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FENNELL DESIGN INC.

a final report for

Horace Mann Park Pool Replacement Feasibility Study

Rapid City, South Dakota

Project No. PR11-6042/CIP No. 50864

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FINAL REPORT

HORACE MANN PARK POOL REPLACEMENT FEASIBILITY STUDY

PROJECT NO: PR11-6042/CIP NO: 50864

RAPID CITY, SOUTH DAKOTA

Prepared For:

Parks & Recreation Department

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We want to express appreciation for the Council Members who attended the various information gathering venues, the review sessions and the open house to question, comment and in general; lend their guidance without steering.

A thank-you goes out to the North Rapid Civic Association for allowing the Fennell Design Team to present trends for aquatic facilities and their energetic participation in indicating their priorities for aquatic activities in their neighborhood. As well, we wish to extend our appreciation to those who responded to the on-line questionnaire to give us further guidance into the attributes of the aquatic experienced desired for the North Rapid (and the whole of the City) area.

We wish to acknowledge the Parks & Recreation Advisory Board, and the Public Works Committee for their review and comments to in-progress reports.

A large thank-you goes out to the staff of the Parks & Recreation Department. Their deft drilling into the concepts and information gathered to assist the Fennell Design Team's interpretation of the gathered facts and opinions into viable aquatic concepts was invaluable. Likewise, their knowledge of the community needs, vision of future potentials and appropriate operating budgets showed in their cautious yet achievable approach to the financial projections assembled to assist with the eventual decisions that will follow from this report.

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Executive Summary

Introduction
This document has been prepared to summarize researched facts, concepts and projections for possible solutions to the swimming needs for the North Rapid Community. Parks & Recreation Department, Public Works Department and the leadership (Mayor and Council) of Rapid City have recognized the need for an upgrade of swimming the North Rapid area of Rapid City. The locations this study focused on were the Horace Mann & Roosevelt Parks.

Horace Mann Park is the current location of the 50 meter pool that tries to fulfill the needs of the local lap swimmers, recreational swimmers and summer long-course competitions. Adjacent to the pool on the site are playground, a pony league baseball field and some of the best views to be found in the metropolitan area.

Roosevelt Park is the location of the Rapid City Swim Center, featuring a natatorium with a 25 YD x 8-lane multi-functioning tank pool, a leisure pool, racquetball courts and dance & combative studio. Adjacent to the Swim Center is the RP Ice Arena, the Roosevelt Park picnic grounds and a series storm-water management basins & pedestrian pathways.

Fennell Design Inc. (FDI) and their selected Consultant Team were contracted to investigate various configurations and placements of pools at the Horace Mann & Roosevelt Park sites. The configurations requested and studied were:

- Leisure Pool @ Horace Mann
- Leisure Pool & 50 Meter Competitive Pool @ Horace Mann
  - One Concept to be “connected” water; One Concept to be “separated” water
- Indoor 50 Meter Competitive Pool with a revised Field-house concept @ Roosevelt Park (infill between the Ice Arena and the Swim Center)
- Outdoor 50 Meter Competitive Pool with a the original Field-house concept @ Roosevelt Park

In order to establish a Feasibility Analysis which includes current thought as well as long-range strategic approaches, Fennell Design Inc (FDI) utilized the following process summarized by the information contained within this report.

This Feasibility Study effort consisted of five primary parts – the Analysis and Assessment, the Demographic Summary & Market Review, the Programming, the Plan Concepts, the Operations Analysis, Review & Comment and the Feasibility Study Report. The intention of this effort is to provide investigated information in order to support the City in determining a responsible & comprehensive approach for long range aquatic facility development. A special note is added here to acknowledge that an Economic Impact Study was NOT requested nor delivered as part of this commissioned report.

Analysis & Assessment
The existing facility analysis and assessment is intended to provide a broad understanding of the existing sites and structures, their constraints, limitations and benefits. Considerations have been given to

vehicular, pedestrian and maintenance traffic as well as adjacent uses and their limiting effects or benefits they may offer. Additionally, at Horace Mann the view-shed is an undeniable amenity.

Demographic Summary & Market Assessment

The demographic profile of the Horace Mann community was studied and compared to the service area for Jimmy Hilton and Parkview pools along with benchmarking against national and regional participation statistics. The study also involved the analysis of market support for a facility and the requirements to construct and operate an aquatic center.

As part of the demographic study, a community profile was developed indicating that the primary service area for the Horace Mann location has a large number of school-aged population that totals 20,279 people. Overall population growth in Rapid City is projected to increase about 5% over the next five years, which will aid in the growth of the market for aquatic facilities and operations. The median age for the Horace Mann service area is 32 years population which is lower than both Jimmy Hilton and Parkview. Median household income in the Horace Mann service area is $27,443, significantly lower than the median household income for the Jimmy Hilton ($43,167) and Parkview ($51,124) primary service areas and the national level of $50,227. Age and household income are two determining factors that drive participation in recreation and leisure services. The demographic profile including the higher level of school-aged children suggests that there are very favorable market conditions to support the aquatic center in the Horace Mann.

Overlaying National Sporting Goods of America (NSGA) participation rates onto the primary service area indicates a potential of 3,614 swimmers in the Horace Mann neighborhood area alone. The City operates three other swimming pools and is considered the primary provider of aquatics in Rapid City. The NSGA statistics suggest that Rapid City has the market potential for 11,132 swimmers. When comparing the market potential to the existing inventory of facilities it is clear that the swimming market is not saturated in the Horace Mann area. Consideration should be given to offer different aquatic amenities at Horace Mann from the existing aquatic facilities to diversify the aquatic experiences currently being offered in the City. Diversifying the aquatic components will help attract participation from a larger section of the community.

Programming

This exercise identifies the components and sizing of those components for a successful operation and response to the desires of the User Groups. The tour of existing facilities assisted in determining which components might be utilized at the subject sights to give a “new and different” aspect to the future facilities. The Program for Horace Mann was built utilizing the operational staff’s input culled from the experience gained from operating the other existing pools along with the survey indicated components. A detailed Space Program for Roosevelt Park is included in this Section of the Report.

Plan Concepts

The Plan Concepts in this report are intended to be preliminary concepts only and are meant to illustrate the potential scope of construction work and to determine the suggested site utilization for each concept. The “Next Step” implementation project(s) may alter the final layout substantially, the overall project scope required to meet the programmatic needs should be anticipated to be consistent with the selected concept plans.

At Horace Mann Park, an initial study of "bubble" diagram placement on the site revealed some issues with parking & traffic on the site and the fact that "separated-water" Leisure **and** 50M pools do not fit

the site without eliminating the Pony League Field. The progression of concept development and critique by the staff and with regard to the survey narrowed the offering to three distinctly different concept choices of approach to the Horace Mann aquatic feature at this neighborhood park. Each concept has potential to serve different User Groups as requested of us in the original RFP and eventual contract for services. Each concept is outlined and discussed further in this Part within the body of the report to assist the City with the choice for the right facility to serve the users of this area.

At Roosevelt Park, two concepts are investigated, one an indoor 50M Competition Pool combined with the Fieldhouse that will infill the area between the Ice Arena and the Swim Center; the other an Outdoor 50M Competition Pool South of the existing Swim Center with stand-alone support structures (bathhouse, pump room and storage) and the original field-house added to the north side of the Swim Center.

Project Context

The City of Rapid City and the Parks & Recreation Department has long recognized the need for a resolution to the aquatic facility at Horace Mann Park and for a long term aquatic facility for the North Rapid Area of Rapid City. Ward representatives to the Council have campaigned for several years for a North Rapid Aquatic solution.

The existing 50M tank pool at Horace Mann Park has long been a maintenance issue and a financial drain on the P&RD maintenance and subsidy budgets. The development of the Roosevelt Park Swim Center and Ice Arena Components of the planned Recreation Center has had an effect on the epicenter of the North Rapid Area.

The community of users and potential users is divergent due to the utilization of the current facility by the Rapid City Area competitive swim teams. Though small in numbers compared to the recreational swimmers, the competitive swimmers bring a different economic context to the picture. Competitive swimming carries with it potential for community economic impact that needs to be considered in any decision about tank configuration within the "stable" of Rapid City Aquatic facilities.

If the City Decision-makers listened to the more public and louder speaking group of users, they would make a decision for a particular tank/use configuration. If they listened to the user community adjacent to Horace Mann, they would make the decision for an obviously different tank/use configuration. This decision is not a simple one!

To assist with the upcoming decision and to help make that decision the decision that positively affects the most citizens and the community as a whole, the City Council, Public Works and Parks & Recreation determined to undergo a feasibility analysis to be joined with possible aquatic configurations and cost & revenue projections. That analysis necessarily needed to listen to the users and potential users of the determined facilities and incorporate their vision, needs and wants into the eventual answer. That

gathered data is assembled in this report such that it can be utilized as a tool to plan and stage community investment to accomplish the most benefit for the least expenditure.
Following are the Stakeholders' vision and mission statement:

City of Rapid City Vision

We envision Rapid City to be a vibrant place for all citizens
to grow, prosper and provide a high quality of life.

City Council of Rapid City Vision

The mission of the Rapid City Council is to promote a cost effective public administration that ensures public trust, provides an open forum, fosters a climate of free enterprise for all people and enhances quality of life.

Parks & Recreation Department Mission

It is the ongoing mission of the Rapid City Parks Division to develop and maintain the best park, recreation and cemetery facilities possible with the budget available. This will be accomplished to ensure that all participants and users will have the safest facilities that can be efficiently built and maintained.

Project Mission

The Mission of the Horace Mann Park Pool Replacement Feasibility Study is to assemble facts, opinions, concepts and recommendations into a single report to act as a tool for the current and future decision makers of the Parks & Recreation Department, Public Works Department and the City Council to utilize for the upcoming decisions related to community aquatic facilities in the North Rapid Area of Rapid City.

Feasibility Study Process

The study to determine the feasibility of aquatic facilities to round out the aquatic choices in Rapid City seeks to achieve a variety of goals. The following list describes the highest priorities as they pertain to the North Rapid City Area aquatic decisions.

Goal 1: Determine the specific Horace Mann physical amenities and constraints. Assemble in-hand studies, investigations and operating/maintenance data along with newly executed topographical data into a single interpreted analysis of the existing site.

Goal 2: Determine the stated and unstated needs for this area of Rapid City. A key purpose of this feasibility study is to determine what the real needs are. The process focuses on the gathering of facts and opinions of the stake-holders, user groups and the local populace.

Goal 3: Determine the programmatic needs for aquatics and recreation for this area of Rapid City and the City as a whole. One of the concepts to be studied as added by Council Member(s) was the indoor competition pool @ Roosevelt Park with a reconfigured field house. This activity will help the City plan for the eventuality of that needed component.

Goal 4: Determine what configurations of aquatic facility will best enhance Horace Mann Park and serve the North Rapid Area. Conceptualize different pool configurations which fit the park and respond to the preferred amenities.

Goal 5: Determine the expectation of construction costs, operating costs, operating revenues and annual subsidy. Assemble (for each concept developed) a square foot based Preliminary Opinion of Probable Cost and an operational pro-forma. Each Pro-forma is based on historical and current demographic and program information provided by national census and Park & Recreation staff.

Goal 6: Gather affected community reaction to the concepts. Utilizing Open-house and web hosted comment formats, allow citizens and users to respond to the offered solutions.
The process used to create this feasibility study involved the following steps:

- Study of relevant literature inclusive of master plans, engineering studies and historical operating costs.
- Site analysis (Horace Mann), topographical and location survey (Horace Mann) and review of available development plans.
- Inventory of existing facilities (Horace Mann), visual inventory/tour of Park View, Sioux park and Roosevelt Park.
- Public Input Sessions via meetings, Web Hosted questionnaires & comment, Staff & Ward Representative reviews and Open House.
- Program development & review to respond to the variety of aquatic and tangential activities offered or desired.
- Conceptual Design of various configurations of pools, bathhouses and field houses (Roosevelt Park) to respond to the space & functional programs.
- Demographic Studies, probable cost studies and pro-forma development.
- Reviews by and Reports to Staff, User Groups, Parks & Recreation Board, North Rapid Area Ward Representatives, Public and Public Works Committee.
- Final Feasibility Study and Report.

Process
These goals and desired outcomes assisted the Design Team with crafting a unique and project specific process to gather, analyze and synthesize opinions, data and review comments. The opinions and ideas of involved staff, user groups, stakeholders and the general public were woven throughout all parts of this six step process. Each phase of work is further elaborated on below:

Part I – Analysis & Assessment:
- Location & Topographic Civil Survey of Horace Mann Park
- Graphic Site Analysis
- Kick-off Meetings to gather verbal input
    - Staff
    - Stakeholders
    - North Rapid Association
- Presentation of current trends and amenities in the world of Aquatics

- "Dot-voting" (Selection of favored components) & Compilation
- Determine Demographic Area of representation/use
- Assist Parks & Recreation with the wording of a Questionnaire hosted by the City website
- Analysis of questionnaire responses
- Tour of existing facilities at Rapid City Swim Center, Horace Mann, Sioux Park and Parkview
- Service Area and Market Analysis Data
- Determine Socio/Economic demographics within the Service Area

Part II – Programming

- Analyze Responses to the City Hosted Questionnaire
- Determine Space Needs for the different pool configurations described above at both sites
- Determine Space Needs for support structures at the outdoor pool concepts
- Determine the Space Needs for the Field-house at Roosevelt Park

Part III – Plan Concepts

- Horace Mann
    - Pool Configurations (5 studied)
    - Site Configurations utilizing the Pool Configurations (3 studied)
    - Support Structures Configurations (6 studied)
- Roosevelt Park
    - Field-house/Indoor 50M Pool Configuration
    - Outdoor 50M Pool Configuration (utilize in-hand Field-house plan)
    - Support Structures Configuration for Outdoor 50M Pool

Part IV – Feasibility/Operations Analysis

- Utilizing national & regional statistics, compare local use tendencies
- Analyze each concept for potential of revenue production, operation and maintenance costs
- Provide Opinions of Probable Cost for each concept
- Analyze trends with respect to existing facilities within the community

Part V - Review & Comment

- Report to Parks & Recreation Board
- Preliminary Concepts review with Staff
- Selection of Configurations to carry forward
- Review of Programming compliance with Plan Concepts
- Preliminary Concepts review with Ward Representatives
- Open House Question, Answer & Comment Session
- On-line Comment

Part VI – Feasibility Study Report

- Progress report to Parks & Recreation Board
- Develop a Draft Report for presentation to Public Works Committee
- Finalize the Feasibility Study

We commend the City of Rapid City for having the progressive forethought to asses analyze and identify potential solutions to the needs that have been long identified for the North Rapid Area of the City. The culmination of this report will serve well as a guiding and supporting document for decisions to be made in the near future. The Executive Summary, following, briefly describes the methodology that produced this report and its components, as well as provides a snapshot of each of the categories identified within each section of this report. The culmination of the Executive Summary includes recommendations for next steps for Rapid City and their next generation aquatic/recreational development.

Information Gathering

The gathering of information, opinions and facts was a critical component to the success of this feasibility study. Efforts were made to include a wide variety of groups as well as differing approaches to harvesting information. Public input sessions, open houses and online surveys were just a few of the tools utilized. Input was categorized into three distinct groups to include staff, stakeholder and user groups, as well as the general public. Project kick-off drew together these three groups in a series of meetings for information gathering purposes.

Following, each of the various review sessions, the intent of and the results of those sessions are described. The Programming and Concepts information referenced in this Section shows the steps the Feasibility Team went through to elicit reaction to those reports, use & space programs, concepts and surveys. Because the facilities serve diverse user groups and many of those being passionate about their specific interest, it is necessary to develop as near to a consensus as possible to make the eventual project(s) successful in the long term.

Additionally, because of the diversity of the groups and the neighborhood, it takes many approaches to input gathering to fit the varied life situations. The various approaches attempted to give the people of the service area as many chances to participate as possible while maintaining a completion schedule.

Staff

The first meeting was a listening session attended by the Fennell Design Team and the staff inclusive of Administrative, Budget, Operations, Programming and Maintenance/Operations personnel.
At this one and one-half hour long session, the Aquatics Director, Parks Director, Recreation Director and head of maintenance imparted many of their needs, histories, concerns and programmatic suggestions. Parks and Recreation Director Jerry Cole prompted discussion by asking the staff probing questions about their current operations and program needs, current shortfalls and perceived needs. During this session the Fennell Design Team asked questions about current trends in recreation and past experience that would help direct design approach towards or away from particular options. The staff proved to be current with recent approaches in the area of community aquatics.

Stakeholder & User Groups

The second meeting of the Kick-off was a one and one-half hour long listening session attended by some of the current Horace Mann Park and Roosevelt Park Stakeholders inclusive of the Parks and Recreation Advisory Board, North Rapid Area Council Ward Representatives and the Mayor. Most of the Stakeholders listened and asked questions throughout the meeting and stayed around to discuss items particular items of interest with the Fennell Design Team.

Several User Groups (Scuba, Fencing and (4) Swim Teams/Organizations) were represented. Discussion was led by the competitive swim representatives with a concentration on a 50 Meter Competitive Pool. Other participants expressed a need for fieldhouse components.

Public
The third meeting of the Kick-off was attended by the Fennell Design Team and Parks & Recreation Director Jerry Cole at a North Rapid Civic Association Membership Meeting. At this meeting the Fennell Design Team Aquatics Consultant (Counsilman*Hunsaker) presented a slide presentation of leisure pool trends and available components.

During the presentation, lists of the components were written on large sheets which were put up on the hallway walls. Following the presentation, at a break in the meeting, Association members participated in a Dot Poll where they were allowed to place up to six dots, voting from the list generated during discussion, for their preferred components. The Fennell Design Team tallied the responses to gather an idea of the neighborhood preferences.

City Website Hosted Survey
Upon review of the attendance and the responses received at the Association Meeting, the Staff & Design Team assembled a survey and posted it to the Rapid City website. Postcards were mailed to residential addresses within the North Rapid user area of Rapid City. Eighty-one respondents gave the Fennell Design Team a cross-sectional response of the target community. (Survey results are included in the Appendix.)

Review & Comment Sessions
Other sessions were offered for input by Staff, Stakeholders, User Groups and Public. Throughout the Programming and Concept phases, the Staff had several review sessions. Progress reports updated the Parks & Recreation Advisory Board of the Design Teams' efforts. A review session for the Ward Representatives was held to review the proposed "final" pool concepts and configurations.

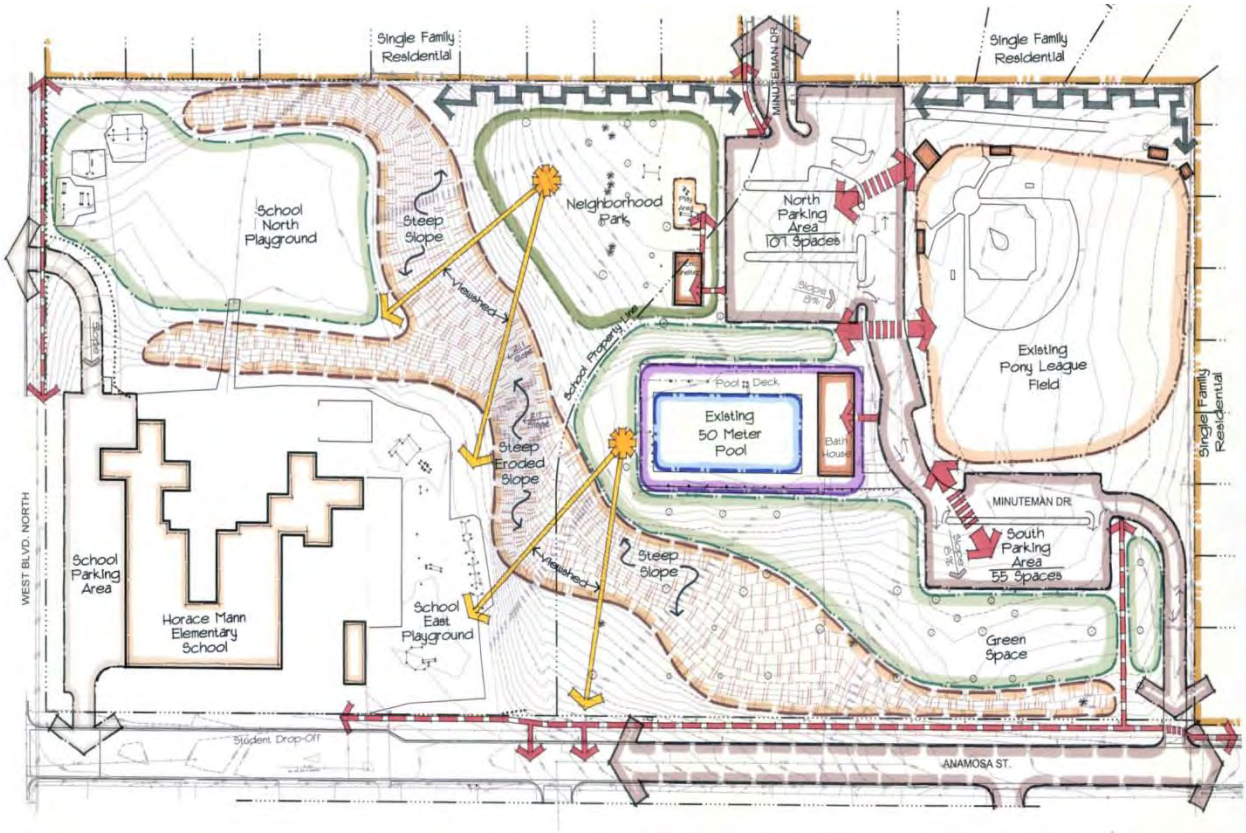
Open House
An Open House was held to give Stakeholders, User Groups and the Public a chance to see the draft park & pool concepts and to discuss the concepts with the Staff and the Fennell Design Team. Several attendees communicated their preferences with regard to site and pool concepts. Following the Open House, the City hosted a comments site on their website for further comment. A draft report was submitted to the Public Works Committee and Accepted by the Common Council, to be followed by a final draft prior to feasibility study completion.

Summary
The general consensus of the public Open House verbal and website comment session was: Horace Mann Park should have Leisure Pool Concept "A" placed in place of the existing 50 M pool; and the 50 M pool should be replaced at Roosevelt Park, with indoor being the preferred configuration. To accomplish this, there was strong leaning to constructing the 50M pool @ Roosevelt Park prior to the Leisure Pool @ Horace Mann or simultaneous to assure continuity of Aquatics at Horace Mann and 50M Competition Pool somewhere in Rapid City.

All information gathered in the public review session as well as survey and website comments were used to inform and shape site design concepts for both Horace Mann and Roosevelt Park options presented. Following is a breakdown of each concept.

Site Analysis & Configuration Feasibility Studies

A Topographical and Location Survey was performed at the Horace Mann site which delineated the severe slope conditions, parking lot configurations and confirmed the property boundaries. This information, while helpful to the Feasibility Study will be invaluable for future development of the solution(s) at this park. Following is a graphic illustration of the park amenities, constraints and adjacencies:



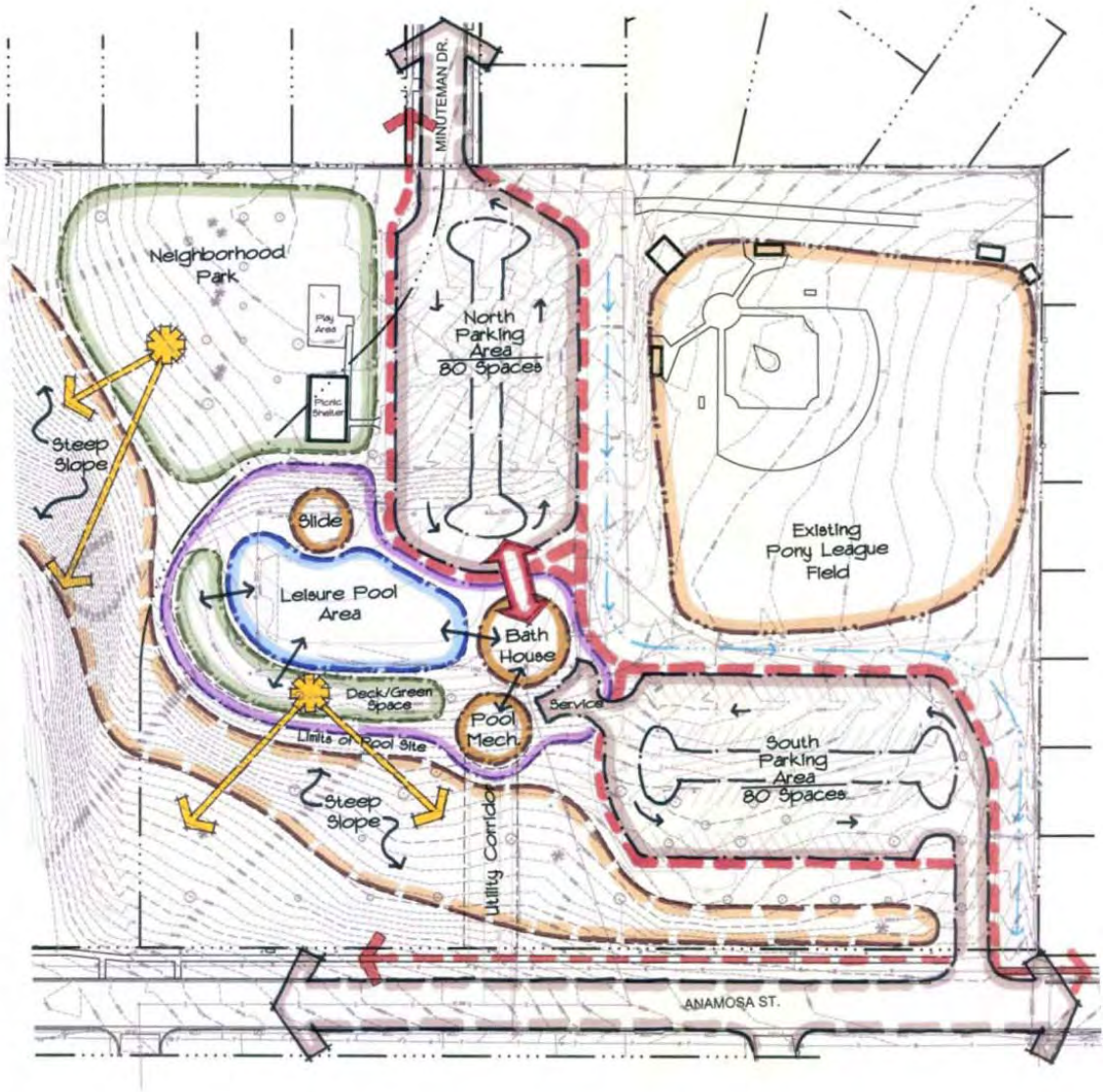
SITE ANALYSIS

Illustrated are the incredible site lines and view-shed, the existing playground, ball-park parking lots and the 50 M pool & bathhouse. Analysis of the slopes, open space and utility corridors also assist with analysis of configuration possibilities. Examining traffic patterns, both vehicular and pedestrian also contributes to knowledge of the existing uses of the site. Site analysis assists the entire design team with understanding of the relationships between existing site elements and proposed new elements.

