Impact Study for the City of La Center, Washington

Analysis of Impacts from the Proposed Cowlitz Indian Tribe's Casino Complex

June 2006

ECONorthwest
ECONOMICS • FINANCE • PLANNING

888 SW Fifth Avenue
Suite 1460
Portland, Oregon 97204
503-222-6060
www.econw.com

Executive Summary

Assignment

ECONorthwest was retained by the City of La Center, Washington ("City") to forecast the impacts on La Center and surrounding areas caused by the operations of a casino complex and Tribal reservation development as described in the Bureau of Indian Affairs ("BIA") draft environmental impact statement ("DEIS") entitled, "Cowlitz Indian Tribe trust acquisition and casino project." Specifically, this analysis was asked to address the following four issues:

1. Impact of the Cowlitz casino project on City gaming tax revenues.
2. Impact of the Cowlitz project on La Center housing demand and values.
3. The impacts of the Cowlitz casino project on the La Center and Ridgefield school districts.
4. How the casino would affect property assessments and property taxes of the four La Center card rooms.
5. From ECONorthwest's experiences with casinos, how traffic impacts might differ from what was portrayed in the DEIS.

Major Findings of This Analysis

The analysis presented in this report calculated the impacts of the entire Cowlitz development on the City of La Center and neighboring areas in the operational year of 2011. The principal findings of this analysis are:

- Gaming taxes paid to the City would fall about 66 percent, which is the difference from what they would be in 2011 without a Cowlitz casino versus what they would be if such a casino were operational that year (see page 20).

- The housing analysis, which begins on page 25, finds that demand for new housing in the La center Zip code would be 114 units higher in 2011 with the Cowlitz development compared to no development. The average prices for homes would be largely unaffected by the development, but because of the higher demand, the total value of residential property would be about 3.58 percent greater than otherwise.

- As explained in the section that begins on 30, local school districts would see a significant increase in enrollment because of the Cowlitz development. The La Center School District would have 73 more students in 2011, which would cost the district about $610,000 more to educate. The Ridgefield School District would see 96 more students, which would cost them $865,000 more to educate in 2011 than if the Cowlitz development would not be built. Because both school districts lack capacity, they would need to spend about $5.6 million in a one-time capital expenditure to accommodate this higher enrollment.

- Although revenues and profits at card rooms would fall, the assessed value of their land and buildings would be largely unaffected (see page 33). The principal vulnerability to the City and County would be the loss of some portion of $6,841 a year in personal property taxes paid by the four card rooms.

- On page 35, this analysis concludes that the traffic forecast in the DEIS is simply wrong and does not match the intended size of the casino complex, nor the size of the market it would serve. It also appears to have left out major traffic generating components, such as the announced 165,000 square feet ("sf") of retail space and the tribal government offices. Overall, this report concludes that in 2011, all of the activities at the Cowlitz property would generate about 10.3 million vehicle trips of which 8.6 million would be net new trips.

Conclusions Regarding the DEIS

The traffic and socioeconomic sections of the DEIS were used in this report. However, those sections had significant deficiencies. Most notably, the authors of those sections did not provide the data and methodology sufficient for a peer to duplicate or verify the analysis and results. Indeed, the presentation of the DEIS data and methodology discouraged helpful scrutiny.

For example, the DEIS analysis regarding school enrollment hinges on the assumption that the long-term "household student generation rate" is 0.35 students per household. Yet, the section of the DEIS where this number is supposedly derived does not show the calculation or an explanation of what is meant by long-term.[1] On cannot tell, for instance, if an accounting was taken for the new households being of working-age casino employees, or if the "generation rate" mixes in retiree households and would be distorted by the demographic trend of smaller family sizes over time.

Nonetheless, a 0.35 figure equates to there being seven new students for every 20 new households moving to La Center, which well below the average of 12 per 20 households in the existing population, as reported in the 2000 Census. The use of a 0.35 factor and a peculiarly low household growth impact for the City led to results in the DEIS that challenge credibility, as noted on pages 19 and 31.

The low household growth impact in the DEIS, in part, may be traced to the employment forecast. The DEIS forecasts 3,151 jobs at the casino[2] and does not appear to include tribal government, retail, and other non-casino employment at the development. It is unclear because the DEIS refers only to "Cowlitz Casino" workforce needs[3] and the data appear consistent with that, but would be low if one were to incorporate workers at the adjoining facilities at the Cowlitz development into the calculation.

Compounding what appears to be a significant undercount, the DEIS assumes only a 0.18 jobs multiplier to account for indirect and induced employment effect.[4] However, there is no source cited for the figure of 0.18 or what it applies to (primary study are or secondary study area? indirect only or indirect plus induced impacts?). Regardless, the additional jobs are ignored in the housing and school impact calculations. The DEIS reports, "For all alternatives, only direct employment is anticipated to generate in-migrant employees/households."[5] The DEIS does not cite anything in the academic literature to support its reasoning, which otherwise seems illogical and inconsistent with anecdotal evidence.

---

[1] Cowlitz Casino Project: Socioeconomic Assessment (final draft). Page 30

[2] Cowlitz Casino Project: Socioeconomic Assessment (final draft). Page 105. Figure 10.

[3] Cowlitz Casino Project: Socioeconomic Assessment (final draft). Page 104.

[4] Cowlitz Casino Project: Socioeconomic Assessment (final draft). Page 57, Table 37.

[5] Cowlitz Casino Project: Socioeconomic Assessment (final draft). Page 63.

To a degree, the authors of the DEIS were hindered by a lack of a supporting market and financial analysis for the casino and other trust land developments. An appropriate market analysis, from which to base the study of environmental consequences, should include revenue projections, visitor counts, and human resource factors necessary to forecast all of the impacts. Although the DEIS makes reference to a "Gaming Market Assessment" having been done,[6] there is no such study in the DEIS. Indeed, there is no uniform set of market-based assumptions that tie the components of the DEIS together.

For example, the traffic/circulation and socioeconomic assessment sections rely on market factors that had to be made up by their authors, who are experts in the fields of transportation and planning, and not gaming. They had to speculate about market-driven elements of the project so that they could address the impacts that they were in charge of determining.

The absence of a uniform market and financial forecast from which to base traffic and socioeconomic forecasts from led to incompatible and unrealistic results. This is highlighted on page 37 of this report, which notes that the forecast of the traffic section is incompatible by a factor of three-fold with the casino revenue forecast in the socioeconomic analysis. This is a serious deficiency, which challenges the realism of the DEIS.

[6] Draft Environmental Impact Statement Cowlitz Indian Tribe trust acquisition and casino project. April 2006. Page 4.8-6.

Difference from Previous Work

This analysis assumes that the Cowlitz casino complex would be as described in the BIA's recently released DEIS, which portrays a much larger development than what was previously announced by the Cowlitz Tribe. Therefore, the results in this report will differ from earlier work done by ECONorthwest for the City of La Center.

Earlier Casino Research for the City

ECONorthwest completed two pieces of work for the City of La Center on the Cowlitz casino project in 2004.

On April 6, 2004, ECONorthwest wrote a report entitled, "Impacts of a tribal casino" for the City, which discussed the effects a casino would have on traffic, gaming taxes, and wastewater.

A follow-up analysis was produced by ECONorthwest and presented in a letter, dated June 14, 2004, to Mayor Irish. The analysis reviewed the socioeconomic portion of an environmental assessment submitted to the Bureau of Indian Affairs by the Cowlitz Indian Tribe. It described a 42,000 sf casino in La Center with 425 electronic gaming devices (EGDs). The analysis by ECONorthwest concluded:

> Basing an environmental assessment for the Cowlitz on a 425-machine casino is patently disingenuous. The apparent reason for choosing 425 machines was the limit set by the WSGC for phase I—a temporary limit that lasts about a year. In fact, 425 EGDs has nothing to do with any market assessment or realistic appraisal of demand. Within a year, if the casino complies with gaming regulators, they could have 2,000 class-III EGDs and 50 gaming tables. By choosing 425, the assessment avoids having to consider an appropriately large casino from which to determine impacts.[7]

The earlier research by ECONorthwest required that a more appropriately size casino be assumed over what the Cowlitz Tribe had been representing. The Cowlitz, through the BIA's April 2006 DEIS, confirmed that they would like to build a much larger development. This analysis accepts as presented in the DEIS the dimensions of that proposed development.

---

7 Letter from Robert Whelan of ECONorthwest to Mayor Jim Irish of the City of La Center, Washington. Page 19. June 14, 2004.

Development Descriptions Used in this Analysis

On April 2006, the DEIS was distributed by the BIA. It describes plans for the Cowlitz Indian Tribe trust acquisition and casino project. It calls for placing 151.87-acres near La Center and off exit-16 on Interstate-5 into Federal trust for the Tribe. The land would be used for gaming, tribal government, and other purposes. The DEIS, however, did not provide a consistent set of market and financial projections, nor did it contain a thorough economic impact analysis. Therefore, to complete this analysis, such market projections, using what was found in the DEIS, had to be made.

Cowlitz Project Description

The proposed action, "Alternative A" in the DEIS, describes the development that the Cowlitz would like to build on its trust land. This analysis takes as given their description.[8] The characteristics of the development, which were used in this analysis, are:

- The casino would have 3,000 video lottery terminals (VLTs).[9]
- There would be 135 house-banked casino table games and a poker room with 20 tables.
- Ten dining outlets and 35,600 sf of bars and entertainment space.
- A 250-room hotel.
- A 200-space RV park with two spas, two laundries, one outdoor pool, a clubhouse, and an office.
- A wastewater treatment plant.
- Employee and customer parking areas with 7,250 stalls—plus an undisclosed number of additional parking spaces for Tribal offices, cultural center, and other facilities.
- A 20,000 sf Tribal office building.
- A 12,000 sf Tribal cultural center (museum and office space).
- 16 Tribal elder housing units.
- 165,000 sf of retail space.
- 147,500 sf of convention and multipurpose space (5,000 seats).

---

8 Draft Environmental Impact Statement Cowlitz Indian Tribe trust acquisition and casino project. April 2006. Pages 2-3 to 2-15.

9 A video lottery terminal is a Class-III EGD found in Washington tribal casinos. They are different than the Class-II bingo-based EGDs, but are very similar to video slot machines found throughout Oregon and Nevada.

