FEASIBILITY ANALYSIS OF
SELECTED INTERCOLLEGIATE SPORTS FOR
WESTERN NEVADA COMMUNITY COLLEGE
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INTRODUCTION

Western Nevada Community College commissioned the University Center for Economic Development and the Small Business Development Center to complete an initial feasibility analysis of intercollegiate sports at Western Nevada Community College (WNCC). In spring 2002, Carson City High School questioned 1,055 high school students at Carson City High School and 369 high school students from Fallon High School, Elko High School, and Spring Creek High School. Table 1 shows the preferences of students at Carson City High School and Table 2 shows the preferences of high school students from Fallon High School, Elko High School, and Spring Creek High School as to possible intercollegiate sports at WNCC.

Table 1. Preferences of Intercollegiate Sports at Western Nevada Community College by Carson City High School Students.

<table>
<thead>
<tr>
<th>Category of Sports</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Football</td>
<td>282</td>
</tr>
<tr>
<td>Baseball</td>
<td>281</td>
</tr>
<tr>
<td>Basketball (Men)</td>
<td>280</td>
</tr>
<tr>
<td>Basketball (Women)</td>
<td>274</td>
</tr>
<tr>
<td>Volleyball</td>
<td>260</td>
</tr>
<tr>
<td>Track</td>
<td>188</td>
</tr>
<tr>
<td>Softball</td>
<td>171</td>
</tr>
<tr>
<td>Tennis (Co-Ed)</td>
<td>153</td>
</tr>
<tr>
<td>Soccer (Women)</td>
<td>143</td>
</tr>
<tr>
<td>Soccer (Men)</td>
<td>141</td>
</tr>
<tr>
<td>Golf (Co-Ed)</td>
<td>128</td>
</tr>
<tr>
<td>Aquatics</td>
<td>128</td>
</tr>
<tr>
<td>Rodeo</td>
<td>80</td>
</tr>
<tr>
<td>Nordic Ski</td>
<td>20</td>
</tr>
<tr>
<td>Other¹</td>
<td>290</td>
</tr>
</tbody>
</table>

¹Other responses include dance, bicycling, and regular physical education.
Table 2. Preferences of Intercollegiate Sports at Western Nevada Community College by Fallon High School, Elko High School, and Spring Creek High School Students.

<table>
<thead>
<tr>
<th>Category of Sports</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Football</td>
<td>153</td>
</tr>
<tr>
<td>Baseball</td>
<td>126</td>
</tr>
<tr>
<td>Track</td>
<td>120</td>
</tr>
<tr>
<td>Softball</td>
<td>76</td>
</tr>
<tr>
<td>Volleyball</td>
<td>72</td>
</tr>
<tr>
<td>Basketball (Women)</td>
<td>70</td>
</tr>
<tr>
<td>Soccer (Men)</td>
<td>70</td>
</tr>
<tr>
<td>Basketball (Men)</td>
<td>68</td>
</tr>
<tr>
<td>Rodeo</td>
<td>67</td>
</tr>
<tr>
<td>Tennis (Co-Ed)</td>
<td>63</td>
</tr>
<tr>
<td>Aquatics</td>
<td>60</td>
</tr>
<tr>
<td>Soccer (Women)</td>
<td>59</td>
</tr>
<tr>
<td>Golf (Co-Ed)</td>
<td>50</td>
</tr>
<tr>
<td>Nordic Ski</td>
<td>29</td>
</tr>
<tr>
<td>Other(^1)</td>
<td>112</td>
</tr>
</tbody>
</table>

\(^1\)Other responses include dance, bicycling, and regular physical education.

From Tables 1 and 2, football and baseball were ranked the highest. Carson City high school students ranked men’s and women’s basketball higher than students from high schools in Fallon, Elko, and Spring Creek. However, high school students from Fallon, Elko, and Spring Creek rank track and softball higher than high school students at Carson City High School. When asked if the student saw any advantage to Western Nevada Community College if athletics were offered, over seventy percent (70%) of Carson City, Elko, Spring Creek, and Fallon high school students agreed with this statement. This reply seems to indicate that athletics at WNCC would potentially attract students to WNCC. Also, if athletics were incorporated into a physical education department at WNCC where recreation facilities would be available to WNCC students, this would potentially enhance the student experience at WNCC.
FEASIBILITY ANALYSIS

Before any athletic program can be authorized at WNCC initial feasibility analysis is required. Using student preferences from Tables 1 and 2, the Athletic Development Committee decided to focus upon four sports for an initial feasibility study. These four sports are men’s baseball, women’s softball, men’s soccer, and women’s soccer.