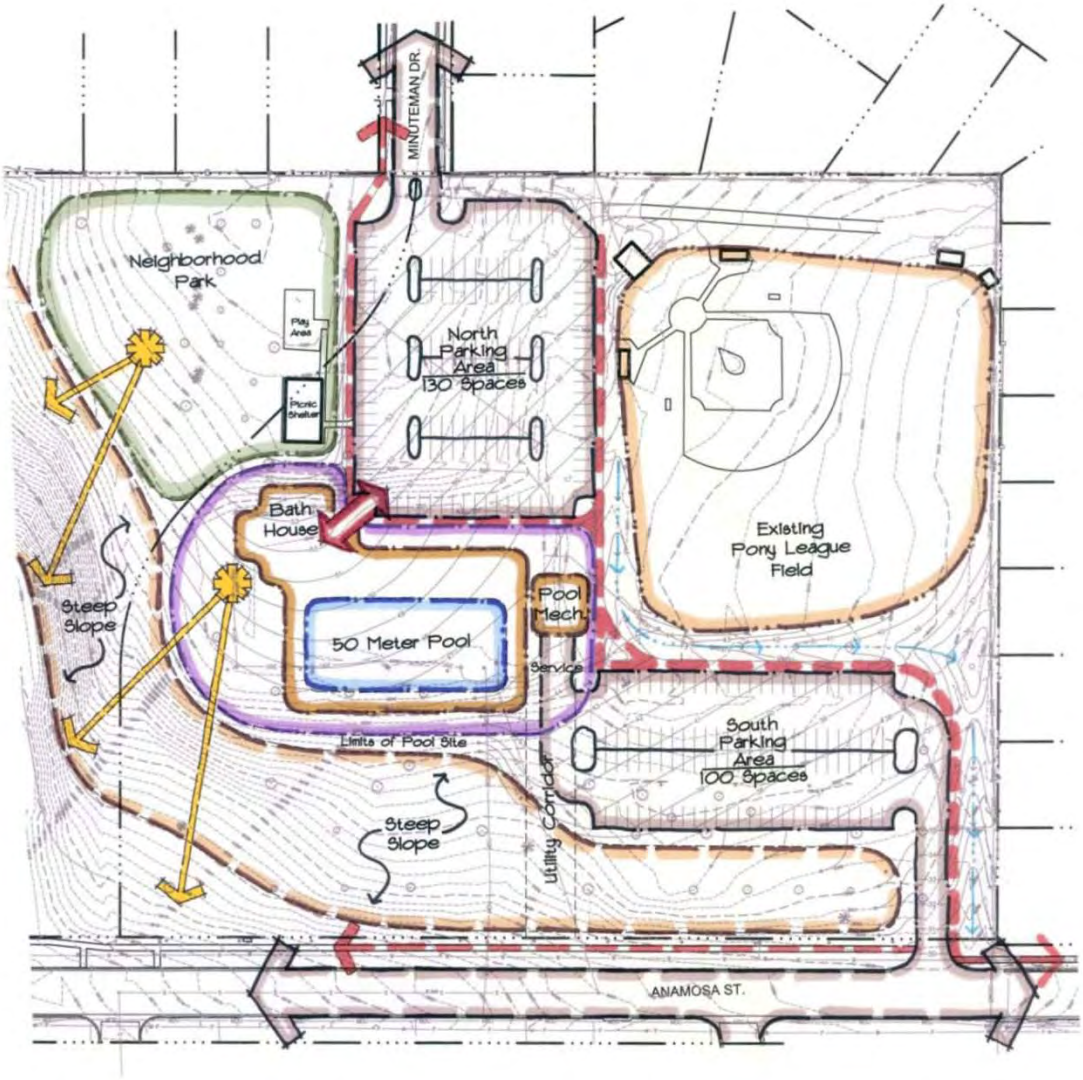
Existing Horace Mann playground.

Existing Horace Mann 50M pool.

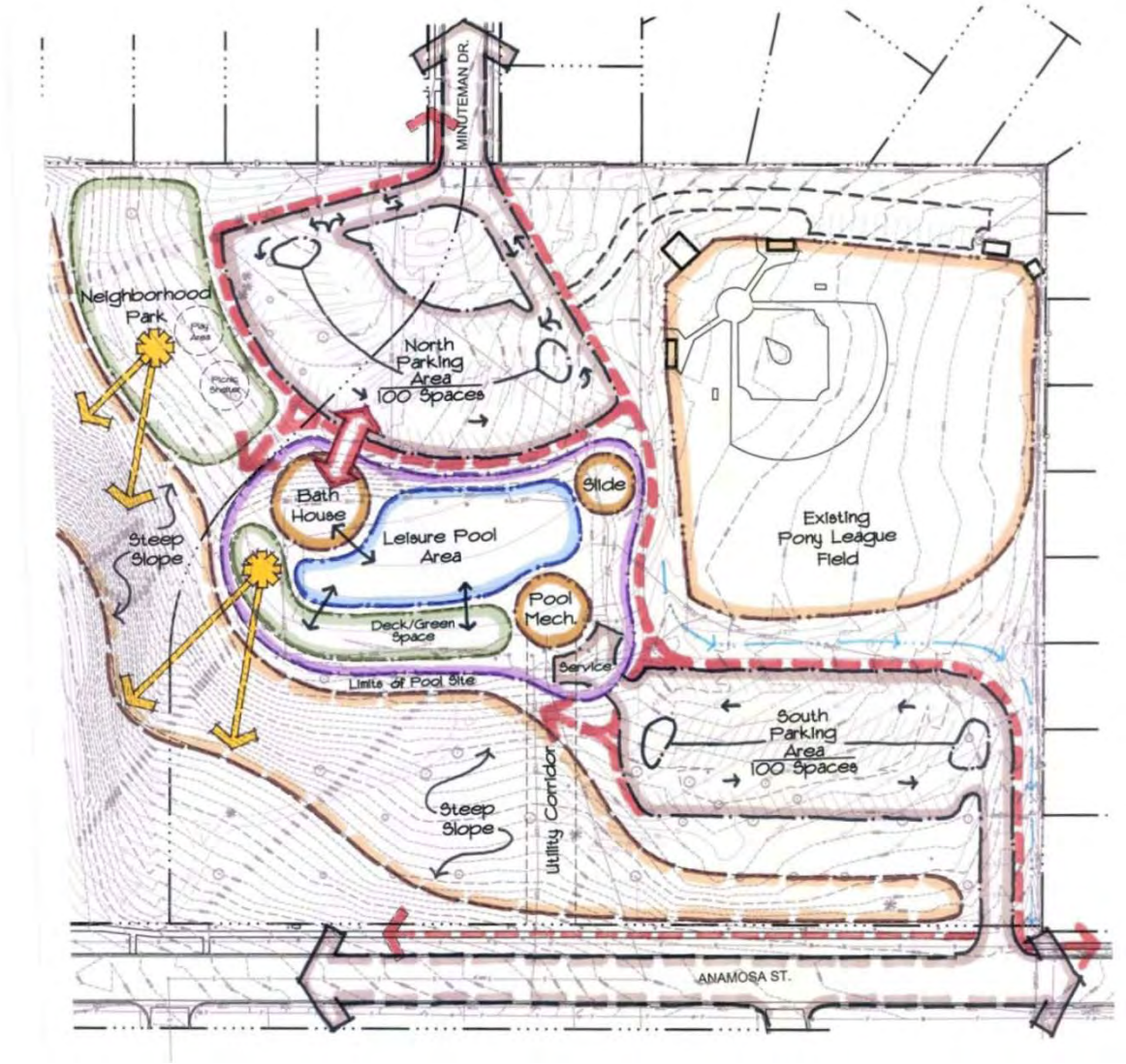
Several Bubble Diagrams representative of the configurations investigated are displayed in the following graphics. Each represents a different approach to traffic, flow, parking configurations and possible pool configuration(s).



BUBBLE DIAGRAM #1
Represented in this diagram is a parking configuration that stays similar to that which exists, however the through-road is disconnected creating two entries to the park. The playground and ball-field are left intact and a leisure pool with new bathhouse is proposed in the same area as the current 50 M pool & bathhouse.

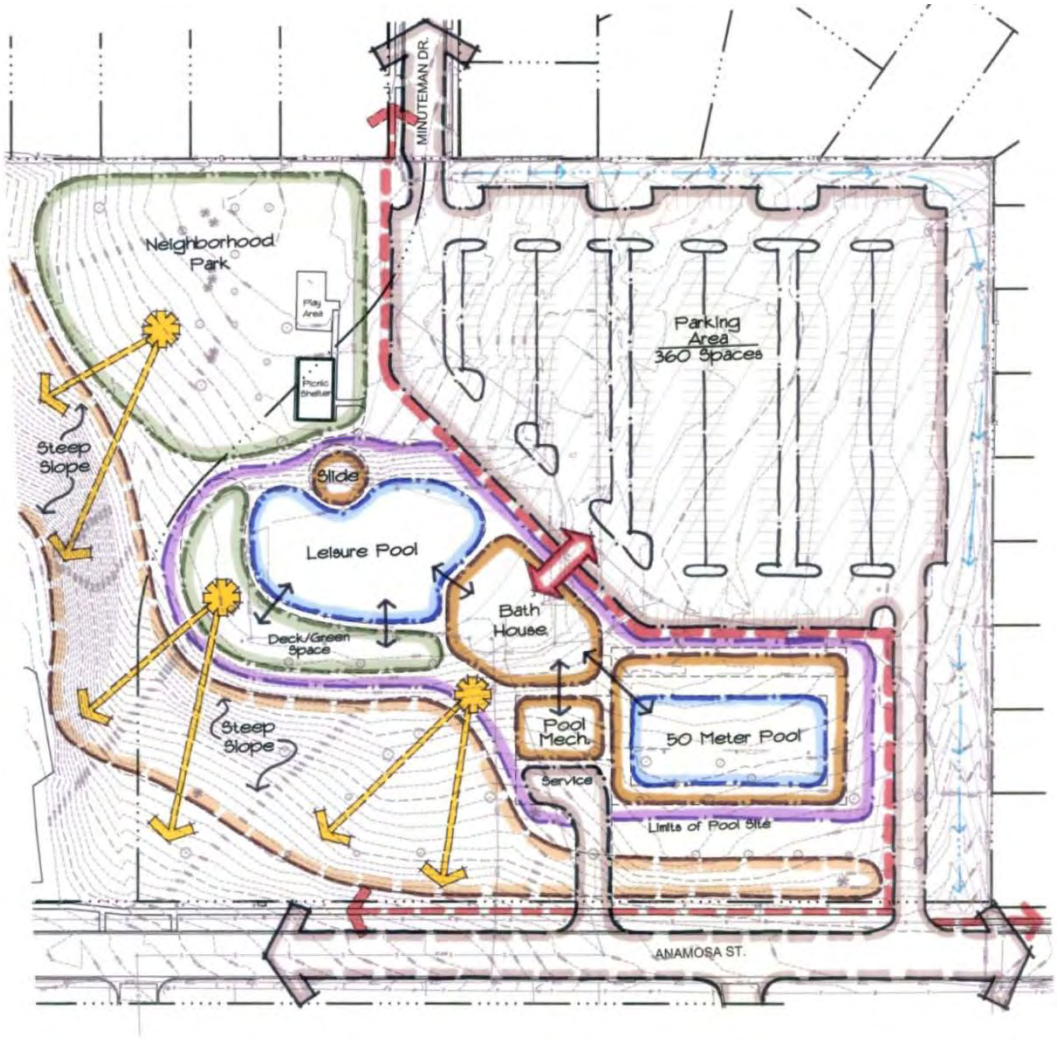


BUBBLE DIAGRAM #2
Represented in this diagram are enhanced parking areas with a 50M pool and suggested a new bathhouse configuration. The ball-field and playgrounds are left intact. Again in this particular option, the through-road is disconnected creating two individual entries to the park.



BUBBLE DIAGRAM #3

This diagram took a divergent view of the parking, suggesting a reorganized upper parking with re-construction of the playground and a leisure pool with split bathhouse and pump-house. The existing ball-field is left intact. Again in this particular option, the through-road is disconnected creating two individual entries to the park.



BUBBLE DIAGRAM #4

This diagram shows both a Leisure Pool and a 50M Competition Pool on the site. The parking demand for servicing these two pools is greater than what can be accommodated on this site. Elimination of the ball-field allows for partial parking needs to be met. This particular configuration replaced the through road concept with a dual entry parking area. Review of the Bubble Diagrams by the staff directed the Fennell Design Team to pursue configurations #1 & #2 with pool configurations supplied by the Aquatics Consultant.

CONCEPT #1, #2, #3, #4 & #5
Preliminary Concepts were assembled, showing the various pool configurations requested to be studied. Each of the (5) supplied configurations was proposed with a bathhouse configuration to show a variety of approaches. Two of the configurations are so similar that they are shown as one, labeled 4 or 5. All of the concepts were assembled with disconnected parking lots stopping the through flowing traffic. Each configuration incorporates water-slides and other play structures.

- Option #1 is a combined leisure & lap pool with a split bathhouse/pump-house. The Pump-house, by being separated, can have a pump-room with a drive-up access to service vehicles.
- Option #2 is a separated lap & leisure pool (shared water) configuration with a connected bathhouse & a lower level pump-room.
- Option #3 is a hybrid lap pool/leisure components to respond to different requests for lap swim configurations. This pool utilizes the same bathhouse/pump-house configuration as #2.
- Option #4 or #5 is two versions of a 50M competition pool. One version (not shown - #4) is just a 50M competition pool with no other amenities. The other version (#5) has a small leisure option with a waterslide.

Review with the Staff, Aquatics Consultant and Pro-forma Consultant suggested moving forward with the following:

- Concepts 2, 3 & 5
- All Bathhouse locations are to be to the East side of the pools
- Preference is for a lower level pump-room
- Consider a site option that closes off the north parking vehicular access at the residential street

Final Concepts

The Final Concepts presented are those that were viewed at the Open House. Each of the concepts represents a pool configuration, a site parking option, a bathhouse configuration and a pool enclosure configuration. There is potential to mix & match some of the elements to some level. The Bathhouse configurations were determined by the orientation of each pool to the site.

SITE CONCEPT A

This concept features a parking layout that keeps the current parking lot configurations and disconnects the through traffic. It features 4-lane lap pool disconnected from a zero-entry leisure pool. (3) water-slides utilize the existing playground hill for their start point; two are roll-out slides and one is a drop-slide. The bathhouse features a centered entry with a lower level pump-room.

CONCEPT B

This concept features an increased parking layout that keeps the current parking lot configuration that connects the through traffic but disconnects the vehicular traffic from the North. It features 6-lane 25 Yard lap pool crossed by a 3-lane 50 M lap component with a drop-slide well and a rectangular shaped zero-entry leisure pool. (2) water-slides utilize the existing playground hill for their start point; both are drop-slides. The bathhouse features a centered entry with a lower level pump-room.

CONCEPT C

This concept features an increased parking layout that keeps the current parking lot configuration that connects the through traffic but disconnects the vehicular traffic from the North. It features an 8-lane 50 M Competition pool. Separate is a small “kiddie-pool” leisure component. (2) water-slides utilize the existing playground hill for their start point; both are drop-slides. The bathhouse features a centered entry with a North concession area and a lower level pump-room.

Cost & Operational Evaluations

BKA conducted an independent analysis of probable operating cost and revenues for the various options being considered at Horace Mann Park and Roosevelt Park. The operating pro-forma developed represents a conservative approach to estimating expenses and revenues and was completed based on the best information available and a basic understanding of the project. The pro-forma included a detailed listing of costs including a staffing plan, listing of contractual services, commodities and estimate for capital replacement. Fees and charges utilized for this study were developed from the existing City rate structure and are subject to review, change, and approval by the City. The results of the operations analysis indicate that the proposed aquatic center at Horace Mann will not recover its operating costs but the Roosevelt Park expansion will have a positive cash flow impact on the existing operation.

Another part of this Section is an Opinion of Probable Cost. These Opinions are cautionary in that they are preliminary in nature and they are trying to predict possible costs for a Budget Year in the future. For that purpose, inflationary factors have been added to try to be as realistic as possible at a Concept Level of Detail within the prediction. The preliminary budget and anticipated years of proposed funding may need to be further reviewed going forward. These numbers include a 10% design fee and a 10% project contingency. Additional site work numbers can be found in the Appendix.

HORACE MANN OPINION OF PROBABLE COST

Horace Mann Costs	Option A	Option B	Option C
Civil/LA	$140,300	$133,200	$131,600
Architectural	$445,400	$486,600	$520,200
Structural	$168,000	$143,200	$134,400
M& E	$280,400	$334,600	$289,000
Pool	$2,922,000[1]	$3,202,000[2]	$3,495,000[3]
Total	$3,956,100	$4,289,600	$4,570,200

HORACE MANN PRO-FORMA/EXPENDITURE-REVENUE COMPARISON

Category	Concept C	Concept A&B
Expenditures	$134,295	$146,208
Revenue	$95,400	$117,592
Difference	($38,895)	($28,616)
Recovery %	71%	80%

Supporting documentation can be found in the Appendix.

[1] Inclusive of all the amenities depicted in the Concept A (slides, play features, etc.)
[2] Inclusive of all the amenities depicted in the Concept B (slides, play features, etc.)
[3] Inclusive of all the amenities depicted in the Concept C (slides, play features, etc.)

Roosevelt Park

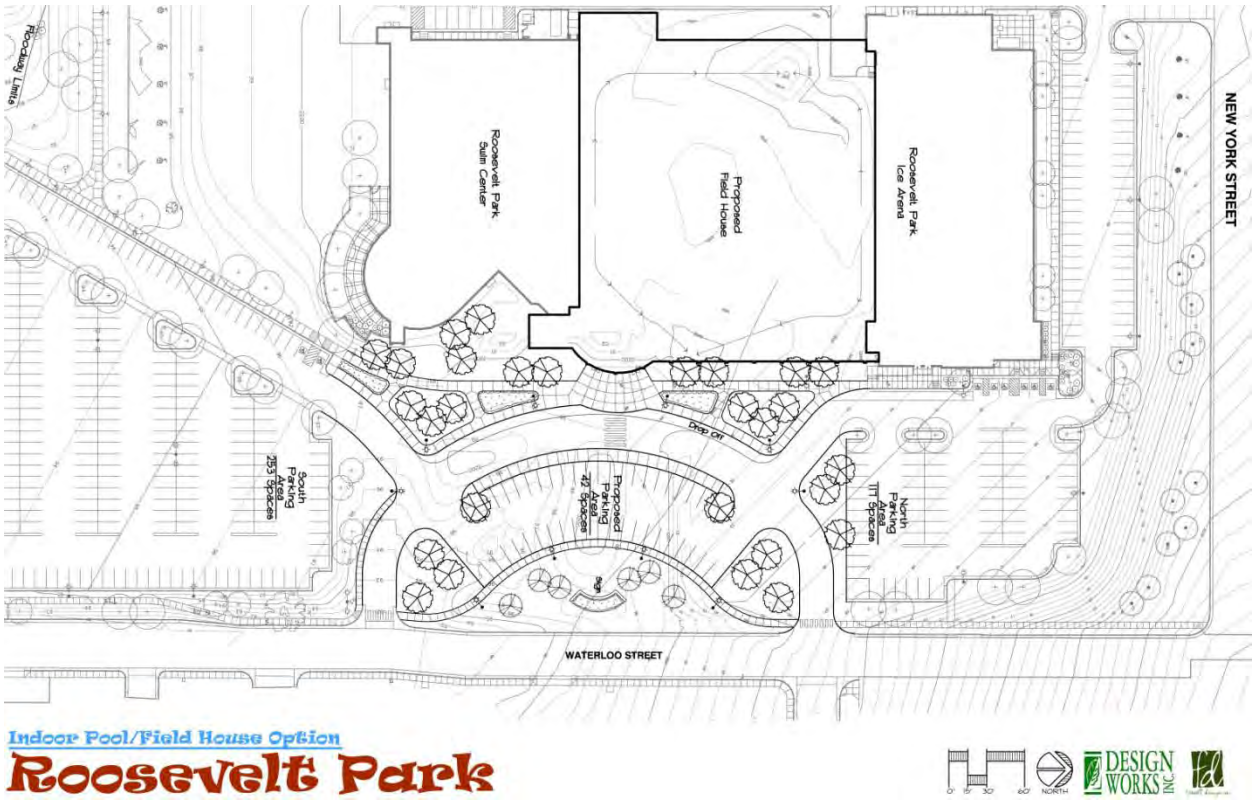
The direction proposed for Roosevelt Park was for two configurations of a 50M Competition Pool and a field house. The Pool was to be investigated as indoor as an infill component attached to a field house. Also to be investigated was an outdoor 50M Competition Pool South of the existing Swim Center utilizing the original Bid Alternate concept as the field house. For purposes of this exercise, Fennell Design Team expanded the original fieldhouse concept to match the space program as noted in the following.

Roosevelt Park Space Program

Fennell Design Team went through a space programming exercise to determine the field house and aquatic needs. Staff reviewed the program several times to assure the spaces were identified and the areas were sufficient.

The accepted space program showed a need for 31,587 SF of Field House Space and 33,834 SF of "wet-side" (aquatic-use) Space for an indoor 50M Competition Pool with viewing areas attached to a field-house. This concept was requested to be investigated as an infill of the space between the existing Ice Arena and Swim Center. For an Outdoor 50M Competition Pool, the Field-house size was slightly reduced and the configuration was that which had been bid as an alternate but not accepted. The area for aquatic related facilities was 38,965 SF. (Space program spreadsheets are attached in the Appendix of this report.)

Existing Roosevelt Park Facility with Pool, area for Fieldhouse & Ice Arena



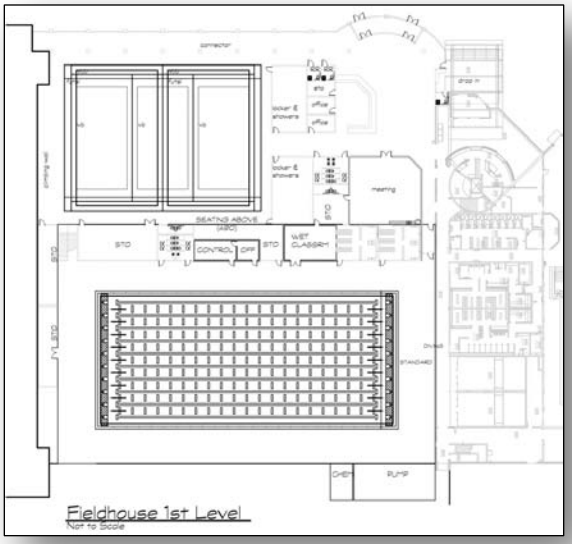
INDOOR CONCEPT WITH SITE & FIELDHOUSE

The 50M Indoor Pool concept is shown attached to a field-house with a common wall separating the two environments (wet & dry). The Ice Arena and the Swim Center are connected by a pedestrian concourse along the east side. This concourse makes up site elevation differences.

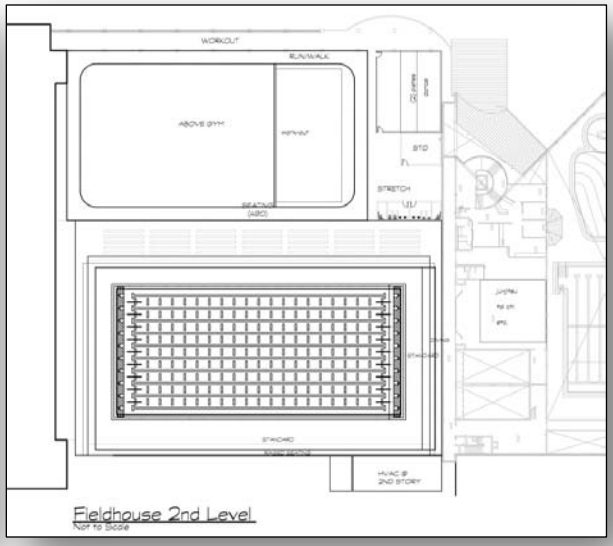
The natatorium includes wet-side locker-rooms, restrooms, equipment storage rooms, natatorium HVAC and spectator observation areas; all surrounding a 10-lane 50M (by 25 Yard wide) competition pool with bulkheads.

The Field House includes Ball Courts, Climbing walls, Child Drop-in Care, Exercise areas, walking/jogging track, dance/fencing/aerobic, new central control, public room with kitchenette, additional dry-side locker shower-rooms and other ancillary spaces.

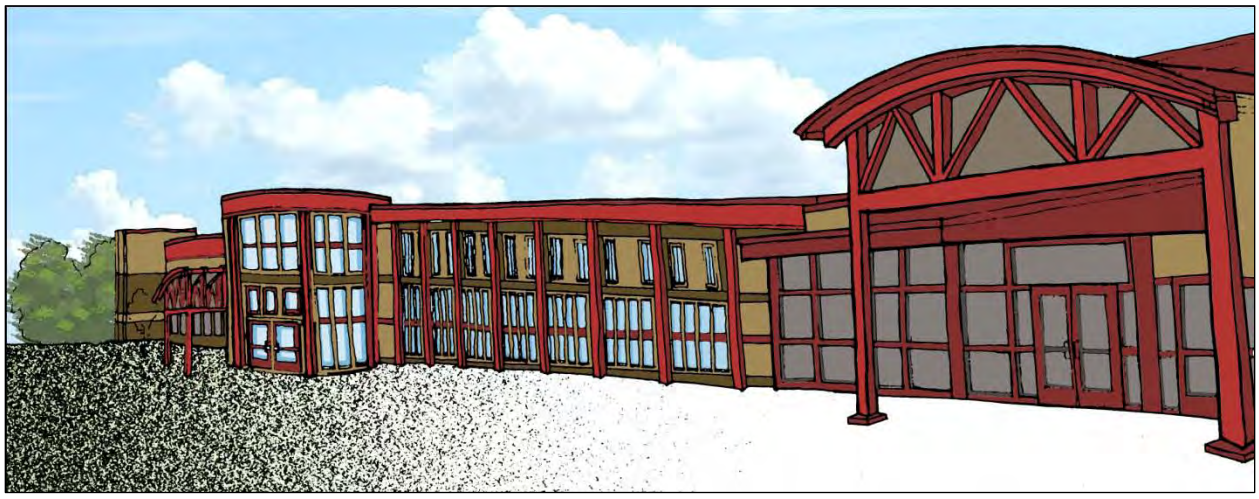
This concept requires some adjustment to the site approach for vehicular and pedestrian traffic. This suggestion is shown with the site concept for this configuration.



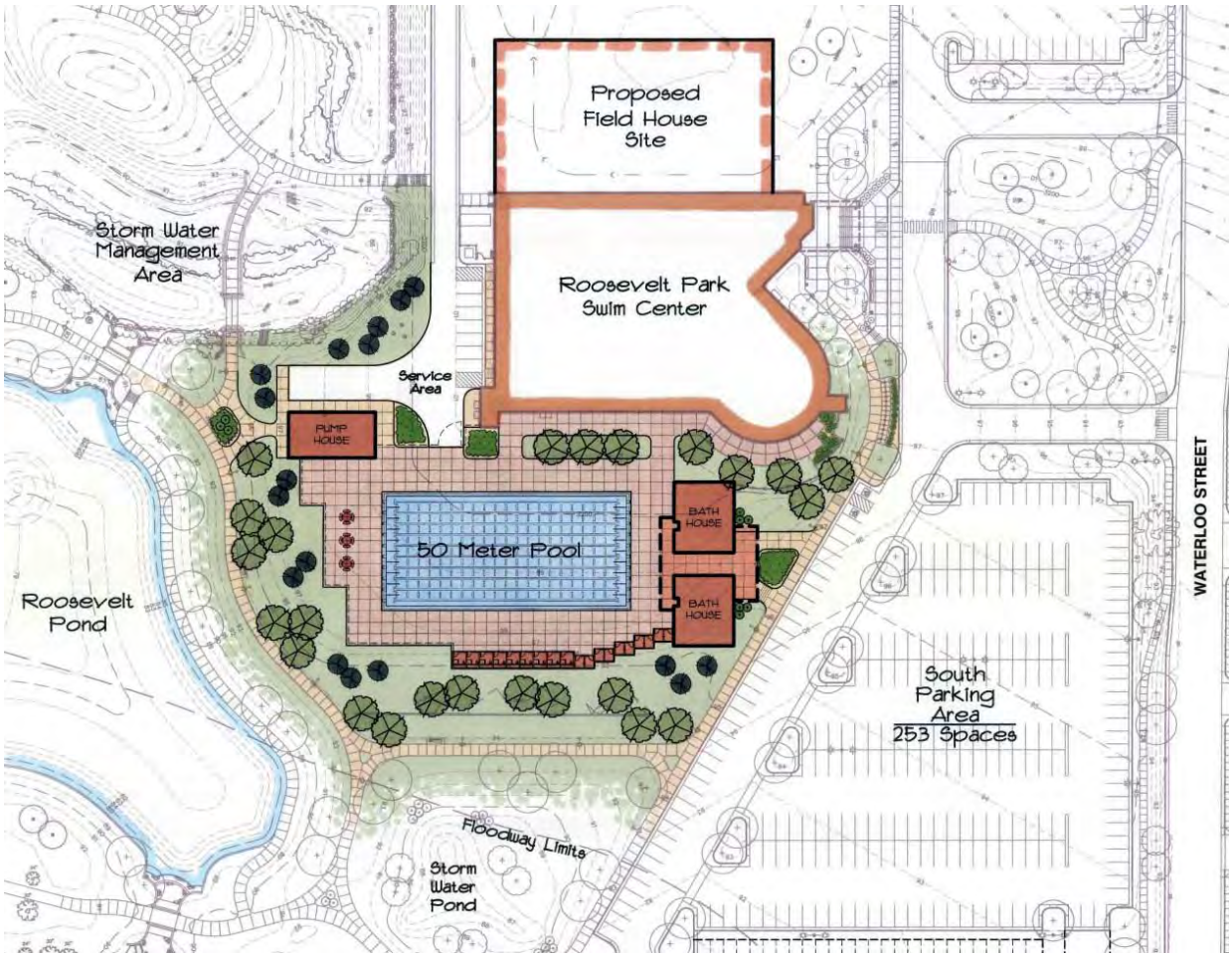
FIELDHOUSE/NATATORIUM
FIRST FLOOR CONCEPT



FIELDHOUSE/NATATORIUM
SECOND FLOOR CONCEPT



FIELDHOUSE/NATATORIUM ELEVATION CONCEPT (with existing Pool and Ice Arena)



OUTDOOR CONCEPT WITH FIELDHOUSE

The 50M Outdoor Pool concept is shown with a separate 50 M Competition pool to the south of the existing Swim Center and a field house along the north side of the Swim Center. This concept leaves an open space between the north side of the field house and the south side of the Ice Arena for future utilization for other athletic functions (another sheet of ice, etc.).

