The Colorado River Experience: Assessing The Value Of Motorized Rafting

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ABSTRACT

Although free markets provide superior solutions to resource allocation, the National Park Service controls access, use, and mode of travel on the Colorado River through the canyon. There is an aggregate number of "user days" allowed for the river. There is a split between motorized and non-motorized travel, and daily limits on the types of trips that can be launched from Lees Ferry, the starting point for Grand Canyon river trips. This paper explores a rather straightforward economic question – How much would it take to entice existing motorized providers to switch to oar powered rafts? Available data allows the development of different scenarios to determine the cost of enticing motorized providers to switch to nonmotorized guided trips. However, there is also intrinsic some providers possess which may make change a purely economic decision to one with other values.

Keywords: Colorado River; Motorized Rafting; Nonmotorized Rafting; Discounted Present Value

INTRODUCTION

Each year nearly 30,000 people raft down the Colorado River through the Grand Canyon (http://blog.cleveland.com/pdextra/2013/03/grand_canyon_rafting_down_the.html). The National Park Service (NPS) controls access, use, and travel mode on the Colorado River through the canyon. The NPS specifies an aggregate number of "user days" allowed for the river. About half the allocation of user days goes to sixteen existing commercial firms. The rest goes to private parties through a lottery system. These user days are also split between motorized and non-motorized travel. Additionally, the park service imposes daily limits on the types of trips that can be launched from Lees Ferry, the starting point for Grand Canyon river trips.

One of the most contentious issues raised in the debate over the allocation of river use has been between those that oppose, and those that support, motorized river travel. Those that oppose motorized travel have become more vocal in their desire for nonmotorized only trips. As with hiking through the Grand Canyon, these proponents advocate for a quieter Canyon experience. In addition, some groups would prefer to ban rafting in the Grand Canyon all together to return the river to a more pristine state. While the NPS may consider altering the modal split in the future, we can inform the public policy debate by considering the value of motorized travel to the business firms involved, and, by extension, to the public. To do this, we ask a rather simple and straightforward economic question – How much would it take to entice existing motorized providers to drop out of business?

Of course, no one will know the answer to that question until an offer is actually made and accepted. However, we have access to a limited data set that shows revenues earned by the sixteen firms that offer commercial river running trips through the Grand Canyon, as well as their user day allotments and franchise fees, which are paid to the National Park Service. This data covers the period from 1994 through 2006. Based on this information we can identify a range of outcomes that would likely encompass the answer we seek.

This report begins with Part I, an overview of commercial river running in the Grand Canyon and some of the general economic arguments that relate to the question of changing the current modes of travel. In Part II, there will be some overall characterization of the data set, supplemented by additional sources. The more we understand the information we have, the better it helps to inform our decision-making. In Part III, a simplified model will be derived and explained. These results will be presented within the context of a robust range of alternatives. Finally, some concluding remarks will be offered about the value of this report and where additional efforts might lead.

PART I. OVERVIEW

River running in the Grand Canyon is controlled by the National Park Service. The park service has determined that no more than about 25,000 people can go down the river per year in order to preserve the quality of the visitor's experience.[1] This result follows from the designation of the maximum number of "user days" by the NPS, currently at about 230,000, the modal split between oar-powered and motorized rafts and the establishment of the number of launches that can be made per day. While this averages out to about ten days per person, typical trip lengths vary from four days to eighteen days.

The user days are allotted to sixteen commercial firms as well as to noncommercial groups, the latter based on a lottery system. Noncommercial groups make their own arrangements for their river trips, although there are some private firms that will outfit groups with equipment and supplies. As of 2006, when the park service last revisited this issue, total user days were split almost equally between commercial and noncommercial groups. However, commercial trips are limited to the summer and shoulder seasons only (April through October), while noncommercial trips occur all year long. Almost 30% of all noncommercial trips are run during the off-peak season of November through March.

There is also an allocation of user days between motorized and non-motorized trips. From September 16 through March 31, only non-motorized rafts[2] may be used on the river, while there is mixed use during the remainder of the year. The park service also regulates the number of launches allowed per day, which occur at Lees Ferry, at the upper end of the national park. For example, from June through August, six total daily launches are allowed, and only three may be motorized rafts.