The feasibility analysis for these four sports was completed using EXCEL spreadsheet software. A detailed description of the EXCEL worksheets is presented in Appendix A. Also, assumptions for cost estimation are discussed in Appendix A. Also in Appendix A, the assumptions used for this analysis are presented in detail. Being on EXCEL spreadsheet software, many of the assumptions and costs can be changed for sensitivity analysis.

Table 3 shows the estimated costs for the four intercollegiate WNCC sports. For the feasibility analysis, baseball, softball, and soccer fields will be leased from the city. If facilities are built, these facilities would be built on WNCC property. If WNCC in the future decides to build baseball, softball, or soccer fields, it is suggested that the structures be incorporated into the general college education. These sports facilities could be used by the physical education department as well as students for individual or intramural sports.

Annual costs for intercollegiate sports vary from $97,931 for baseball to $47,394 for men’s or women’s soccer. Participant costs vary from $3,264 for baseball to $2,266 for men’s or women’s soccer. In 2002, the number of students at WNCC was 2,200. Therefore, annual costs per student range from $44.51 for baseball to $21.54 for men’s or women’s soccer.
Table 3. Costs Estimates for Four Intercollegiate Sports for Western Nevada Community College.

<table>
<thead>
<tr>
<th>Sport</th>
<th>Participant Numbers</th>
<th>Annual Costs</th>
<th>Participant Cost</th>
<th>Student Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseball</td>
<td>30</td>
<td>$97,931</td>
<td>$3,264</td>
<td>$44.51</td>
</tr>
<tr>
<td>Softball</td>
<td>25</td>
<td>$79,311</td>
<td>$3,141</td>
<td>$36.05</td>
</tr>
<tr>
<td>Men’s Soccer</td>
<td>20</td>
<td>$47,394</td>
<td>$2,266</td>
<td>$21.54</td>
</tr>
<tr>
<td>Women’s Soccer</td>
<td>20</td>
<td>$47,394</td>
<td>$2,266</td>
<td>$21.54</td>
</tr>
</tbody>
</table>

Number of students at WNCC is 2,200
SUMMARY

The University Center for Economic Development and the Small Business Development Center at the University of Nevada were commissioned by Western Nevada Community College (WNCC) to complete an initial feasibility analysis of intercollegiate sports at WNCC. Preferences for intercollegiate sports by high school students at Carson City High School, Fallon High School, Elko High School, and Spring Creek High School were obtained through a questionnaire administered by Carson City High School. An interesting finding of the student questionnaire was that 70 percent of these high school students were supportive of intercollegiate athletics at WNCC and that intercollegiate athletics would add to student life at the WNCC campus. This result would imply that WNCC should attempt to incorporate intercollegiate sports into WNCC activities. This could be accomplished through a physical education department in which facilities would be available to all WNCC students.

Annual costs of intercollegiate sports were estimated for baseball, softball, men’s soccer and women’s soccer. Annual costs vary from $97,931 for baseball to $47,394 for men’s or women’s soccer. Per student costs range from $44.51 for baseball to $21.54 for men’s or women’s soccer. An interesting aspect for baseball, softball, men’s soccer, and women’s soccer is that these sports could later be incorporated into a future physical education department at WNCC.
REFERENCES

APPENDIX A:

Background on Spreadsheet Analysis
Description and Assumptions of Spreadsheet Analysis

- Eight spreadsheets were used in this analysis. These spreadsheets are:

1. Basic Information for Each Sport
2. Annual Coaching Costs for Each Sport
3. Travel Related Costs
4. Equipment and Fees
5. Baseball Costs
6. Softball Costs
7. Men’s Soccer Costs
8. Women’s Soccer Costs
Basic Information for Each Sport

- This spreadsheet, which is shown on page 14, is used to estimate game and practice rental.

- After discussions with the Athletic Development Committee of WNCC, it is assumed that number of participants in baseball is 30, for softball it is 25, for men’s soccer it is 20, and for women’s soccer the assumed number of participants is 20. These values can be changed for sensitivity analysis.

- Also, the number of home games, away games, and practice days for baseball, softball, men’s soccer, and women’s soccer were assumed after discussion with the Athletic Development Committee of WNCC. These values can be changed for sensitivity analysis.