The outdoor pool includes outdoor dressing “cabanas”, concessions, restrooms, equipment storage rooms, Pump-house and a large deck area for spectator observation; all surrounding a 10-lane 50M (by 25 Yard wide) competition pool. The Field House includes Ball Courts, Child Drop-in Care, Exercise areas, walking/jogging track, public room with kitchenette, additional dry-side locker shower-rooms and other ancillary spaces.

Cost & Operational Evaluations

As discussed earlier, BKA conducted an independent analysis of probable operating cost and revenues for the various options being considered at Horace Mann Park and Roosevelt Park. The operating pro-forma developed represents a conservative approach to estimating expenses and revenues and was completed based on the best information available and a basic understanding of the project. The pro-forma included a detailed listing of costs including a staffing plan, listing of contractual services, commodities and estimate for capital replacement. Fees and charges utilized for this study were developed from the existing City rate structure and are subject to review, change, and approval by the City. The results of the operations analysis indicate that the proposed aquatic center at Horace Mann will not recover its operating costs but the Roosevelt Park expansion will have a positive cash flow impact on the existing operation.

Another part of this Section is an Opinion of Probable Cost. These Opinions are cautionary in that they are preliminary in nature and they are trying to predict possible costs for a Budget Year in the future. For that purpose, inflationary factors have been added to try to be as realistic as possible at a Concept Level of Detail within the prediction. The preliminary budget and anticipated years of proposed funding may need to be further reviewed going forward. These numbers include a 10% design fee and a 10% project contingency. Additional site work numbers can be found in the Appendix.

ROOSEVELT PARK OPINION OF PROBABLE COST

Costs	Outdoor Pool	Indoor Pool	Field-house w/Outdoor	Field-house w/Indoor
Civil/LA	$ 282,000	$ 0	$ 105,200	$ 144,000
Architectural	$ 480,200	$2,946,000	$2,601,800	$3,476,400
Structural	$ 202,800	$ 722,400	$ 584,200	$ 784,800
M& E	$ 281,800	$1,947,200	$ 961,800	$1,285,000
Pool	$3,360,000	$3,400,000	$ 0	$ 0
Total	$4,608,800	$9,015,600 $241/SF	$4,252,200 $124/SF	$5,690,200* $124/SF

ROOSEVELT PARK FIELDHOUE PRO-FORMA/EXPENDITURE-REVENUE COMPARISON

Category	Field-house With Indoor Pool	Field-house With Outdoor Pool
Expenditures	$483,802	$309,115
Revenue	$362,959	$288,913
Difference	($120,843)	($30,202)
Recovery %	75%	90%

Supporting documentation can be found in the Appendix.

Conclusion

From the discussions and feed-back through the process with Staff, Stakeholders, User Groups and the population from the North Rapid City area, we suggest the following conclusions:

Horace Mann

Due to the nature of the views from Horace Mann Park, the view-shed maintenance has been a priority for all involved with this study. The North Rapid Area population desires a leisure pool with lap pool configuration. Through the Open House discussions and the following City Website derived comments, this conclusion was made very clear. Most commented that Pool Concept A is their preferred configuration.

Early in the Study Process, there was a very strong resistance to eliminating the ball field and reducing the playground or open grassy areas. Consideration for renovation of the parking, traffic flow and vehicular aces to the site should be a high priority for P&R Dept. planning.

Roosevelt Park

The North Rapid Area population and User Groups desire a 50 M Competition Pool located at the Roosevelt Park site. P&R Dept. programming is limited due to the absence of a field house at the Roosevelt Park site. An indoor pool combined with a field house is the configuration that fills the most long term needs at this site. This configuration in-fills the empty space between the Swim Center and the Ice Arena, reduces staffing of control desks and creates the most programming potential.

An outdoor pool with a field-house has less of an annual operational cost impact, yet does not appear to fulfill the demands expressed by the User Groups and the Staff.[4]

Both

To serve the use needs for both Horace Mann and competitive swimming in Rapid City, both a 50M and a leisure pool should be constructed simultaneously. However, the established budgets for the aquatic facilities and the field house are insufficient to achieve the program needs established during the programming phase.

If the current pool budgets are combined, there is a chance that the Horace Mann Park could be the site of one of the pool options. None of the options presented fulfills the need we see for the Horace Mann Park site **and** the needs expressed by most User Groups while meeting the combined budget.

We suggest the City of Rapid City revisit their funding mechanism(s) and available resources before making a decision on what is to be done.

[4] We wish to reiterate that we were not charged with performing an economic impact study related to Aquatic Facilities within Rapid City.

Appendix

Appendix I - Survey Results

Appendix II - Market Analysis

Appendix III - Opinions of Probable Cost, Pro-Forma & Site Costs for each Site

Appendix IV – Staffing/Cost/Revenue Models

Appendix V - Space Programs

PW062612-19

Horace Mann Pool Feasibility Edit

Response Summary

Total Started Survey: 83
Total Completed Survey: 83 (100%)

PAGE: 2

1. What type of pool would you rather see at Horace Mann Park?

Create Chart Download

	Response Percent	Response Count
50 Meter Lap Pool (like the one at Horace Mann Park now)	1.2%	1
Leisure Pool (similar to the Parkview or Sioux Park pools)	25.3%	21
A Combination 50 Meter Pool and Leisure Pool with elements built together	**38.6%**	**32**
A Separate 50 Meter Lap Pool and a Separate Leisure Pool	34.9%	29
answered question		83
skipped question		0

2. If you answered 50 Meter Lap Pool in Question #1, please rank the importance of the following features or programs from 1 to 5 with 1 being most important to you and 5 being the least important.

Download

	Response Percent	Response Count
Lap Lanes Show Responses	93.8%	15
Diving Boards Show Responses	87.5%	14
Slides Show Responses	75.0%	12
Climbing Wall Show Responses	75.0%	12
Other Show Responses	62.5%	10
answered question		16
skipped question		67

3. If you answered Leisure Pool in Question #1, please rank the importance of the following elements 1 to 8 with 1 being the most important to you and 8 being the least important.

Download

	Response Percent	Response Count
Zero Depth, beach style entry	96.9%	31
answered question		32
skipped question		51

PW062612-19

3. If you answered Leisure Pool in Question #1, please rank the importance of the following elements 1 to 8 with 1 being the most important to you and 8 being the least important. Download

Show Responses

Slides Show Responses	93.8%	30
Lazy River Show Responses	96.9%	31
Diving Boards Show Responses	100.0%	32
Spray/Play Fountains Show Responses	90.6%	29
Interactive Water Play Features Show Responses	87.5%	28
Lap Swimming Area Show Responses	93.8%	30
Water Obstacle Course Show Responses	87.5%	28
	answered question	**32**
	skipped question	**51**

4. If you answered Combination 50 Meter Lap Pool and a Leisure Pool in Question #1, please rank the importance of the following features or programs from 1 to 8 with 1 being the most important to you and 8 being the least important. Download

	Response Percent	Response Count
Zero Depth, Beach Style Entry Show Responses	97.2%	35
Slides Show Responses	97.2%	35
Lazy River Show Responses	100.0%	36
Diving Boards Show Responses	100.0%	36
Spray/Play Fountains Show Responses	97.2%	35
Interactive Water Play Features Show Responses	94.4%	34
Lap Swimming Area Show Responses	97.2%	35
Water Obstacle Course Show Responses	91.7%	33
	answered question	**36**
	skipped question	**47**

5. If you answered Separate 50 Meter Lap Pool and Separate Leisure Pool in Question #1, please rank the following features or programs from 1 to 8 with 1 being the most important to you and 8 being the least important. Download

	Response Percent	Response Count
Zero Depth, Beach Style Entry Show Responses	100.0%	31
	answered question	**31**
	skipped question	**52**

PW062612-19

5. If you answered Separate 50 Meter Lap Pool and Separate Leisure Pool in Question #1, please rank the following features or programs from 1 to 8 with 1 being the most important to you and 8 being the least important. Download

Slides Show Responses	100.0%	31
Lazy River Show Responses	93.5%	29
Diving Boards Show Responses	100.0%	31
Spray/Play Fountains Show Responses	96.8%	30
Interactive Water Play Features Show Responses	96.8%	30
Lap Swimming Area Show Responses	100.0%	31
Water Obstacle Course Show Responses	96.8%	30
	answered question	31
	skipped question	52

6. Would you like to have a Lazy River feature as part of the new Horace Mann Park Swimming Facility? (A Lazy River is for general recreation, meandering along on an inner tube, and can also be used for water walking exercises.) Create Chart Download

	Response Percent	Response Count
Yes	74.1%	60
No	7.4%	6
Maybe	18.5%	15
	answered question	81
	skipped question	2

7. How important is it to have a Lazy River feature at the Horace Mann Park Swimming Facility? Create Chart Download

	Response Percent	Response Count
Very Important	24.4%	20
Somewhat Important	50.0%	41
Not Important	23.2%	19
No Opinion	2.4%	2
	answered question	82
	skipped question	1

8. Would you like to have a Zero Depth Beach Style Entry as part of the new Horace Mann Swimming Facility? (This feature is great for easy entrance into the pool, is a great place to sit and lounge in shallow water, and is a nice area for small children to play.) Create Chart Download

answered question	82
skipped question	1

PW062612-19

8. Would you like to have a Zero Depth Beach Style Entry as part of the new Horace Mann Swimming Facility? (This feature is great for easy entrance into the pool, is a great place to sit and lounge in shallow water, and is a nice area for small children to play.) Create Chart Download

	Response Percent	Response Count
Yes	**89.0%**	**73**
No	1.2%	1
Maybe	9.8%	8
	answered question	82
	skipped question	1

9. How important is it to have a Zero Depth, Beach Style Entry Feature? Create Chart Download

	Response Percent	Response Count
Very Important	**64.2%**	**52**
Somewhat Important	25.9%	21
Not Important	7.4%	6
No Opinion	2.5%	2
	answered question	81
	skipped question	2

10. Would you like to have Water Slides as part of the facility? Create Chart Download

	Response Percent	Response Count
Yes	**84.0%**	**68**
No	1.2%	1
Maybe	14.8%	12
	answered question	81
	skipped question	2

11. What types of Water Slides would you like to see? Create Chart Download

	Response Percent	Response Count
Large Water Slide similar to what you might find at a commercial water park	22.2%	18
Medium to large slide	**67.9%**	**55**
Family slide (ride down side by side)	49.4%	40
Toddler size slides	40.7%	33
	answered question	81
	skipped question	2

PW062612-19

12. Would you like to have Interactive Water Play Features as part of the facility? Create Chart Download

	Response Percent	Response Count
Yes	**62.8%**	**49**
No	6.4%	5
Maybe	30.8%	24
	answered question	**78**
	skipped question	**5**

13. What types of Interactive Water Play Features would you like to see (Select all that apply) Create Chart Download

	Response Percent	Response Count
Large premier play feature (similar to what you might find at a commercial water park	22.1%	17
Medium to large play feature	**64.9%**	**50**
Small play feature	36.4%	28
	answered question	**77**
	skipped question	**6**

14. Would you like to have a Water Obstacle Course as part of the facility? Create Chart Download

	Response Percent	Response Count
Yes	**47.4%**	**37**
No	17.9%	14
Maybe	34.6%	27
	answered question	**78**
	skipped question	**5**

15. How important is it to have a Water Obstacle Course? Create Chart Download

	Response Percent	Response Count
Very Important	9.9%	8
Somewhat Important	**39.5%**	**32**
Not Important	29.6%	24
No Opinion	21.0%	17
	answered question	**81**
	skipped question	**2**

PW062612-19

16. Would you like to have Spray/Play Fountains as part of the facility? Create Chart Download

	Response Percent	Response Count
Yes	**74.1%**	**60**
No	4.9%	4
Maybe	21.0%	17
	answered question	**81**
	skipped question	**2**

17. How important is it to have Spray/Play Fountains? Create Chart Download

	Response Percent	Response Count
Very Important	32.1%	26
Somewhat Important	**49.4%**	**40**
Not Important	13.6%	11
No Opinion	4.9%	4
	answered question	**81**
	skipped question	**2**

18. Would you like to have a Lap and Competitive Swimming Area as part of the facility? Create Chart Download

	Response Percent	Response Count
Yes	**65.9%**	**54**
No	18.3%	15
Maybe	15.9%	13
	answered question	**82**
	skipped question	**1**

19. How important is is to have a Lap & Competitive Swimming Area? Create Chart Download

	Response Percent	Response Count
Very Important	**41.5%**	**34**
Somewhat Important	22.0%	18
Not Important	29.3%	24
No Opinion	7.3%	6
	answered question	**82**
	skipped question	**1**

PW062612-19

20. Do you like the idea of having Diving Boards at the facility? Create Chart Download

	Response Percent	Response Count
Low Dive (1 Meter)	**60.8%**	**48**
High Dive (3 Meter)	16.5%	13
No Diving Boards	22.8%	18
	answered question	79
	skipped question	4

21. How important is is to have Diving Boards at the facility? Create Chart Download

	Response Percent	Response Count
Very Important	19.5%	16
Somewhat Important	36.6%	30
Not Important	**40.2%**	**33**
No Opinion	3.7%	3
	answered question	82
	skipped question	1

22. Would you like the facility to offer aquatic exercise like aqua aerobics, water walking, etc.? Create Chart Download

	Response Percent	Response Count
Yes	**72.0%**	**59**
No	11.0%	9
Maybe	17.1%	14
	answered question	82
	skipped question	1

23. How important is having aquatic exercise programs offered at the facility? Create Chart Download

	Response Percent	Response Count
Very Important	31.7%	26
Somewhat Important	**43.9%**	**36**
Not Important	19.5%	16
No Opinion	4.9%	4
	answered question	82
	skipped question	1

PW062612-19

24. Did you or a family member swim at one of the other City pools in the past year? Create Chart Download

	Response Percent	Response Count
Yes	**85.0%**	**68**
No	13.8%	11
Maybe, can't remember	1.3%	1
	answered question	80
	skipped question	3

25. If you or a family member used one of the City pools this past year, was it to: Create Chart Download

	Response Percent	Response Count
Lap Swim	26.0%	19
Open Swim (play for fun)	**79.5%**	**58**
Take Swim Lessons	15.1%	11
Swim Team Practice or Meet	0.0%	0
Party	16.4%	12
Other	20.5%	15
	answered question	73
	skipped question	10

26. The cost to use Horace Mann Pool for a youth today is $2.75. How much would you be willing to pay if the pool had the elements you thought were most important? Create Chart Download

	Response Percent	Response Count
$3.00	23.8%	19
$3.50	20.0%	16
$4.00	**36.3%**	**29**
$4.50	3.8%	3
$5.00	16.3%	13
	answered question	80
	skipped question	3

27. Counting yourself, how many people live in your household? Download

	Response Percent	Response Count
Under 5 Years Show Responses	**32.9%**	**27**
6-9 Years	18.3%	15
	answered question	82
	skipped question	1

PW062612-19

27. Counting yourself, how many people live in your household?		Download
Show Responses		
10-14 Years Show Responses	25.6%	21
15-19 Years Show Responses	14.6%	12
20-24 Years Show Responses	6.1%	5
25-34 Years Show Responses	29.3%	24
35-44 Years Show Responses	29.3%	24
45 - 54 Years Show Responses	24.4%	20
55-64 Years Show Responses	**32.9%**	**27**
65+ Years Show Responses	20.7%	17
	answered question	**82**
	skipped question	**1**

Section I – Demographic Summary & Market Review

The City of Rapid City has contracted the consulting to investigating the potential of renovation the existing Horace Mann Swimming Pool. To that end a market analysis has been developed to illustrate the demographic realities of the Horace Mann area and Rapid City proper for replacing the Horace Mann Pool in the community.

The following is a summary of the basic demographic characteristics of the Horace Mann neighborhood along with a comparison of the other City outdoor swimming facilities at Jimmy Hilton and Parkview along with a comparison with basic sports participation standards as produced by the National Sporting Goods Association 2010 Survey.

Service Areas: The purpose of renovating the aquatic facility at Horace Mann Park and is replace an aging traditional 50-meter outdoor pool to benefit Rapid City proper. Renovation of such a facility would allow the swim team to continue to grow the entry level swimmer base of the team and provide recreational swimming opportunities for Rapid City and the Horace Mann area.

Primary service areas are usually defined by the distance people will travel on a regular basis (a minimum of once a week) to utilize a facility or its programs. The primary service area was identified with staff assistance and is located on the map below (page 7 below). Secondary service areas are usually defined by the distance people will travel on a less consistent basis to utilize a facility or its programs.

Service areas can also vary in size with the types of components that are included in a facility. A center with active play elements and leisure pool components (water slides, sprays, fountains, zero depth entry, etc) will generally have a larger service area than a more traditionally oriented facility. Specialized facilities such as a sports field house, ice arena or large competitive aquatic venue will have even larger service areas that make them more of a regional destination.

Service areas can also be based upon a facility's proximity to major thoroughfares. Other factors impacting the use as it relates to driving distance are the presence of alternative service providers in the primary service area. Alternative service providers can have an impact upon membership, daily admissions and the associated penetration rates for programs and services.

Table A – Service Area Comparison Chart:

	Horace Mann	Jimmy Hilton	Parkview
Population:			
2010 Census	20,279	11,523	10,474
2011 Estimate	20,229	11,531	10,557
2016 Estimate	20,775	11,906	11,122
Households:			
2010 Census	8,523	5,232	4,452
2011 Estimate	8,509	5,237	4,493
2016 Estimate	8,839	5,477	4,819
Families:			
2010 Census	4,283	2,882	2,796
2011 Estimate	4,284	2,887	2,829
2016 Estimate	4,348	2,960	2,978
Average Household Size:			
2010 Census	2.23	2.13	2.28
2011 Estimate	2.23	2.13	2.28
2016 Estimate	2.21	2.10	2.24
Ethnicity: 2011 Estimate			
Hispanic	5.9%	3.2%	4.1%
White	66.6%	87.5%	86.9%
Black	1.4%	0.9%	1.0%
American Indian	24.1%	6.7%	7.4%
Asian	1.5%	0.9%	0.8%
Pacific Islander	0.1%	0.1%	0.1%
Other	1.0%	0.7%	0.4%
Multiple	5.3%	3.2%	3.4%
Median Age:			
2010 Census	31.9	39.6	36.4
2011 Estimate	32.0	39.9	36.6
2016 Estimate	32.7	41.1	37.5
Median Income:			
2011 Estimate	$27,443	$43,167	$51,124
2016 Estimate	$30,670	$52,826	$60,100
Household Budget Expenditures[1]:			
Housing	65	86	94
Entertainment & Recreation	63	87	96
Sports & Leisure Market Potential:			
Swimming	96	107	105

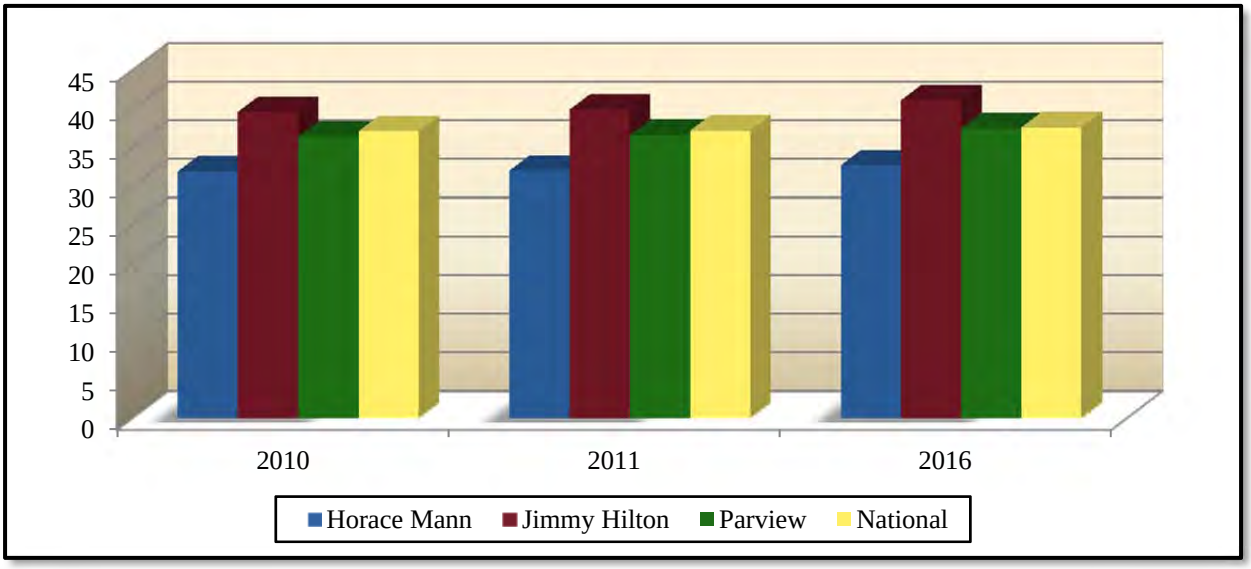
[1] This information is placed on an index with a reference point being the National average of 100.

The median age and household income levels are compared with the national number as both of these factors are primary determiners of participation in recreation activities. The lower the median age, the higher the participation rates are for most activities. The level of participation also increases as the median income level goes up.

Table B – Median Age:

	2010 Census	2011 Projection	2016 Projection
Horace Mann Pool	31.9	32.0	32.7
Jimmy Hilton Pool	39.6	39.9	41.1
Parkview Pool	36.4	36.6	37.5
Nationally	37.1	37.2	37.6

Chart A – Median Age

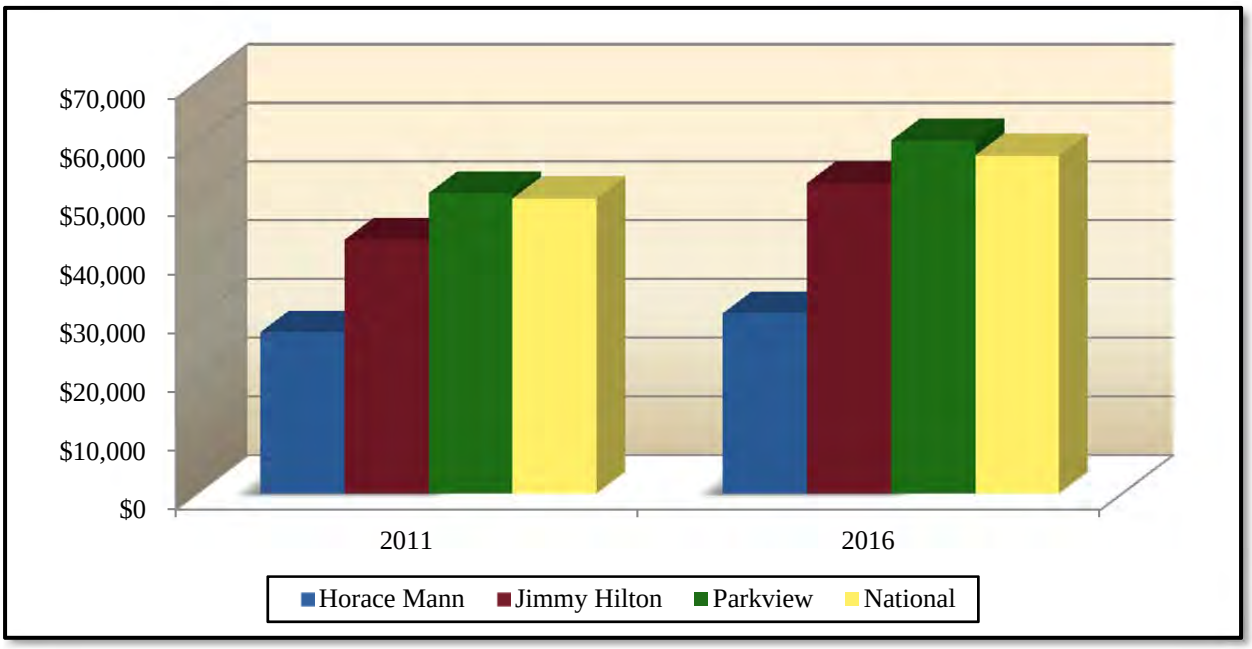


The median age for the service areas of Horace Mann and Parkview pool appears to less than the National number while the median age for the Jimmy Hilton pool is greater than the National number. All three services areas would point to the existence of families in the service area which would be primary users of aquatic facilities.

Table C – Median Household Income:

	2011 Estimate	2016 Projection
Horace Mann Pool	$27,443	$30,670
Jimmy Hilton Pool	$43,167	$52,826
Parkview Pool	$51,125	$60,100
Nationally	$50,227	$57,536

Chart B – Median Household Income



In addition to taking a look at Median Age and Median Income, it is important to examine Household Budget Expenditures. In particular looking at housing information; shelter, utilities, fuel and public services along with entertainment & recreation can provide a snap shot into the cost of living and spending patterns in the services areas. The table below looks at that information and compares the three services areas.

Table D – Household Budget Expenditures[2]

Horace Mann Pool	SPI	Average Amount Spent	Percent
Housing	65	$13,106.21	30.9%
Shelter	*64*	*$10,142.51*	*23.9%*
Utilities, Fuel, Public Service	*65*	*$2,963.71*	*7.0%*
Entertainment & Recreation	63	$2,041.98	4.8%

Jimmy Hilton Pool	SPI	Average Amount Spent	Percent
Housing	86	$17,409.37	30.5%
Shelter	*85*	*$13,446.45*	*23.6%*
Utilities, Fuel, Public Service	*87*	*$3,962.92*	*7.0%*
Entertainment & Recreation	87	$2,801.67	4.9%

Parkview Pool	SPI	Average Amount Spent	Percent
Housing	94	$19,022.53	30.3%
Shelter	*93*	*$14,652.83*	*23.3%*
Utilities, Fuel, Public Service	*96*	*$4,369.70*	*7.0%*
Entertainment & Recreation	96	$3,083.60	4.9%

SPI: Spending Potential Index as compared to the National number of 100.

Average Amount Spent: The average amount spent per household.

Percent: Percent of the total 100% of household expenditures. **Note:** Shelter along with Utilities, Fuel, Public Service are a portion of the Housing percentage.

[2] Consumer Spending data are derived from the 2004 and 2005 Consumer Expenditure Surveys, Bureau of Labor Statistics. ESRI forecasts for 2010 and 2015.

