Indian Bingo		<ul style="list-style-type: none"> ▪ players did not experience real time player interaction - when a player purchases a ticket but then has to return to the gaming site to collect his winnings, that does not qualify as real time play
Play Away Pull-Tab	Use of technology is in form of technological aid and not an electronic facsimile because: 1) cards used are pull tabs, (2) the website used to reveal the results is not an electronic facsimile, (3) the website met the Commission's definition of "technological aid," and (4) the gambling is not done over the internet and the website clearly states that the winning ticket must be redeemed at the casino where it was purchased.	

Game	Highlighted Characteristics that Make Game a Class II	Highlighted Characteristics that Make Game a Class III
Break the Bank		<ul style="list-style-type: none"> ▪ electronic device incorporated the entire game of paper pull-tabs, rather than just being a technological aid to facilitate play of the game
Class II Pull-Tab		<ul style="list-style-type: none"> ▪ game is an electronic facsimile of paper pull-tab because the machine replicated the game of paper pull-tabs in an electronic form.
Play Pull Tab		<ul style="list-style-type: none"> ▪ game is electronic facsimile of the traditional game because device "performs all the actions that a player of the traditional pull-tab game would have performed, including selecting a pull-tab ticket, disclosing the hidden symbols on the ticket and determining whether a particular pull-tab ticket is a 'winner.'"
Digideal Digital Card System		<p>Commission outlines test for determining whether electronic device used is permissible:</p> <ul style="list-style-type: none"> ▪ Test: (1) whether the table itself is an electronic facsimile or a technological aid. If the table is an electronic facsimile then that game is automatically not a Class II game. If a technological aid then, (2) does the IGRA define the use of such aids with card games? If no, then the table used in non-banking games falls under Class III.