- Practice and game rentals were assumed to be $25 per day for baseball and softball, while it was assumed that men’s soccer and women’s soccer rentals are assumed to be $30 per day. These values can be changed for sensitivity analysis.
Annual Coaching Costs for Each Sport

- The spreadsheet shown on page 16 is used to derive coaching base salary and benefits.
- The salaries for all coaches were derived from discussion with the California Community Colleges, the Athletic Department at the University of Nevada, Reno, and a referenced study by the Community Advisory Committee Studying Athletics at CCSNS (1998).
- Final salaries were estimated after discussion with the Athletic Development Committee of WNCC.
- Benefits were assumed to be 25 percent of base salary.
- The base coaching salaries can be changed for sensitivity analysis.
Travel Related Costs

- The spreadsheet that is shown on page 18 is used to estimate travel costs.
- The travel mileage is assumed for community colleges in the conference.
- Van rental is assumed to be $85 per day.
- Driver cost charge is $0.50 per mile.
- Lodging per diem was assumed to be $27 per day and meal per diem was assumed to be $20 per day.
- The values in the spreadsheet can be changed for sensitivity analysis.
Equipment and Fees

- The spreadsheet that is shown on page 21 is used to estimate equipment and fee changes.
- For baseball, items for uniforms and equipment are not purchased every season. Items under this heading are:
  - Game, Practice, Shoes, Travel Bags ----------------------------- $20,530
  - Balls, Bats, Helmets, Protectors, Masks, Gloves
    Pitching Machine ---------------------------------------- $  6,450
  TOTAL
  $26,980
- For baseball, items for game and practice field equipment are not purchased every season. Items under this heading are:
  - Bases, Three Plates, Three Rubbers, Batting Tunnels,
    Portable Cage, Protective Screens ------------------------ $6,660
- For baseball, tournament costs are part of the regular season only.
- For baseball, miscellaneous changes cover tape, training supplies, score books, etc.
- For baseball, one person for game management is assumed to be paid $8.00 per hour for 4 hours each game.
- For baseball, two umpires will be used and are assumed to be paid $70 per game.
- Insurance for baseball players was assumed to be $19 per player.
- For softball, items for uniforms and equipment are not purchased every season. Items under this heading are:
  - Game, Practice, Shoes, Travel Bags ----------------------------- $13,780
  - Balls, Bats, Helmets, Protectors, Masks, Gloves
    Pitching Machine ---------------------------------------- $  5,530
  TOTAL
  $19,310
- For softball, items for game and practice field equipment are not purchased every season. Items under this heading are:
  - Bases, Three Plates, Three Rubbers, Batting Tunnels,
    Portable Cage, Protective Screens ------------------------ $4,000
- For softball, tournament costs are part of regular season only.
- For softball, miscellaneous charges cover tape, training supplies, score books, etc.
- For softball, one person for game management is assumed to be paid $8.00 per hour for 4 hours for each game.
• For softball, two umpires will be used and they are assumed to be paid $60 per game.
• Insurance for softball players was assumed to be $19 per player.
• For men’s soccer, items for uniforms and equipment are not purchased every season. Items under this heading are:
  - Match, Practice Socks, Shoes, Balls, and Ball Bags ---------------$7,800
• For men’s soccer, items for game/practice field equipment will be provided by Carson City Recreation.
• For men’s soccer, it is assumed that there will be no tournaments.
• For men’s soccer, miscellaneous charges cover tape, training supplies, etc.
• For men’s soccer, no one will be hired for game management.
• For men’s soccer, two referees will be used and they are assumed to be paid $60 per game.
• Insurance for men’s soccer player was assumed to be $19 per player.
• Assumptions and costs used for men’s soccer were likewise applied to the women’s soccer program.
• Laundry equipment and expenses were not enumerated for any of the four sports.
• It was assumed that local doctors would donate services for physicals in the four sports.
Baseball

- The spreadsheet shown on page 23 is used to estimate costs of a baseball program at WNCC.
- Remember, the costs for uniforms and equipment and game and practice field equipment will not be the same every year.
- Other items in the cost analysis can be changed by the user for sensitivity analysis.
- The estimated total annual cost is $97,931 or $3,264 per participant. Assume there are 2,200 students attending WNCC, the cost per student is $44.51.
Softball

- The spreadsheet shown on page 25 is used to estimate costs of a softball program at WNCC.
- Remember, costs for uniforms and equipment and game and practice field equipment will not be the same every year.
- Other items in the cost analysis can be changed by the user for sensitivity analysis.
- The estimated total annual cost is $79,311 or $3,141 per participant. Assume there are 2,200 students attending WNCC, the cost per student is $36.05.
Men’s Soccer

- The spreadsheet shown on page 27 is used to estimate costs of a men’s soccer program at WNCC.
- Remember, the costs for uniforms and equipment will not be the same ever year.
- Other items in the cost analysis can be changed by the user for sensitivity analysis.
- The estimated total annual cost is $47,394 or $2,266 per participant. Assume there are 2,200 students attending WNCC, the cost per student is $21.54.
Women’s Soccer

- The spreadsheet shown on page 29 is used to estimate costs of a women’s soccer program at WNCC.
- Remember, the costs for uniforms and equipment will not be the same every year.
- Other items in the cost analysis can be changed by the user for sensitivity analysis.
- The estimated total annual cost is $47,394 or $2,266 per participant. Assume there are 2,200 students attending WNCC, the cost per student is $21.54.