Since the river has come under close regulation by the park service, there has been little changeover in commercial ventures that operate rafting trips. The de facto status of these river allotments is that they are the private property of the firm. While the NPS could change these arrangements, it has thus far shown no particular interest in doing so. And, while these firms must bid on their contracts every ten years, they receive a preference in keeping their allotments. From 1994 to 2006 only one firm, High Desert Adventures, dropped off the list of concessionaires, to be replaced by a new firm, Grand Canyon Discovery. However, the latter is an affiliate with one of the other existing commercial firms, Arizona Raft Adventures.

Data available from the Grand Canyon River Outfitters Association,[3] a group that represents the commercial operators, show the proportional breakdown of their clientele between motorized and non-motorized uses in terms of launches, passengers and user days for 2007. This information is summarized in Figure 1, below.

[1] The information presented here comes from the NPS Record of Decision on the Colorado River Management Plan EIS (2006).
[2] While most of the river running is done with rafts, there are also kayaks and dories that are used. For simplicity, the term "raft" will be used to include all of these non-motorized conveyances.
[3] Grand Canyon River Outfitters Association, "Commercial Recreational Use – Annual Summary; April 1 through October 31, 2007."

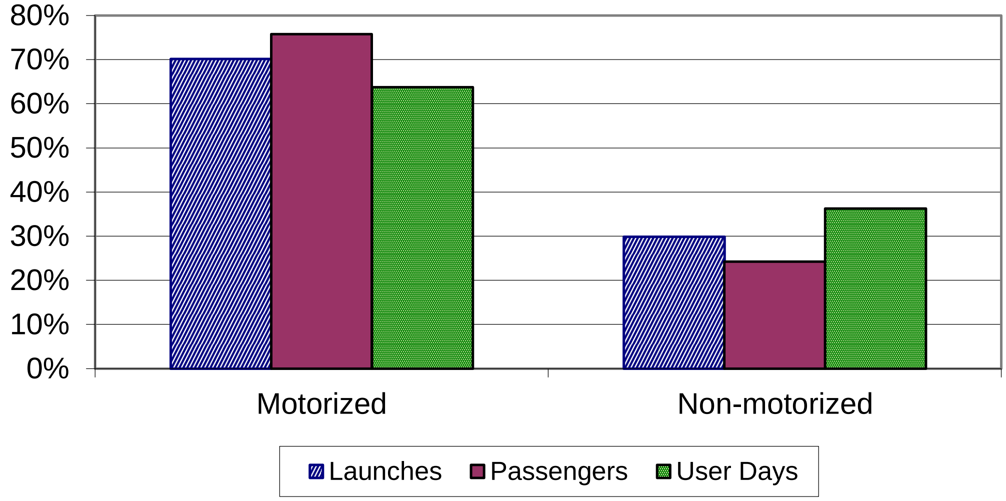

Figure 1: Commercial River User Statistics – 2007
Source: Grand Canyon River Outfitters Association, "Commercial Recreational Use – Annual Summary; April 1 through October 31, 2007."

Motorized travel accounts for the lion's share of the business done by these commercial firms. In 2007, these firms used almost 99% of their allotted user days. The passenger share exceeds the user day share for motorized trips because these trips are shorter than non-motorized trips. That is, one passenger may absorb seven user days on a motorized trip versus ten user days on a non-motorized trip.

Most commercial passengers - over 85% - were carried over the months of May through August. The distribution of these commercial passengers across the months of the commercial use season, for 2007, is shown below in Figure 2.

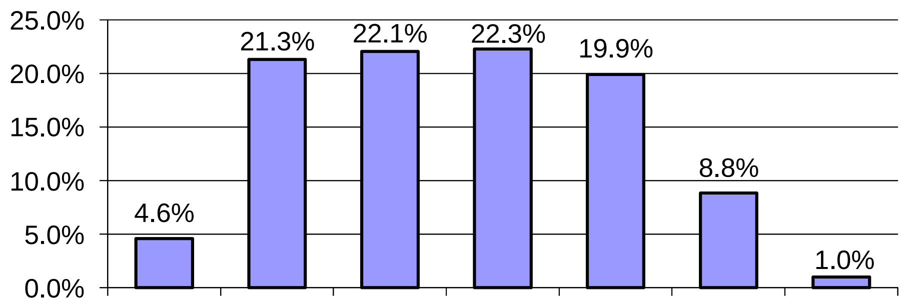

Figure 2: Commercial Passenger Distribution across Commercial Season – 2007
Source: Grand Canyon River Outfitters Association, "Commercial Recreational Use – Annual Summary; April 1 through October 31, 2007."

