

# Fitness Portal Needs and Feasibility Assessment

## for M-NCPPC Prince George's County Department of Parks and Recreation

Joseph Luff, Tofik Mahdi, Lyndon Ross,  
Aaron Shimanov, Nicole Wesneski

Under Supervision of Professor TJ Rainsford  
INST 490: Integrated Capstone for Information Science  
University of Maryland, College Park  
PALS

December 2019



PALS - Partnership for Action Learning in Sustainability  
An initiative of the National Center for Smart Growth

Gerrit Knaap, NCSG Executive Director  
Kim Fisher, PALS Director

# Contents

Abstract .....	p. 3
Methods .....	p. 4
Deliverables .....	p. 5
Recommendations .....	p. 6 - 7
Conclusion .....	p. 8
Appendix .....	p. 9 - 14

## **Abstract**

The Prince George's County Parks and Recreation Department is seeking to develop an online portal to deliver fitness content. This report presents an initial needs and feasibility assessment of the opportunities and challenges that setting up a portal would involve. The report also includes information on how a portal could be implemented.

## Methods

The first task was to identify the Parks and Recreation Department's capability for hosting a fitness portal. We interviewed multiple staff members, as well as Vermont Systems, the registration system vendor, to learn what features were needed and what could be supported.

The second step was a comparative analysis to see the trends and features in other fitness portals that could be implemented for Parks and Recreation's fitness courses. Research included prominent on-demand fitness services, particularly the details of their services and how they are delivered to customers (means of access, details, pricing, etc.), as well as recording details of other fitness services to compare and contrast service execution.

The team was initially tasked with surveying Parks and Recreation patrons and instructors for their opinions about a portal and what they would be willing to pay for the service. A Google Forms survey was created and sent the survey to Parks and Recreation staff for distribution. We agreed that the survey would more likely be well-received coming from staff. However, it was difficult to get patron response; they didn't always agree to receiving email that would deliver the survey, so the team wasn't able to get their input.

The project was adjusted instead to document how patron surveying could work in the project's next phase. This included providing recommendations for survey topics, possible survey questions, and the scale that ensures the data is easy to work with. To analyze instructor responses, the team used the information received to make data visualizations and to form our recommendations.

The lack of engagement in the survey was an obstacle to collecting useful data. Initially, only three instructors responded, and none sent the survey on to students as intended in the distribution plan. The team considered different ways to generate responses, but ultimately Parks and Recreation took on communicating with the instructors. Another obstacle was being unable to meet with the County's IT department to get a better idea of the available options, but we were able to contact Vermont Systems to understand some of the web system limitations.

# Deliverables

The deliverable provided by the team are described below.

## Analysis of Current Technology and Programs

- Current Technology
  - the Department's two systems and their capabilities. The two systems, ParksDirect for customers and RecTrac employees, are managed by Vermont Systems
- Current Programs
  - the dataset of Department programs offered between Winter 2017 and Spring 2020 to see the type of class most frequently offered and what enrolled age groups

## Comparative Analysis

- This deliverable's goal was to find details of live-streaming and on-demand fitness content to learn their business and delivery models. This information could be used as a reference to or as an example to avoid. Further analysis of fitness services showed means of access, service offering details, materials used, number of users, and service cost/pricing. The complete analysis indicated that in the event Parks and Recreation offers the service, it should be via computer and other digital devices, and should be subscription-based with initial registration price.

## Student and Instructor Survey

- The list of questions the Parks and Recreation Department may find useful in interviews of student in the future. There is also a codebook for the format of survey responses.

## Final Presentation

- Presentation at the client's office on the comparative analysis, the project scope, methodology and thought processes, and recommendations for future actions. The presentation included alternative solutions and ideas to expand the project.

## Recommendations

The Prince George's County Parks and Recreation Health and Wellness should not move forward with an inclement weather supplementary live-streaming service for the following reasons:

- Concerns for managing classes of a medium to larger size.
- Fewer than 40% of instructors had the physical space and willingness to purchase a webcam to stream courses.
- A significant number of class attendees are seniors, opening the possibility of a technical skill barrier that would make it hard for them to stream from their computer and interact with the live-streaming service.
- During inclement weather, the instructors' or students' Wi-Fi or power may be out.
- Live-streamed classes will likely be restricted to one camera angle, which for certain courses such as yoga, would make it difficult for students to see if their form is correct.
- Vermont Systems doesn't offer in-house live-streaming, so the portal would need to be contracted elsewhere. Cisco and Zoom are streaming services with capabilities that match most of the Department's requirements. Unfortunately, they lack straightforward cost structures, so bookkeeping would be an issue.
- There is no mobile app live-streaming capability for tablets and phones.