Need for Market Projections

Because of the absence of market assessment, to properly forecast impacts this analysis had to begin by making its own market projections of revenues, visitor counts, and employment. This was done using casino market and financial models that ECONorthwest has developed over the last decade.

Use of Zip Code Data

This analysis uses a casino model that describes the residences of casino visitors and employees by Zip code. This results in some complications.

For example, the City of La Center's boundaries encompass only about a fourth of the population living in the La Center Zip code 98629. The remainder lives outside the boundaries of the City and are mostly in nearby rural areas. Similarly only 17.7 percent of the population of the Ridgefield Zip code 98642 lives in the City of Ridgefield itself. Similarly, although the La Center and Ridgefield school district boundaries are generally close to their respective Zip code boundaries, they are nonetheless not identical.

The model uses Zip codes because, unlike cities and school district boundaries, Zip code boundaries are nearly fixed (the exception is when a Zip code is split into two because of high population growth). Therefore, U.S. Census and demographic data collected by Zip code are more reliable and stable over time.

When building models of casino demand and employment, using Zip codes is better because, unlike cities, Zip codes cover the entire state including many places that are outside city limits. Their advantage over county and large city data is that Zip code areas are small enough to accurately describe the average driving times to and from casinos—important variables in forecasting traffic, visitor counts, and revenues.

Thus, when this analysis talks of the La Center Zip code, it is describing the entire 98629 Zip code area. Places on the south side of the East Fork of the Lewis River are in the Ridgefield Zip code 98642.

Section II

Market Projections

To predict the impacts of the Cowlitz casino complex on La Center, a market forecast for a typical operational year was made. From this, other variables necessary to predict impacts on the City of La Center and the two local school districts were forecast.

Market Projections

The analysis begins with a market projection that characterizes the demand for the goods and services that would be offered at the casino complex (including tribal government) and the employees required. From this, revenue and visitation forecasts were made.

The market projection is based on economic modeling and research conducted by ECONorthwest at tribal and commercial casinos. The firm has over ten years experience studying the gaming industry and has done many direct research projects of casinos in the Pacific Northwest. The most current demographic forecast from Claritas, Inc., which is a nationally recognized market research data provider, was used in this analysis along with the Cowlitz project description as reported in the DEIS.

Assumptions

Certain assumptions had to be made about the Cowlitz project and the economy.

The first assumption regards timing. It is assumed that the Cowlitz project could open as early as late 2007 and that it would reach market stabilization in four years, which would be a point when the facilities are in full operation and market awareness is well established. Therefore, the market projections were made for the year 2011 and the analysis measures the project’s impacts on La Center for that operational year.

The second assumption is that the competitive market would consist of the casinos that are currently known and open today. The closest competing casinos are the four card rooms in La Center, the Lucky Eagle tribal casino in Rochester, and the Spirit Mountain Casino in Grand Ronde, Oregon. This analysis does not presume that any new casinos, other than the Cowlitz, would open by 2011. It appears that the consultant contributing to the DEIS also made this same assumption.

This analysis uses the current inflation forecasts employed by ECONorthwest. The consumer price index, which measures general inflation, is forecast to rise 3.44 percent a year from 2006 to 2011. The wage and salary employment cost index is forecast to rise at a 3.59 percent rate over the same period. Both indexes are published by the U.S. Department of Labor. Building construction costs are forecast to rise at a 3.78 percent rate.

2011 Revenue, Visit, & Employment Projections

The analysis finds that the facilities, as described in the DEIS, would employ 4,015 workers in total in 2011. Gross gaming revenues would be $492.5 million, and total revenues, including retail sales, are anticipated to be $579.5 million. Total revenues are net of gaming promotional allowances, which is the retail value of food and beverage, hotel, and other services provided to casino guests based on their gaming activity.[10] Such complementary programs, or “comps” as they are commonly known, are standard in the casino industry.

Overall, the developments on the trust land would attract about 9,155,000 visitors onto the property in 2011, as shown in Table 1. The volume of visitors and employees is consistent with known casino, tribal government, and retail projects studied by ECONorthwest. Details on how these projections were made can be found in the appendix of this report, which starts on page 39.

[10] Mohegan Sun 2004 Annual Report. Page 60.

Table 1: 2011 Market Projections, Values in 2011 Dollars

Variable	Forecast 2011
Hotel operations:	
Room supply	91,250
Rooms sold	78,019
Occupancy rate	85.5%
Average daily rate	$112.30
Other room revenue (except food)	$10.79
Employee counts by venue:	
Casino, restaurants, and other casino-related	3,418
Hotel, RV park & recreation areas	239
Tribal govt., cultural center & wastewater plant	80
Retail	278
Total employment	4,015
Visits to the Cowlitz trust land by purpose:	
Convention & meeting attendance	231,642
Ticketed entertainment show guests	65,298
Hotel guests	159,939
RV park guests	111,690
Casino gaming	7,320,208
Eating, drinking, & other non-gaming in casino	4,118,080
Retail store shopping	1,553,590
Tribal government & facilities visitors	54,750
Commercial, delivery & other support visitors	27,375
Casino bldg. workers and gaming commission	822,145
Hotel and RV employees	57,360
Tribal govt. employees & tribal council	19,720
Retail employees	66,720
Eldercare residents & guests	2,920
Less multiple purpose visits	(5,456,135)
Total visits to property	9,155,302
Revenues:	
Video lottery terminals	$394,088,310
Table games	90,568,358
Poker	7,884,000
Retail	43,942,418
Food & beverage	53,423,696
Hotel and RV park	12,231,602
Entertainment, conventions & other	16,791,338
Less promotional allowances	($39,403,253)
Total Revenues	$579,526,469
Subtotal -- gaming revenues	$492,540,668

Source: ECONorthwest and others (see appendix on page 39)

Capacity and Competitive Issues

The forecast is subject to competitive issues and capacity limitations that are, in large part, not related to market conditions, but rather by the unpredictable nature of compact negotiations and decisions by Federal, state, and tribal governments.

The casino model reveals that the Cowlitz facility would be running above a comfortable range for a 3,000 VLT operation in 2011. A casino is severely capacity-constrained if its VLTs average more than 8.4 hours of use a day. As forecast on Table 1, the average VLT on the casino floor would be actively being played about 9.5 hours a day.

For a Washington casino with 3,000 VLTs averaging 9.5 hours a day, we would expect that it would be turning away 350 slot players on the typical non-holiday week.

Because of this capacity problem, some casino players would gravitate towards table games, which are less profitable for tribes and less satisfying for the slot players compelled to go to their less preferred alternative. More common would be a slot player unable to find the machines they like when they walk in because of crowded conditions. Thus, we expect that even as early as in its fourth year the Cowlitz would be losing business to other casinos due to overcrowding.

Overall, the machines at the casino would be able to generate $360 per day per machine in 2011—a high amount, but not without precedent. The Mohegan Sun, for example, reported a slot win per unit per day of $379 last year.[11] However, the income demographics of that casino are substantially higher than the Cowlitz, thus, it takes less time of play for the typical Mohegan Sun player to lose $379 on a slot machine than it would a Cowlitz player on a VLT. Thus, a $360 per day rate at the Cowlitz is evidence of a crowded casino—and uncomfortably so for a Northwest casino.

Possible Changes

We caution that changes in the configuration of the casino from what is presented in the DEIS could have substantial effects of the forecast shown in Table 1. In addition, the competitive landscape could change and affect casino revenues, visitations, and employee counts. Among the factors that would affect the forecast are:

- The Governor of Washington could limit the Cowlitz to 2,000 VLTs, as has been done to other tribes in their compacts.
- The casino could run keno and bingo (games not mentioned in the DEIS) as means to spread player action across more gaming positions so that capacity is not as severely strained.

[11] Mohegan Tribal Gaming Authority. 2005 Annual Report. Page 32.

- The Governor could agree to allow more than 3,000 VLTs, which would set a new precedent in compact negotiations that might spark requests from other tribes wanting more. The size of the casino gaming floor described in the DEIS, 134,150 sf, would be able to accommodate about another thousand machines.

- It is perhaps more likely the Governor would agree to let the Cowlitz build a second casino that would hold 1,000 VLTs and put it next to the main casino that would have 2,000. This would keep the compact in-line with those negotiated with other tribes in the State. The Muckleshoot Casino, for example, is doing this two-casino configuration in Auburn, Washington.[12]

- The Cowlitz could install Class-II gaming machines that simulate VLTs, but run off of electronic bingo games. Revenues from these machines would not be subject to a community impact fund. The State of Washington has no legal authority over Class-II gaming on tribal lands. Several casinos in Washington mix Class-II and Class-III machines.[13]

- The competitive landscape in 2011 might include one or more new casinos that would compete with the Cowlitz. Among the possibilities are a casino in Cascade Locks and the recently proposed casino at the old Multnomah Greyhound Track. Either one would draw business away from the Cowlitz, possibly rendering 3,000 VLTs as being more than sufficient to meet demand. The revenues and employment forecast in Table 1 would be less should one or both competitors come onto the market.

- Besides having fewer customers, one effect of new competitors on the Cowlitz would be that they would cause the Cowlitz to set lower hold rates on their VLTs to preserve market share. Casinos with lower hold rates have more employees per million dollars of gaming revenue.

Employee Residency

To determine the impacts of the Cowlitz project and trust land acquisition on local housing markets and schools, market projections were made to ascertain where the 4,015 employees in 2011, shown in Table 1, would live. This was accomplished using the employment residency patterns of known, existing casinos, and comparing them to the potential labor forces in each Zip code within a 90-minute driving range.

---

[12] Mike Archbold. "Tribe building second casino," King County Journal. April 1, 2006.

[13] A Class-II machine has some of the physical and play characteristics to a slot machine, but is technically an electronic bingo game that runs at high speed, is networked with other casinos around the country, and displays wins and losses in a way that looks like a VLT. The Lucky Eagle Casino, among others, has these machines. Because the manufacturers take a large cut of the revenues, players and casino owners prefer Class-III VLTs.

Over 95 percent of Indian casino employees in Oregon and Washington live within a 90-minute commuting time. The few workers whose permanent residences are further away are often at casinos for temporary special assignments or are in the process of relocating to the area. Frequently they live in temporary housing close to the casinos.