Given that these firms operate very much like any private business, we are interested in primarily assessing their willingness to drop out of business. To investigate this we will analyze a data set that shows revenues for these commercial firms over the time period of 1994 to 2006. With an understanding of the revenue side of the business, we will make some simplifying assumptions about costs to extract the expected profit, which will then serve as the basis for assessing what monetary payment would be necessary to entice these producers to drop out. We will have to assume, out of necessity, that the user days freed up won't be otherwise available to other firms, or to new entrants into this industry.

Of secondary interest is the option of enticing these firms to switch from motorized to non-motorized rafts. This won't necessarily alter the total number of user days, but one of the other complaints that arise from the current system is that the motorized rafts are "too noisy."

Most firms do offer both motorized and non-motorized trips. To switch their mode of travel would likely incur costs as they swap out their motorized equipment for non-motorized equipment and some loss in revenue if we can reasonably presume that this shift will result in an overall lower market demand, and therefore prices, for this service.

The direction of effects here is straightforward. Since motorized trips can cover more distance in less time, they afford the traveler shorter itineraries.[4] Converting to non-motorized travel is likely to lengthen trips[5] which will certainly cause demand to fall. To fill these spaces, they may have to heavily discount their prices. Indeed, it is possible that operating this many user days, under these conditions, may not be profitable. So, the net effect would be the same as dropping out of business, without replacing the user days.

It has been suggested by some in the river running community that a non-motorized trip can cover the same distance in the same amount of time as a motorized trip. This would mean that firms can still offer the same kinds of trips as they currently offer. However, it would seem clear that this would require that visitors spend more time actually running the river. While this would seem to be exactly the experience that visitors are interested in, there is nothing to stop existing commercial providers from offering these kinds of trips today. So, there must be more to the quality of the visitor's experience besides just being in the raft – time spent enjoying the canyon's vistas from various stops along the river, as well at the chance to be more reflective and even engaging in light hiking activities would seem to be integral parts to one's overall canyon experience.

PART II. THE DATA

A. Overview

The data set covers the period from 1994 through 2006. It shows the user days allotted to each of the sixteen firms that have concessions for commercial trips, as well as their annual gross revenues and the franchise fees paid to the National Park Service. The original data set is presented in the Appendix.

While the NPS offers the right for anyone to bid on these contracts, the existing users have been able to obtain and maintain some property rights in this regard. They are given preferential treatment in keeping their contract, and in keeping their allotment of user days. Indeed, in 2006, OARS, which already has an allotment of 7,355 user days, made a failed attempt to bid for Aramark's 9,546 user day allotment (Grand Canyon National Park News Release, 2007).

The sixteen concessionaires offer a variety of trips. Eleven of these firms offer both motorized and oar-powered trips, while four firms only offer oar-powered trips, and one firm only offers motorized trips. Their shares of the total 115,500 commercial user days allotted is shown in Figure 3.

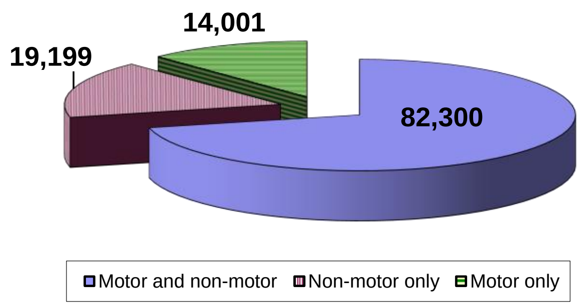

Figure 3: Annual Commercial User Day Allotment by Type of Trip
Source: Grand Canyon National Park News Release, 2007

[4] In addition, these commercial firms often offer half canyon trips, ranging from three to four days in length. In 2007, about 12% of their total passenger load was on half canyon trips.
[5] In fact, the Park Service also imposes maximum trip lengths on the different modes of travel – for non-motorized rafts this maximum is six days longer than for motorized rafts.

A list of the sixteen commercial firms, their user day allotment and the types of trips that they offer is shown in the Table 1.