There are some alternative solutions:

### Hybrid Courses

- Pre-recorded classes using multiple cameras at a Parks and Recreation facility would alleviate the need for instructors to have space and cameras. Furthermore, pre-recorded videos can be edited and closed captioned for accessibility. Pre-recording also helps overcome scheduling issues, making it easier for students and instructors. For example, hybrid courses can be scheduled on Monday and Wednesday, and online on Fridays. This enables students to exercise and get value out of the course, without going out every day of the week. Lastly, students and instructors who consent to being pre-recorded, should be in smaller classes (5 to 7 people), which makes it more manageable for instructors to track students' online activity.

### Public-Private Partnerships

- A bolder idea is for the Department to hire a software developer who understands Vermont Systems' portal well enough to program an in-house live-streaming solution. The Department could then license this capability back to Vermont Systems and potentially generate revenue from Vermont Systems as well as from enrolling students. This solution still creates issues—

student interaction, scheduling, and access to cameras and physical space—but it could be a save long-term costs.

#### New Vendor

- A new vendor able to handle class registration and video streaming would be simpler than having multiple portals or working with the current vendor to get support. Vermont Systems, may be open to adding the necessary functionality, but not to developing a full video streaming service.

If continuing with this project in the future, we recommend:

- choosing an alternative to create the project
- surveying patrons to determine interest in an online fitness service
- surveying instructors to determine interest and capacity for an online hybrid course.

## **Conclusion**

the Parks and Recreation Department should initially focus on delivering pre-recorded class modules made at Parks and Recreation facilities. The project's next steps should be surveys to discover patron interest and instructor capability. Understanding why instructors were not open to a live-streaming service is important to moving forward.

Pre-recorded fitness classes can offer time flexibility to meet the customer's schedule, while also allowing the instructor to record a class at a familiar Parks and Recreation facility. This options helps all parties to make the fitness courses more accessible with the least amount of cost.

The UMD PALS Fitness Portal team can be reached at: [joeluff41@gmail.com](mailto:joeluff41@gmail.com)

# Appendix

## Appendix 1

### Analysis of Current Technology and Programs

This project began with an analysis of the Parks and Recreation Department’s current fitness programs and information technology structure. This necessary starting point outlined what currently exists to develop a system that is within reach and that addresses the needs and requests of County’s Health and Wellness division leaders, their employees, and their customers.

The Health and Wellness division offers a variety of fitness classes ranging from aerobics, yoga, and more each with sections for different age groups and skill levels. The fitness courses are usually offered in multiple sessions throughout the year. Each session has a defined number of classes for patrons to attend at a Parks facility. All of the County's Parks fitness courses are offered in-person only.

The table below is based on the Parks and Recreation Department data set sent on course enrollment statistics. We particularly looked at age demographics, as seniors can face access barriers to using online platforms.

Age Group	Enrollments	Classes Offered
Seniors	12,735 (42.71%)	1,094 (24.76%)
Adults	13,462 (45.15%)	2,386 (54.01%)
Teenagers	40 (0.13%)	20 (0.45%)
Children	237 (0.79%)	48 (1.09%)
Pre-schoolers	44 (0.15%)	9 (0.20%)
Mixed Age	3,299 (11.06%)	861 (19.49%)

The data indicates that while only 24.76% of the classes offered are targeted to seniors, 42.71% of total enrollments are by seniors. Seniors make up a significant part of class enrollments and their needs for intuitive technology should be considered going forward.

Parks and Recreation's existing technology infrastructure uses two portals—one for user accounts and class listings and one for registration. Both portals are designed and managed by third-party vendor, Vermont Systems.

ParksDirect serves the patron/customer side. Customers can create ParksDirect accounts and then register for courses, purchase event tickets, and rent venues. RecTrac is the online database used by employees to complete transactions, and to view and manage customer account information. Parks and Recreation's in-house IT department handles day-to-day technology needs, but it outsources the more advanced concerns to third-party vendors.

Parks and Recreation currently lacks remote or digital fitness components, including video streaming. Vermont Systems doesn't provide video services, but they would be interested in potentially integrating with a vendor who does, to track of students accounts and class enrollment.

