

# **Worcester Consortium Shuttle Service**

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## **Worcester Consortium Shuttle Service**

On May 9<sup>th</sup>, 2014 the consortium shuttle ran for the very last time after more than 40 years of service. This shuttle was designed to create a convenient mode of transportation for students who were registered for classes at other Worcester colleges. The route composed of Becker college, WPI, Assumption college, Worcester State University, Clark University, College of the Holy Cross, Worcester Public Library, Union Station and Worcester Art Museum.

Over the years, the consortium shuttle had presented two major flaws that diminished the ridership of the shuttle resulting in its exit of the market. One flaw that was presented was the length of time it took to arrive at the desired destination- long rides were a result of frequent stops and a roundabout route. For example, let's say a student at Clark registers for a class at Holy Cross and decides to take the consortium shuttle to Holy Cross from Clark. The duration to Holy Cross was approximately eight minutes and going back to Clark was approximately 50 minutes. The problem is that the one-way route would require the student to sit through the entire route to get from Clark to Holy Cross and back. For most cross-registered students, this choice of transportation was too time consuming, as a solution to save their time, students would call a cab on their way back, decreasing the ridership. According to the Higher Education Consortium of Central Massachusetts (HECCMA) for the year 2013-2014, the total drop offs were 1,317 and the total pick-ups were only 898. Approximately 30% of the passengers had chosen to not take the shuttle back to Clark. Another flaw that the shuttle faced was that it was frequently late- making it difficult for student to take advantage of this service. With these two faults in mind, ridership decreased to an average of 13 people per day.

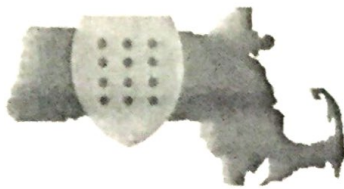
The consortium shuttle cost Clark University \$50 per hour (\$600 per day with the shuttle running 12 hours per day). Since the shuttle was so underutilized, it would have been more cost effective for Clark to pay for individual cabs for students. On Clark's best day (approximately 14 pick-ups) it would have only cost then \$182 per day to rent a cab, making a substantial different from \$600 to run the consortium shuttle. Also, due to the low ridership, Clark did not have enough to cover its fixed costs nor its variable costs. In this case, the fixed cost is the bus rental since the fee would be constant whether or not the ridership is high or low. The

variable cost is the driver's wage and gas. Depending on the number of hours the driver works and the number of miles the bus travels, the cost for wage and gas can be very different each day. If we added these costs together the average total cost was greater than price, suggesting for and exit. As a result, to save money Clark exited the market to mitigate investment risks and find alternatives.

Currently, as an alternative for students who are registered for classes at other consortium schools, Clark has provided a Red Cab for student to get to and from, free of charge. All aspects of the consortium shuttle were analyzed to find the solutions and alternatives. A possible solution discussed was the possibility of another shuttle running the opposite direction. An addition of a second shuttle running the opposite direction could reduce the long ride, but it was not practical because the cost of drivers and shuttle rental were so high. Gas played a small part in this since the expenses were greatly weighed on the cost of the drivers and rental of the shuttle. By adding another shuttle, it would double the price. It could possibly attract more students but the number of students that are actually taking classes outside of Clark are quite low.

To a large extent, the consortium shuttle provided many benefits to the society as a whole because the shuttle went around to many schools around Worcester and it made for a better community. By offering this service and allowing students to take classes at other schools it was a positive externality. Students who take courses that are not offered at their school allows for a more educated and more rounded population. This promotes development and dissemination in every subject. This shuttle also allowed students to visit many other schools and go downtown. As students walked around and purchased goods from stores or restaurants, the economy of Worcester would be helped. This service was a positive externality and increases the overall well-being of society.

As Clark University forgoes the consortium shuttle, alternatives like cabs will be the most cost effective with essentially the same benefit.



# HECCMA

HIGHER EDUCATION CONSORTIUM OF CENTRAL MASSACHUSETTS

## Update on HECCMA à la carte services

Prepared by Jeanine B. Went

February 27, 2014

### EXECUTIVE SUMMARY

This report was commissioned to examine HECCMA a la carte services, including usage and expenses for FY 13-14, and to provide recommendations for FY 14-15.

### CONSORTIUM SHUTTLE SERVICE

Usage summary and charts (attached –Appendix A) were prepared by Jerry Maday, College of the Holy Cross Transportation Department, using data provided by our current shuttle provider, A.A.

Transportation. Upon review the data, key student affairs leaders weighed-in on their thoughts. Below you will find an outline of current costs and current recommendations for next year.

### KEY FINDINGS

#### Expenses FY 13-14

Per Hour: \$50.00

12 hrs. /day for 157 days: \$94,200

Campus Charges: \$15,700 each

#### Usage Overview through January 31, 2014

|                      | Becker | WPI | Assumption | WSU   | Clark | Holy Cross | Worcester Library | Union Station | Art Museum |
|----------------------|--------|-----|------------|-------|-------|------------|-------------------|---------------|------------|
| YTD PICK-UPS         | 587    | 684 | 772        | 1,709 | 898   | 312        | 245               | 235           | 128        |
| YTD DROP-OFFS        | 355    | 311 | 689        | 1,060 | 1,317 | 568        | 400               | 594           | 126        |
| YTD TOTAL PASSENGERS | 942    | 995 | 1,461      | 2,769 | 2,215 | 880        | 645               | 829           | 254        |