The normal patterns relating drive time, working age population by Zip code, and employment by casinos were used to determine the residency of Cowlitz employees in 2011. This is shown on Table 2. For comparison, the table also lists the number of employees, by home residence in 2006, who work at the Last Frontier and New Phoenix card rooms.

Table 2: Residences of Employees Working on the Cowlitz Trust Land in 2011 and at Two La Center Card Rooms in 2006

Employee Residence	Cowlitz Development in 2011	New Phoenix & Last Frontier in 2006
La Center (Zip code 98629)	180	58
Ridgefield (Zip code 98642)	208	12
Vancouver Zip codes	1,642	205
Rest of Clark County	251	46
Woodland (Zip code 98674)	185	27
Other Washington within 90 minutes	228	28
Portland, OR Zip codes	814	30
Other Oregon within 90 minutes	322	14
Places more than 90 minutes away	185	5
Total employment	4,015	425

Source: ECONorthwest casino model analysis, Claritas, Inc., and employee count data from the New Phoenix and Last Frontier card rooms.

By far the largest source of workers would be the Zip codes of Vancouver, Washington. Recall that Zip codes sometime extend beyond city boundaries, so the analysis is not restricted by city limits. In addition, the Vancouver Zip codes are where nearly half the current employees of the new Phoenix and Last Frontier card rooms live.

For the Cowlitz, the Zip codes in Vancouver and Portland would be the hometowns of 1,642 and 814 employees, respectively. This is to be expected because I-5 intersects both cities and they each have large labor pools. It is expected that the Cowlitz would draw a higher proportion of workers from Portland than do the existing card rooms because large casino complexes have more hierarchal management structures and need more workers with specialized skills, which are often more heavily concentrated in the biggest city of a region. Even so, many workers are apt to want to live close to the new casino.

La Center and Ridgefield would be the hometowns of 180 and 208 Cowlitz Indian Tribe employees, respectively. Although having much smaller labor pools than the cities to their south, both are less than ten minutes from the proposed casino site. Past research by ECONorthwest has shown that tribal casino employees have a strong tendency to live near their places of work. This is partly due to the 24/7 nature of their work and the value off-hour workers place on being close to home.

Household Formation and New Housing Units

The Cowlitz project is going to employ workers and managers to operate establishments in the government, retail, accommodation, entertainment, lodging, utility, and other sectors. With 4,015 new jobs, many will choose to reside close to the project and others will commute.

Factors Affecting Employment and Housing

The determinants of who would move into the local area and require the construction of a new home include:

- Employees, who migrate to the area to work at the new business, cannot find suitable housing, and stimulate the construction of new local housing.

- Some migrating employees will buy or rent existing housing occupied by households seeking to leave the area and households that are otherwise dissolving. They replace existing households, but do not require a new building.

- Some people in the local laborforce that would lose existing jobs because of the Cowlitz operations will go and work for the Cowlitz. They stay in their existing homes.

- The Cowlitz operations would hire some of the qualified unemployed workers in the community, which has no effect on housing demand.

- Some people that lived in the community and had not been participating in the laborforce are attracted to take jobs at a Cowlitz operation. The laborforce participation rate (the percent of people 16+ in age that are working) goes up, busing demand does not.

- The older children reared in households in the community that previously were going to move away from their parents' home so they can find jobs decide instead to stay and work at a Cowlitz project business. Many eventually get married or otherwise change their home circumstances and form new households. This, in turn, would put demand on new housing.

- Non-locals start commuting from towns that are within 90-minutes of the new business, but choose not to move to the local area and have no direct impact on housing.

- Non-locals with permanent residences over 90-minutes away come in and work on assignments at the new business and occupy temporary housing or live with an existing household. They can affect rental and transient lodging demand, but their impact is ephemeral.

- Workers in the community that used to commute to jobs in other towns quit and start working for a Cowlitz project employer instead. There is no change in housing demand.

- Tribal members from other states and counties migrate to the community near the casino project to be close to tribal services and events. They cause new housing demand, which many tribes would subsidize.

Indirect and Induced Impacts

Housing demand is affected not just by the employees of a tribal development, but by those affected indirectly and because of downstream spending.

Those that work directly for the Cowlitz Tribe or for businesses on the Cowlitz Reservation are called **direct** employees. However, those operations on trust land are going to make purchases of goods and services that, in turn, cause higher employment. These are called **indirect** jobs.

An even greater number of jobs are going to be caused by income-induced effects. This is the result of jobs created by the spending of wages by direct employees and indirect employees, and the spending of money garnered from the Tribe's earnings at the casino and other trust land facilities. All of this spending of personal and tribal income causes additional employment growth called the **induced** jobs impact.

Modeling the indirect and induced impacts of the Cowlitz project was outside the scope of work for this report, but national data shows that for every 100 hotel-casino jobs created there are 34 indirect jobs and 251 induced jobs created—or 285 jobs in total. That is a gross impact, which one should not use to forecast the effects of a casino on a City government. The net impact is more appropriate.

The net impact takes into account that some direct job growth at a casino (or any business or government activity) comes partly at the expense of job loses elsewhere in the economy. For example, you might expect some jobs to move from La Center restaurants to the restaurants at the Cowlitz casino, so the net impact of the casino is less than the gross because some jobs in the community only shift to the casino and no net new job creation results.

Impacts also have to consider leakages. That is the spreading of economic benefits beyond the borders of the subject area. Since the subject area of this analysis is small (La Center and, for school impacts, Ridgefield), there are plenty of opportunities for leakage.

For example, if a Cowlitz worker lives in Vancouver, they will spend most of their wages outside of La Center, which means the almost all the benefits of their income leaks out of the La Center economy, so there are virtually no induced impacts. Similarly, if the Cowlitz hotel buys linen services from a Portland firm, all of the indirect effects leak out and have no discernable impact on La Center or even Clark County.

This analysis assumes that for every 100 jobs on the Cowlitz trust land held by residents of the La Center and Ridgefield Zip codes, there would be 38 indirect and induced jobs created. This is far less than the national figure of 285, but reasonable given experience developing economic impact models of tribal enterprises in small economies.

Net Household Formation & School Enrollment

Historical Census and employment data for similarly situated communities, places that had large casino and tribal government facilities built near them in the mid 90s, were analyzed. This allowed the analysis to estimate the number of local residents that would switch to working at the Cowlitz facilities, and the number of new households that would relocate or form in the local area because of the job growth. Furthermore, knowing the typical household composition of casino workers, the changes in school enrollments were forecast.

The impacts were carried out down to the needs for new housing units, increases in school enrollment, and impact on total personal incomes. The income effect on tribal members and the possibility of tribal member relocations, other than the 16 units for Tribal elders on the trust land, were not considered in this analysis. The findings of this analysis are summarized in Table 3.

Table 3: Net Impact of Cowlitz Project on Local Demographics, 2011

Demographic Impacts in 2011	La Center Zip code 98629	Ridgefield Zip code 98642
Employment of Residents:		
Direct Cowlitz employment	180	208
Indirect & induced employment	68	79
Total jobs	248	287
Source of Employees:		
From existing labor pool	101	76
Relocations to existing housing	33	78
Relocations to new housing	114	133
Total jobs	248	287
Households of Jobholders:		
Hire from existing household	95	72
Replace existing household	31	74
New household formation	108	125
Affected households	234	271
Net Changes due to Cowlitz Project:		
Increase in households	108	125
New housing units	112	130
Total population	328	393
Population of 5-17 year olds	80	101
Public K-12 school students:		
Elementary (K-5 in La Center)	34	-
Elementary (K-6 in Ridgefield)	-	48
Middle school (6-8 in La Center)	19	-
Middle school (7-8 in Ridgefield)	-	15
High school (9-12)	20	33
Total school enrollment change	73	96
2011 Personal Income (MN $):		
Without Cowlitz project	$245.6	$563.3
With Cowlitz project in-place	254.4	574.1
Impact of Cowlitz on personal income*	$8.8	$10.8

** Income impact excludes the effect of non-employee tribal member incomes.*
Source: ECONorthwest casino model analysis, U.S. Census, and Claritas, Inc.

For La Center, there would be 180 direct employees of the Cowlitz facilities in 2011, which would stimulate 68 additional employees to live in the La Center Zip code because of indirect and induced impacts. The net employment gain would be 248. However, partly because La Center has card room employees, 101 of those Cowlitz employees would come from the existing labor pool. The rest would move in. About 33 would move into existing housing and a net impact of 114 would move into, or stimulate indirectly, new housing units. Overall, there would be a net increase of 108 households and 112 housing units.[14]

The Ridgefield Zip code has a larger labor pool. The impact of the Cowlitz project would cause an increase of 208 direct, and 79 indirect and induced jobs. There would be less job switching as Ridgefield has fewer card room employees, so the net influx of new workers would be higher in Ridgefield than in La Center. There would be 125 more households living in Ridgefield in 2011 than if the Cowlitz project was not built.

As noted on page 7, the city limits of La Center and Ridgefield encompass areas that are much smaller than their respective Zip codes. The analysis cannot tell where within the Zip codes households would choose to live. Where they choose would ultimately depend on where development occurs.

School Enrollment

School enrollment would go up not just because of a net increase in households, but because the households replacing some of the existing residents of the area are simply larger and have more school age children.

Among the factors relevant to this analysis is that households of casino employees are slightly larger than the average La Center and Ridgefield household where 23.1 percent of the households are headed by retirees.[15] One of the characteristics of places where large casinos open is a movement of some retirees out of the area and younger, working age families with children moving in. As a result, the number of school age children (5 to 17) goes up not just because they accompany their parents that move into new homes in La Center and Ridgefield, but also because they come from families that buy or rent housing previously occupied by childless retiree households.

The resulting school enrollment forecast shows increases of 73 and 96 for the La Center and Ridgefield Zip codes, respectively. The Zip code boundaries closely track the school district boundaries, so the forecast gains here are good estimates of the impacts.

---

[14] Some households would have two Cowlitz workers, so the number of employees is greater than the number of households formed. The amount of housing needed is slightly higher than the net increase in households because it is assumed that a 4 percent vacancy rate would be preserved in the market to accommodate household mobility.