## **Appendix 2**

### **Comparative Analysis**

The analysis of fitness services (Beachbody, Daily Burn, Fightcamp, Mirror Fitness, and Peloton) included researching their of means of access, service details, materials used, number of users, and cost/pricing for users.

Two other factors analyzed were who provides and maintains the compnies' IT and video services of as well as how much that costs to implement and maintain. Ultimately, analysis points weren't included in the final deliverable; that information isn't publicly available and unique to each company.

For the comparative analysis, please refer to the following link for a copy of the document:  
<https://drive.google.com/file/d/1BEbGHdPodr5KM15NU9njGQc1FwS-UBQS/view?usp=sharing>

## **Appendix 3**

### **Final Presentation**

The work was presented twice—first to the client and project team and then to the INST490 class—and displayed as a poster at the County Parks and Recreation showcase. The presentation demonstrated the project's progress through the semester and presented the recommendations.

We wanted to ensure the recommendations were communicated to client in a productive way and offered future actions. The multiple presentations were an effort of the whole PALS Fitness Portal team.

## **Appendix 4**

### **Survey**

The patron and instructor surveys were hosted on Google Forms. The free platform accommodated the question options and further surveying. Survey results can be viewed on Google Sheets, where further survey analysis can be done. Distributing the survey could be via

QR codes. To make the project QR code project we used the site [QRCode Monkey](#), but any QR code generator can work.

### **Patron Survey Questions**

1. On a scale of 1-5, what is your overall satisfaction with the in-person fitness courses in their current format (fitness routines, environment, instructor)? (1 being very unsatisfied - 5 very satisfied)
2. Do you have any additional concerns as to how the fitness courses are currently presented?
3. On a scale of 1-5, how interested are you in the ability to attend fitness classes virtually using a digital device (computer, mobile device, etc.)? (1 being very uninterested, 5 being very interested)
4. Do you believe you would have space to take and participate in fitness courses from home?
5. Do you believe you would have access to any fitness materials you may need to participate from home? (weights, yoga mat, jump rope, etc.)
6. Do you have a webcam/camera you can use to participate in live streams for courses, or would you be willing to purchase one?
7. On a scale of 1-5, how likely are you to attend a class virtually at least once during a course, in the situation that you are unable to physically get to a facility? (1 being unlikely, 5 being very likely)
8. On a scale of 1-5, how much would you value being able to communicate with other members of the class during the live stream? (1 being would not communicate with others, 5 being would regularly communicate with others)
9. In what ways would you like to be able to interact with other class members?
10. In what ways would you like to be able to interact with the instructor of a course through the portal?
11. Do you believe that a change in fitness course prices would be acceptable if online access was made possible in addition to in-person classes?
12. How much would you be willing to pay \*per course\* to add the ability to attend some classes of a course virtually? (in US Dollars)
13. How much would you be willing to pay \*per class session\* to add the ability to attend some classes of a course virtually? (in US Dollars)

### **Patron Survey Codebook**

1. On a scale of 1-5, what is your overall satisfaction with the in-person fitness courses in their current format (fitness routines, environment, instructor)? (1 being very unsatisfied - 5 very satisfied)
  - a. Format: Numeric, Likert scale
  - b. Answer options:
    - i. 1 Very unsatisfied
    - 2 Somewhat unsatisfied
    - 3 Neutral
    - 4 Somewhat satisfied
    - 5 Very satisfied
2. Do you have any concerns as to how the fitness courses are currently presented?