Chart C – Household Budget Expenditures Spending Potential Index

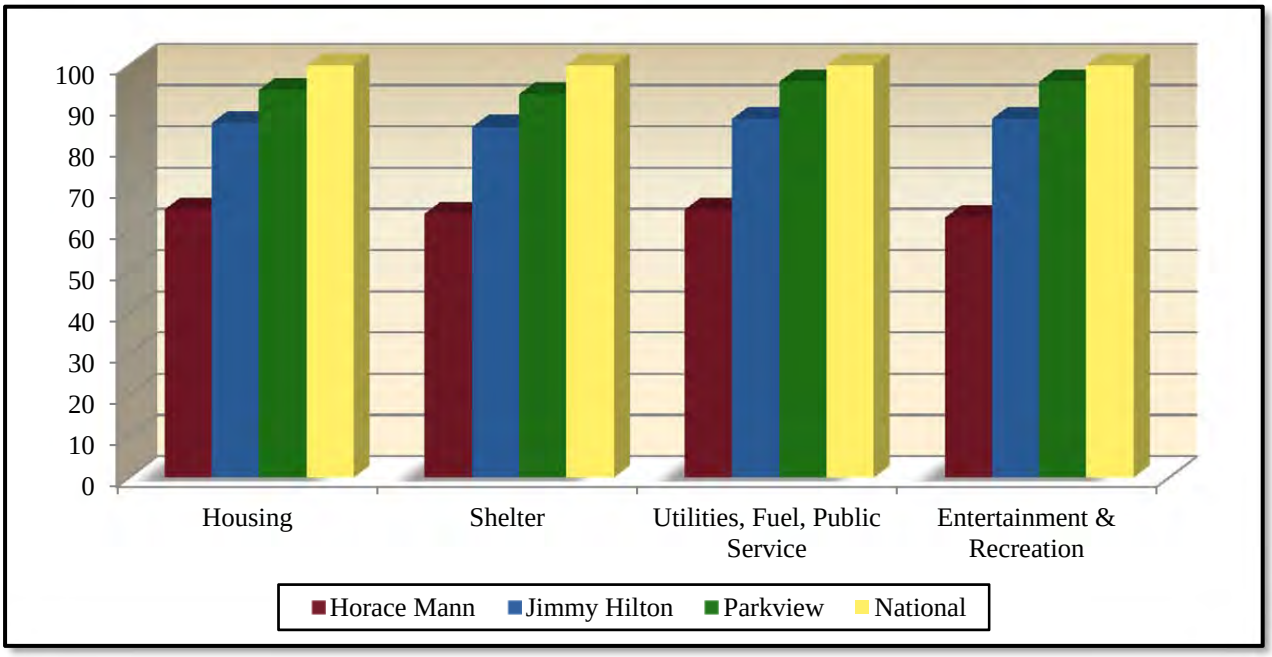
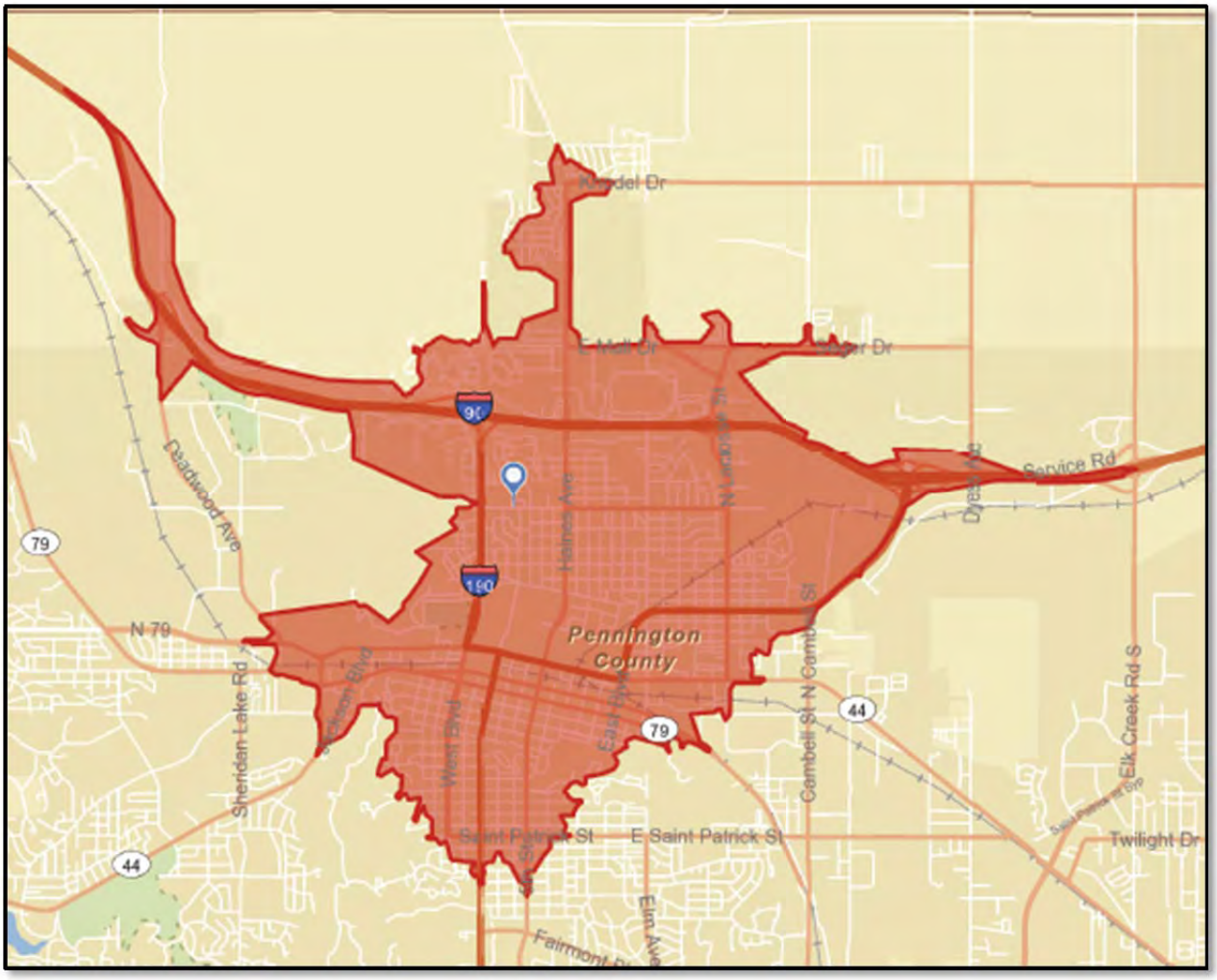


Chart C, illustrates that the Household Budget Expenditures Spending Potential Index in all three service areas is lower than the National level indicating that less dollars being spent for those services as compared to a National level.

It will be important to keep this information in mind when developing fee structure and looking at an appropriate cost recovery philosophy.

Map A – Horace Mann Pool Service Area



Population Distribution by Age: Utilizing census information for the Horace Mann Pool Service Area, the following comparisons are possible.

Table E – 2011 Horace Mann Pool Service Area Age Distribution
(ESRI estimates)

Ages	Population	% of Total	Nat. Population	Difference
-5	1,648	8.4%	6.5%	+2.1%
5-17	3,880	19.2%	17.6%	+1.6%
18-24	2,655	13.1%	9.8%	+3.3%
25-44	5,551	27.4%	26.6%	+0.8%
45-54	2,655	13.1%	14.5%	-1.4%
55-64	2,136	10.6%	12.0%	-1.4%
65-74	1,156	5.7%	7.2%	-1.5%
75+	1,162	5.7%	6.0%	-0.3%

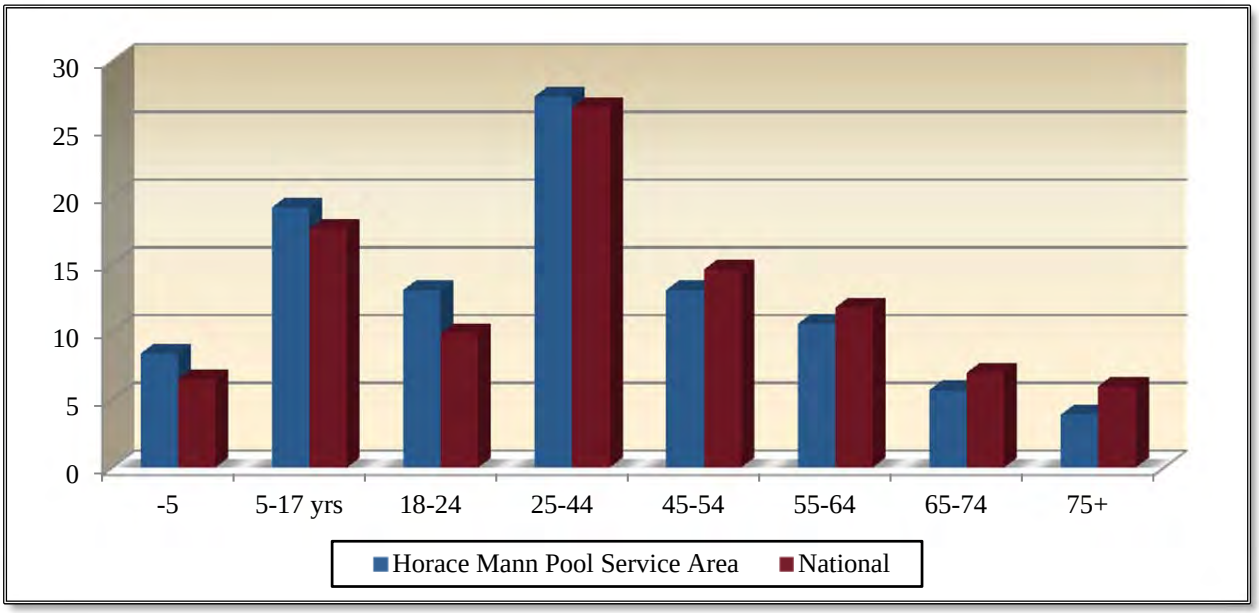
Population: 2011 census est. in the different age groups in the Horace Mann Pool Service Area.

% of Total: Percentage of the Horace Mann Pool Service Area population in the age group.

National Population: Percentage of the national population in the age group.

Difference: Percentage difference between the Horace Mann Pool Service Area population and the national population.

Chart D – 2011 Horace Mann Pool Service Area Age Group Distribution



Population Distribution Comparison by Age: Utilizing census information from the Horace Mann Pool Service Area, the following comparisons are possible.

Table F – 2011 Horace Mann Pool Service Area Population Estimates
(U.S. Census Information and ESRI)

Ages	2010 Census	2011 Projection	2016 Projection	Percent Change	Percent Change Nat'l
-5	1,683	1,648	1,691	+0.5%	+3.4%
5-17	3,289	3,880	3,950	+20.1%	+1.6%
18-24	2,663	2,655	2,598	-2.4%	-0.9%
25-44	5,573	5,551	5,628	+1.0%	+2.7%
45-54	2,683	2,655	2,498	-6.9%	-6.1%
55-64	2,112	2,136	2,355	+11.5%	+11.8%
65-74	1,125	1,156	1,465	+30.2%	+28.6%
75+	1,150	1,162	1,264	+9.9%	+7.0%

Chart E – Horace Mann Pool Service Area Population Growth

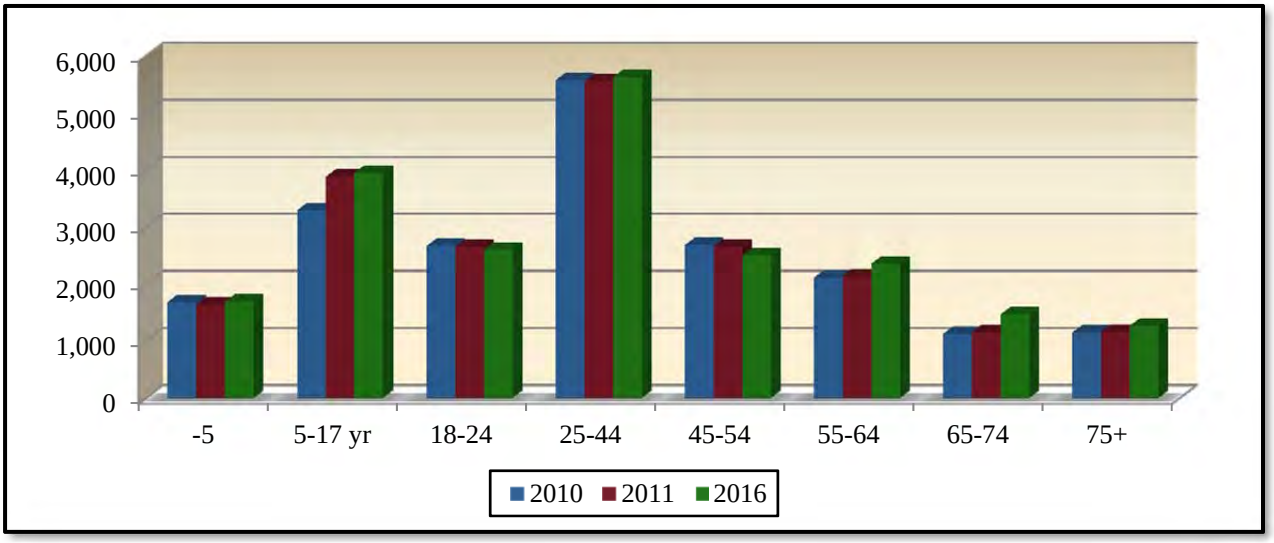


Table-F, illustrates the growth or decline in age group numbers from the 2010 census until the year 2016. It is projected that all of the age categories, except 18-24 and 45-54 will see an increase in population. It must be remembered that the population of the United States as a whole is aging and it is not unusual to find negative growth numbers in the younger age groups and significant net gains in the 45 plus age groupings in communities which are relatively stable in their population numbers.

Below is listed the distribution of the population by race and ethnicity for the Horace Mann Pool Service Area based on 2011 Census Data.

Table G – Horace Mann Pool Service Area Ethnic Population and Median Age
(Source – U.S. Census Bureau and ESRI)

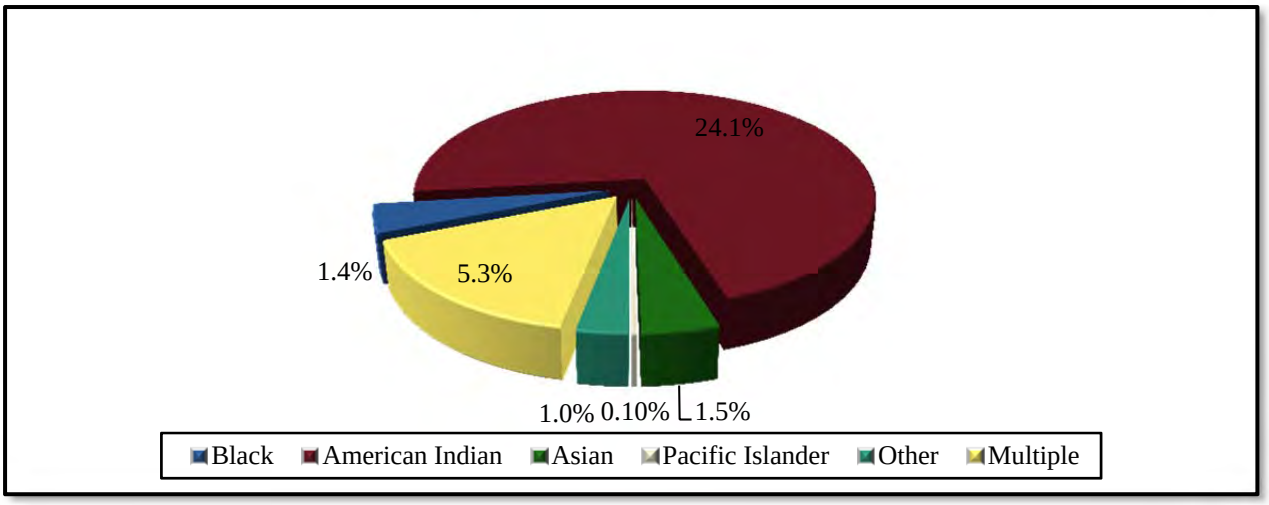
Ethnicity	Total Population	Median Age	% of Population	% of South Dakota Pop.
Hispanic	1,198	21.4	5.9%	2.8%

Table H – Horace Mann Pool Service Area Population by Race and Median Age
(Source – U.S. Census Bureau and ESRI)

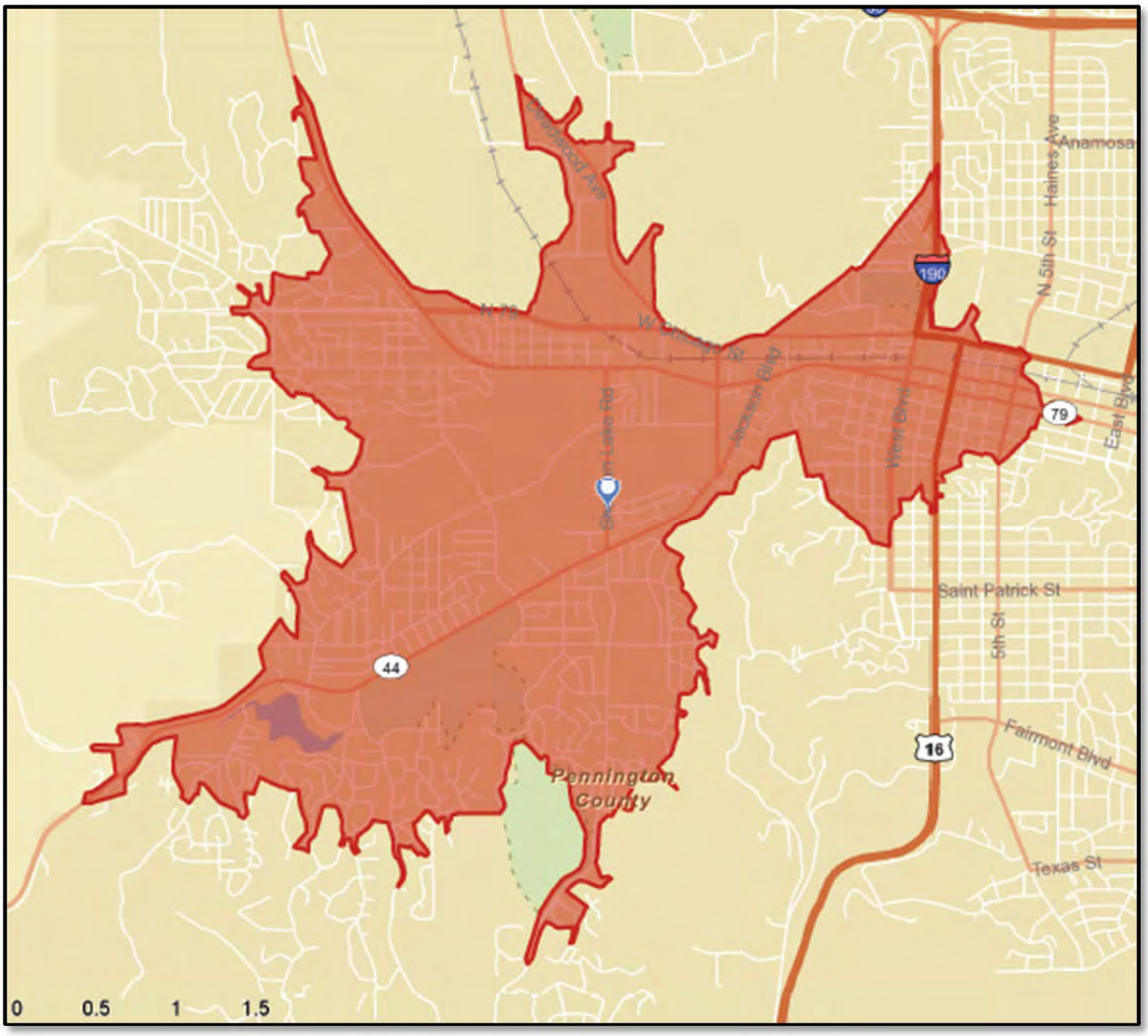
Ethnicity	Total Population	Median Age	% of Population	% of South Dakota Pop.
White	13,463	37.5	66.6%	85.9%
Black	293	31.8	1.4%	1.3%
American Indian	4,873	24.2	24.1%	8.8%
Asian	306	28.7	1.5%	0.9%
Pacific Islander	14	21.3	0.1%	0.04%
Other	212	29.7	1.0%	0.9%
Multiple	1,068	18.2	5.3%	2.1%

2011 Horace Mann Pool Service Area Total Population: 20,229 Residents

Chart F – Horace Mann Pool Service Area Non-White Population by Race



Map B – Jimmy Hilton Pool Service Area



Population Distribution by Age: Utilizing census information for the Jimmy Hilton Pool Service Area, the following comparisons are possible.

Table I – 2011 Jimmy Hilton Pool Service Area Age Distribution
(ESRI estimates)

Ages	Population	% of Total	Nat. Population	Difference
-5	680	5.9%	6.5%	-0.6%
5-17	1,684	14.6%	17.6%	-3.0%
18-24	1,107	9.6%	9.8%	-0.2%
25-44	2,899	25.1%	26.6%	-1.5%
45-54	1,608	13.9%	14.5%	-0.6%
55-64	1,489	12.9%	12.0%	+0.9%
65-74	948	8.2%	7.2%	+1.0%
75+	1,117	9.7%	6.0%	+3.7%

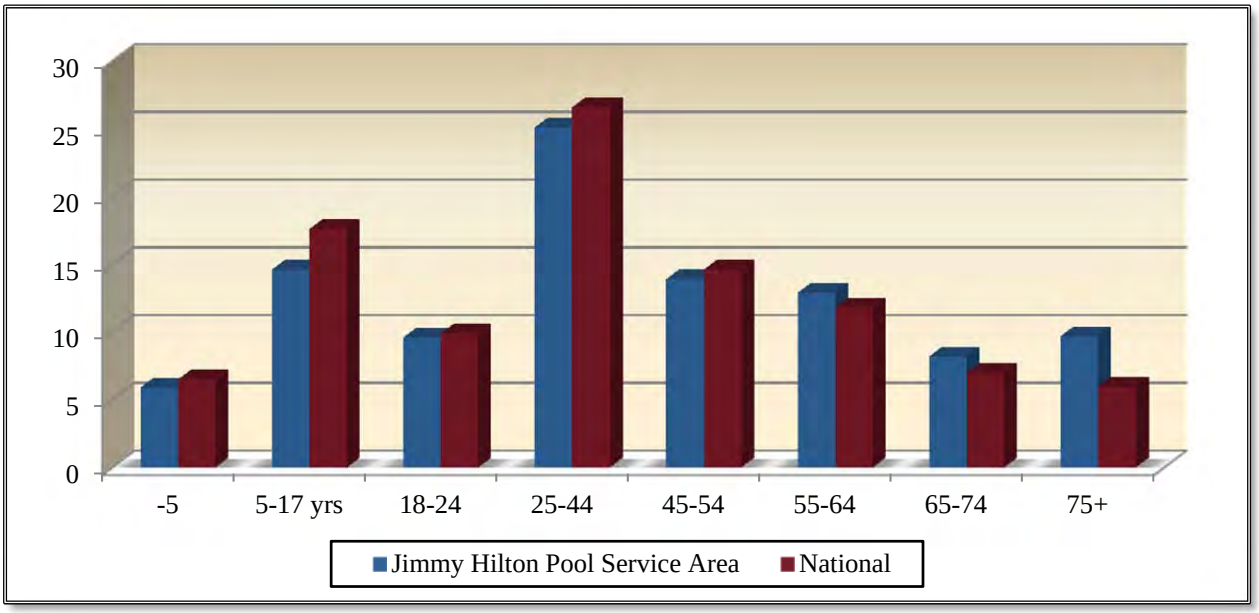
Population: 2011 census estimates in the different age groups in the Jimmy Hilton Pool Service Area.

% of Total: Percentage of the Jimmy Hilton Pool Service Area population in the age group.

National Population: Percentage of the national population in the age group.

Difference: Percentage difference between the Jimmy Hilton Pool Service Area population and the national population.

Chart G – 2011 Jimmy Hilton Pool Service Area Age Group Distribution



Population Distribution Comparison by Age: Utilizing census information from the Jimmy Hilton Pool Service Area, the following comparisons are possible.

Table J – 2011 Jimmy Hilton Pool Service Area Population Estimates
(U.S. Census Information and ESRI)

Ages	2010 Census	2011 Projection	2016 Projection	Percent Change	Percent Change Nat'l
-5	692	680	694	+0.3%	+3.4%
5-17	1,695	1,684	1,680	-0.9%	+1.6%
18-24	1,106	1,107	1,083	-2.1%	-0.9%
25-44	2,907	2,899	2,923	+0.6%	+2.7%
45-54	1,618	1,608	1,510	-6.7%	-6.1%
55-64	1,469	1,489	1,636	+11.4%	+11.8%
65-74	921	948	1,185	+28.7%	+28.6%
75+	1,115	1,117	1,194	+7.1%	+7.0%

Chart H – Jimmy Hilton Pool Service Area Population Growth

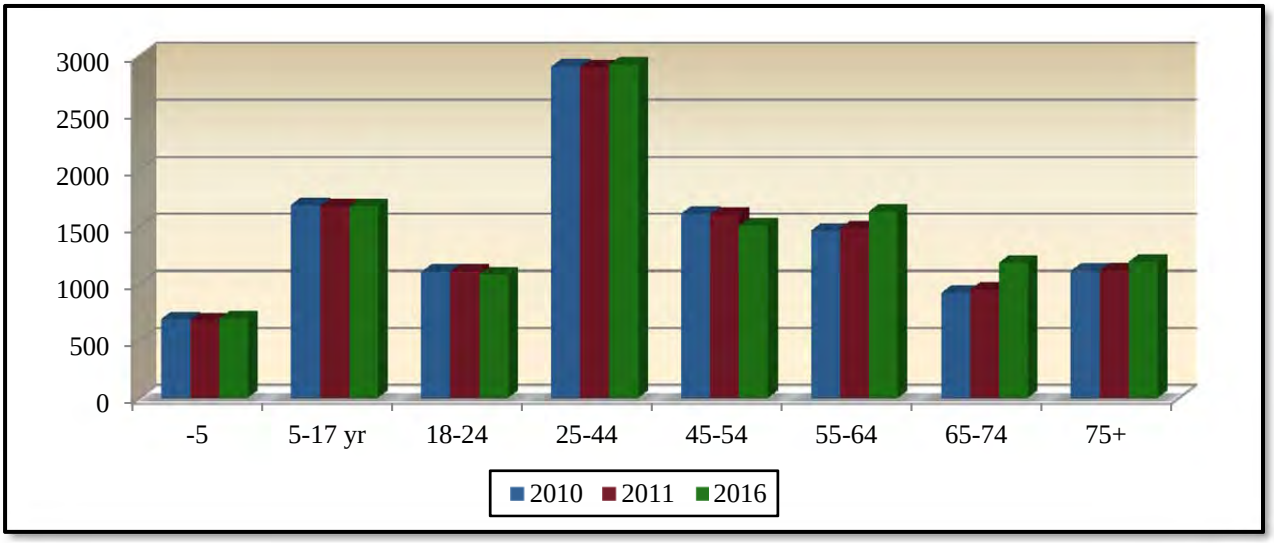


Table-J, illustrates the growth or decline in age group numbers from the 2010 census until the year 2016. It is projected that all of the age categories, except 5-17, 18-24 and 45-54 will see an increase in population. It must be remembered that the population of the United States as a whole is aging and it is not unusual to find negative growth numbers in the younger age groups and significant net gains in the 45 plus age groupings in communities which are relatively stable in their population numbers.

Below is listed the distribution of the population by race and ethnicity for the Jimmy Hilton Pool Service Area based on 2011 Census Data.