[15] 2000 U.S. Census table 65, summary file 3 for the 98629 and 98642 Zip codes

Comparison to the DEIS School Data

The DEIS paints a peculiar, if not unrealistic, picture of a large employer moving into the area, but having virtually no effect on the need for either housing or schools. Here are the impacts during the operational phase (year when the casino and related facilities are fully up and ruining) that the DEIS forecasts for the cities of La Center, Ridgefield, and Woodland combined:

- Total new housing required due to in-migration: 5 housing units over the three cities (primary area).[16]
- In-migration of people for jobs at the Cowlitz operations into the primary area: 5.[17]
- Student enrollment growth in La Center, Woodland, and Ridgefield: Less than 2 students in the entire primary area.[18]

The DEIS forecasts are substantially different from what common sense would tell you about the impacts that building facilities employing several thousand workers would have on the neighboring communities.

---

[16] Cowlitz Casino Project: Socioeconomic Assessment (final draft). Page 71.

[17] Cowlitz Casino Project: Socioeconomic Assessment (final draft). Page 62.

[18] ECONorthwest had to calculate this number from the figures presented in the DEIS (Cowlitz Casino Project: Socioeconomic Assessment (final draft). pages 84 and 85). On table 53 of the assessment, total student enrollment growth is forecast to be 111 for the secondary area. The table does not show the primary area, so ECONorthwest needed to calculate it. The secondary area is forecast to have 315 new households, according to the DEIS socioeconomic assessment (table 52). The primary area is said to have 5 (table 40 of the socioeconomic assessment). The ratio of student enrollment to household growth used in the assessment is 0.35. By multiplying household growth (5) by the ratio (0.35), we arrive at fewer than two new students in the three cities. The socioeconomic assessment obfuscates this far-fetched conclusion by misleading readers on the fifth paragraph of page 84 where the 111 student increase forecast for the secondary area (all of Clark and Cowlitz counties) is used to describe the impact on the primary area (just the three cities), otherwise their analysis would appear so absurd as to be ludicrous.

Gaming Tax Impact

The impact of the Cowlitz casino on La Center's gaming tax revenues was forecast for the year 2011. Using a casino model and incorporating the relative driving times from regional Zip codes to both the La Center card rooms and the Cowlitz casino site, the model was able to forecast card room gaming receipts with and without a Cowlitz casino being present.

La Center Gambling Tax Forecast

The impact of a Cowlitz casino on La Center gambling tax revenues would be dramatic. Besides having a much better location, the Cowlitz casino would also have a superior product by virtue of having VLTs and a more elaborate casino.

The analysis measures the impact by first forecasting what gaming receipts would be in La Center in 2011 if there were no Cowlitz casino. The casino model was then run with the Cowlitz casino, as described in the DEIS, put in. The difference between these two scenarios is the impact of the Cowlitz casino on gaming receipts and gambling taxes in La Center, which is shown in Table 4.

Table 4: Net Gaming Receipts and Gaming Taxes in La Center, Base Case and With a Cowlitz Casino, 2011

Impact Type	Without a Cowlitz Casino	With Cowlitz Casino	Difference
Taxable gaming receipts:			
Card room receipts	$46,865,738	$15,944,415	-66.0%
Pull-tab receipts	192,463	55,022	-71.4%
City gaming taxes	$4,696,197	$1,597,193	-66.0%

Source: ECONorthwest, May 2006.

The analysis concludes that, if the Cowlitz casino is fully operational and in its fourth year in 2011 to the dimensions described in the DEIS, City gambling tax revenues would be 66 percent less than if the Cowlitz do not build a casino near La Center. Instead of collecting about $4,696,197 in gambling taxes in 2011, the City would get $1,597,193—a difference of $3,099,004.

Tax Rate Assumption

The analysis assumes that the tax rates in-place in 2011 would be as they are today: ten percent of card room receipts and five percent of net pull-tab receipts. It should be noted that communities sometimes lower tax rates if they fear local card rooms would close. Card rooms sometimes seek tax relief after they come under debilitating competition.

For example, the cities of Fife[19] and Spokane[20] lowered their gambling tax rates recently in response to competition from large tribal casinos—the Emerald Queen and Northern Quest, respectively. Spokane County, which has the large Northern Quest Casino and several nearby casinos operated by the Spokane and Coeur D'Alene tribes, lowered its card room taxes for similar competitive reasons.[21]

Main Causes of Tax Impact

The principal causes of the negative impact on gaming tax revenues from the Cowlitz casino are the location disadvantage of the card rooms, the comparative advantage of Cowlitz product mix, and the prohibition on smoking at card rooms. In addition, the relative product inferiority of pull-tabs would affect gaming tax collections.

Location

Location plays a critical role in the ability of casinos to attract players and generate gambling revenues. Location does so in two ways: affecting proximity and visibility. Both are important. For a casino to be highly successful, it must be easy for players to get to, relative to competing casinos, and be highly visible so that prospective players are reminded of its existence and can easily find it. Relative to the proposed Cowlitz casino, the four card rooms in La Center are disadvantaged on both factors.

Proximity

The proximity differences between the Cowlitz and La Center's four card rooms are small—in most cases, four to five minutes. However, the area's geography is such that 98.6 percent of the player trips to the card rooms would involve passing the Cowlitz casino site or, at minimum, turning on the exit near the front of the new casino. Only casino players living in the Yacolt, Amboy, and La Center Zip codes would find the card rooms quicker to get to. Given that gaming is a commodity-like service (*i.e.:* games like 21 and poker are similar and sometimes identical in different casinos), most players would have no strong incentive to drive past a large Indian casino and go the extra four to five minutes down a rural road to get to a card room.

---

19 "Fife considers reducing take from struggling casino." Rob Tucker. The News Tribune (Tacoma). December 21, 2003, page B41.

20 "City council votes to lower casino taxes." Mike Prager. The Spokesman-Review (Spokane). November 29, 2005. Page 1.

21 "County slashes gambling tax." Amy Cannata. The Spokesman-Review (Spokane). August 3, 2005. Page B-1.

Visibility

The extra drive time can be overcome somewhat by visibility, which the card rooms also lack. The card rooms cannot be seen from the Cowlitz site, Exit-16, or Interstate-5. There is no signage by the exit and if a person did not know in advance of the card rooms, they would be unlikely to find them by happenstance.

The Cowlitz Tribe, on the other hand, is planning a multistory hotel, highly visible complex, and signage that would be visible from a long distance. This would serve as an advertisement to tourists, but in reality, its greatest marketing benefit would be as a mechanism to reinforce consumer awareness of the Cowlitz casino on the minds of commuters and local residents.

Visibility is a highly effective marketing tool that the Cowlitz would have, but the card rooms would not.

Product Mix

The Cowlitz would be able to offer a superior product mix. Besides amenities such as large shows, a hotel, elaborate interior designs, and ten restaurants, they would also have more game variety. Unlike the card rooms, the Cowlitz would be able to offer VLTs. This is a key advantage because VLTs typically account for about 80 percent of gaming revenues and 69 percent of the gaming time spent in Washington tribal casinos by players. The Cowlitz would also be able to provide non-card tables games, such as craps and roulette—both of which are critical for enhancing a Las Vegas feel and atmosphere. Finally, the Cowlitz could set higher betting limits on their table games than the card rooms are allowed.

Past research indicates that card rooms are able to retain players seeking a more intimate local feel. After all, gambling is predominantly a social activity. Large casinos often find it very challenging to sustain a warm and friendly feel. For the Cowlitz, if they are limited to no more than 3,000 VLTs and get no new competitors in the marketplace, achieving a comfortable playing environment is going to be particularly difficult because of frequent overcrowding.

Card rooms would also capture play from Cowlitz employees. How much depends on the regulations set forth by the Cowlitz Gaming Commission. Some tribes prohibit all members and employees from playing at their casinos, while others are less restrictive. Past observations reveal that many casino employees will frequent local non-tribal bars, restaurants, and card rooms because they like going to a place outside of where they work so that they can relax. In addition, casino workers are more predisposed to gamble and, therefore, go to neighborhood card rooms.

Thus, the card rooms would have clear product mix disadvantages but still be able to garner a share of the player action from those consumers that like a friendly, local, and intimate atmosphere or are seeking an alternative to the large tribal casino.

Smoking

Differences in smoking rules will adversely affect the card rooms. The expectation is that the Cowlitz would allow smoking in their casino and that the card rooms would remain smoke-free in 2011. Tribes are not compelled to prohibit smoking and doing so would be detrimental to their financial interests.

While most casino players do not smoke, those that do, on average, gamble more heavily. Furthermore, most non-smoking players are not significantly bothered by casino smoke. Those that are, which in a recent Washington survey conducted by ECONorthwest showed one-in-six casino players greatly disliked smoke, are generally infrequent and low-stakes players. Therefore, the close proximity of a smoking casino will cause a settling out in the market.

The card rooms would attract a higher proportion of low-stakes, low-risk, casual players than the Cowlitz. Smokers that currently go to the card rooms because there are no convenient alternatives are going to gravitate to the Cowlitz casino. Non-smokers that are more attracted to the action of a big casino than are bothered by the smell of smoke, are going to go to the Cowlitz.

The card rooms would sustain lower revenues and even lower profits (it costs as much to deal 21 to a $50 a hand player as it does to a $5 player, and higher stakes players will gravitate to the smoking casino).

Pull-tabs

The impact of the Cowlitz casino on pull-tab sales in La Center is expected to be greater than the impact on table game receipts because pull-tabs are an economically inferior good in comparison to VLTs. Something is called "economically inferior" if it has characteristics that make consumers willing to switch away quickly to alternatives whenever they become available.

This is clear when examining how many Indian casinos with VLTs still offer pull-tabs. Of the 34 Indian casinos operating in Oregon and Washington, only five still sell pull-tabs.[22] Many had pull-tabs in the past, but poor demand, which worsened after the introduction of VLTs (especially in casino bars), encouraged tribes to discontinue pull-tab sales.

Pull-tabs are uncompetitive with VLTs because of the wide price difference between them. In Washington, the average house advantage on pull-tabs is about 28.4 percent.[23] The house advantage on VLTs at Washington tribal casinos typically ranges from six to eight percent.[24] Thus, pull-tabs, even when available at an Indian casino, are largely relegated for sale at bars as a type of low-wager, convenience form a gambling.