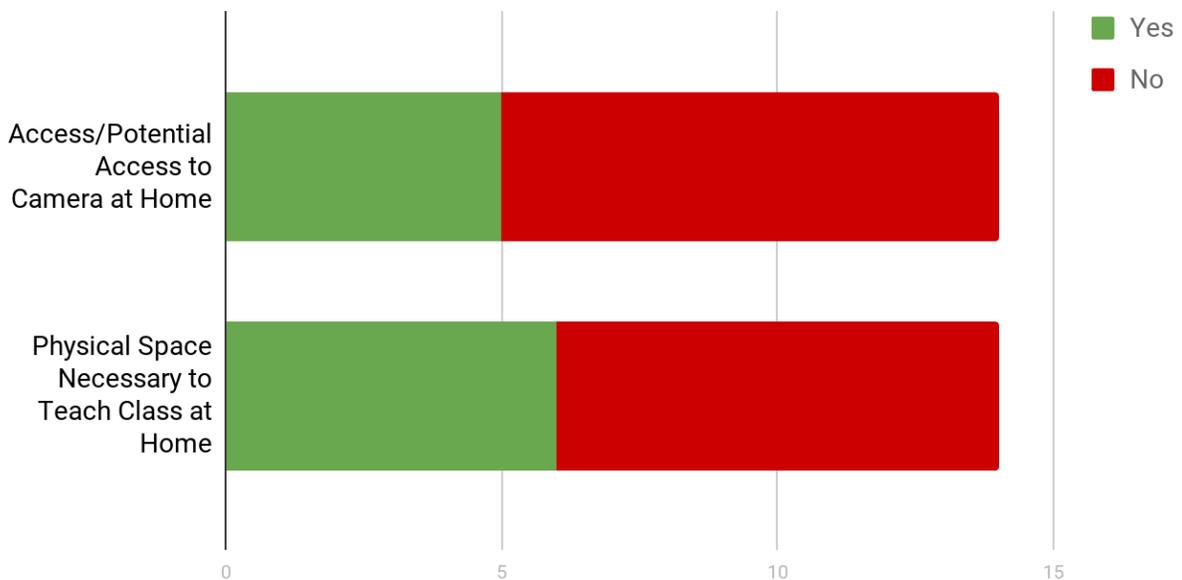
- a. Format: String, open-ended
- 3. On a scale of 1-5, how interested are you in the ability to attend fitness classes virtually using a digital device (computer, mobile device, etc.)? (1 being very uninterested, 5 being very interested)
  - a. Format: Numeric, Likert scale
  - b. Answer options:
    - i. 1 Very unsatisfied
    - 2 Somewhat unsatisfied
    - 3 Neutral
    - 4 Somewhat satisfied
    - 5 Very satisfied
- 4. Do you believe you would have space to take and participate in fitness courses from home?
  - a. Format: Multiple choice
  - b. Answer options:
    - i. Yes
    - No
- 5. Do you believe you would have access to any fitness materials you may need to participate from home? (weights, yoga mat, jump rope, etc.)
  - a. Format: Multiple choice
  - b. Answer options:
    - i. Yes
    - No
- 6. Do you have a webcam/camera you can use to participate in live streams for courses, or would you be willing to purchase one?
  - a. Format: Multiple choice
  - b. Answer options:
    - i. Yes
    - No
- 7. On a scale of 1-5, how likely are you to attend a class virtually at least once during a course, in the situation that you are unable to physically get to a facility? (1 being unlikely, 5 being very likely)
  - a. Format: Numeric, Likert scale
  - b. Answer options:
    - i. 1 Very unlikely
    - 2 Somewhat unlikely
    - 3 Neutral
    - 4 Somewhat likely
    - 5 Very likely
- 8. On a scale of 1-5, how much would you value being able to communicate with other members of the class during the live stream? (1 being would not communicate with others, 5 being would regularly communicate with others)
  - a. Format: Numeric, Likert scale
  - b. Answer options:
    - i. 1 Very unlikely
    - 2 Somewhat unlikely

- 3 Neutral
- 4 Somewhat likely
- 5 Very likely

9. In what ways would you like to be able to interact with other class members?
  - a. Format: String, open-ended
10. In what ways would you like to be able to interact with the instructor of a course through the portal?
  - a. Format: String, open-ended
11. Do you believe that a change in fitness course prices would be acceptable if online access was made possible in addition to in-person classes?
  - a. Format: Multiple choice
  - b. Answer options:
    - i. Yes
    - No
12. How much would you be willing to pay \*per course\* to add the ability to attend some classes of a course virtually? (in US Dollars)
  - a. Format: Numeric
  - b. Range restriction: Values must be  $\geq 0$
13. How much would you be willing to pay \*per class session\* to add the ability to attend some classes of a course virtually? (in US Dollars)
  - a. Format: Numeric
  - b. Range restriction: Values must be  $\geq 0$

### Instructor Survey Responses Visualization

#### Instructor Capability to Teach From Home



## **Instructor Survey Responses Spreadsheet**

[https://docs.google.com/spreadsheets/d/1A-ZnT\\_tSK8qLdJzf1r25-Ko201-6JgISsJT7u0Q\\_K0/edit?usp=sharing](https://docs.google.com/spreadsheets/d/1A-ZnT_tSK8qLdJzf1r25-Ko201-6JgISsJT7u0Q_K0/edit?usp=sharing)

The first sheet in this spreadsheet has unnecessary columns (from the student survey) removed from the table. The second sheet is the original copy of the responses.