Table 1: Commercial River Runners, Grand Canyon – 2007

Company	Company	User Days	motorized	non-motorized
Arizona Raft Adventures	ARA	10,368	x	x
Arizona River Runners	ARR	11,099	x	x
Canyon Expeditions	Ex-CE	2,960		x
Canyon Explorations	CE	4,063		x
Canyoneers	C	4,403	x	x
Colorado River and Trails	CRT	2,848	x	x
Diamond River Adventures	DRA	7,203	x	x
Grand Canyon Discovery	GCD/HDA	3,323	x	x
Grand Canyon Expeditions	GCE	13,967	x	x
Hatch River Expeditions	HRE	11,027	x	x
Moki Mac River Expeditions	MMRE	3,693	x	x
OARS	OARS	7,355		x
Outdoors Unlimited	OU	4,821		x
Tour West	TW	4,823	x	x
Western River Expeditions	WRE	14,001	x	
Wilderness River Adventures	ALS	9,546	x	x

Source: Grand Canyon River Outfitters Association website, 2007

There is a wide range of user day allotments. The top two firms – Western River Expeditions and Grand Canyon Expeditions – have nearly 28,000 user days, which is almost a quarter of the total. And, almost all of their trips are motorized. At the other end of the spectrum are small firms, with allotments of around 3,000 user days, who offer mostly non-motorized trips.

B. Revenue Data

From 1994 to 2006, these sixteen firms have seen their total yearly gross revenues rise from about twenty million dollars to thirty-three million dollars. Annually, they have also paid millions of dollars to the NPS as a fee for doing business. These total revenues, and fees, are shown in Figure 4. From 1996 to 2006, these track quite closely, as NPS fees varied between 7.6% and 8.4% of gross revenues. Prior to 1996, this fee was about 4.5% of revenues. In 1996, an additional fee, classified as the "Colorado River Fund," was added to the franchise fee. The CRF fee represented about 3.2% of revenues and was phased out as a separate fee by 2004.

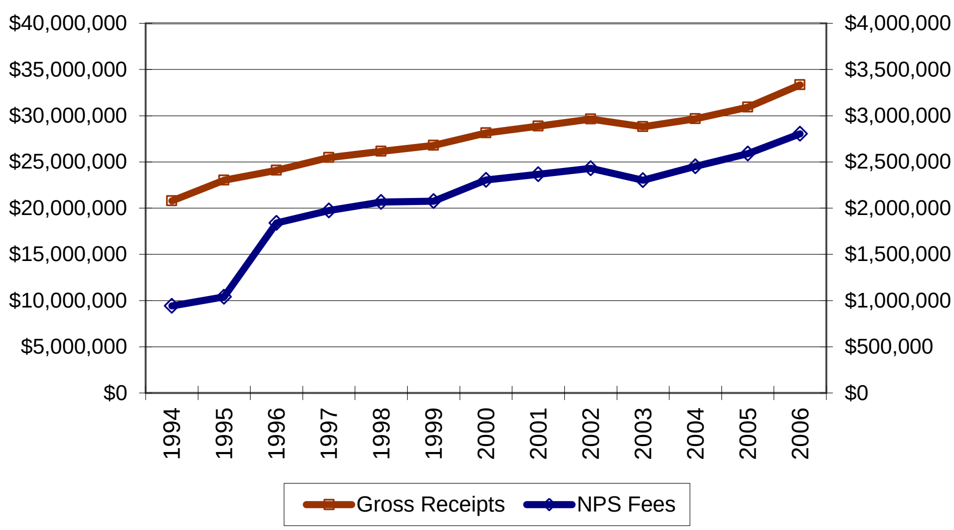

Figure 4: Gross Receipts (left) and NPS Fees (right) 1994 – 2006
Source: See Appendix Attached