[22] Survey of casinos as reported on May 7, 2005 on the website: http://www.casinocity.com

[23] Gambling Statistics for Fiscal Year Ending June 30, 2005. Published by the Washington State Gambling Commission. Page 32.

[24] ECONorthwest experience working with tribal casinos in Washington state.

As a result, the forecast calls for the Cowlitz casino having a greater impact on pull-tab tax receipts. The introduction of VLTs into the local market simply makes pull-tabs less attractive to players. Tax revenues from pull-tabs would be 71.4 percent less in 2011 is the Cowlitz casino opens.

Downstream Impacts

There would be a number of collateral economic losses to La Center due to the competition the Cowlitz casino would have on the four card rooms. There would be declines in local spending by card room employees and customers. There would be the displacement of bar and restaurant spending by local residents and players to the Cowlitz operation. Sewer rates payments would decline, as well. The impact of lower revenues at the card rooms would also adversely affect the intangible business values of the four card rooms.

Of these downstream effects, only the direct tax and the "resulting indirect loss of City of La Center related revenue" are mentioned in the text of the DEIS, and only the former is quantified.[25] However, they only represent a portion of the losses that would ultimately affect the City and its businesses.

[25] Cowlitz Casino Project: Socioeconomic Assessment (final draft). Page 92.

Section IV

Housing Demand & Values

The City of La Center posed the question, "what would be the impact of the Cowlitz project on La Center housing demand and values." This analysis finds that the demand for housing would increase by about 112 units in the La Center Zip code, but that the average home price would not be affected significantly.

General Observations

Any large project can affect the local housing market by stimulating net income and household growth. Although some have argued that casinos adversely affect housing markets, we are unaware of any evidence in support of such a belief that would pass muster in a peer review. Indeed, the data that we have seen show that casinos usually cause an increase in housing demand, which is often modest, and have no significant effects on the prices of homes. However, because of the increase in housing units, the total value of residential real estate in the towns next to casinos usually does go up.

Nuisance Effect

Ironically, although casinos are labor intensive and attract spending from outside local communities, the fear that a new casino would somehow hurt property values is a common, albeit not universal refrain. Such concerns are most often voiced in places with large numbers of retirees or affluent residents that prefer a sedate hometown.

The problem with these fears is that they are emotional without good data to support them. There is no economic mechanism linking casinos to forcing real estate prices lower. Towns where some residents feared falling home prices due to a new casino, like Lincoln City and Florence on the Oregon coast, saw no decline in housing prices. Communities in the Northwest that have had casinos built in them have, on average, experienced stronger housing markets because they benefited from improved demand and incomes.

For example, on June 10, 1995 the Lucky Eagle Casino opened in the town of Rochester, Washington. It is the closest Indian casino to La Center. According to the U.S. Census, approximately 120 new housing units were built in Rochester in the five years following the casino's opening—an increase in the housing stock of 22 percent.[26] The average home price rose 124 percent since May 1996. That is slightly better than what Thurston County experienced (116 percent) and nearly the same as the statewide average of 122 percent.[27]

[26] From table DP-4 for Rochester, Washington accessed May 25, 2006 at: http://factfinder.census.gov

[27] Data accessed on May 25, 2006 at: http://www.zillow.com/local/Washington/Thurston/Rochester

Such data, however, offer no consolation to those that simply hate the idea of a casino. A resident that either prefers a quiet town life, dislikes gambling, sees no personal income benefit, or frowns on the likes of casino players, often will see a casino as a nuisance.

From their perspective, a large project like what the Cowlitz have in mind, can only have adverse effects on their quality of life and, therefore, the value (or utility, as economists call it) that they derive from their property. They presume such feelings are universal or so widely held that the new casino would cause so many to sell and scare away any interested buyers, that prices would fall. While one can appreciate that some neighbors would hate having a casino built near their homes, nonetheless, it is the experience throughout the Northwest that large casinos do not hurt property values.

The reason why the introduction of something that some residents view as a nuisance does not affect property values is that there is a large number of people that do not share the same view. If a homeowner dislikes having a casino, they may move and sell their house to someone who likes casinos or is indifferent to their presence. In addition, the wage and small business income growth that is stimulated by the casino causes spending on local housing to go up, which further supports the market. In these cases, property values would not be diminished.

Demand

The casino model analysis determined that the businesses and tribal government institutions on the proposed Cowlitz Indian trust land would directly employ 180 residents from the La Center Zip code 98629 (from Table 2 on page 13). It would also stimulate indirect and induced employment of another 68 residents, which would make the total impact 248. Many would occupy existing housing in the Zip code, but others would cause the number of housing units demanded to go up 112 over and above what would otherwise be needed in the market in the year 2011 (from Table 3 on page 17).

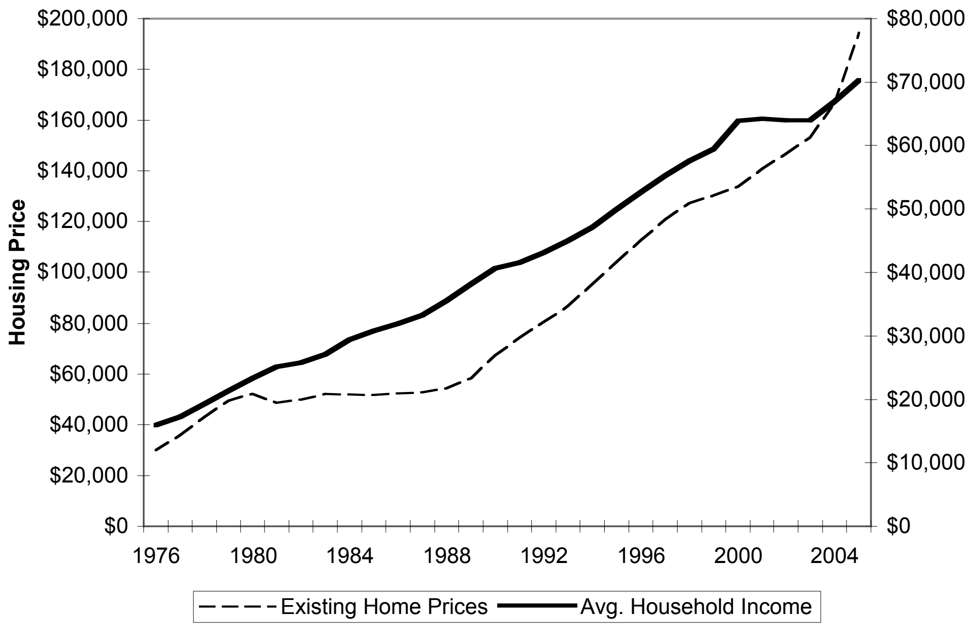
The 98629 Zip code encompasses the City of La Center, but only about 23.3 percent of the housing units in the Zip code were located inside of the city limits according to the 2000 U.S. Census. Thus, while the analysis can forecast that the entire Zip code would see an additional 112 housing units, one can only speculate as to how many of those units would be built in the City itself. Presumably, if the 2000 Census ratio holds, it would be 26 new units by 2011. However, many other issues can affect where homes are built including changes in city boundaries and decisions about permitting housing developments.

Housing Values

Economic research shows that housing prices are highly income elastic on nearly a one-to-one basis. That means if household incomes rise by ten percent, for example, the prices of housing would also rise about ten percent. That relationship generally holds unless there is a severe restriction imposed on construction or land available for home building.

The relationship between home prices and household incomes in the Portland-Vancouver metropolitan area is illustrated in Figure 1.[28] It shows that the price of existing homes in the region have tracked average household incomes closely.

Figure 1: Household Income and the Price of Existing Single-Family Homes in the Portland-Vancouver Metro Area, 1976 - 2005



Sources: Office of Federal Housing Enterprise Oversight, the U.S. Census, and the U.S. Department of Commerce Bureau of Economic Analysis, Claritas, and ECONorthwest.

Home prices lagged income growth in the 1980s in large part because mortgage rates throughout the decade were at double-digit rates. The recent run-up in prices reflects the combined impacts of rising incomes and low mortgage rates. If the housing price data were adjusted for changing mortgage rates, the relationship between incomes and housing costs, which for many is the mortgage payment and not the selling price, would be closer.

The impact of the Cowlitz development on housing values in La Center will track the income effect forecast in Table 3, which is on page 17. It shows personal income in the 98629 Zip code being $8.8 million higher in 2011 with the Cowlitz project in place. The equates to a net impact of +3.58 percent and, therefore, we can expect that the total value of residential housing in the Zip code would be that much higher in 2011 if the Cowlitz project is built.

---

[28] Clark and Skamania counties in Washington, and Multnomah, Clackamas, Columbia, Washington, and Yamhill counties in Oregon. Average household income data for this region was calculated using US Census data. ECONorthwest estimated average household incomes in inter-census years using data from Bureau of Economic Analysis and Claritas, Inc.

The average price of a house would track average household income. The analysis finds that the average home price in the La Center Zip code would be little different with or without the Cowlitz development in 2011. That is because the change in personal income per household in the Zip code would be negligibly higher if the Cowlitz Tribe opens their facilities.

As shown in Table 3, 108 additional households are forecast to move into new housing in the La Center Zip code should the Cowlitz project go through. That equals 3.50 percent more households in 2011 than would otherwise exist, which nearly matches the change in total personal income. Thus, home prices would not be much different.

Section V Impact on School Districts

The City of La Center asked for estimates of the impact that the Cowlitz development would have on the La Center and Ridgefield school districts.

Impacts on the School Districts

This analysis estimated the impact of the Cowlitz development on the La Center and Ridgefield school districts in terms of operating costs and the capital outlays necessary for buildings to accommodate additional students. It accounts for the net direct, indirect, and induced impacts on enrollments in the public schools attributable to the operations of the facilities on the Cowlitz trust lands as portrayed in the DEIS.

This analysis of incremental impacts does not consider non-building capital costs or the effects of the counterfactual scenario—the growth that would otherwise occur in the region if the Cowlitz project were not developed.