Table K – Jimmy Hilton Pool Service Area Ethnic Population and Median Age
(Source – U.S. Census Bureau and ESRI)

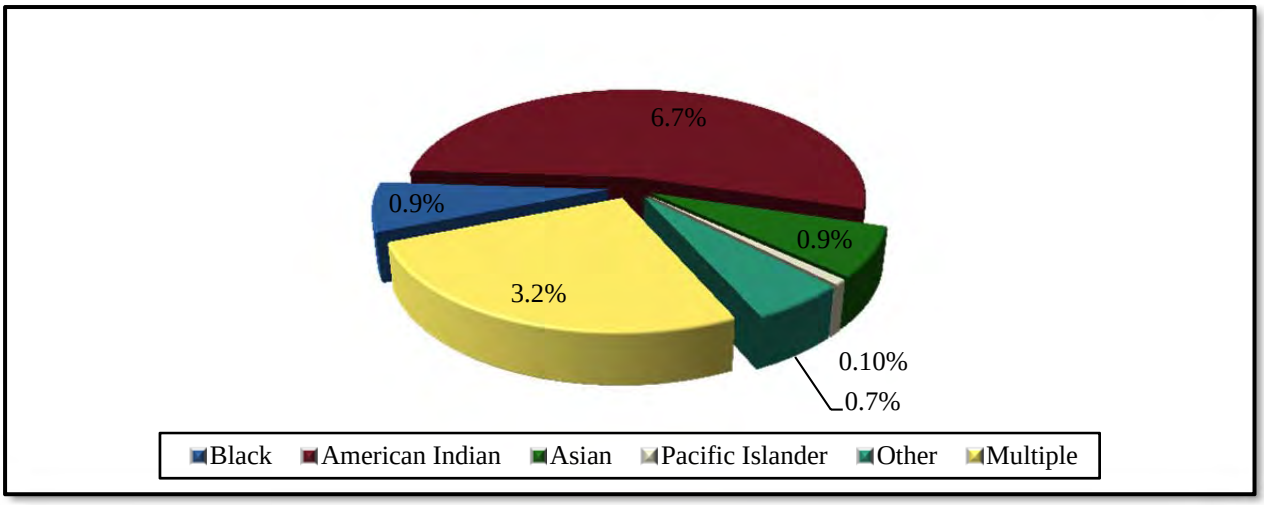
Ethnicity	Total Population	Median Age	% of Population	% of South Dakota Pop.
Hispanic	365	22.7	3.2%	2.8%

Table L – Jimmy Hilton Pool Service Area Population by Race and Median Age
(Source – U.S. Census Bureau and ESRI)

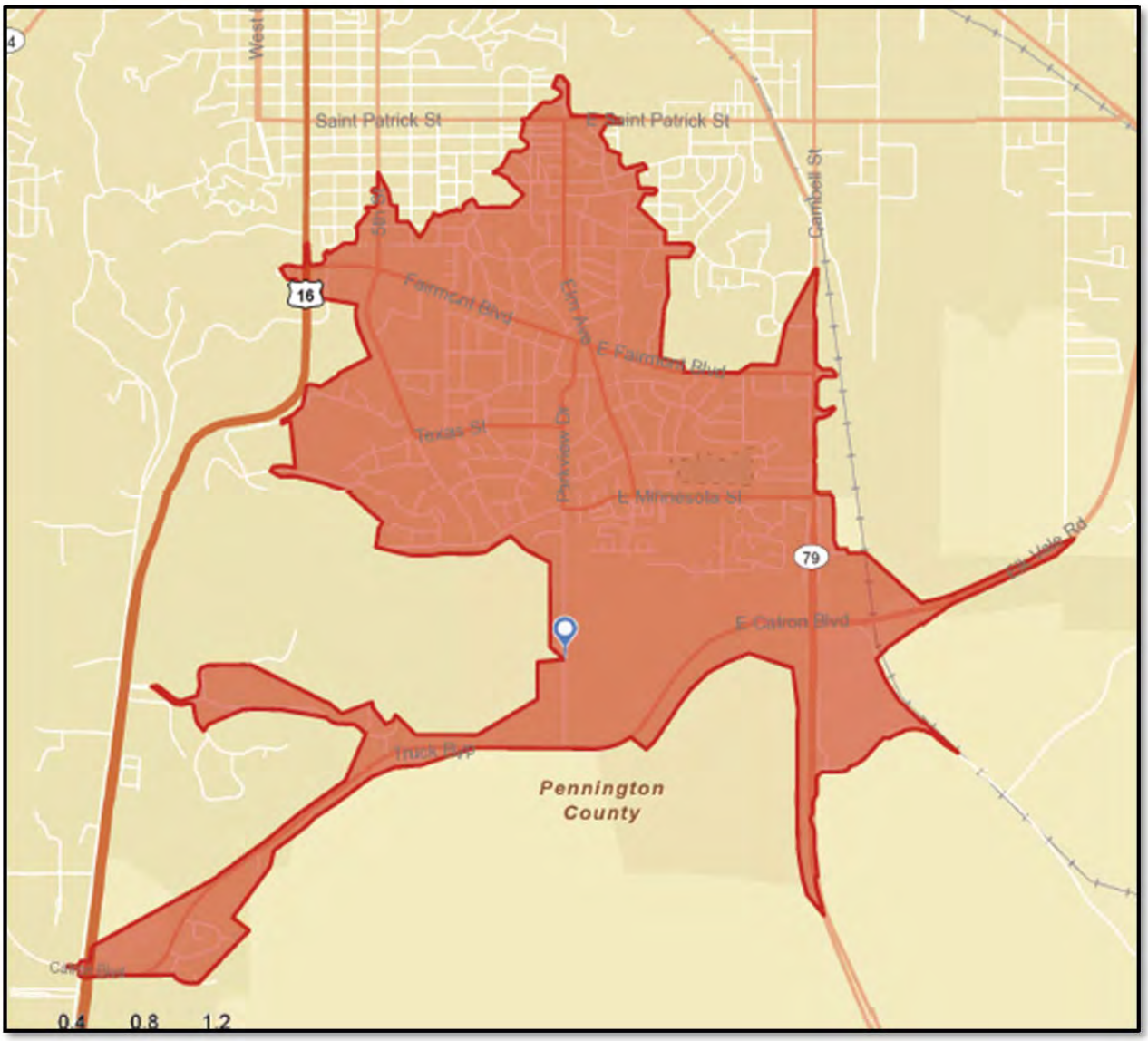
Ethnicity	Total Population	Median Age	% of Population	% of South Dakota Pop.
White	10,092	42.5	87.5%	85.9%
Black	102	31.4	0.9%	1.3%
American Indian	774	27.8	6.7%	8.8%
Asian	107	30.3	0.9%	0.9%
Pacific Islander	8	46.3	0.1%	0.04%
Other	78	33.5	0.7%	0.9%
Multiple	371	17.1	3.2%	2.1%

2011 Jimmy Hilton Pool Service Area Total Population: 109,829 Residents

Chart I – Jimmy Hilton Pool Service Area Non-White Population by Race



Map C – Parkview Pool Service Area



Population Distribution by Age: Utilizing census information for the Parkview Pool Service Area, the following comparisons are possible.

Table M – 2011 Parkview Pool Service Area Area Age Distribution
(ESRI estimates)

Ages	Population	% of Total	Nat. Population	Difference
-5	771	7.3%	6.5%	+0.8%
5-17	1,849	17.5%	17.6%	-0.1%
18-24	1,012	9.6%	9.8%	-0.2%
25-44	2,650	25.1%	26.6%	-1.5%
45-54	1,445	13.7%	14.5%	-0.8%
55-64	1,144	10.8%	12.0%	-1.2%
65-74	719	6.8%	7.2%	-0.4%
75+	966	9.2%	6.0%	+3.2%

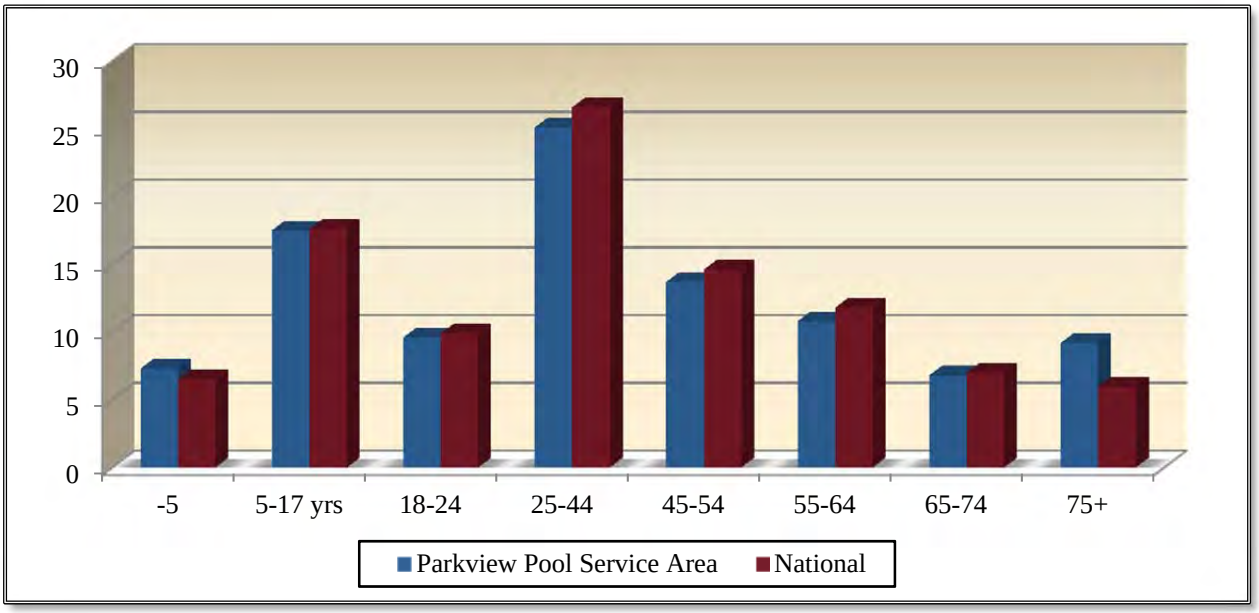
Population: 2011 census estimates in the different age groups in the Parkview Pool Service Area.

% of Total: Percentage of the Parkview Pool Service Area population in the age group.

National Population: Percentage of the national population in the age group.

Difference: Percentage difference between the Parkview Pool Service Area population and the national population.

Chart J – 2011 Parkview Pool Service Area Age Group Distribution



Population Distribution Comparison by Age: Utilizing census information from the Parkview Pool Service Area, the following comparisons are possible.

Table N – 2011 Parkview Pool Service Area Population Estimates
(U.S. Census Information and ESRI)

Ages	2010 Census	2011 Projection	2016 Projection	Percent Change	Percent Change Nat'l
-5	779	771	807	+3.6%	+3.4%
5-17	1,843	1,849	1,898	+3.0%	+1.6%
18-24	1,004	1,012	1,007	+0.3%	-0.9%
25-44	2,638	2,650	2,729	+3.4%	+2.7%
45-54	1,440	1,445	1,396	-3.1%	-6.1%
55-64	1,118	1,144	1,291	+15.5%	+11.8%
65-74	696	719	925	+32.9%	+28.6%
75+	956	966	1,069	+11.8%	+7.0%

Chart K – Parkview Pool Service Area Population Growth

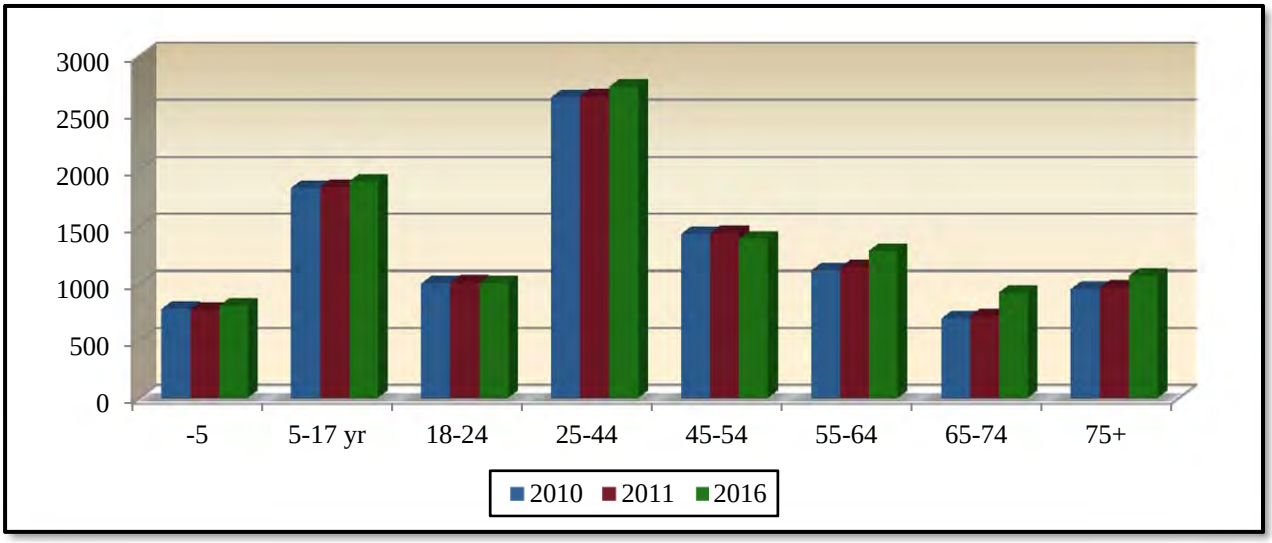


Table-N, illustrates the growth or decline in age group numbers from the 2010 census until the year 2016. It is projected that all of the age categories, except 45-54 will see an increase in population. It must be remembered that the population of the United States as a whole is aging and it is not unusual to find negative growth numbers in the younger age groups and significant net gains in the 45 plus age groupings in communities which are relatively stable in their population numbers.

Below is listed the distribution of the population by race and ethnicity for the Parkview Pool Service Area based on 2011 Census Data.

Table O – Parkview Pool Service Area Ethnic Population and Median Age
(Source – U.S. Census Bureau and ESRI)

Ethnicity	Total Population	Median Age	% of Population	% of South Dakota Pop.
Hispanic	433	18.5	4.1%	2.8%

Table P – Parkview Pool Service Area Population by Race and Median Age
(Source – U.S. Census Bureau and ESRI)

Ethnicity	Total Population	Median Age	% of Population	% of South Dakota Pop.
White	9,169	39.2	86.9%	85.9%
Black	107	27.5	1.0%	1.3%
American Indian	784	22.4	7.4%	8.8%
Asian	85	31.0	0.8%	0.9%
Pacific Islander	9	37.5	0.1%	0.04%
Other	41	28.6	0.4%	0.9%
Multiple	362	15.0	3.4%	2.1%

2011 Parkview Pool Service Area Total Population: 10,557 Residents

Chart L – Parkview Pool Service Area Non-White Population by Race

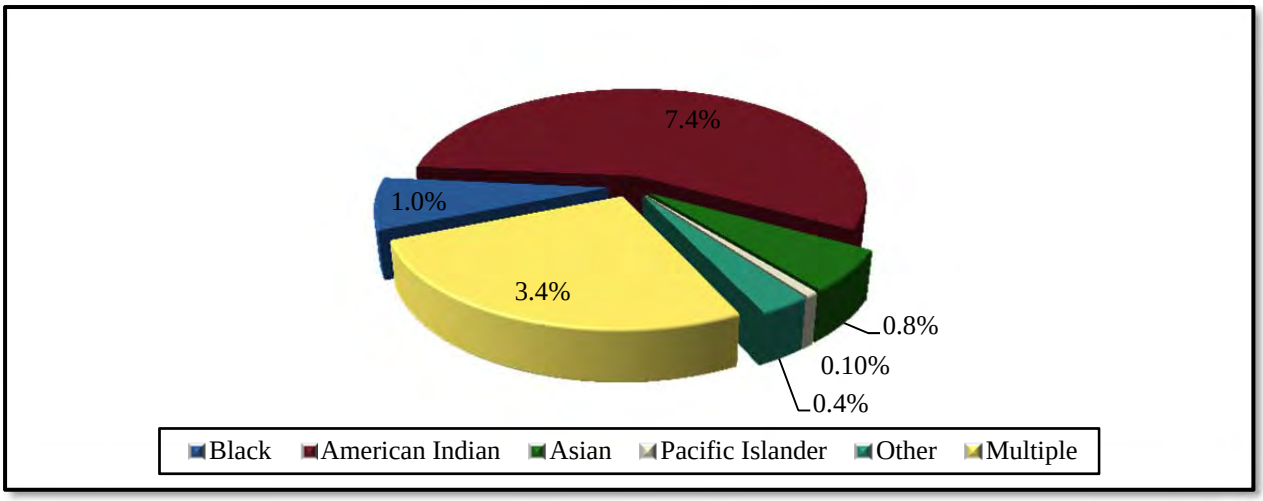


Table Q – Service Area Comparison Chart:

	City of Rapid City
Population:	
2010 Census	67,956
2011 Estimate	68,427
2016 Estimate	71,887
Households:	
2010 Census	28,586
2011 Estimate	28,852
2016 Estimate	30,694
Families:	
2010 Census	18,957
2011 Estimate	17,227
2016 Estimate	18,005
Average Household Size:	
2010 Census	2.29
2011 Estimate	2.29
2016 Estimate	2.26
Ethnicity: 2011 Estimate	
Hispanic	4.2%
White	80.8%
Black	1.1%
American Indian	12.2%
Asian	1.1%
Pacific Islander	0.1%
Other	0.7%
Multiple	4.0%
Median Age:	
2010 Census	35.6
2011 Estimate	36.3
2016 Estimate	37.2
Median Income:	
2011 Estimate	$41,090
2016 Estimate	$51,574
Household Budget Expenditures[3]:	
Housing	86
Entertainment & Recreation	87
Sports & Leisure Market Potential:	
Swimming	104

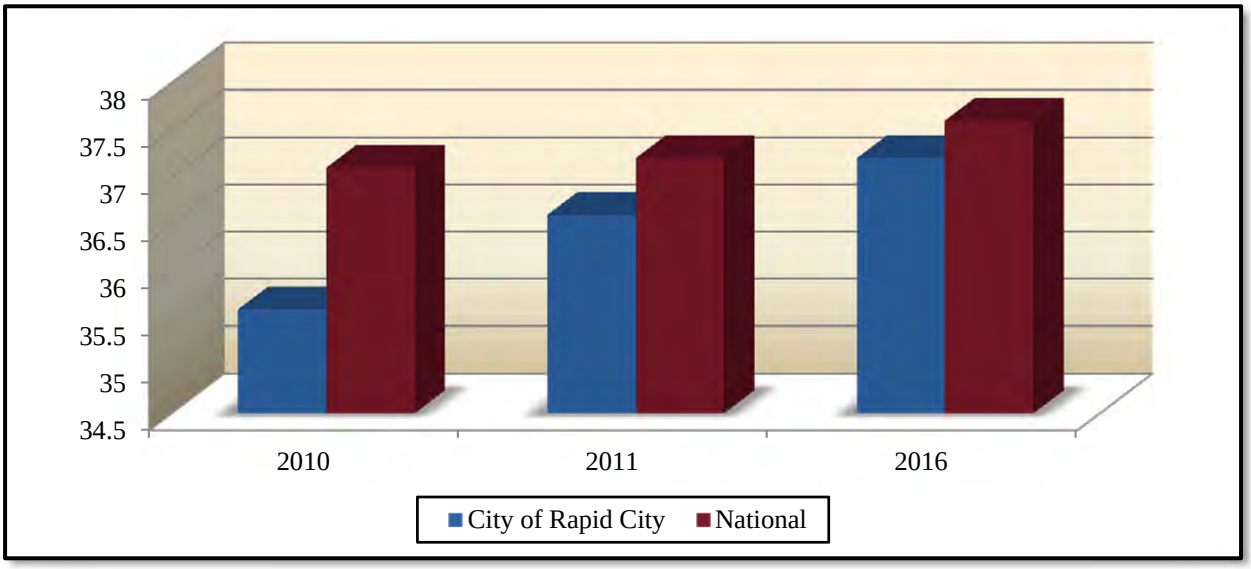
[3] This information is placed on an index with a reference point being the National average of 100.

The median age and household income levels are compared with the national number as both of these factors are primary determiners of participation in recreation activities. The lower the median age, the higher the participation rates are for most activities. The level of participation also increases as the median income level goes up.

Table R – Median Age:

	2010 Census	2011 Projection	2016 Projection
City of Rapid City	35.6	36.6	37.2
Nationally	37.1	37.2	37.6

Chart M – Median Age



With the median age in the City of Rapid City being slightly lower than the National number the statistics would point to a population comprised of families with younger children. It is important to note that swimming as an activity spans all age categories but the highest concentration of participation is in the age categories under 45.

Map A – 2010 Median Age by Census Tract

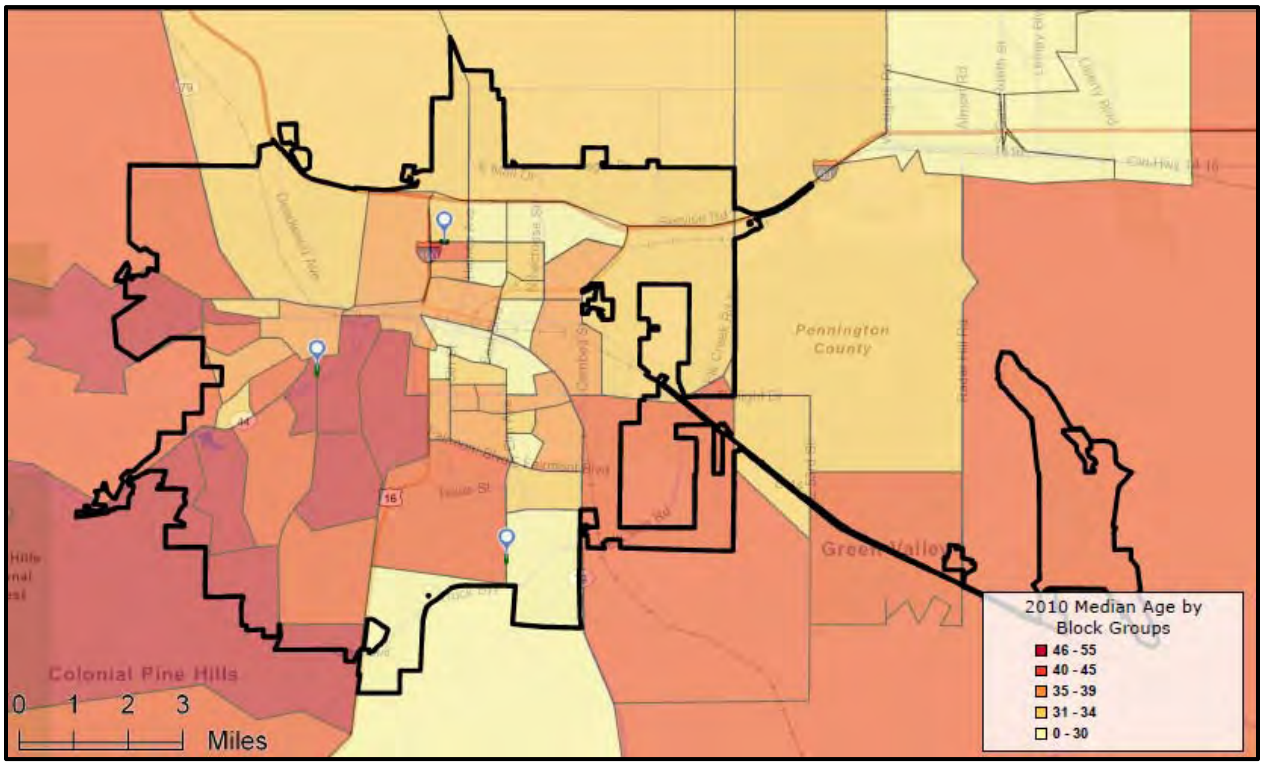
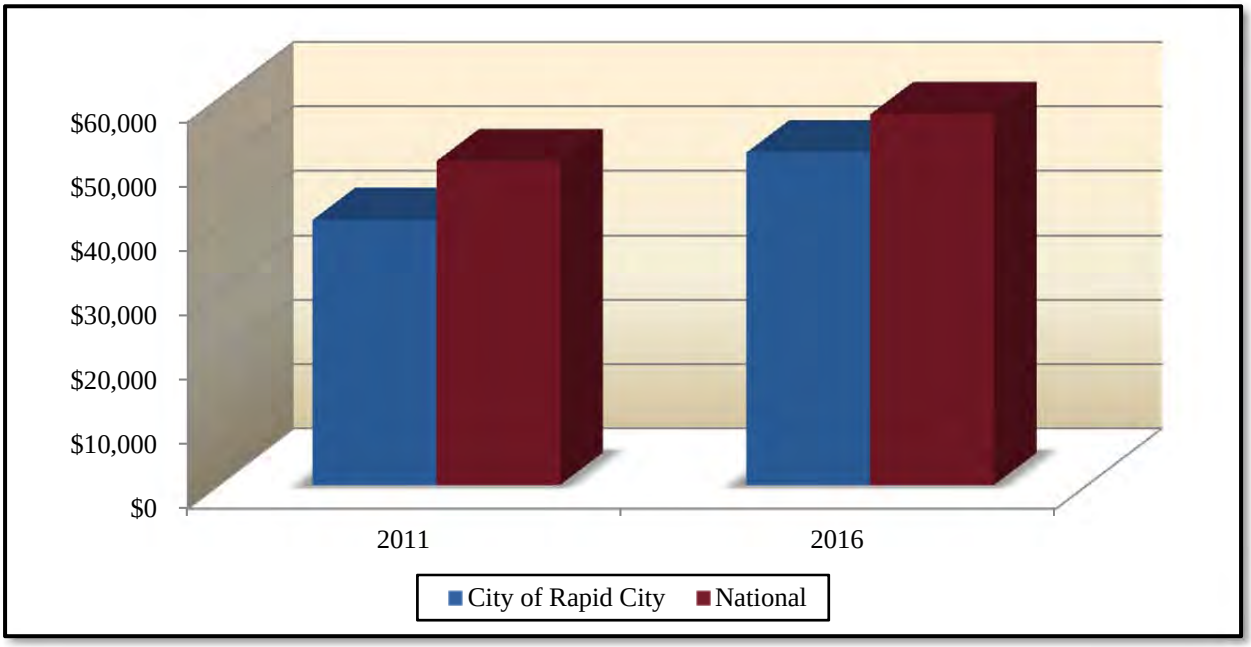


Table S – Median Household Income:

	2011 Estimate	2016 Projection
City of Rapid City	$41,090	$51,574
Nationally	$50,227	$57,536

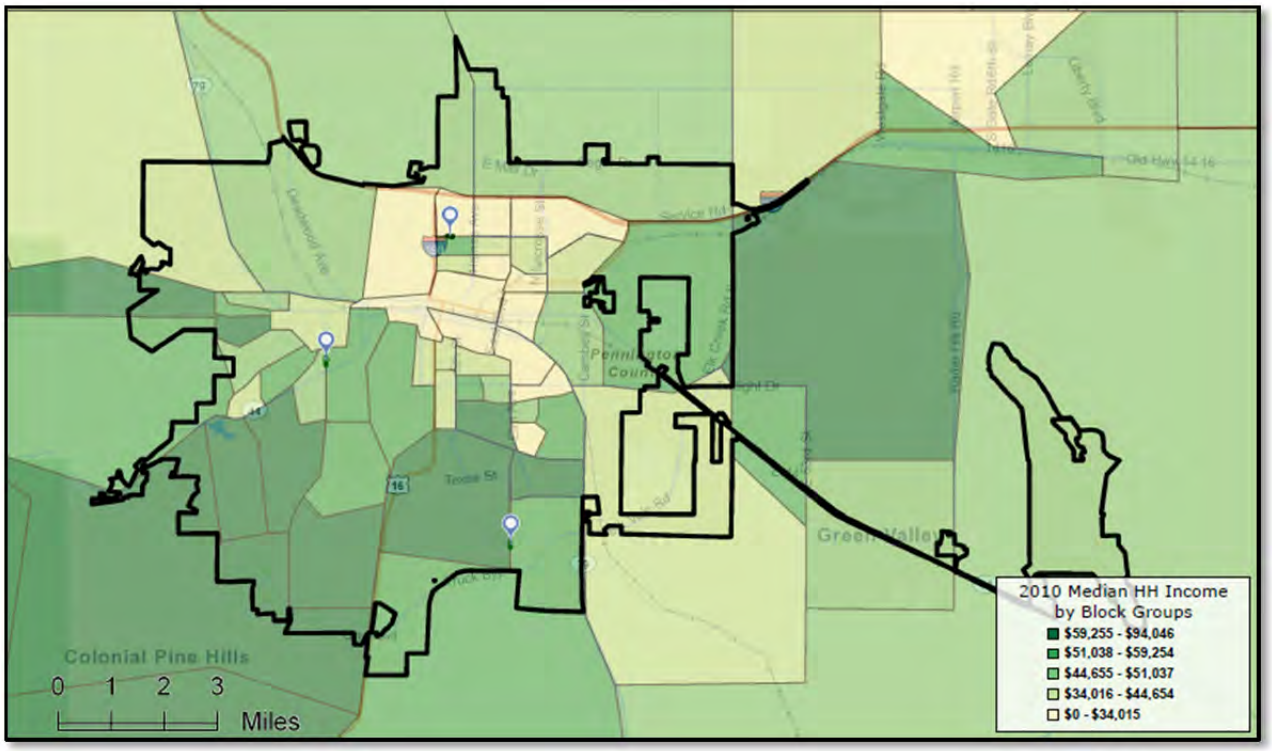
Chart N – Median Household Income



Based upon 2011 projections the following narrative can be provided for each service area:

In the City of Rapid City the percentage of households with median income over $50,000 per year is 41.8% compared to 50.3% on a national level. Furthermore, the percentage of the households in the school district with median income less than $25,000 per year is 28.2% compared to a level of 24.7% nationally.