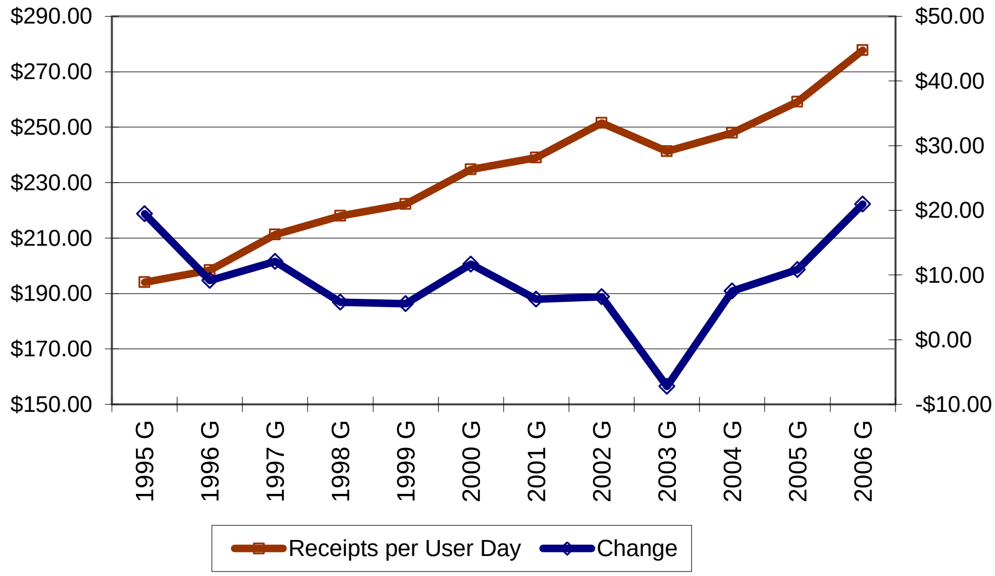

Figure 5: Receipts/User Day (left) and Annual $ Change (right) 1995 – 2006
Source: See Appendix Attached

While the Park Service does fix maximum prices for these river trips, we can look at the change in gross revenues over this time period to see that there is some variability in pricing that certainly reflects market conditions. Average revenue per user day rose from about $195 in 1995 to $280 in 2006, as shown in Figure 5 (left axis). The average annual dollar change in revenue is shown on the right axis of this figure. These changes were highest at the beginning and end of the period, while it was negative in 2003. That decline is likely to be a lagged response to the recession in 2001-2002. With many of these river trips booked a year, or more, in advance, and requiring significant deposits, even if there was discounting in 2002, it was not enough to depress a rise in these average revenue figures in that year.

The average revenue per user day is further broken down by the modal choices offered by the sixteen concessionaires. Figure 6 shows these results. Both the non-motorized and mixed-use firms have comparable earnings, and growth in earnings, from 1994 to 2006. Except for 1994, the firms offering only non-motorized river trips have slightly higher revenues per user day, which may indicate that the cost of serving these passengers is higher than for motorized river travel.

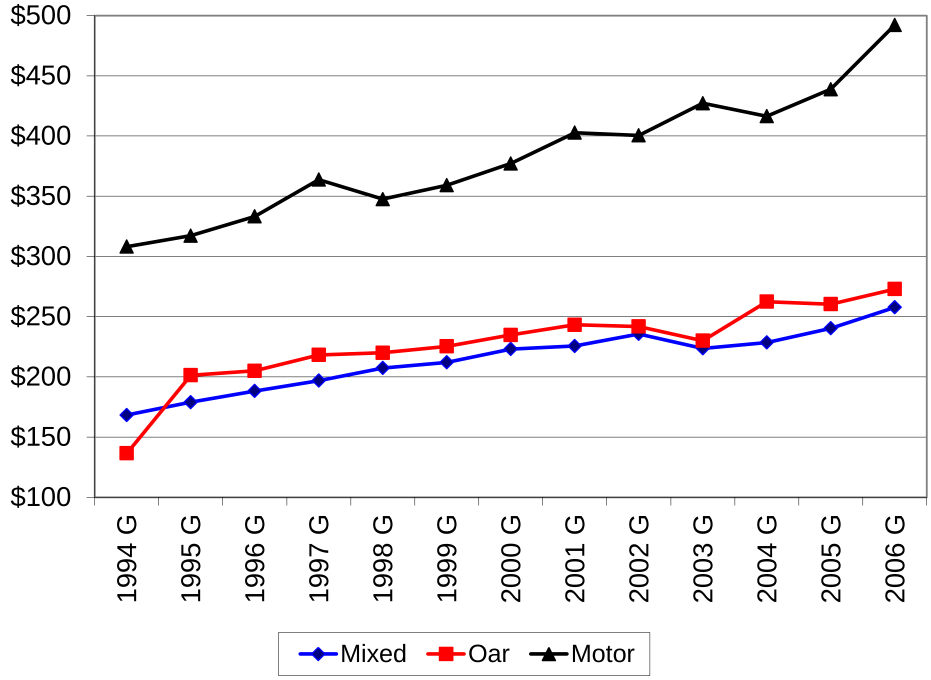

Figure 6: Gross Revenues per User Day, by Type 1994 – 2006
Source: See Appendix Attached

The single firm that offers only motorized travel - Western River Expeditions – has earnings about double these other firms on a per user day basis. This arises due to the fact that while all trips must start at Lees Ferry, there is some discretion about where these trips end. Western River Expeditions pulls people off the river a few days short of Lake Mead and then fills the rafts with new customers for the remaining user days available to them.