Operating Costs

The Cowlitz development would have an impact on public school enrollment in 2011 in the La Center and Ridgefield Zip school districts because it would significantly increase the number of enrolled students. The forecast, shown on Table 3, calls for increased enrollments of 73 and 96 in the La Center and Ridgefield districts, respectively.

The increased enrollment would measurably increase the operating costs of both districts. To estimate the impact, ECONorthwest contacted both school districts and obtained per student annual operating costs. These costs were then converted into 2011 dollars.[29] The results appear in Table 5.

[29] These numbers are based on 2005-2006 cost per student and adjusted to 2011 values using ECONorthwest's consumer price index forecast, which calls for an approximate inflation impact of 3.5 percent a year. A dollar in 2006 would be worth about $1.20 in 2011.

Table 5: Forecast Impact on Annual Operating Costs of the La Center and Ridgefield School Districts Due to Cowlitz-Stimulated Enrollment, 2011

School District	Enrollment Impact	Cost per Student	Operating Cost Impact
La Center	73	$8,361.50	$610,390
Ridgefield	96	$9,012.20	865,171
Total Impact	169	$8,731.13	$1,475,561

Source: ECONorthwest forecast of enrollment, May 2006. Current operating cost per student data from the Ridgefield and La Center school districts adjusted to 2011 dollars by ECONorthwest.

The analysis reveals that the La Center School District's operating costs in 2011 would be $610,390 higher because of the added burdens placed on it by the 73 extra students due to the presence of the Cowlitz development. Ridgefield would see its operating costs come in about $865,000 higher in 2011. Overall, the operating costs on the two school districts would be nearly $1.5 million more in 2011. An expense of similar magnitude, after accounting for inflationary effects, would be repeated in future years.

Capital Costs

The Cowlitz development would put pressure on the school districts not just for additional operating costs, but also to add building capacity.

Capacity of the School Districts

The La Center and Ridgefield school districts are currently over capacity. Thus, even moderate increases in enrollment caused by the Cowlitz development would compel the districts to build more school rooms, which would be costly.

The Ridgefield School District has four schools (two elementary schools, one middle school, and one high school) with a total capacity of 1,625. As of May 1, 2006, there were 1,967 students enrolled in the district.

The La Center School District has three schools (one elementary school, one middle school, and one high school) with a total capacity of 1,350. There are currently 1,487 students enrolled.[30]

Both school districts have plans to add additional capacity by building new schools, however, neither has passed bonds to finance the school construction. In the meantime, the school districts are resorting to the temporary solution of portable classrooms to deal with the lack of space. The Ridgefield School District has 22 portable classrooms and the La Center School District has nine with one being used as a school district office.

[30] Sources: Mary Vagner, Ridgefield School District, interviewed by ECONorthwest, May 22, 2006 and Laurie Kasanback, La Center School District, via e-mail, May 23, 2006.

Capital Cost Impact

The impact of 169 more public school students imposed by the Cowlitz development would require the school districts to build capacity, which would be a substantial one-time capital outlay. Forecasting the impact of the cost of adding classroom capacity depends on timing as well as the number of students to be provided for. For consistency, this analysis assumes the construction would take place in 2011, which is the year chosen for other parts of this research.

The analysis estimates the capital cost impact by first using school building construction cost data from FW Dodge, a nationally recognized source of construction project statistics. Data from FW Dodge for recent school building construction in Clark County, adjusted for building cost inflation,[31] was used. The data show the average cost in Clark County per square foot of school building had been, in 2006 dollars, about $197 (in 2011 dollars, it would be $237). Land costs of $9.25 a square foot, also in 2011 dollars, and finished building capacity of 135 square feet per student were assumed. Based on those figures, it is assumed that the cost to construct enough school building capacity to handle each additional student was found to be $33,228.

The cost in 2011 of having to construct school buildings to safely accommodate the anticipated 169 additional students going to school each year because of the Cowlitz development would be in excess of $5.6 million, as shown in Table 6. This does not include equipment and supplies.

Table 6: Forecast Impact on Capital Cost to Build School Capacity in the La Center and Ridgefield School Districts Due to Cowlitz-Stimulated Enrollment, 2011

School District	Enrollment Impact	Cost of Additional Capacity in 2011
La Center	73	$2,425,644
Ridgefield	96	3,189,888
Total Impact	169	$5,615,532

Source: ECONorthwest forecast of enrollment, May 2006. Current operating cost per student data from the Ridgefield and La Center school districts adjusted to 2011 dollars by ECONorthwest.

Comparison to the DEIS Regarding Schools

The DEIS states that the amount of children added to the school districts would be a "relatively insignificant amount."[32] Indeed, as determined on page 19 of this report, the DEIS finds that fewer than two new students would be enrolled in the Ridgefield, La Center, and Woodland school districts because of the Cowlitz operations.

[31] Construction costs were corrected for inflation using the Engineering News Review building construction cost index. Major construction contractors and the U.S. Department of Commerce use the index.

[32] Cowlitz Casino Project: Socioeconomic Assessment (final draft). Page 84.

This analysis clearly shows that the DEIS is wrong. The impact would be great. About $5.6 million in school buildings would need to be constructed and the two districts would find themselves having to educate about 169 more students a year at a cost approaching $1.5 million a year.

Section VI

Impact on Card Room Values

The City asked how the Cowlitz casino would affect the property assessments and property taxes of the four La Center card rooms. The conclusion of this analysis is that the Cowlitz casino might have a small impact.

Card Room Assessments

The Clark County Assessors Office provided the 2006 assessed values and property taxes for the card rooms in La Center. This information is shown in Table 7.

Table 7: Property Tax Assessments of the Four Card Rooms in La Center, 2006

Card Room	Land	Building	Taxes on Land & Buildings	Personal Property	Taxes on Personal Property	Total Tax in 2006
Double Down	$198,800	$826,100	$11,504	$101,842	$1,283	$12,787
The Palace	198,800	407,800	6,809	82,241	1,013	7,822
New Phoenix	259,500	1,006,100	14,206	236,631	2,910	17,115
Last Frontier	300,200	991,000	14,493	129,608	1,634	16,127
Total	$957,300	$3,231,000	$47,011	$550,322	$6,841	$53,852

Source: Clark County commercial property assessor, Mr. Mark Rauchenstein, email to Robert Whelan of ECONorthwest on May 23, 2006.

The land and buildings of the four card rooms in La Center are assessed at a value of $4,188,300. The personal property inside the buildings is assessed at $550,322. For 2006, the total property tax due on the lands, buildings, and personal properties of the four card rooms is $53,852.

As was noted on page 20, this analysis estimates that the Cowlitz casino would cause gaming revenues at the card rooms in 2011 to be 66 percent less than otherwise. It stands to reason that that the card rooms would suffer financially as a result. However, this would not affect the assessed values of the land and buildings of the card rooms.

The profitability of a card room business affects its intangible value, not the value of its physical real estate and property (the building, land, equipment, and supplies). Assessors do not analyze business profitability in the course of determining assessed valuations of real and personal property. Intangible personal property is expressly exempt from taxation in Washington State.

Instead, the real estate is valued according to what the building is designed for and what it would get if sold on the open market to somebody who would open their own business inside of it. Presumably, the assessed value of a La Center card room, excluding equipment and supplies, would be given the same assessed value whether it were just a restaurant/bar, a card room casino, or an empty building. A highly profitable restaurant would pay the same property taxes as an unprofitable one if they both had identical structures, equipment, and market prices for their lands.

A card room that suffers from a marked decline in its profitability does not enjoy a reduction in assessed values and property taxes for their land and building. However, if such a card room gets rid of equipment or closes and removes equipment, the assessed value and taxes levied on its personal property would decline. Personal property is, "all movable furniture, fixtures, machinery, farm equipment and supplies used by an individual, partnership, corporation, or association that own or possess personal property."[33]

The card rooms in La Center had about $550,000 worth of personal property and paid $6,841 of property taxes on it in 2006. Should the Cowlitz open a casino, the assessed value of personal property could decline and so would the taxes. For that to happen a card room would have to remove equipment and supplies. Thus, only the property tax on personal property in La Center would be vulnerable to a negative impact from the Cowlitz casino.

[33] Clark County Assessors Office website accessed May 26, 2006: http://www.clark.wa.gov/assessor/appraisals/personal.html

Traffic Impacts

The City of La Center asked for a comment in this report on whether the traffic impacts portrayed in the DEIS differ substantially from what ECONorthwest would expect given its experience.

Cowlitz Versus Other Large Casinos

By comparing the trip forecast for the Cowlitz project, which in the DEIS is based on the year 2010, to historical data on two other casinos, this analysis finds that the DEIS trip counts are too low.

Cowlitz Trip Forecast

This analysis could not calculate the overall trip generation based on the data presented in the DEIS because they apparently left out the RV park, retail stores, and tribal functions from the table. More problematic, trip generation rates for the events center were based on the times events would be held, rather than an annual average.[34] This is appropriate for measuring peak effects from the events center, but makes it impossible to estimate the annual traffic impacts from the DEIS so that they can be compared with this analysis.

The trip generation rates shown in the DEIS for just the casino, which is the biggest attractor, are useable in this analysis as they appear to be averages that can be applied to calculate annual estimates.

The DEIS shows total daily trip generation for the Cowlitz casino to be 12,508 on Saturday's and 8,302 on weekdays,[35] which is a daily average of 8,903 and annual total of 3,249,542 for the year forecast for the DEIS traffic analysis, 2010. This is the equivalent of about 2.9 million persons visiting the casino in 2010 and 66.36 per day per 1,000 sf of gaming space.[36]

[34] DEIS page 4.8-11, table 4.8-2.

[35] DEIS page 4.8-11.

[36] 3,249,542 vehicles in and out of the casino parking lot with people that intend to go into the casino, averaging 1.77 persons per vehicle, divided by two equals 2,875,845 persons walking into the casino. Not all gamble and many are employees. Visits per square foot based on a 134,150 sf gaming floor, as reported in the DEIS.

Past research by ECONorthwest shows that in large northwest casinos about 74 percent of the trips are by casino gamblers (the other 26 percent are employees, non-gambling visitors, and commercial visitors). That would mean the Cowlitz would get 2,128,125 casino players in 2010. The DEIS forecasts $415.2 million in gaming revenues.[37] By dividing the two, it is revealed that the DEIS assumes the average player would spend $195 on gaming each visit. That is about three times higher than the typical Northwest urban average of $65 and evidence that either the revenue or traffic forecasts in the DEIS are substantially out of line.