### RECOMMENDATIONS

#### Student Affairs Recommendations

| COLLEGE    | REPRESENTATIVE       | KEEP | DROP | UNDECIDED |
|------------|----------------------|------|------|-----------|
| Assumption | Catherine Woodbrooks | X    |      |           |
| Becker     | Nancy Crimmin        |      |      | X         |
| Clark      | Denise Darrigrand    | X    |      |           |
| Holy Cross | Jacqueline Peterson  |      | X    |           |
| WSU        | Julie Kazarian       | X    |      |           |
| WPI        | Greg Snoddy          |      |      | X         |

**NOTE:** *If half choose not to participate, this changes/impacts the value of participation for those wishing to continue. Those who are undecided are entertaining other modes of transport for students who cross-register for classes at other institutions. A firm decision will be made by the end of this academic year.*

**Jeanine's Recommendations**

- Consider a van shuttle in lieu of a bus to defray gas/diesel consumption and costs.
- Begin to investigate relationship with WRTA, as new information was shared by Barry Maloney at the HECCMA Board Meeting on February 26.
- Begin to explore cab vouchers with Greg Snoddy in lieu of Shuttle and perform a cost comparison analysis.
- Begin to explore shared Zipcar Contract for consortium institutions and possibly the City of Worcester as an alternative shared transportation source.
- Make firm decision about commitment to Shuttle by June 1, 2014.

## **Worst Case Scenario- Cab versus Shuttle\***based on an average of 21 days/month

### **Assumption**

Average number of pick-ups in a given day = 12 (based on an average of all days in October, which is the month of highest usage)

Average fare from Yellow Cab: \$13

Cost per day for Assumption to move to Yellow Cab contract= \$156/day or \$3276 per month in one-way cab fares

**\$6552** per month assuming round trip

**\$1750** per month in shuttle fare

### **Becker**

Average number of pick-ups in a given day = 10 (based on an average of all days in October, which is the month of highest usage)

Average fare from Yellow Cab: \$13

Cost per day for Becker to move to Yellow Cab contract= \$130/day & \$2730 per month in one-way cab fares

**\$5460** per month assuming round trip

**\$1750** per month in shuttle fare

### **Clark**

Average number of pick-ups in a given day = 14 (based on an average of all days in November, which is the month of highest usage)

Average fare from Yellow Cab: \$13

Cost per day for Clark to move to Yellow Cab contract= \$182/day or \$3822 per month in cab fares

**\$7644** per month assuming round trip

**\$1750** per month in shuttle fare



### **College of the Holy Cross**

Average number of pick-ups in a given day = 5 (based on an average of all days in November, which is the month of highest usage)

Average fare from Yellow Cab: \$13

Cost per day for College of the Holy Cross to move to Yellow Cab contract= \$65/day or \$1365 per month in cab fares

**\$2730** per month in cab fares

**\$1750** per month in shuttle fare

### **WPI**

Average number of pick-ups in a given day = 10 (based on an average of all days in November, which is the month of highest usage)

Average fare from Yellow Cab: \$13

Cost per day for WPI to move to Yellow Cab contract= \$130/day or \$2730 per month in one-way cab fares

**\$5460** per month assuming round trip

**\$1750** per month in shuttle fare

### **WSU**

Average number of pick-ups in a given day = 27 (based on an average of all days in November, which is the month of highest usage)

Average fare from Yellow Cab: \$13

Cost per day for WSU to move to Yellow Cab contract= \$351/day or \$7371 per month in cab fares

**\$14,742** per month assuming round trip

**\$1750** per month in shuttle fare

## **Best Case Scenario-Cab versus Shuttle** \*based on an average of 21 days/month

### **Assumption**

Average number of pick-ups in a given day = 10 (based on an average of all days in September, which is the month of highest usage)

Average fare from Yellow Cab: \$13

Cost per day for Assumption to move to Yellow Cab contract= \$130/day & \$2730 per month in one-way cab fares

**\$5460** per month assuming round trip

**\$1750** per month in shuttle fare

### **Becker**

Average number of pick-ups in a given day = 8 (based on an average of all days in September, which is the month of lowest recorded usage)

Average fare from Yellow Cab: \$13

Cost per day for Becker to move to Yellow Cab contract= \$104/day & \$2184 per month in one-way cab fares

**\$4368** per month assuming round trip

**\$1750** per month in shuttle fare

### **Clark**

Average number of pick-ups in a given day = 12 (based on an average of all days in September, which is the month of lowest recorded usage)

Average fare from Yellow Cab: \$13

Cost per day for Clark to move to Yellow Cab contract= \$156/day or \$3276 per month in one-way cab fares

**\$6552** per month assuming round trip

**\$1750** per month in shuttle fare



### **College of the Holy Cross –no change**

Average number of pick-ups in a given day = 5 (based on an average of all days in September, which is the month of lowest recorded usage)

Average fare from Yellow Cab: \$13

Cost per day for College of the Holy Cross to move to Yellow Cab contract= \$65/day or \$1365 per month in one-way cab fares

**\$2730** per month in cab fares

**\$1750** per month in shuttle fare

### **WPI –no change**

Average number of pick-ups in a given day = 10 (based on an average of all days in September, which is the month of lowest recorded usage)

Average fare from Yellow Cab: \$13

Cost per day for WPI to move to Yellow Cab contract= \$130/day or \$2730 per month in one-way cab fares

**\$5460** per month assuming round trip

**\$1750** per month in shuttle fare

### **WSU**

Average number of pick-ups in a given day = 20 (based on an average of all days in September, which is the month of lowest recorded usage)

Average fare from Yellow Cab: \$13

Cost per day for WSU to move to Yellow Cab contract= \$260/day or \$5460 per month in one-way cab fares

**\$10,920** per month assuming round trip

**\$1750** per month in shuttle fare