The data also includes observations of the fees paid to the NPS by these commercial firms. While the total fees collected closely track gross revenues, as shown in Figure 4, the variation across firms is not inconsequential, ranging from a low of 4.2% to a high of 10.5%, as shown in Table 2.

Table 2: Commercial Fees Paid to the NPS - 2006

Company	User Days	2006 Fees
Arizona River Runners	11099	10.5%
Grand Canyon Expeditions	13967	10.1%
Western River Expeditions	14001	9.4%
Arizona Raft Adventures	10368	9.3%
OARS	7355	9.2%
Wilderness River Adventures	9546	8.6%
Hatch River Expeditions	11027	8.1%
Diamond River Adventures	7203	7.6%
Canyoneers	4403	6.6%
Outdoors Unlimited	4821	6.5%
Tour West	4823	6.3%
Grand Canyon Discovery	3323	5.2%
Colorado River and Trails	2848	5.1%
Canyon Explorations	4063	5.0%
Moki Mac River Expeditions	3693	5.0%
Canyon Expeditions	2960	4.2%

Source: See Appendix Attached

As a final point of comparison, we can look at the gross revenues earned per user day for each firm and compare that to the amount implied by their current listing of prices for the 2009 season. There are two omissions here – OARS and Grand Canyon Discovery. The former had no posted prices on their web site, while the web site for the latter is the same as Arizona Raft Adventures. The prices were recorded for eight day motorized trips, when available. Seven day motorized trip prices were used for Canyoneers, Hatch, Tour West, and Western River Expeditions. Thirteen day oar trips were priced for Canyon Expeditions, Canyon Explorations, and Outdoors Unlimited, none of whom offer motorized trips. The comparison between the price per user day (2009) and gross revenue per user day (2006) are shown in Figure 7.

The results are reasonably close, but not all show higher prices per person. The outlier of Western River Expeditions is reduced a bit when we look at prices, although the per person, per day figure is still higher for this firm than for any of the other fifteen commercial concessionaires.

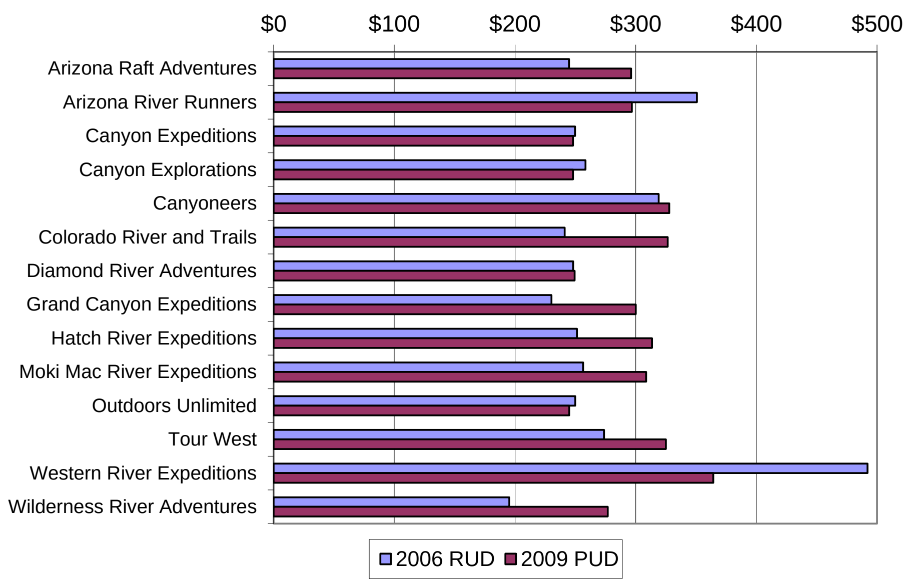

Figure 7: 2006 Revenue per User Day and 2009 Price per User Day
Source: See Appendix Attached

PART III. ANALYSIS AND RESULTS

A. Overview

The data set gives us some insight into the revenue side of commercial river running operations. Cost data, however, is unavailable. The components are readily identifiable – labor, fuel, food, depreciation, overhead, maintenance, fees, and taxes. The difference between revenues and costs is, of course, the profit earned by the owners of the firm. This is the value, at a minimum, that owners would demand in return for giving up their interests in this business. They may place additional value on the business, especially if they are active participants. For example, they may get a great deal of non-monetary benefit from the mere ownership of such a service. If this is the case, to sway them to give up the business may require more than a simple dollar-for-dollar compensation of lost profit.