Comparison to Spirit Mountain

Spirit Mountain is less than half the size of the proposed Cowlitz casino. Still, it is the largest casino in Oregon with 1,500 VLTs and 39 table games. According to the Spirit Mountain Casino, they draw nearly three million visitors a year and have 85,000 sf of gaming space.[38] They have 1,600 employees.[39] With three million visitors traveling 1.8 persons per vehicle, workers averaging 240 working days per year at 1.16 per vehicle, and 100 support/delivery trips a day, then in 2005 they would have had 4,058,300 trips to and from their casino.

The forecast for 2010 from the DEIS puts the Cowlitz trip level in the future at about 800,000 less per year than Spirit Mountain, yet the Cowlitz is forecasting out four years, includes a huge retail component, and has a casino that is more than twice the size of Spirit Mountain.

Comparison to the Muckleshoot Casino

The Muckleshoot Casino, the most popular in the Northwest, attracted over 10,000 visitors a day in 2003.[40] They had 2,000 VLTs and about 69 table games at the time.[41] The Muckleshoot has about 2,000 employees.[42] Assuming 240 working days per employee, 10,000 visitors a day, and 100 commercial and administrative visitors a day, and similar parameters as used in our previous example, the casino would have had 4,946,100 trips in 2003.

Thus, in 2003, the Muckleshoot attracted about 1,700,000 more trips than the BIA's DEIS forecasts for a much larger casino in 2010. In addition, unlike the Muckleshoot, the Cowlitz would have a hotel, entertainment center, RV park, and large retail complex.

---

[37] Cowlitz casino project: socioeconomic assessment. January 2006. Page 90.

[38] Spirit Mountain Casino press kit accessed from casino website on May 12, 2006 at http://www.spirit-mountain.com/aboutus/presskit/smcsmc.aspx

[39] U.S. Housing and Urban Development website accessed on May 12, 2006 at http://www.hud.gov/local/wa/working/onap/giving.cfm

[40] Website access on May 14, 2006: www.ndnlaw.com/images/pdf/28.pdf

[41] Website accessed May 14, 2006: http://www.casinocity.com/us/wa/auburn/mucklesh/

[42] Website access on May 14, 2006: http://www.paragonrea.com/exclusive/details.asp?property_id=430

Comparison to the Mohegan Sun Casino

The Mohegan Sun has two casinos in Connecticut. While data for the Mohegan Sun was used in the DEIS traffic analysis to measure the impact of an event center at the Cowlitz project, it was not used to project traffic for the Cowlitz project as a whole.[43] The Mohegan Sun has parking for approximately 13,000 guests and 3,100 employees for a casino complex comprising of 298,500 sf of gaming area.[44]

A traffic study from the University of Massachusetts Dartmouth reports that in 2004 the Mohegan Sun had 14.6 million visitations (not including employees and commercial visitors). If they came 1.8 per vehicle, which is typical of casinos, then the average number of daily trips in 2003 would have been about 44,000 a day or an intensity level of 148.89 per sf of gaming space.[45] This intensity is 124 percent higher than forecast in the DEIS for the Cowlitz casino.

Conclusion About the DEIS Traffic Forecast

From public data, trips to the most popular Oregon and Washington casinos in the recent past have substantially exceed what the DEIS forecasts for the Cowlitz in 2010. Furthermore, the relationship between the trip levels and the gaming revenues shown in the DEIS are clearly incongruent as evidenced by the startlingly high revenue per casino visitor figure of $195—three times higher than should be expected.

Based on our experience, we would expect the trip rates to the Cowlitz property to be much larger than the DEIS forecasts. There are at least three weaknesses in the DEIS traffic analysis:

1. The DEIS appears to have left out elements of the project that will stimulate trips—most notably retail, tribal functions, and the RV park.

2. The traffic impacts calculated in the DEIS are based on comparisons of casino floor area, hotel room counts, and event center seats to limited observations made at other properties.[46] The observations of other casinos used were, in some cases, limited to an hour. For example, to measure peak traffic impacts, the DEIS observed traffic in and out of the Spirit Mountain Casino on a Friday in December 2005 between 4 and 5 in the afternoon.[47] However, December is the slowest month of the year for Northwest casinos and Fridays from 4 to 5 PM are usually more than 25 percent below the peak hour of the week for a casino.

---

[43] Cowlitz Tribe casino traffic impact study. February 2006. Page 31.

[44] Mohegan Sun. Annual Report 2005. Page 15.

[45] New England Casino Gaming: A Foxwoods Resort and Mohegan Sun, 2004 Update. Center for Policy Analysis. University of Massachusetts Dartmouth. January 2004.

[46] Cowlitz Tribe casino traffic impact study. February 2006. Page 28.

[47] Cowlitz Tribe casino traffic impact study. February 2006. Appendix B.

3. The DEIS does not consider the casino's proximity to a large urban center, which is going to result in more frequent trips by locals. Put simply, when a casino is an hour away it may attract six visits a year from players. However, if it is 15 minutes away, those same players will visit more often although spend less time and money on each visit. Still, they create traffic. In Las Vegas, about 43 percent of local casino visitors go at least once a week.[48] Such local player behavior is a well-known phenomenon in the casino industry.

Trip Forecast of This Analysis

For this analysis, the visitor count forecast from Table 1 was used to estimate trip generation at the Cowlitz project in 2011. Using vehicle occupation factors to determine how many trips in 2011 the trust land would generate, 10,303,572 trips are forecast. However, pass-by trips reduce the net trip generation due to the Cowlitz project to 8,629,215. For comparison, in 2003 the Muckleshoot Casino, which lacked large retail, hotel, and tribal government facilities on its site, and had a much smaller casino than the Cowlitz are planning, generated 4.9 million trips and an estimated net trip generation of 4.1 million.[49]

Table 8: Traffic Forecast, 2011

Purpose of Visit	Person Visits	Vehicle Occupancy	Vehicle Visits	Vehicle Trips
Convention & meeting attendees	231,642	2.02	114,674	229,348
Ticketed entertainment show guests	65,298	2.85	22,912	45,824
Hotel guests	159,939	2.05	78,019	156,038
RV park guests	111,690	2.55	43,800	87,600
Casino players	7,320,208	1.78	4,112,476	8,224,952
Non-gaming casino visitors	4,118,080	1.91	2,152,402	4,304,804
Retail store customers	1,553,590	2.45	634,118	1,268,236
Tribal facilities visitors	54,750	2.17	25,230	50,460
Commercial & other support visitors	27,375	1.16	23,599	47,198
Casino workers & gaming commission	822,145	1.16	708,746	1,417,492
Hotel employees	57,360	1.16	49,448	98,896
Tribal employees & tribal council	19,720	1.16	17,000	34,000
Retail employees	66,720	1.16	57,517	115,034
Eldercare residents & guests	2,920	2.95	990	1,980
Less multiple purpose visits	(5,456,135)	1.89	(2,889,145)	(5,778,290)
Total visitation on the Cowlitz property	9,155,302	1.78	5,151,786	10,303,572
Less pass-by trips	(1,595,438)	1.91	(837,178)	(1,674,357)
Net trip generation	7,559,863	1.75	4,314,608	8,629,215

48 Liz Benston. "Station's ECON 101," The Las Vegas Sun. January 8, 2006. Accessed on the Internet on May 15, 2006: http://www.lasvegassun.com/sunbin/stories/sun/2006/jan/08/519932156.html

49 Net after deducting pass-by trips, which we estimate is one-sixth of the visitations to the Muckleshoot. Although near Seattle, the Muckleshoot is on the outskirts of Auburn and outside the range of normal commuter and local shopping traffic for most people living in the region, so the pass-by potential is largely limited to those going to Enumclaw and small communities to the northeast of Auburn.

Market Calculations

Table 1, on page 10 of this report, contains numbers that were calculated from data from various sources. Indicated below, for each row on the table, are the calculations and sources of each item:

- **Hotel operations, room supply**: 250 rooms[50] times 365 days in 2011.
- **Rooms sold**: Projected occupancy rate times supply
- **Occupancy rate**: Based on earlier proprietary research by ECONorthwest on the occupancy patterns of tribal hotel casinos.
- **Average daily rate**: National average room rate of full-service hotels on highway locations in 2004 adjusted for inflation to 2011.[51]
- **Other room revenue (except food):** Food revenues were excluded from the hotel calculation because the Cowlitz operation probably would record all restaurant and bar sales under its food & beverage department. Other revenues include communications, valets, meeting room fees, and other operated hotel departments. National average of full-service hotels on highway locations in 2004, adjusted for inflation to 2011, was used.[52]
- **Employee counts by venue:** This is a mix of full- and part-time workers. However, in Oregon and Washington, there is little seasonality, so over 93 percent of casino workers are full-time.
- **Casino, restaurants, and other casino-related (employees):** Based on a cross-sectional regression analysis of Northwest Indian casinos of gaming position and gaming revenue data as they relate to non-hotel casino employment. This includes restaurants, bars, arcades, cabarets, in-casino gift shops, back-of-the-house workers, gaming office employees, valets, and security.

[50] DEIS Cowlitz Indian Tribe trust acquisition and casino project. April 2006. Page 2-9.

[51] The 2004 Host Study – Hotel Operating Statistics. Smith Travel Research. 2004. Page 25.

[52] The 2004 Host Study – Hotel Operating Statistics. Smith Travel Research. 2004. Page 29.

- **Hotel, RV park, & recreation areas (employees):** ECONorthwest assumption of 0.9 employee per available hotel room was used. Note that casino hotels in Washington and Oregon usually do not include food & beverage service workers in their totals. This is why a low number, 0.9, was used. Normally, employment at full-service hotels is in the 1.2 to 1.4 per room range. RV park is assumed to have six employees and eight for the recreation areas associated with the RV park (pool, spas, clubhouse, *etc*.).

- **Tribal govt., cultural center & wastewater plant (employees):** There will be 20,000 sf of tribal offices and a 12,000 sf cultural center.[53] The analysis assumes that 8,000 sf would be occupied by museum exhibition space. The remaining 24,000 sf would be mostly offices. The useable ratio of office space is 70 percent and 225 sf are needed per employee.[54] In addition, five employees would work at the wastewater treatment plant.