Map B – 2010 Median Income by Zip Code



In addition to taking a look at Median Age and Median Income, it is important to examine Household Budget Expenditures. In particular looking at housing information; shelter, utilities, fuel and public services along with entertainment & recreation can provide a snap shot into the cost of living and spending patterns in the services areas. The table below looks at that information and compares the City of Rapid City to the State of South Dakota.

Table T – Household Budget Expenditures[4]

City of Rapid City	SPI	Average Amount Spent	Percent
Housing	86	$17,475.85	30.5%
Shelter	*85*	*$13,491.29*	*23.6%*
Utilities, Fuel, Public Service	*88*	*$3,984.56*	*7.0%*
Entertainment & Recreation	87	$2,804.29	4.9%

State of South Dakota	SPI	Average Amount Spent	Percent
Housing	77	$15,563.21	29.2%
Shelter	*74*	*$11,723.05*	*22.0%*
Utilities, Fuel, Public Service	*85*	*$3,840.16*	*7.2%*
Entertainment & Recreation	84	$2,702.72	5.1%

SPI: Spending Potential Index as compared to the National number of 100.

Average Amount Spent: The average amount spent per household.

Percent: Percent of the total 100% of household expenditures. **Note:** Shelter along with Utilities, Fuel, Public Service are a portion of the Housing percentage.

[4] Consumer Spending data are derived from the 2004 and 2005 Consumer Expenditure Surveys, Bureau of Labor Statistics. ESRI forecasts for 2010 and 2015.

Chart O – Household Budget Expenditures Spending Potential Index

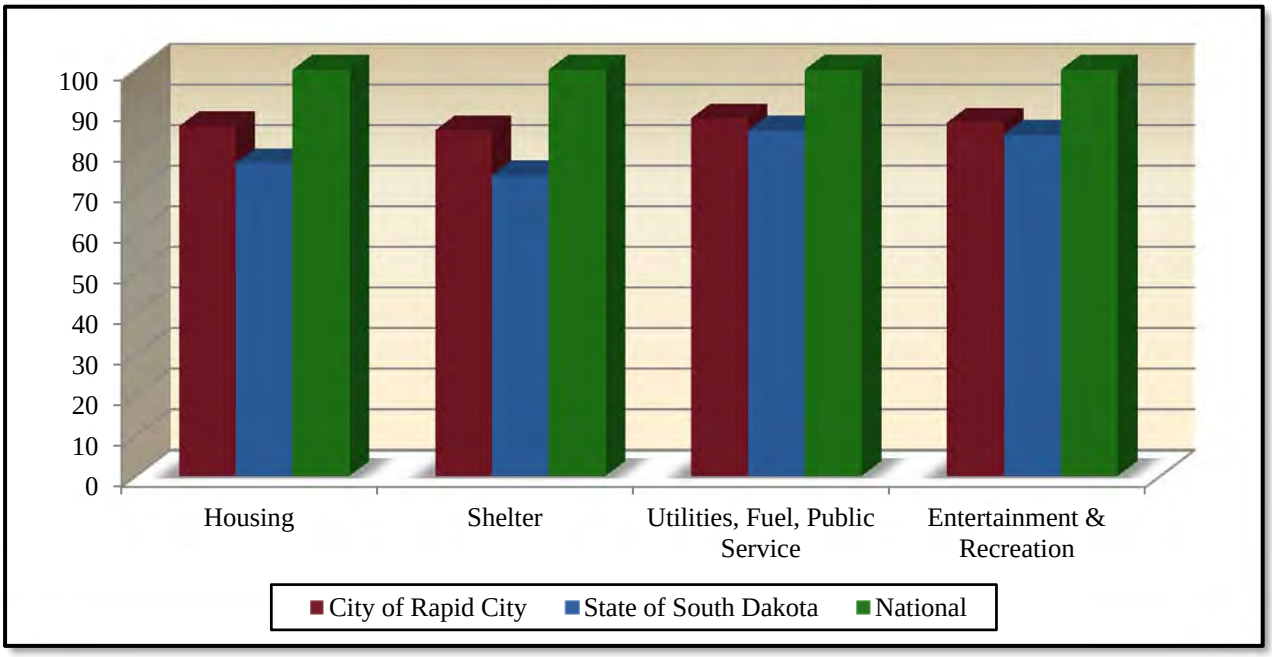
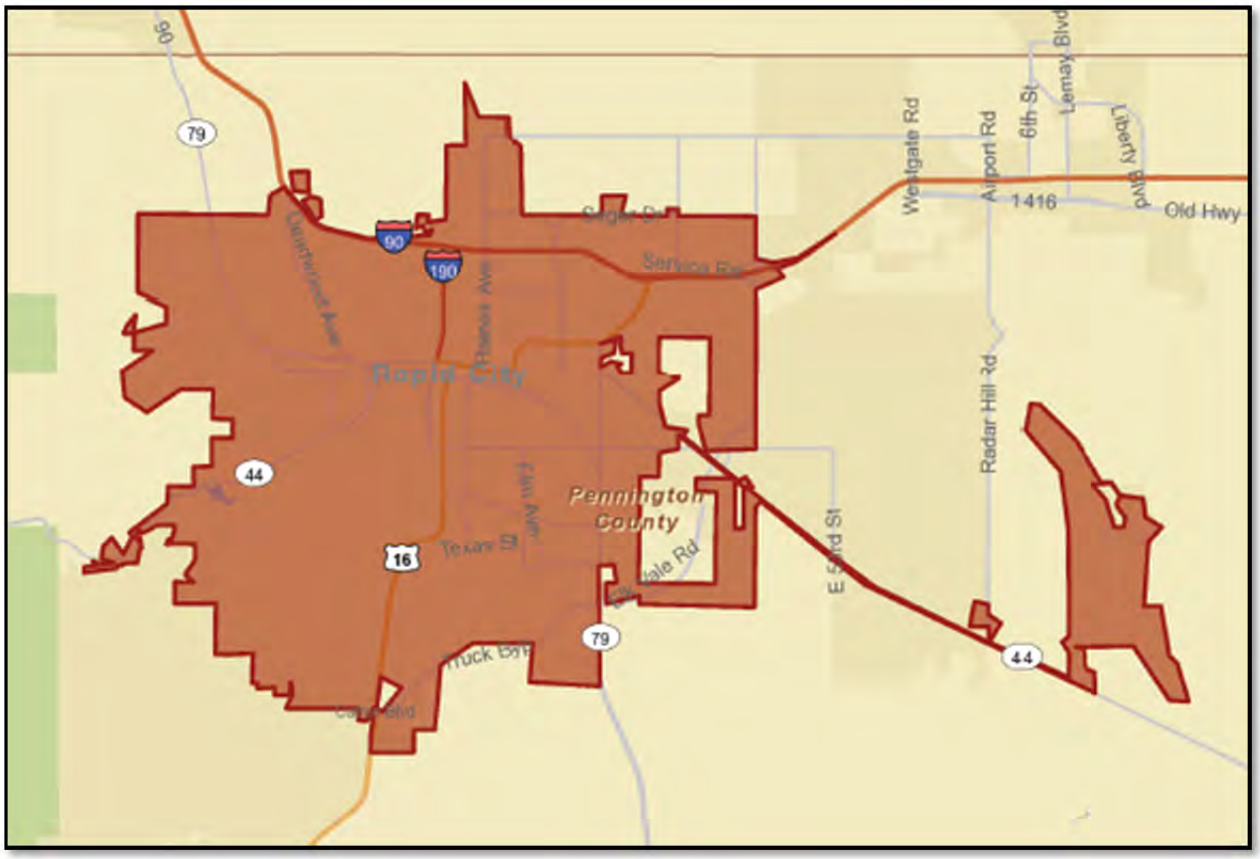


Chart C, illustrates that the Household Budget Expenditures Spending Potential Index in the State of South Dakota is lower than the National level indicating that as a state less dollars being spent for those services as compared to a National level.

The Household Budget Expenditures Spending Potential Index of the City of Rapid City would indicate that the dollars being spent is greater than what is being spent on a state level and less than what is being spent on a National level. This would indicate a lower cost of living in the City of Rapid City in comparison to a National level.

It will be important to keep this information in mind when developing fee structure and looking at an appropriate cost recovery philosophy.

Map D – City of Rapid City



Population Distribution by Age: Utilizing census information for the City of Rapid City, the following comparisons are possible.

Table U – 2011 City of Rapid City Area Age Distribution
(ESRI estimates)

Ages	Population	% of Total	Nat. Population	Difference
-5	4,974	7.3%	6.5%	+0.8%
5-17	11,305	16.5%	17.6%	-1.1%
18-24	7,106	10.4%	9.8%	-1.4%
25-44	17,422	25.4%	26.6%	-1.2%
45-54	9,413	13.7%	14.5%	+0.7%
55-64	8,218	12.0%	12.0%	+0.0%
65-74	4,996	7.3%	7.2%	+0.1%
75+	5,092	7.4%	6.0%	+1.4%

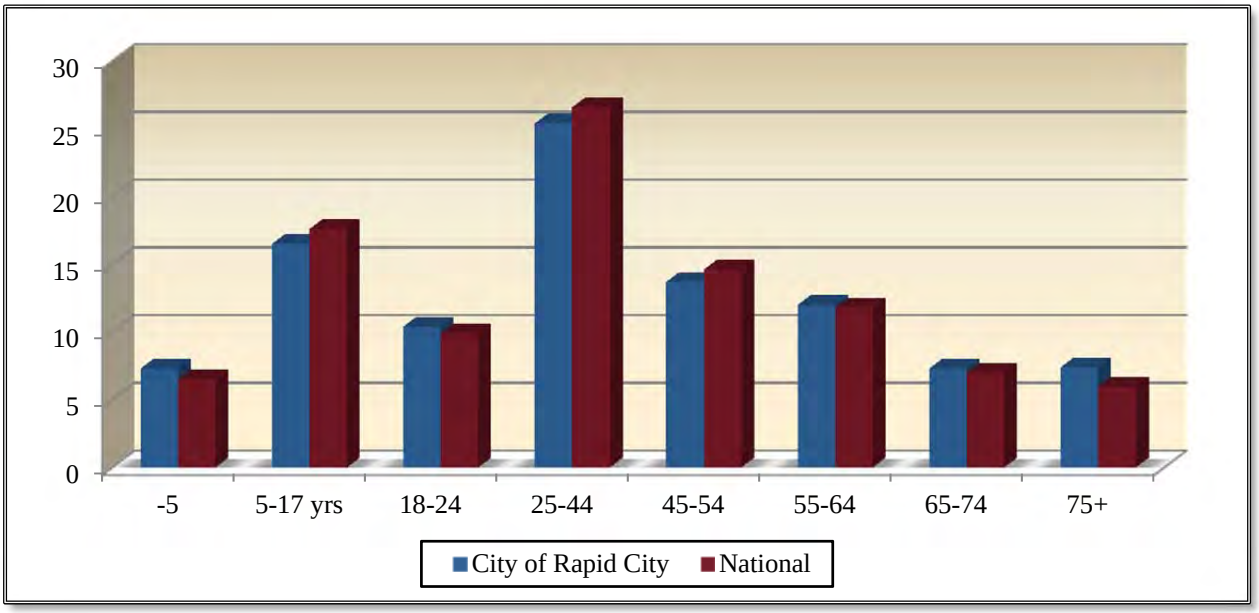
Population: 2011 census estimates in the different age groups in the City of Rapid City.

% of Total: Percentage of the City of Rapid City population in the age group.

National Population: Percentage of the national population in the age group.

Difference: Percentage difference between the City of Rapid City population and the national population.

Chart P – 2011 City of Rapid City Age Group Distribution



The demographic makeup of the City of Rapid City, when compared to the characteristics of the national population, indicates that there are some differences with an equal or larger population in the -5, 45-54, 55-64, 65-74 and 75+ age groups and a smaller population in the 5-17, 18-24 and 25-44 age groups. The largest positive variance is in the 75+ age group with +1.4%, while the greatest negative variance is in the 18-24 age groups with -1.4%.

Population Distribution Comparison by Age: Utilizing census information from the City of Rapid City, the following comparisons are possible.

Table V – 2011 City of Rapid City Population Estimates
(U.S. Census Information and ESRI)

Ages	2010 Census	2011 Projection	2016 Projection	Percent Change	Percent Change Nat'l
-5	5,109	4,974	5,190	+1.6%	+3.4%
5-17	11,281	11,305	11,525	+2.2%	+1.6%
18-24	7,120	7,106	7,056	-0.9%	-0.9%
25-44	17,511	17,422	17,897	+2.2%	+2.7%
45-54	9,207	9,413	9,000	-2.2%	-6.1%
55-64	7,878	8,218	9,208	+16.9%	+11.8%
65-74	4,811	4,996	6,406	+33.2%	+28.6%
75+	4,939	5,092	5,606	+13.5%	+7.0%

Chart Q – City of Rapid City Population Growth

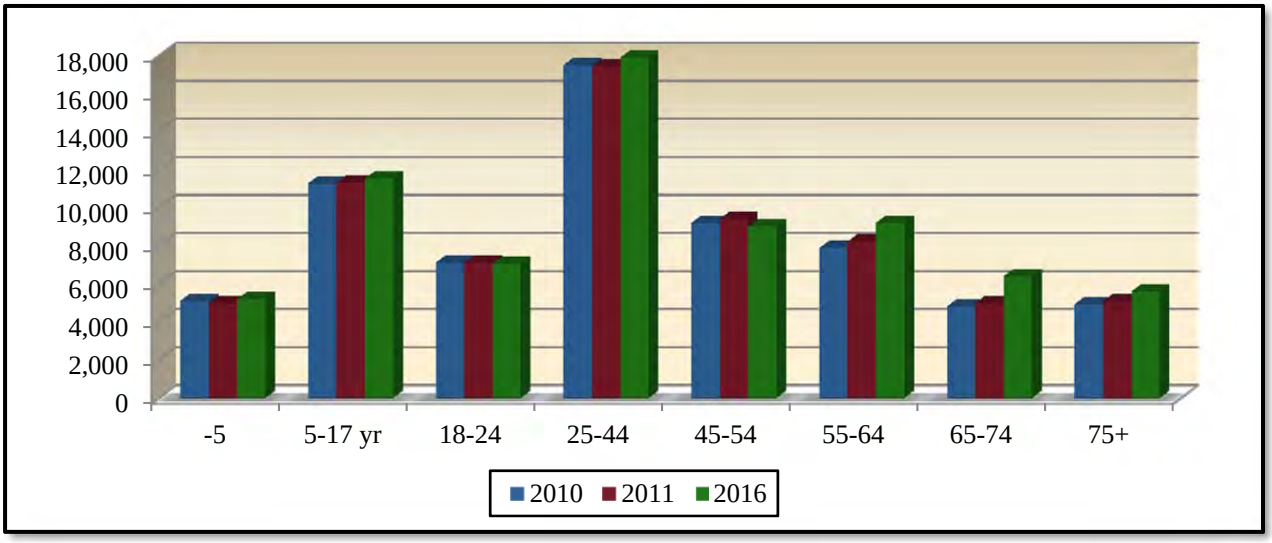


Table-V, illustrates the growth or decline in age group numbers from the 2010 census until the year 2016. It is projected that all of the age categories, except 18-24 and 45-54 will see an increase in population. It must be remembered that the population of the United States as a whole is aging and it is not unusual to find negative growth numbers in the younger age groups and significant net gains in the 45 plus age groupings in communities which are relatively stable in their population numbers.

Below is listed the distribution of the population by race and ethnicity for the City of Rapid City based on 2011 Census Data.

Table W – City of Rapid City Ethnic Population and Median Age
(Source – U.S. Census Bureau and ESRI)

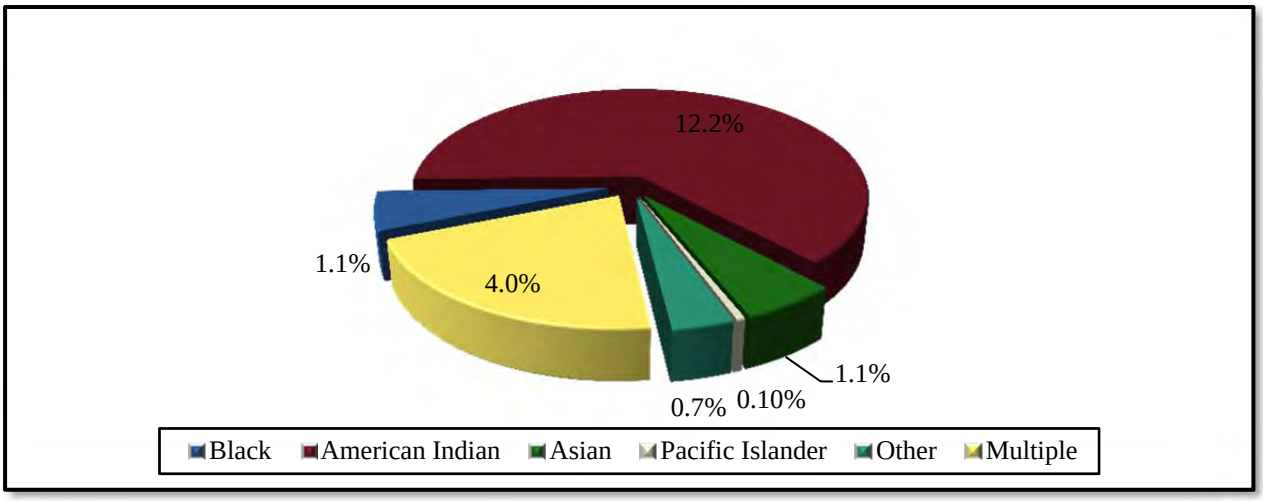
Ethnicity	Total Population	Median Age	% of Population	% of South Dakota Pop.
Hispanic	2,884	21.0	4.2%	2.8%

Table X – City of Rapid City Population by Race and Median Age
(Source – U.S. Census Bureau and ESRI)

Ethnicity	Total Population	Median Age	% of Population	% of South Dakota Pop.
White	55,389	39.7	80.8%	85.9%
Black	723	29.8	1.1%	1.3%
American Indian	8,364	24.1	12.2%	8.8%
Asian	773	29.8	1.1%	0.9%
Pacific Islander	49	30.0	0.1%	0.04%
Other	480	29.7	0.7%	0.9%
Multiple	2,750	16.6	4.0%	2.1%

2011 City of Rapid City Total Population: 68,527 Residents

Chart R – City of Rapid City Non-White Population by Race



Recreation Activities Participation

On an annual basis the National Sporting Goods Association (NSGA) conducts an in-depth study and survey of how Americans spend their leisure time. This information provides the data necessary to overlay rate of participation onto the City of Rapid City to determine market potential.

Comparison With National Statistics: Utilizing information from the National Sporting Goods Association 2010 Survey and comparing them with the demographics from the City of Rapid City, the following participation projections can be made (statistics were compared based on age, household income, regional population and national population).

Table Y – Swimming Participation Rates for City of Rapid City

Activity	Age	Income	Region	Nation	Average
Swimming	18.2%	16.1%	19.3%	18.5%	18.0%

Age: Participation based on individuals ages 7 & Up of the City of Rapid City.

Income: Participation based on the 2011 estimated median household income in the City of Rapid City.

Region: Participation based on regional statistics (West South Central).

National: Participation based on national statistics.

Average: Average of the four columns.

Anticipated Participation Numbers by Activity: Utilizing the average percentage from Table-Y above plus the 2010 census information and census estimates for 2011 and 2016 (over age 7) the following comparisons can be made.

Table Z – Participation Rates City of Rapid City

Activity	Average	2010 Part.	2011 Part.	2016 Part.	Difference
Swimming	18.0%	10,986	11,132	11,690	+704

Note: The estimated participation numbers indicated above are for swimming and do not necessarily translate into expected attendance figures at a facility. However, these figures do indicate the total number of people participating in swimming and other activities within the City of Rapid City.

Anticipated Annual Swimmer Days: Utilizing NSGA's 2010 survey information B*K can determine the average number of time each of the groups listed below participated in swimming. Once that average has been determined it can be applied to the participation numbers from Table-Z to provide an anticipated number of swimmer days within the service areas. Anticipated number of swimmer days can be defined as the number of times all of the individuals within the service area will swim during a year, regardless of duration.

Table AA – Anticipated Annual Swimmer Days City of Rapid City

National	Male	Female	Region	Income	Average
41.08	39.84	42.20	34.79	44.39	**40.46**

Average	2010 Part.	2011 Part.	2016 Part.	Difference
40.46	444,484	450,396	472,968	+28,484

It should be noted that these are current users of aquatic facilities and it is the goal of most privately held fitness clubs to capture 5-10% of the market. For the facility in the City of Rapid City based upon size and location a more realistic capture rate would be 3-5% which would still generate considerable patronage to a facility of this type and operating structure.

In addition to developing a unique participation percentage for the City of Rapid City and looking at the number of swimmer days, B*K also examines the frequency of participation in the various activities according to the 2010 NSGA Survey. The chart below outlines that data by activity.

Table AB – Participation Frequency

	Frequent	Occasional	Infrequent
Swimming Frequency	110+	25-109	6-24
Swimming Percentage of Population	6.4%	45.0%	48.6%

In the chart above one can look at each activity and how it is defined with respect to visits being Frequent, Occasional or Infrequent and then the percentage of population that participates.

Table AC – Participation Numbers

	Frequent	Occasional	Infrequent	Total
Swimming	112	67	15	
Population	712	5,009	5,410	
Visits	**79,744**	**335,603**	**81,150**	**496,497**

The table above takes the frequency information one step further and identifies the number of times an individual may participate in the activity, applies the percentage from Table-AB to the population in Table-Z and then gives a total number of aquatic facility visits. Those visits are not specific to one facility, but rather specific to the City of Rapid City population. In other words those visits are already taking place at the facilities within the service area.

Participation by Ethnicity and Race: Participation in sports activities is also tracked by ethnicity and race. The table below compares the overall rate of participation nationally with the rate for Hispanics and African Americans. Utilizing information provided by the National Sporting Goods Association's 2010 survey, the following comparisons are possible.

Table AD – Comparison of National, African American and Hispanic Participation Rates

	City of Rapid City	National Participation	African American Participation	Hispanic Participation
Swimming	18.0%	18.5%	9.8%	18.1%

Primary Service Part: The unique participation percentage developed for the City of Rapid City.

National Rate: The national percentage of individuals who participate in the given activity.

African American Rate: The percentage of African Americans who participate in the given activity.

Hispanic Rate: The percentage of Hispanics who participate in the given activity.

Based on the fact that there is not a significant Hispanic and Black population in the City of Rapid City those participation rates become less relevant to the impact on overall participation percentages.

Summary of Sports Participation: The following chart summarizes participation in various sports and leisure activities utilizing information from the 2010 National Sporting Goods Association survey.

Table AE – Sports Participation Summary

Sport	Nat'l Rank[5]	Nat'l Participation (in millions)	Primary Service Rank	Primary Service % Participation
Exercise Walking	1	95.8	1	34.0%
Exercising w/ Equipment	2	55.3	2	18.6%
Swimming	**3**	**51.9**	**3**	**18.0%**
Aerobic Exercising	7	38.5	4	13.0%
Workout @ Club	9	36.3	6	12.1%
Running/Jogging	10	35.5	5	12.6%
Weightlifting	12	31.5	7	10.6%
Basketball	14	26.9	8	9.4%
Yoga	16	20.2	9	6.7%
Soccer	20	13.5	11	3.9%
Baseball	22	12.5	10	4.1%
Tennis	23	12.3	13	3.7%
Softball	27	10.8	11	3.9%
Volleyball	28	10.6	14	3.3%
Skateboarding	33	7.7	15	2.3%

Nat'l Rank: Popularity of sport based on national survey.

Nat'l Participation: Percent of population that participate in this sport on national survey.

Primary Service %: Ranking of activities based upon average from Table-M.

Primary Service Rank: The rank of the activity within the City of Rapid City.

While the rate of participation in swimming within the City of Rapid City is third history illustrates that this is consistent with its ranking in most service areas with a fluctuation in percentage participation increasing on a National level that is parallel to the 4-year Summer Olympic cycle.

[5] This rank is based upon the 51 activities reported on by NSGA in their 2010 survey instrument.

Comparison of State Statistics with National Statistics: Utilizing information from the National Sporting Goods Association, the following charts illustrate the participation numbers in selected sports in the State of South Dakota.

State of South Dakota participation numbers in selected indoor and outdoor sports - As reported by the National Sporting Goods Association in 2010.

Table AF – South Dakota Participation Rates

Sport	South Dakota Participation (in thousands)[6]	Age Group	Largest Number
Exercise Walking	250	55-64	45-54
Exercising w/ Equipment	135	25-34	25-34
Swimming	**145**	**7-11**	**7-11**
Aerobic Exercising	49	25-34	25-34
Workout @ Club	48	25-34	25-34
Running/Jogging	40	12-17	25-34
Weightlifting	121	18-24	25-34
Basketball	23	7-11	12-17
Yoga	40	25-34	25-34
Soccer	0	7-11	7-11
Baseball	37	7-11	7-11
Tennis	0	7-11	25-34
Softball	0	12-17	25-34
Volleyball	0	12-17	12-17
Skateboarding	0	7-11	12-17

NY Participation: The number of people (in thousands) in South Dakota who participated more than once in the activity in 2009 and are at least 7 years of age.

Age Group: The age group in which the sport is most popular or in other words, where the highest percentage of the age group participates in the activity. (Example: The highest percent of an age group that participates in exercise walking is 55-64.) **This is a national statistic.**

Largest Number: The age group with the highest number of participants. Example: The greatest number of exercise walkers is in the 45-54 age group. (Note: This statistic is driven more by the sheer number of people in the age group than by the popularity of the sport in the age span.) **This is a national statistic.**

[6] Those activities with "0" participants means that participation numbers for that activity were not reported by NSGA.

South Dakota sport percentage of participation compared with the population percentage of the United States:

South Dakota's population represents 0.3% of the population of the United States (based on 2011 Estimates).

Table AG – South Dakota Participation Correlation

Sport	Participation Percentages
Weightlifting	0.4%
Exercise Walking	0.3%
Exercising w/ Equipment	0.3%
Baseball	0.3%
Swimming	**0.2%**
Yoga	0.2%
Aerobic Exercising	0.1%
Workout @ Club	0.1%
Running/Jogging	0.1%
Basketball	0.1%

Note: Sports participation percentages refer to the total percent of the national population that participates in a sport that comes from the State of South Dakota's population. The fact that the rate of participation is equal to or greater in 4 activities indicates a relatively low rate of participation. Swimming ranks 5th in state participation and is below the percentage of population in correlation to the Nation as a whole, which equates to less propensity to participate in that activity from the State of South Dakota.

Recreation Expenditures Spending Potential Index: In addition to participation in recreation activities ESRI also measures recreation expenditures in a number of different areas and then indexes this against national numbers. The following comparisons are possible.

Table AH – Recreation Expenditures Spending Potential Index[7]

City of Rapid City	SPI	Average Spent
Fees for Participant Sports	85	$90.90
Fees for Recreational Lessons	79	$108.42
Social, Recreation, Club Membership	84	$137.01
Exercise Equipment/Game Tables	71	$58.61
Other Sports Equipment	88	$8.35

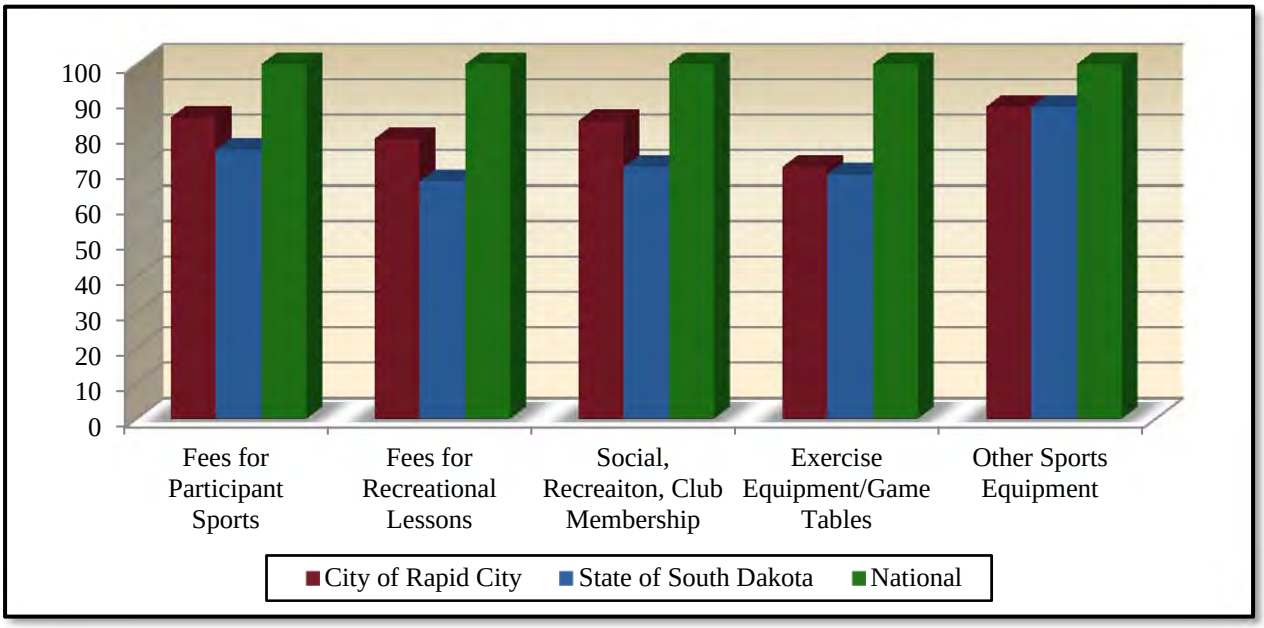
State of South Dakota	SPI	Average Spent
Fees for Participant Sports	76	$80.63
Fees for Recreational Lessons	67	$90.90
Social, Recreation, Club Membership	71	$116.34
Exercise Equipment/Game Tables	69	$56.66
Other Sports Equipment	88	$8.30

Average Amount Spent: The average amount spent for the service or item in a year.

SPI: Spending potential index as compared to the national number of 100.

[7] Consumer Spending data are derived from the 2006 and 2007 Consumer Expenditure Surveys, Bureau of Labor Statistics.

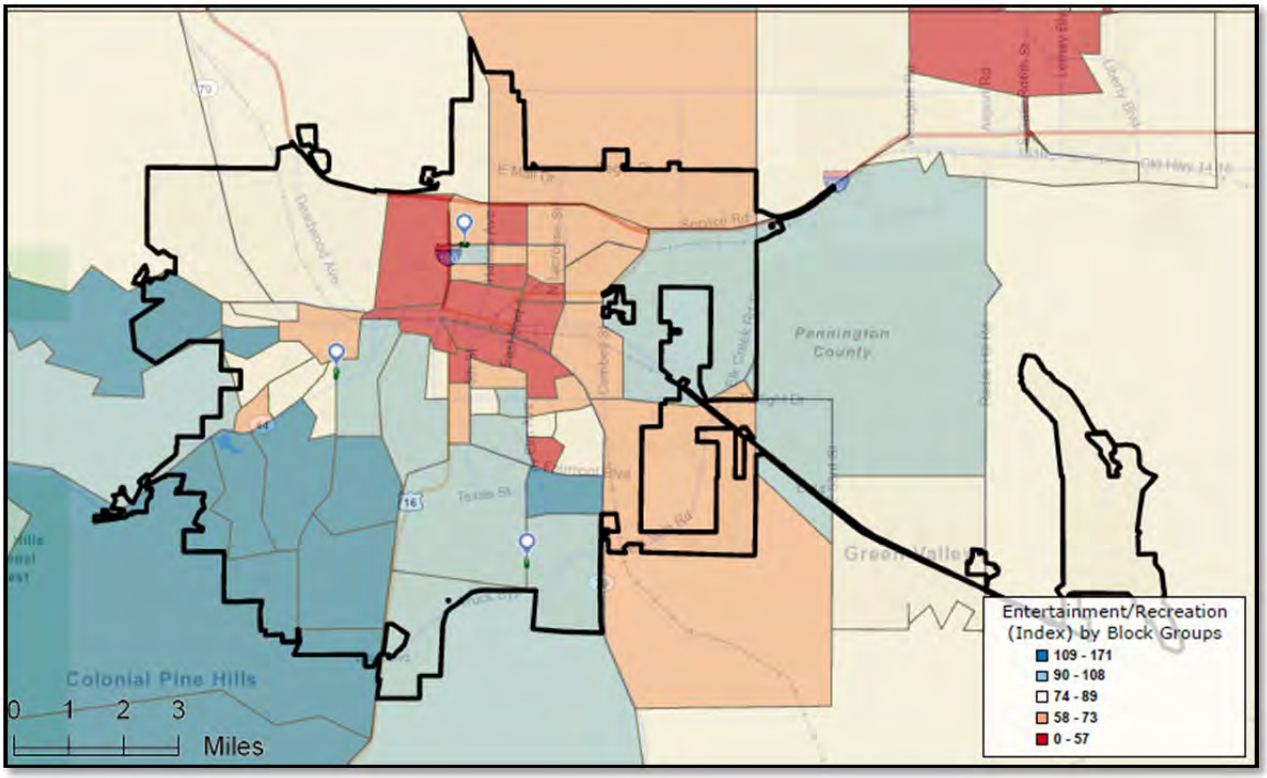
Chart S – Recreation Spending Potential Index



The SPI index indicates that in the City of Rapid City the rate of spending is higher than the state average but lower than the National Spending Potential Index (SPI) of 100. This information is very important when determining a price point for activities and cost recovery philosophy. Of particular note would be the numbers relating to Fees for Participant Sports and Fees for Recreational Lessons. The ability to offer additional program opportunities out of an aquatic facility will only increase the ability of the facility to recover operating costs and less the possibility of an operational subsidy.

It is also important to note that these dollars are currently being spent, so the identification of alternative service providers and the ability of another facility to capture a portion of these dollars will be important.

Map F – 2010 Entertainment & Recreation Spending by Block Group



In addition to examining the participation numbers for swimming through the NSGA 2010 Survey and the Spending Potential Index for Entertainment & Recreation B*K can access information about Sports & Leisure Market Potential. The following information illustrates participation rates for Swimming in the service areas.

Table AI – Market Potential Index for Adult Swimming Participation by Service Area

Primary Service Area	Expected Number of Adults	Percent of Population	MPI
Swimming	9,211	18.6%	104

State of South Dakota	Expected Number of Adults	Percent of Population	MPI
Swimming	111,266	17.8%	100

Expected # of Adults: Number of adults, 18 years of age and older, participating in the activity.

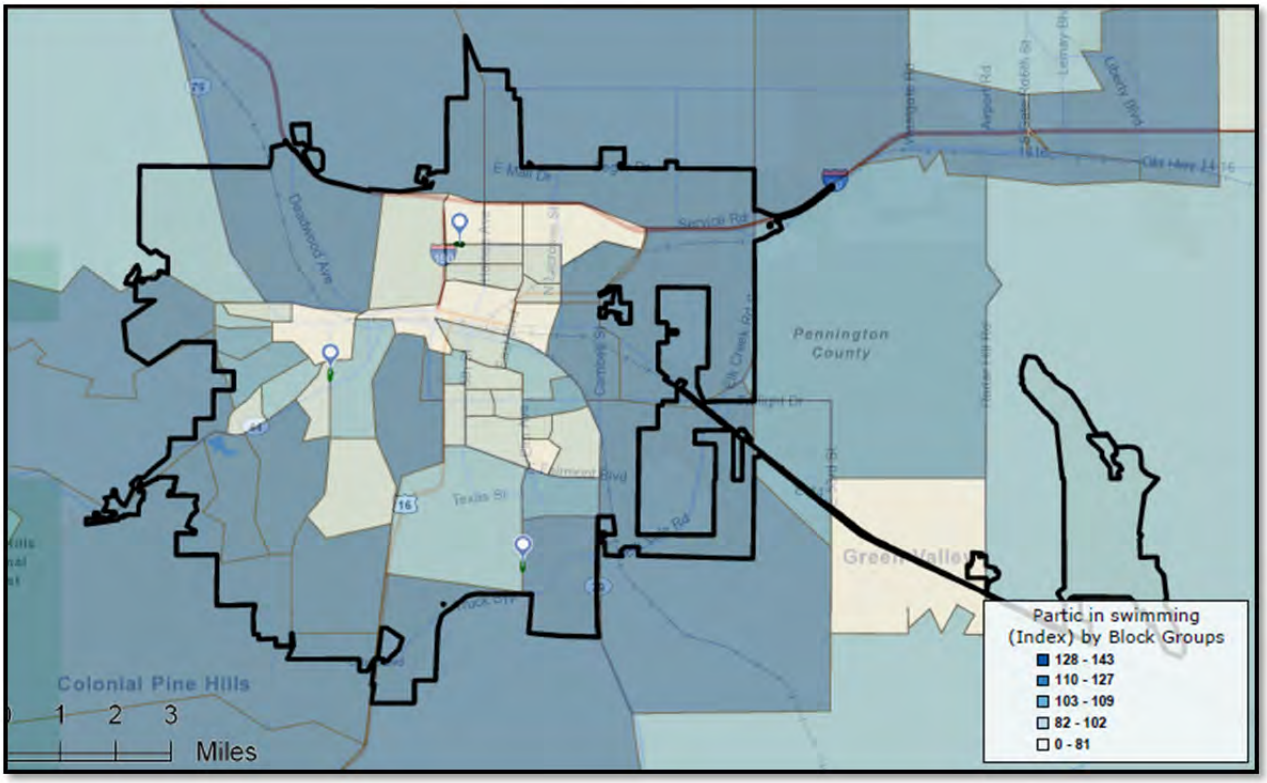
Percent of Population: Percent of the service area that participates in the activity.

MPI: Market potential index as compared to the national number of 100.

The information illustrated in Table-Y would indicate that the market potential for swimming in the City of Rapid City is greater than what is seen on a State of South Dakota and National level.

It should also be noted according to the NSGA 2010 Survey the highest rate of participation on a national level for swimming comes from the 7-11 age group. Additionally it should be noted that adult participation for swimming on a national level accounts for 65.9% of total participation. This helps illustrate that swimming is an activity that reaches across all demographic age groups and the need to have diversified programming within the facility to maximize revenue generation.

Map G – Adult Participation in Swimming by Block Group:



Below are listed those sports activities that would often take place either in a community recreation facility, or in close proximity to, and the percentage of growth or decline that each has experienced nationally over the last 10 years (2001-2010).

Table AJ – National Activity Trend (in millions)

Sport/Activity	2010 Participation	2001 Participation	Percent Change
Hockey (ice)	3.3	2.2	50.0%
Aerobic Exercising	38.5	26.3	46.4%
Running/Jogging	35.5	24.5	44.9%
Workout @ Club	36.3	26.5	37.0%
Weight Lifting	31.5	23.9	31.8%
Exercise w/ Equipment	55.3	43.9	26.0%
Exercise Walking	95.8	78.3	22.3%
Tennis	12.3	10.9	12.8%
Soccer	13.5	13.9	-2.9%
Basketball	26.9	28.1	-4.3%
Swimming	**51.9**	**54.8**	**-5.3%**
Volleyball	10.6	12.0	-11.7%
Baseball	12.5	14.9	-16.1%
Softball	10.8	13.2	-18.2%
Skateboarding	7.7	9.6	-19.8%

2010 Participation: The number of participants per year in the activity (in millions) in the United States.

2001 Participation: The number of participants per year in the activity (in millions) in the United States.

Percent Change: The percent change in the level of participation from 2001 to 2010.

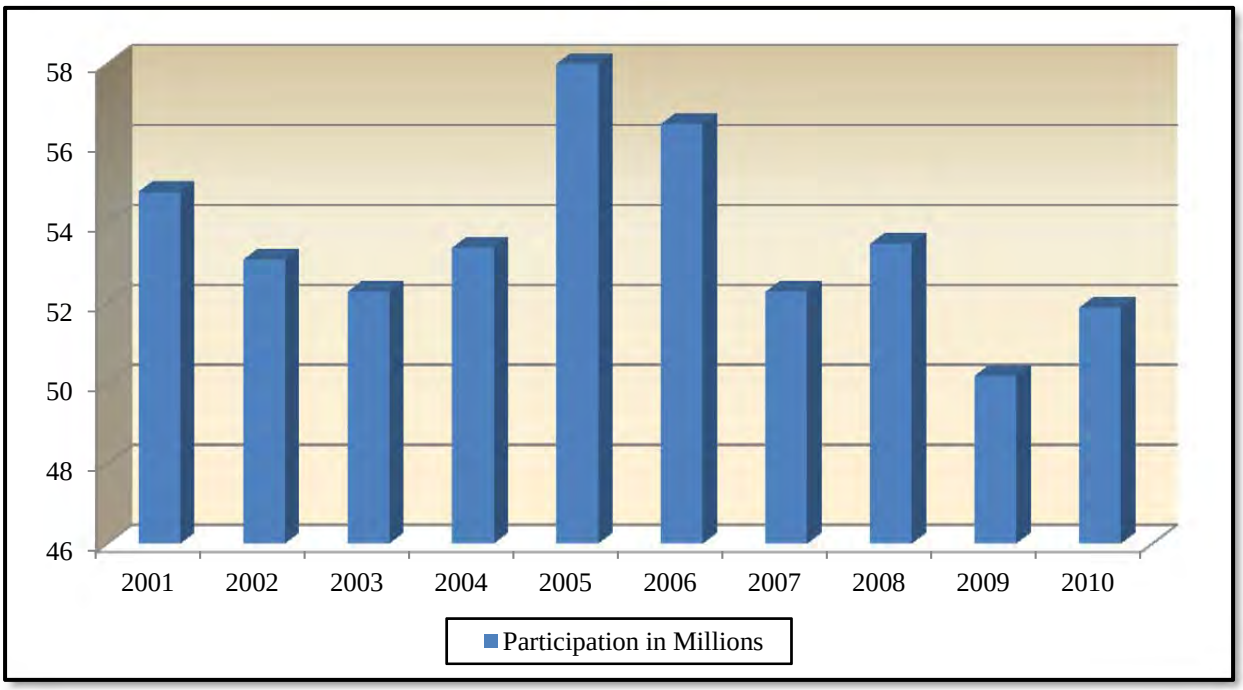
While a decrease in National Swimming Participation is not consistent with the positive growth USA Swimming has experienced in the past 5-10 years it must be remembered that these numbers provide a National perspective.

Below are listed those sports activities that would often take place either in a community recreation facility, or in close proximity to, and the percentage of growth or decline that each has experienced nationally over the last 10 years (2001-2010).

Table AK – Swimming Participation (in millions)

Year	Total Participation
2001	54.8
2002	53.1
2003	52.3
2004	53.4
2005	58.0
2006	56.5
2007	52.3
2008	53.5
2009	50.2
2010	51.9

Chart T – Swimming Participation (in millions)



Aquatic Activity and Facility Trends: Without a doubt the hottest trend in aquatics is the leisure pool concept. This idea of incorporating slides, current channels, fountains, zero depth entry, other water features and theme into a pool's design has proved to be extremely popular for the recreational user. The age of the conventional pool in most recreational settings has been greatly diminished. Leisure pools appeal to the younger children (who are the largest segment of the population that swim) and to families. These types of facilities are able to attract and draw larger crowds and people tend to come from a further distance and stay longer to utilize such pools. This all translates into the potential to sell more admissions and increase revenues. It is estimated conservatively that a leisure pool can generate up to 20% to 25% more revenue than a comparable conventional pool and the cost of operation, while being higher, has been offset through increased revenues. Of note is the fact that patrons seem willing to pay a higher user fee at a leisure pool than a conventional aquatics facility.

Another trend that is growing more popular in the aquatic's field is the development of a raised temperature therapy pool for rehabilitation programs. This has usually been done in association with a local health care organization or a physical therapy clinic. The medical organization either provides capital dollars for the construction of the pool or agrees to purchase so many hours of pool time on an annual basis. This form of partnership has proven to be appealing to both the medical side and the organization that operates the facility. The medical sector receives the benefit of a larger aquatic center, plus other amenities that are available for their use, without the capital cost of building the structure. In addition, they are able to develop a much stronger community presence away from traditional medical settings. The facility operators have a stronger marketing position through an association with a medical organization and a user group that will provide a solid and consistent revenue stream for the center. This is enhanced by the fact that most therapy use times occur during the slower mid-morning or afternoon times in the pool and the center.

Despite the recent emphasis on recreational swimming and therapy, the more traditional aspects of aquatics (including swim teams, instruction and aqua fitness) remain as the foundation for many aquatic centers. The life safety issues associated with teaching children how to swim is a critical concern in most communities and competitive swim team programs through USA Swimming, high schools, and other community based organizations continue to be important. Aqua fitness, from aqua exercise to lap swimming, has enjoyed strong growth during the last ten years with the realization of the benefits of water-based exercise.

Opinions of Probable Cost, Pro-Forma & Site Work Costs

HORACE MANN OPINION OF PROBABLE COST

Horace Mann Costs	Option A	Option B	Option C
Civil/LA	$140,300	$133,200	$131,600
Architectural	$445,400	$486,600	$520,200
Structural	$168,000	$143,200	$134,400
M& E	$280,400	$334,600	$289,000
Pool	$2,922,000[1]	$3,202,000[2]	$3,495,000[3]
Total	$3,956,100	$4,289,600	$4,570,200

HORACE MANN PRO-FORMA/EXPENDITURE-REVENUE COMPARISON

Category	Concept C	Concept A&B
Expenditures	$134,295	$146,208
Revenue	$95,400	$117,592
Difference	($38,895)	($28,616)
Recovery %	71%	80%

ROOSEVELT PARK OPINION OF PROBABLE COST

Costs	Outdoor Pool	Indoor Pool	Field-house w/Outdoor	Field-house w/Indoor
Civil/LA	$ 282,000	$ 0	$ 105,200	$ 144,000
Architectural	$ 480,200	$2,946,000	$2,601,800	$3,476,400
Structural	$ 202,800	$ 722,400	$ 584,200	$ 784,800
M& E	$ 281,800	$1,947,200	$ 961,800	$1,285,000
Pool	$3,360,000	$3,400,000	$ 0	$ 0
Total	$4,608,800	$9,015,600 $241/SF	$4,252,200 $124/SF	$5,690,200* $124/SF

[1] Inclusive of all the amenities depicted in the Concept A (slides, play features, etc.)
[2] Inclusive of all the amenities depicted in the Concept B (slides, play features, etc.)
[3] Inclusive of all the amenities depicted in the Concept C (slides, play features, etc.)

ROOSEVELT PARK FIELDHOUE PRO-FORMA/EXPENDITURE-REVENUE COMPARISON

Category	**Field-house With Indoor Pool**	**Field-house With Outdoor Pool**
Expenditures	$483,802	$309,115
Revenue	$362,959	$288,913
Difference	($120,843)	($30,202)
Recovery %	75%	90%

SITE WORK COSTS FOR HORACE MANN & ROOSEVELT PARK CONCEPTS

Site Work Costs	**Estimated Range**		
Horace Mann Concept A Site Work	$960,000.00	to	$1,080,000.00
Horace Mann Concept B Site Work	$1,056,000.00	to	$1,172,000.00
Horace Mann Concept C Site Work	$1,056,000.00	to	$1,172,000.00
Roosevelt Park Indoor Pool Site Work	$414,000.00	to	$532,000.00
Roosevelt Park Outdoor Pool Site Work	$356,000.00	to	$480,000.00

Section IV - Operations Analysis for Horace Mann Pool

The operations analysis represents a conservative approach to estimating expenses and revenues and was completed based on the best information available and a basic understanding of the project. Fees and charges utilized for this study represent the current fee structure and market value and are subject to review, change, and approval by the City. There is no guarantee that the expense and revenue projections outlined in the operations analysis will be met as there are many variables that affect such estimates that either cannot be accurately measured or are subject to change during the actual budgetary process. Without question, weather will have the greatest impact on the revenue generation.

Expenditures

Expenditures have been formulated on the costs that were designated by the consultant to be included in the operating budget for the facility. The figures are based on the size of the aquatic center, the specific components of the facility, and the hours of operation. The expenses were calculated with the assumption of a 14 week operation (Memorial Day-Labor Day). All expenses were calculated to the high side and the actual cost may be less based on the final design, operational philosophy, and programming considerations adopted by staff.

Family Aquatic Center – There were several options developed by the consulting team for consideration and the City narrowed the list of potential options down to option number 2, 3 and 5. The operating pro-forma focused on these three options.

Operation Cost Model:

Category	Option 5	Option 2 and 3
Personnel		
Full-time	$ 0	$ 0
Part-time[1]	$ 72,770	$ 84,683
	$ 72,770	$ 84,683

[1] Summary of part time positions can be found on page 4.

Appendix IV - Horace Mann

Operation Cost Model cont.

Category	**Option 5**	**Option 2 and 3**
Commodities		
Office Supplies	$ 500	$ 500
First aid supplies	$ 450	$ 450
Maint/repair materials	$ 1,200	$ 1,200
Janitorial supplies	$ 900	$ 900
Rec. program supplies	$ 750	$ 750
Food Supplies	$ 8,000	$ 8,000
Uniforms	$ 1,500	$ 1,500
Printing/postage	$ 500	$ 500
Pro-shop	$ 1,000	$ 1,000
Chemicals	$ 9,500	$ 9,500
Other	$ 500	$ 500
Total	$24,800	$24,800

Appendix IV - Horace Mann

Operating Cost Model cont.

Category	**Option 5**	**Option 2 and 3**
Contractual		
Utilities (gas & elect)	$12,000	$12,000
Water/sewer[2]	$ 0	$ 0
Advertising	$ 3,000	$ 3,000
Insurance	$ 2,500	$ 2,500
Communications	$ 750	$ 750
Trash Removal	$ 500	$ 500
Training	$ 1,500	$ 1,500
Rapid Ride	$ 225	$ 225
Dues and subscription	$ 250	$ 250
Others	$ 1,000	$ 1,000
Total	$21,725	$21,725

Category	**Option 5**	**Option 2 and 3**
Capital		
Replacement fund[3]	$15,000	$15,000
Total	$15,000	$15,000
Grand Total	**$134,295**	**$146,208**

[2] Cost for water and sewer being provided by the City.

[3]Capital needs will be minimal during the first year of operation since most equipment and operating systems will be under warranty. It is strongly recommended that a sinking fund be established with a goal to build adequate reserves that meet future capital needs. American Public Works recommends planning for 2%-4% of construction cost for capital and maintenance needs. Since maintenance costs have been factored into this pro-forma, a target for building the sinking fund to a level of $30,000-$50,000 is desirable.

Appendix IV - Horace Mann

Staffing levels:

Positions	**Hours**	**Option 5**	**Option 2&3**
Part-Time[4]			
Front desk (all) ($7.50/hr)	42 hrs/wk	$ 4,410	$ 4,410
Pool Manager 18 wks (all) ($10.50/hr)	56 hrs/wk	$10,584	$10,584
Head Lifeguard ($8.50/hr)	42 hrs/wk	$ 4,998	$ 4,998
Lifeguard (Option 1 & 4) ($7.75/hr)	294 hrs/wk	$31,899	
Lifeguard (Option 2 & 3) ($7.75/hr)	396 hrs/wk		$42,966
Concession Worker (all) ($7.50/hr)	70 hrs/wk	$ 7,350	$ 7,350
Building Attendant ($7.50/hr)	28 hrs/wk	$ 3,360	$ 3,360
Program Instructors (all)			
Aquatics		$ 4,998	$ 4,998
Salaries		$67,599	$78,666
Benefits (7.65% of part-time wages)		$ 5,171	$ 6,017
Total Part-Time Salaries		$72,770	$84,683

[4] Detailed worksheet and schedule by position can be found beginning on page 8.

Appendix IV - Horace Mann

Revenues

The following revenue projections were formulated from information on the specifics of the project and the demographics of the service area as well as comparing them to national statistics, other similar facilities and the competition for recreation services in the area. Actual figures will vary based on the size and makeup of the components selected during final design, market stratification, philosophy of operation, fees and charges policy, and priority of use. All revenues were calculated conservatively as a result.

Revenue Projection Model:

Category	Option 5	Option 2&3
Fees[5]		
Daily Admissions	$32,550	$47,775
Pool Passes – 10	$ 9,950	$13,430
Pool Passes - 20	$ 7,475	$ 8,962
Rentals	$10,500	$10,500
Total	$60,475	$80,667
Programs		
Aquatics	$15,300	$15,300
Total	$15,300	$15,300
Other		
Pro-shop	$ 1,500	$ 1,500
Concession	$16,000	$18,000
Birthday parties[6]	$ 2,125	$ 3,400
Total	$19,625	$21,625
Grand Total	**$95,400**	**$117,592**

[5] The fee schedule used for the purposes of this revenue model can be found on page 6. A detailed worksheet for revenue calculations can be found on page 12.
[6] Based on 25 parties at $85.00 each.

Expenditure – Revenue Comparison

Category	Option 5	Option 2&3
Expenditures	$134,295	$146,208
Revenue	$95,400	$117,592
Difference	($38,895)	($28,616)
Recovery %	71%	80%

This operational pro-forma was completed based on the best information available and a basic understanding of the project. However, there is no guarantee that the expense and revenue projections outlined above will be met as there are many variables that affect such estimates, weather included, that either cannot be accurately measured or are not consistent in their influence on the budgetary process.

Future years: Expenditures – Revenue Comparison: Operation expenditures are expected to increase by approximately 3% a year through the first 3 to 5 years of operation. Revenue growth is expected to increase by 5% to 10% a year through the first three years and then level off with only a slight growth (3% or less) the next two years. Expenses for the first year of operation should be slightly lower than projected with the facility being under warranty and new. Revenue growth in the first three years is attributed to increased market penetration and in the remaining years to continued population growth. In most aquatic facilities the first three years show tremendous growth from increasing the market share of patrons who use such facilities, but at the end of this time period revenue growth begins to flatten out. Additional revenue growth is then spurred through increases in the population within the market area, a specific marketing plan to develop alternative markets, the addition of new amenities or by increasing user fees.