- **Retail (employees):** There will be 165,000 sf of retail space.[55] As a model of retail, data from Kohl's Corporation were used in the analysis. This retailer is building stores in the Northwest, is not in Clark County yet, and is typical of a successful, large format department store. The number of square feet of selling space per employee is 529.[56] Approximately 89 percent of the total retail space is selling space.[57]

- **Total employment:** Employment by venues is totaled.

- **Visits onto the trust land by purpose:** This totals the visits made (by individuals, not vehicles) onto the trust land property to various venues. Because many people will visit more than one venue, the sum of individual venue visitors exceeds the number of visitations made to the Cowlitz trust land. An adjustment is made for this on Table 1.

- **Convention & meeting attendance:** Using data from the Oregon Convention Center, the analysis applied a factor of approximately 1.76 attendees per sf of convention space.[58] There would be 85,000 sf of such space at the casino.[59] The analysis assumes that 20 percent of meeting space visitors would make two trips to and from the property.

---

[53] DEIS Cowlitz Indian Tribe trust acquisition and casino project. April 2006. Page 2-9.

[54] Rules of Thumb and Development Guidelines. Columbia University.

[55] DEIS Cowlitz Indian Tribe trust acquisition and casino project. April 2006. Page 2-9.

[56] Kohl's Corporation 10-K report filed with the U.S. Securities and Exchange Commission. January 28, 2006.

[57] "Kohl's to open on April 16." The Burlington Free Press. March 31, 2004. Page 6A. Based on a recently built Kohl's store of 86,605 sf total, as reported and compared to the sales space estimate of 77,302 sf for that same store as reported in the 2006 10-K report of Kohl's Corporation.

[58] Economic/Fiscal Impact Analysis for the Oregon convention Center, June 2004. KPMG. Page 8. 2003 attendance was 656,644 and there are 373,720 sf of sellable space.

[59] DEIS Cowlitz Indian Tribe trust acquisition and casino project. April 2006. Page 2-9.

- **Ticketed entertainment show guests:** The casino would have a 62,500 sf, 5,000-seat room for entertainment.[60] The analysis assumes that ticketed entertainment shows would be held at the venue. In fiscal year 2003/04, the Portland Center for the Performing Arts held 99 commercial shows at its theaters, which have a total seating capacity of 6,976.[61] The estimated attendance was 91,104 or 18.22 visitors a year per available seat. This comparable factor was applied to the anticipated seating capacity at the casino, as reported in the DEIS.

- **Hotel guests:** Analysis assumes 2.05 per room sold, which is consistent with casino properties along highways.

- **RV park guests:** Analysis assumes that the 200 spaces, on an annual average, would be occupied 60 percent of the time with an average vehicle carrying 2.55 passengers.[62]

- **Casino gaming:** Taken from the proprietary casino model developed by ECONorthwest. It takes into account the number of casino players in Zip codes in Oregon and Washington, their proximity (by driving times) to the Cowlitz casino and other casinos, income and age demographics, and the supply of non-local tourists that would come to the casino based on traffic information and previous surveys done by ECONorthwest. Furthermore, the model estimates the number of hotel and meeting/convention guests that would also gamble. This variable only counts those that would wager at the casino.

- **Eating, drinking, & other non-gaming in casino:** The casino model estimates non-players based on observed proportions at other casinos with similar location characteristics. This includes people such as adults that come to the casino to eat at restaurants, but not gamble. It also includes many minors that would eat at the restaurants. It is also assumed that three out of every eight people that gamble would also eat at a restaurant are drink in a bar. Many hotel and RV guests would also eat and drink in the casino. Although not shown in the DEIS, the casino would also probably have to offer entertainment for minors such as an arcade and childcare facility.

[60] DEIS Cowlitz Indian Tribe trust acquisition and casino project. April 2006. Page 2-9.

[61] Metro Exposition-Recreation Commission department summaries. Accessed over the Internet on May 6, 2006 at: www.merc-facilities.org/library/holdings/MERC%20Budget%20Overview%202005-06.pdf

[62] From the US Department of Transportation national personal transportation survey, 1990. Page 7-35.

- **Retail store shopping:** Analysis took the retail floor space, corrected it for actual selling space, multiplied by sales per sf, and divided by the average transaction size. It then assumes 1.8 persons per transaction in the stores. The average transaction of mass merchandisers[63] was grossed-up from 2006 dollars to 2011 using the consumer price index forecast. There would be 165,000 sf of retail, according to the DEIS, of which about 89 percent would be selling space (as explained earlier). The average sales be sf of selling space $256 (2006 dollars)[64] was grossed-up to 2011 dollars.

- **Tribal government & facilities visitors:** The analysis assumes 150 per day for tribal government services, museum visits, and cultural center events for tribal members.

- **Commercial, delivery, & other support visitors:** The analysis assumes 75 per day. This is based on comparisons to other casino properties.

- **Casino bldg. workers and gaming commission:** The analysis assumes 240 working days per employee in 2011 plus five visits per day from gaming enforcement and commissioners. Casino building workers include employees in the restaurants, offices, and back-of-the house function areas, as well as those working outside such as landscaping, security patrol, and parking valet.

- **Hotel and RV employees:** The analysis assumes 240 working days per employee in 2011.

- **Tribal govt. employees & tribal council:** The analysis assumes 240 working days per employee in 2011 and ten visitors from tribal council every week.

- **Retail employees:** The analysis assumes 240 working days per employee in 2011.

- **Eldercare residents & guests:** The analysis assumes one visitor every other day per eldercare home in 2011. There would be 16 housing units.[65]

---

[63] $43 in 2006 as reported by AC Nielsen. Taken from website accessed on May 5, 2006 at http://us.acnielsen.com/news/20060130.shtml

[64] Kohl's Corporation 2006 annual report.

[65] DEIS Cowlitz Indian Tribe trust acquisition and casino project. April 2006. Page 2-9.

- **Less multiple purpose visits:** Many visitations made to the Cowlitz property would involve visiting more than one venue. For example, a person might stay at the hotel, but then visit a restaurant and the casino, thus making three visits on one vehicle round trip. By subtracting multiple venue visits, the analysis arrives at a total for visits onto the trust land property. This total is verified by comparing it to the results of the casino model, which was built on measuring actual visitations onto casino properties in Washington and Oregon.

- **Total visits to the property:** Individuals entering the trust land during the course of 2011.

- **Revenues:** This section of the table summarizes only the revenues from the commercial operations of the Cowlitz on the trust land. Tribal government revenues, such as grants and Federal housing program subsidies, are not considered.

- **Video lottery terminals:** Gaming revenues (wagers minus prizes paid) to players on VLTs as estimated from the proprietary casino model developed by ECONorthwest. The amount shown on Table 1 is approximately $359 per day per machine. This is roughly equivalent to the average machine being played 9.5 hours at 82 cents per play with a seven percent hold. A seven percent hold is approximately the current rate on the Oregon Lottery's VLTs in Portland.

- **Table games:** The casino model is the source of the Gaming revenue forecast for house-banked casino table games, such as craps and 21. The amount shown for 2011 on Table 1 is about equal to $1,838 per table per day.

- **Poker:** Gaming revenues from the rake for poker games. The casino model forecast for 2011 is slightly over $1,000 per table per day. This is high for an Indian casino, but not when considering that the Cowlitz would limit the number of tables to only 20.

- **Retail:** Using Kohl's as a model, the analysis assumes that about 89 percent of the retail building area would be selling space and that sales per sf of selling space in 2011 would be about $298 a year. The sources for these were cited earlier in footnotes 63, 56, and 57.

- **Food & beverage:** Sales of food & beverages equal about 10.8 percent of gaming revenues, which is the statistical average relationship at Indian casinos in Oregon[66] and very similar to the levels seen in Washington, which ECONorthwest has worked for in the past. The amount shown on Table 1 equals about $6.47 per person entering the casino.

---

[66] The Contributions of Indian Gaming to Oregon's Economy. The Oregon Tribal Gaming Alliance. February 15, 2005. Page 29.

- **Hotel and RV park:** Hotel revenues were calculated by multiplying the number of rooms sold by the sum of the average daily room rate and other revenues per room found in the top portion on Table 1. The sources for these variables were explained earlier and cited in footnotes 51, 50, and 52. RV park revenues (all sources) are assumed$60 per occupied space day.

- **Entertainment, conventions & other:** Revenues from other sources were calculated by taking the sum of these revenues as a percentage of total gaming revenues at Oregon casinos[67] and applying it to the forecast 2011 gaming revenues at the Cowlitz casino. Other revenues might include ticket sales, tobacco sales, RV space rentals, consumer show rents and fees, advertising fees, equipment rentals, museum admissions, arcade game sales, childcare revenues, and sales of sundries.

- **Less promotional allowances:** Most casinos in the Pacific Northwest give players promotional allowances, which are also known as comps. These are discounts, free goods & services, awards, and prizes designed to strengthen and develop casino player loyalty. Comps are charged as an expense to the casino even if used by players to get free meals and hotel rooms. Thus, the revenues reported for food & beverage, and the hotel on Table 1 do not include the effect of comps. Instead, they would be deducted by the Tribe as either a casino expense or as a deduction off their gross gaming revenue line. Comps in Washington average about eight percent of gaming revenues.

- **Total revenues:** This is the sum of all revenue items with the deduction taken for comps.

- **Subtotal – gaming revenues:** This subtotal is simply the gross gaming revenues from VLTs, table games, and poker (before comps). For commercial casinos, gaming taxes are calculated from this amount. For tribes in Washington, most take a percentage of gaming revenues and apply them to community impact funds. In 2004, there were 18 tribes operating casinos and 15 had distributed funds. Compacts call for up to two percent of table game revenues and to 0.5 percent of VLT revenues to go to community impacts. Revenues before comps are used in these calculations.[68]

---

[67] The Contributions of Indian Gaming to Oregon's Economy. The Oregon Tribal Gaming Alliance. February 15, 2005. Page 29.

[68] Washington State Gaming Commission. Draft minutes of the Thursday March 9, 2006 Commission meeting. Pages 5-9.