Projected Fee Schedule: The fee schedule above was developed as the criteria for estimating revenues. Actual fees are subject to review and approval by the City of Rapid City.

Category	Daily	10 Punch	20 Punch
Adult	$ 5.25	$ 44.00	$ 71.00
Youth	$ 4.25	$ 39.00	$ 56.00
Senior	$ 3.75	$ 34.00	$ 50.00
Family	$10.00	$114.00	$163.00

Appendix IV - Horace Mann

Attendance projections: The following attendance projections are based on the participation estimates worksheet from page 10 below. The admission numbers are affected by the rates being charged, the facilities available for use, and the competition within the service area. The figures are also based on the performance of other similar facilities in the area. These are averages only and the yearly figures are based on 82 days of operation.

Seasonal Admissions	Options 5	Option 2&3
Daily[7] (95 daily admission)	7,790	10,250
Punch Passes (275 sold annually) (365 sold annually)	3,750	4,800
Total Yearly	11,540	15,150
Total Daily	140	183

[7] Based on an 82 day operation

Section V – Part-Time Staff Hours

Option 2 and 3

Time	Hours	Staff	Days	Total Hours/Wk
Front Desk				
Mon-Sun				
1pm-7pm	6	1	7	42
Total				42 hours
Pool Manager				
Mon-Sun				
8am-4pm	8	1	7	56
Total				56 hours
Head Guard				
Mon-Sun				
1pm-7pm	6	1	7	42
Total				42 hours
Lifeguards				
Mon-Fri				
8am –Noon	4	2	5	40
Noon-5pm	5	8	6	240
5pm – 7pm	2	6	6	72
Sunday				
1pm – 5pm	4	8	1	32
5pm – 7pm	2	6	1	12
Total				396 hours
Concession Worker				
Mon-Sun				
12:30pm-6:30pm	6	1	7	42
1pm-5pm	4	1	7	28
Total				70 hours

Appendix IV - Horace Mann

Program Staff Cost
Aquatics

Category	Classes/wk	Wks	Rate	Amount
Lessons	80	6	$ 8.85	$4,248
Fitness	4	6	$20.00	$ 480
Privates	30	Annual	$ 9.00	$ 270
Total				$4,998

Appendix IV - Horace Mann

Option 5

Time	Hours	Staff	Days	Total Hours/Wk
Front Desk				
Mon-Sun				
1pm-7pm	6	1	7	42
Total				42 hours
Pool Manager				
Mon-Sun				
8am-4pm	8	1	7	56
Total				56 hours
Head Guard				
Mon-Sun				
1pm-7pm	6	1	7	42
Total				42 hours
Lifeguards				
Mon-Fri				
8am –Noon	4	2	5	40
Noon-5pm	5	6	5	150
5pm – 7pm	2	4	5	40
Sat-Sun				
1pm – 5pm	4	6	2	48
5pm – 7pm	2	4	2	16
Total				294 hours
Concession Worker				
Mon-Sun				
12:30pm-6:30pm	6	1	7	42
1pm-5pm	4	1	7	28
Total				70 hours

Appendix IV - Horace Mann

Program Staff Cost
Aquatics

Category	Classes/wk	Wks	Rate	Amount
Lessons	80	6	$ 8.85	$4,248
Fitness	4	6	$20.00	$ 480
Privates	30	Annual	$ 9.00	$ 270
Total				$4,998

Section VI - Program Fees and Revenue Worksheet

Options 5

Daily Admissions - Pool

Category	Number	Fee	Daily Revenue
Adult	20	$ 5.25	$ 105.00
Youth	45	$ 4.25	$ 191.25
Senior	5	$ 3.75	$ 18.75
Family	15	$ 10.00	$ 150.00
Total Daily	95		$ 465.00 x 70 days = $32,550

Punch Cards (10) – Pool

Category	Number	Fee	Revenue
Adult	35	44.00	$ 1,540
Youth	90	39.00	$ 3,510
Senior	10	34.00	$ 340
Family	40	114.00	$ 4,560
Total Annuals	175		$ 9,950

Punch Cards (20) – Pool

Category	Number	Fee	Revenue
Adult	20	71.00	$ 1,420
Youth	60	56.00	$ 3,360
Senior	5	50.00	$ 250
Family	15	163.00	$ 2,445
Total Annuals	100		$ 7,475

Rentals - Pool

Category	Hours/Week	Fee	Weeks	Revenue
Swim Team	100 lanes	$5.00/LH	15	$ 7,500
Swim Meet	20	$150.00	1	$ 3,000
Total				$10,500

Swim Programs

Category	Number	Fee	Sessions	Revenue
Swim Lessons	50	$50.00	3	$ 7,500
Privates	40	$15.00	Annual	$ 600
Water Fitness	28	$50.00	3	$ 4,200
Masters Swim	20	$50.00	3	$ 3,000
Total				$15,300

Appendix IV - Horace Mann

Options 2 & 3

Daily Admissions - Pool

Category	Number	Fee	Daily Revenue
Adult	20	$ 5.25	$ 105.00
Youth	75	$ 4.25	$ 318.75
Senior	5	$ 3.75	$ 18.75
Family	25	$ 10.00	$ 250.00
Total Daily	125		$ 692.50 x 70 days = $47,775

Punch Cards (10) – Pool

Category	Number	Fee	Revenue
Adult	35	44.00	$ 1,540
Youth	150	39.00	$ 5,850
Senior	10	34.00	$ 340
Family	50	114.00	$ 5,700
Total Annuals	250		$ 13,430

Punch Cards (20) – Pool

Category	Number	Fee	Revenue
Adult	20	71.00	$ 1,420
Youth	72	56.00	$ 4,032
Senior	5	50.00	$ 250
Family	20	163.00	$ 3,260
Total Annuals	115		$ 8,962

Rentals - Pool

Category	Hours/Week	Fee	Weeks	Revenue
Swim Team	100 lanes	$5.00/LH	15	$ 7,500
Swim Meet	20	$150.00	1	$ 3,000
Total				$10,500

Swim Programs

Category	Number	Fee	Sessions	Revenue
Swim Lessons	50	$50.00	3	$ 7,500
Privates	40	$15.00	Annual	$ 600
Water Fitness	28	$50.00	3	$ 4,200
Masters Swim	20	$50.00	3	$ 3,000
Total				$15,300

Appendix IV – Roosevelt Park

Section IV - Operations Analysis for Roosevelt Expansion

The operations analysis represents a conservative approach to estimating expenses and revenues and was completed based on the best information available and a basic understanding of the project. Fees and charges utilized for this study represent the current fee structure and market value and are subject to review, change, and approval by the City of Rapid City. There is no guarantee that the expense and revenue projections outlined in the operations analysis will be met as there are many variables that affect such estimates that either cannot be accurately measured or are subject to change during the actual budgetary process.

Expenditures

Expenditures have been formulated on the costs that were designated by the consultant to be included in the operating budget for the facility. The figures are based on the size of the expansion, the specific components of the facility, and the hours of operation. All expenses were calculated to the high side and the actual cost may be less based on the final design, operational philosophy, and programming considerations adopted by staff.

Roosevelt Complex - Expansion of the center that includes a 50-meter competitive pool, wet/dry classroom, field house for indoor sports, racquetball courts, rock climbing wall, group exercise classes, fitness and exercise area, administrative support area and storage. Expansion will be approximately 46,732 square feet for the field house and 38,376 square feet for the aquatic center. A second option listed below includes an outdoor 50-meter pool instead of an indoor pool and the original field house of 34,322.

Operation Cost Model:

Category	Field House	Outdoor Pool
Personnel		
Full-time	$ 0	$ 0
Part-time[1]	$194,002	$127,515
	$194,002	$127,515

[1] Summary of part time positions can be found on page 4.

Appendix IV – Roosevelt Park

Operation Cost Model cont.

Category	**Field House**	**Outdoor Pool**
Commodities		
Office Supplies[2]	$ 1,000	$ 1,000
First aid supplies[3]	$ 0	$ 0
Maint/repair materials[4]	$ 1,200	$ 1,000
Janitorial supplies[5]	$ 1,500	$ 1,000
Rec. program supplies	$ 2,500	$ 2,000
Uniforms	$ 2,000	$ 2,000
Printing/postage[6]	$ 0	$ 0
Pro-shop[7]	$ 1,000	$ 1,000
Chemicals	$14,500	$ 8,500
Other	$ 1,500	$ 1,500
Total	$25,200	$18,000

[2] Increase to existing budget
[3] No impact to existing budget
[4] Increase to existing budget
[5] Increase to existing budget
[6] No impact to existing budget
[7] Goggles, swim diapers, shampoo, lotion, etc

Appendix IV – Roosevelt Park

Operating Cost Model cont.

Category	Field House	Outdoor Pool
Contractual		
Utilities[8] (gas & elect)	$205,500	$114,500
Water/sewer[9]	$ 0	$ 0
Advertising	$ 5,000	$ 5,000
Insurance	$ 15,000	$ 15,000
Communications[10]	$ 600	$ 600
Trash Removal[11]	$ 0	$ 0
Training	$ 2,500	$ 2,500
Others	$ 1,000	$ 1,000
Total	$229,600	$138,600

Category	Field House	Outdoor Pool
Capital		
Replacement fund[12]	$ 35,000	$ 35,000
Total	$ 35,000	$ 35,000
Grand Total	**$483,802**	**$319,115**

[8] Based on a net square footage of 39,722 for the field house at $2.50/SF and net square footage of 32,619 for the aquatic center at $3.50/SF.
[9] Service provided by the City.
[10] Increase/expansion of the existing service
[11] No impact to the existing service
[12] Capital needs will be minimal during the first year of operation since most equipment and operating systems will be under warranty. It is strongly recommended that a sinking fund be established with a goal to build adequate reserves that meet future capital needs. American Public Works recommends planning for 2%-4% of construction cost for capital and maintenance needs. Since maintenance costs have been factored into this pro-forma, a target for building the sinking fund to a level of $30,000-$50,000 is desirable.

Appendix IV – Roosevelt Park

Staffing levels:

Pay rates were determined based on the estimated of existing positions in Rapid City. The positions listed are necessary to ensure adequate staffing and support. The wage scales for both the full-time and part-time staff positions reflect estimated wages for 2013.

Positions	**Field House and Outdoor Pool**
Full-Time	
Administrative Secretary	$0
Benefits (35% of salaries)	$0
Total Full-Time	$0

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Positions	**Hours**	**Field House**	**Outdoor Pool**
Part-Time[13]			
Front desk (36 wks) ($7.50/hr)	37 hrs/wk	$ 9,990	$ 9,990
Lifeguard ($8.50/hr)	228 hrs/wk	$100,776	
Front desk (outdoor) ($7.50/hr)	67 hrs/wk		$ 7,035
Lifeguard (outdoor) ($8.50/hr)	231 hrs/wk		$ 27,489
Head Guard ($8.50/hr)	92 hrs/wk		$ 11,730
Gym Attendant ($7.50/hr)	50 hrs/wk	$ 18,750	$ 18,750
Custodian ($7.50/hr)	28 hrs/wk	$ 3,360	$ 3,360
Program Instructors (all)			
Aquatics		$ 10,860	$ 3,620
Fitness		$ 19,200	$ 19,200
Sports		$ 17,280	$ 17,280
Salaries		$180,216	$ 118,454
Benefits (7.65% of part-time wages)		$ 13,786	$ 9,061
Total Part-Time Salaries		$194,002	$ 127,515

[13] Detailed worksheet and schedule by position can be found on page 8.

Appendix IV – Roosevelt Park

Revenues

The following revenue projections were formulated from information on the specifics of the project, existing facility usage, and the demographics of the service area as well as comparing them to national statistics. Actual figures will vary based on the size and makeup of the components selected during final design, market stratification, philosophy of operation, fees and charges policy, and priority of use. All revenues were calculated conservatively as a result.

Revenue Projection Model:

Category	Field House	Outdoor Pool
Fees[14]		
Daily Admissions	$ 38,058	$ 28,487
Punch Pass – 10	$ 21,905	$ 21,905
Punch Pass - 20	$ 22,005	$ 22,005
Annuals	$ 123,545	$ 123,545
Total	$ 205,513	$ 195,942
Programs		
Aquatics	$ 66,600	$ 15,300
Sports	$ 29,446	$ 29,446
Fitness	$ 41,400	$ 41,400
Total	$137,446	$ 86,146
Other		
Pro-shop/Vending	$ 3,000	$ 3,000
Birthday parties[15]	$ 17,000	$ 3,825
Total	$ 20,000	$ 6,825
Grand Total	**$362,959**	**$288,913**

[14] The fee schedule used for the purposes of this revenue model can be found on page 7. A detailed worksheet for revenue calculations can be found on page 11.

[15] Based on 200 parties at $85.00 each.

Appendix IV – Roosevelt Park

Expenditure – Revenue Comparison

Category	Facility Budget	Outdoor Pool
Expenditures	$483,802	$319,115
Revenue	$362,959	$288,913
Difference	($120,843)	($30,202)
Recovery %	75%	90%

This operational pro-forma was completed based on the best information available and a basic understanding of the project. However, there is no guarantee that the expense and revenue projections outlined above will be met as there are many variables that affect such estimates, weather included, that either cannot be accurately measured or are not consistent in their influence on the budgetary process.

Future years: Expenditures – Revenue Comparison: Operation expenditures are expected to increase by approximately 3% a year through the first 3 to 5 years of operation for the field house. Revenue growth is expected to increase by 5% to 10% a year through the first three years and then level off with only a slight growth (3% or less) the next two years. Expenses for the first year of operation should be slightly lower than projected with the facility being under warranty and new. Revenue growth in the first three years is attributed to increased market penetration and in the remaining years to continued population growth. In most aquatic facilities the first three years show tremendous growth from increasing the market share of patrons who use such facilities, but at the end of this time period revenue growth begins to flatten out. Additional revenue growth is then spurred through increases in the population within the market area, a specific marketing plan to develop alternative markets, the addition of new amenities or by increasing user fees.

Five-Year Revenue-Expense Comparison for Field House

Years	Expense	Revenue	Difference	Cost Recovery
2013	$483,802	$362,959	($120,843)	75%
2014	$498,316	$381,106	($117,210)	76%
2015	$513,265	$398,256	($115,009)	77%
2016	$528,663	$414,187	($114,476)	78%
2017	$544,523	$428,683	($115,840)	78%

Appendix IV – Roosevelt Park

Projected Fee Schedule: The fee schedule above was developed as the criteria for estimating revenues. Actual fees are subject to review and approval by the City of Rapid City.

Category	Daily	10 Punch	20 Punch	Annual
Adult	$ 5.25	$ 44.00	$ 71.00	$287.00
Youth	$ 4.25	$ 39.00	$ 56.00	$221.00
Senior	$ 3.75	$ 34.00	$ 50.00	$196.00
Family	$10.00	$114.00	$163.00	$516.00

Attendance projections: The following attendance projections are based on the participation estimates worksheet from page 10 below. The admission numbers are affected by the rates being charged, the facilities available for use, and the competition within the service area. The figures are also based on the performance of other similar facilities in the area. These are averages only and the yearly figures are based on 84 days of operation.

Seasonal Admissions	Field House
Daily (135 additional weekly admissions)	6,750
Annuals[16] (295 additional annuals)	30,680
Punch Passes (695 additional punch passes)	9,700
Total Yearly	47,130
Total Daily	130

[16] Based on 104 visits per annual sold

Appendix IV – Roosevelt Park

Section V – Part-Time Staff Hours

Field House Option

Time	Hours	Staff	Days	Total Hours/Wk
Front Desk Support				
Mon-Fri				
3pm-8pm	5	1	5	25
Sat/Sun				
Noon-6pm	6	1	2	12
Total				37 hours
Lifeguards				
Mon-Fri				
5:30am –3:30pm	10	2	5	100
3:30pm-8:30pm	5	3	5	75
Saturday				
8am-Noon	4	2	1	8
Noon-8pm	8	3	1	24
Sunday				
1pm – 8pm	7	3	1	21
Total				228 hours
Custodian				
Mon-Sun				
4pm-8pm	4	1	5	20
Sat/Sun				
1pm-5pm	4	1	2	8
Total				28 hours

Appendix IV – Roosevelt Park

Gym Attendant

Mon-Sun				
3pm-9pm	6	1	5	30
Saturday				
9am-9pm	12	1	1	12
Sunday				
Noon-8pm	8	1	1	8
Total				50 hours

Program Staff Cost

Aquatics

Category	Classes/wk	Wks	Rate	Amount
Lessons	80	12	$10.00	$9,600
Fitness	4	12	$20.00	$ 960
Privates	30	Annual	$10.00	$ 300
Total				$10,860

Fitness

Category	Classes/wk	Wks	Rate	Amount
Group Fitness	20	48	$20.00	$19,200
Total				$19,200

Sports

Category	Classes/wk	Wks	Rate	Amount
Basketball	8	24	$60.00	$11,520
Volleyball	6	24	$20.00	$ 2,880
Sports	6	24	$20.00	$ 2,880
Total				$17,280

Appendix IV – Roosevelt Park

Outdoor Pool Option

Time	Hours	Staff	Days	Total Hours/Wk
Front Desk Support				
Mon-Fri				
8am-7pm	11	1	5	55
Sat/Sun				
1pm-7pm	6	1	2	12
Total				67 hours
Lifeguards				
Mon-Fri				
7am –3pm	8	2	5	80
3pm-9pm	6	3	5	90
Saturday				
7am-Noon	5	2	1	10
Noon-9pm	9	3	1	27
Sunday				
Noon – 8pm	8	3	1	24
Total				231 hours
Head Guard				
Mon-Sat				
7am-9pm	14	1	6	84
Sunday				
Noon-8pm	8	1	1	8
Total				92 hours

Appendix IV – Roosevelt Park

Section VI - Program Fees and Revenue Worksheet

Field House Option

Weekly Admissions

Category	Number	Fee	Daily Revenue
Adult	65	$ 5.25	$ 341.25
Youth	35	$ 4.25	$ 148.75
Senior	15	$ 3.75	$ 56.25
Family	20	$ 10.00	$ 200.00
Weekly Total	135		$ 746.25 x 51 weeks = $38,058

Punch Cards (10)

Category	Number	Fee	Revenue
Adult	250	44.00	$ 11,000
Youth	65	39.00	$ 2,535
Senior	45	34.00	$ 1,530
Family	60	114.00	$ 6,840
Total Annuals	420		$ 21,905

Punch Cards (20)

Category	Number	Fee	Revenue
Adult	165	71.00	$11,715
Youth	45	56.00	$ 2,520
Senior	25	50.00	$ 1,250
Family	40	163.00	$ 6,520
Total Annuals	275		$22,005

Annual Passes

Category	Number	Fee	Revenue
Adult	50	287.00	$ 14,350
Youth	15	221.00	$ 3,315
Senior	40	196.00	$ 7,840
Family	190	516.00	$ 98,040
Total Annuals	295		$123,545

Appendix IV – Roosevelt Park

Swim Programs

Category	Number	Fee	Sessions	Revenue
Swim Lessons	40	$50.00	18	$36,000
Privates	120	$15.00	Annual	$ 1,800
Water Fitness	28	$50.00	12	$16,800
Masters Swim	20	$50.00	12	$12,000
Total				$66,600

Sports Programs

Category	Number	Fee	Sessions	Revenue
Basketball	16	$350.00	2	$11,200
Volleyball	12	$130.00	2	$ 3,120
Kickball	12	$130.00	2	$ 3,120
Rock Wall	30	$ 50.00	8	$12,000
Total				$29,440

Fitness Programs

Category	Number	Fee	Sessions	Revenue
Group Classes – Advanced	60	$50.00	12	$36,000
Personal Training	180	$30.00	Annual	$ 5,400
Total				$41,400

Appendix IV – Roosevelt Park

Outdoor Pool Option

Daily Admissions – Outdoor Pool

Category	Number	Fee	Daily Revenue
Adult	15	$ 5.25	$ 78.75
Youth	5	$ 4.25	$ 21.25
Senior	7	$ 3.75	$ 26.25
Family	3	$ 10.00	$ 30.00
Total Daily	35		$ 156.25 x 70 days = $10,937

Weekly Admissions – Outdoor Pool

Category	Number	Fee	Daily Revenue
Adult	45	$ 5.25	$ 236.25
Youth	25	$ 4.25	$ 106.25
Senior	12	$ 3.75	$ 45.00
Family	10	$ 10.00	$ 100.00
Weekly Total	102		$ 487.50 x 36 weeks = $17,550

Punch Cards (10)

Category	Number	Fee	Revenue
Adult	315	44.00	$ 13,860
Youth	85	39.00	$ 3,315
Senior	50	34.00	$ 1,700
Family	75	114.00	$ 8,550
Total Annuals	525		$ 27,425

Punch Cards (20)

Category	Number	Fee	Revenue
Adult	165	71.00	$11,715
Youth	45	56.00	$ 2,520
Senior	25	50.00	$ 1,250
Family	40	163.00	$ 6,520
Total Annuals	275		$22,005

Annual Passes

Category	Number	Fee	Revenue
Adult	55	287.00	$ 15,785
Youth	25	221.00	$ 5,525
Senior	45	196.00	$ 8,820
Family	225	516.00	$116,100

Appendix IV – Roosevelt Park

Total Annuals	350	$146,230

Rentals - Pool

Category	Hours/Week	Fee	Weeks	Revenue
Swim Team	100 lanes	$5.00/LH	15	$ 7,500
Swim Meet	20	$150.00	1	$ 3,000
Total				$10,500

Swim Programs

Category	Number	Fee	Sessions	Revenue
Swim Lessons	50	$50.00	3	$ 7,500
Privates	40	$15.00	Annual	$ 600
Water Fitness	28	$50.00	3	$ 4,200
Masters Swim	20	$50.00	3	$ 3,000
Total				$15,300

	Land-side Recreation	PACES REQ' Must Can	Like	DIMENSIONS			SF UNIT	NET AREA OF MUST	NET AREA OF "LIKE"	
	Activity Spaces									
	Futsul Space - MEDIUM	1	2	116	X	70	8,120	8,120	16,240	SHARE
GYM	BASKETBALL - NCAA	1	2	106	X	62	6,572	6,572	13,144	6' APRON; SHARE
GYM	VOLLEYBALL	3	6	36	X	75	2,700	8,100	16,200	6' APRON; SHARE
GYM	YOUTH BASKETBALL	2	3	86	X	54	4,644	9,288	13,932	6' APRON; SHARE
GYM	CLIMBING WALL	1	1	40	X	15	600	600	600	BEST AT A CORNER
GYM	STORAGE	1	2	24	X	24	576	576	1,152	
MULTI-PURPOSE	DANCE	1	1	65	X	40	2,600	2,600	2,600	WITH STORAGE ADJ; WOOD
MULTI-PURPOSE	FENCING (PISTE)	2	4	65	X	10	650	1,300	2,600	WITH STORAGE ADJ; WOOD
MULTI-PURPOSE	JUI-JITSU	1	1	40	X	40	1,600	1,600	1,600	WITH STORAGE ADJACENT
MULTI-PURPOSE	TAI-CHI	1	1	40	X	40	1,600	1,600	1,600	WITH STORAGE ADJACENT
MULTI-PURPOSE	MEETING; 50 PEOPLE	1	1	35	X	35	1,225	1,225	1,225	
MULTI-PURPOSE	KITCHENETTE	1	1	20	X	16	320	320	320	
CHILD CARE	DROP-IN	1	1	30	#	35	1,050	1,050	1,050	WITH INDOOR PLAY & RR's
RAQUETBALL	R-BALL, WALL-BALL, AERO.	2	2	40	X	20	800	1,600	1,600	
FIELD HOUSE	WALKING TRACK	1	1	660	X	8	5,280	5,280	5,280	
FIELD HOUSE	EXERCISE MACHINES	1	1	40	X	80	3,200	3,200	3,200	
CONTROL	OFFICES	2	3	14	X	10	140	280	420	
	Program Spaces	21	30					23,069	31,862	Sharing and repurposed space
	Personnel Spaces	2	3							taken into consideration
	Support Spaces									
FIELD HOUSE	LOCKERS/SHOWERS	3		30	X	20	600			
FIELD HOUSE	RESTROOMS	2		20	X	12	240			
CONTROL	RESTROOMS	2		20	X	12	240			
CONTROL	RECEPTION/CENT CONTROL	1		30	X	10	300			
CONNECTOR	CONCOURSE	1		12	X	200	2,400			
	Support Spaces	9					3,780	3,780	3,780	
	TOTAL SPACES:	32								
	Total Net SF							26,849	35,642	
	Efficiency Factor			15%				4,738	6,290	
	TOTAL PROPOSED USABLE SF							31,587	41,932	

PW062612-19

Roosevelt Park Recreation Center *SPACE ANALYSIS FORM*

PRELIMINARY PROGRAM

SPACE NEEDS ASSESSMENT

DATE: March 12, 2012

	DEPARTMENT:	Original Program										
	INDOOR	SPACES REQ'D			DIMENSIONS			SF	NET AREA	NET AREA	NET AREA	COMMENTS
	Wet-side Programming	Must	Like	Hopeful				UNIT	OF MUST	OF "LIKE"	OF "HOPEFUL"	
	Activity Spaces											
50 M	50 M x 25 YD w/Bulkhead	1	1	1	214	X	116	24,824	24,824	24,824	24,824	
	SEATING	400	600	800	2	X	3.50	7	2,800	4,200	5,600	Stack above Support Spaces?
	"Wet Classroom"	600	700	800	20	x	30	600	600	700	800	
	Life Guard/First Aid	200	200	200	12	x	17	204	204	204	204	
	Manager	140	140	140	12	x	12	144	144	144	144	
	Aquatic Control	1	1	1	12	X	24	288	288	288	288	
	Program Spaces	**3**	**3**	**3**					**28,224**	**29,724**	**31,224**	
	Personnel Spaces	**3**	**3**	**3**					**636**	**636**	**636**	
	Support Spaces											
AQUATIC	LOCKERS/SHOWERS	2			30	X	20	600	1,200	1,800	2,400	
AQUATIC	Pump/Filter/Chemicals	1			30	X	30	900	900	900	900	At perimeter
AQUATIC	Mechanical	1			30	X	40	1,200	1,200	1,200	1,200	
AQUATIC	Storage	2			12	X	20	240	480	480	960	
VIEWING	RESTROOMS	2			20	X	12	240	480	480	960	
	Support Spaces	**8**							**4,260**	**4,860**	**6,420**	
	TOTAL SPACES:	**14**										
		Total Net SF							**33,120**	**35,220**	**38,280**	
		Efficiency Factor			**15%**				**5,845**	**6,215**	**6,755**	
		TOTAL PROPOSED USABLE SF							**38,965**	**41,435**	**45,035**	

PW062612-19

DATE: March 12, 2012

	DEPARTMENT:	Program									
	OUTDOOR	SPACES REQ'D			DIMENSIONS			SF	NET	NET	COMMENTS
	Wet-side Program	Must						UNIT	AREA OF MUST	AREA OF "LIKE"	
	Activity Spaces										
50 M	50 M x 25 YD (No Bulkhead)	1			165	X	79.5	13,118	13,118	-	
	Deck Surronding Pool	1			25		600	15,000	15,000	-	
VIEWING	SEATING	400			2	X	3.50	7	2,800	-	Bleachers on deck
	Structures	**1**							**13,118**	**-**	Deck NOT included
	Program Spaces	**2**							**2,800**	**-**	
	Support Spaces										
SUPPORT	Changing Rooms/showers	2			30	X	20	600	1,200	1,800	
	Check-in & MGR	360			15	x	24	360	360	450	
	Concession	450			20	X	25	500	500	600	
AQUATIC	Pump & Filter	1			30	X	20	600	600	600	
AQUATIC	Storage	2			15	X	20	300	600	800	
	Support Spaces	**7**						**2,360**	**3,260**	**4,250**	Enclosed Space
	TOTAL SPACES:	**10**									
		Total Net SF							**16,378**	**4,250**	
		Efficiency Factor			**15%**				**2,457**	**638**	
		SUB-TOTAL PROPOSED USABLE SF							18,834	4,888	Deck NOT included
		TOTAL PROPOSED USABLE SF							33,834	4,888	Deck IS included