To assess the value of the owner's profit, one must calculate the discounted present value of this income stream, which is received yearly. If an owner makes $250,000 this year, it is worth exactly that, in present value terms. But, if an owner is expected to make $250,000 five years from now, it is worth considerably less than that amount today. The present value would depend on the rate of discount. Although that is different for everyone, we can use typical market rates of interest to account for this discount. For example, at a market rate of 5% return on some safe investment, averaged out over five years, the future amount of $250,000 is worth about $196,000 today. That is, the receipt of $196,000 today, invested at a 5% annual return, will yield $250,000 in five years.

So, to discern the amount of money it would take to get an owner to drop out of business, we would have to identify the annual profit stream, some discount rate of interest and some lifetime for this income stream. Since we do not have access to this information, we can look at a range of likely values for these parameters and show a resulting range of outcomes.

It is more complicated to determine how much money it would take to get an owner to switch from non-motorized trips to motorized ones. One would presume that the answer is less than it would take to get an owner to drop out of business. It is not clear that all owners could sell out their allotment of user days if they only offered non-motorized, and longer, trips. They may have to lower their prices, spreading the negative effects to the portion of their business that is already geared towards the non-motorized options. And, where this negative impact on prices affects the whole market, firms that didn't offer motorized trips may be induced to start doing so, confounding any intent to reduce motorized use of the river.

B. Buying Owners Out of Business

We have seen that the average gross revenue per user day, in 2006, was about $280. We do know that the NPS fee is about 8.5%, so we can derive a "net" revenue here of approximately $256. What share of this is likely to be the owner's profit? We will consider three outcomes – a low, medium, and high estimate of this profit – of $25, $75, and $125. These would represent profit of about 10%, 30%, and 50% of the net revenue.[6] If the average motorized raft consists of sixteen passengers, and if they spend an average of seven days per trip, this would mean that each raft would represent 112 user days. That represents $2,800, $8,400, and $14,000 of profit for our low, medium, and high outcomes (per boat, per trip).

To look at a range of possible outcomes, we will need to consider various discount rates and time periods. For the former, we can look at 2%, 5%, and 8% as a useful range of rates. With the data set provided, the growth rate in gross revenues, per user day, averaged around 5% over the years of 1994 to 2006. For time frames we will consider ten years, twenty years, and fifty years. The results are shown in Tables 3-5.

Table 3: Low Profit Scenario

years\rate	2%	5%	8%
10	$25,151	$21,621	$18,788
20	$45,784	$34,894	$27,491
50	$87,986	$51,117	$34,254

Table 4: Medium Profit Scenario

years\rate	2%	5%	8%
10	$75,454	$64,863	$56,365
20	$137,352	$104,683	$82,472
50	$263,958	$153,350	$102,761

Table 5: High Profit Scenario

years\rate	2%	5%	8%
10	$125,756	$108,104	$93,941
20	$228,920	$174,471	$137,454
50	$439,930	$255,583	$171,269

To buy a reduction of one motorized raft from the Colorado River from one seven day trip, would cost between almost $19,000, if the owner has a short time horizon and a high discount rate, to almost $440,000, if the owner has a long time horizon and a low discount rate. For the medium profit scenario, at a 5% discount rate, and with a twenty year time horizon, the cost would be about $105,000.

[6] Net of NPS franchise fees only; not net of taxes and interest.

With a current allotment of approximately 72,690 user days for motorized rafts, this averages out to about 650 motorized rafts traveling down the river per year, at the average trip length of seven days[7]. To voluntarily buy all of them off the river would likely cost at least $12 million, and may cost well over $280 million. For the medium profit scenario, at a 5% discount rate, and with a twenty year time horizon, the cost would be about $68 million.

C. Paying Owners to Switch

As noted earlier, it is much more problematic to estimate the adverse income effects from switching away from motorized and to non-motorized rafts. And, some uncertainty extends to non-participants insofar as they may be able to adjust their modes of travel that offset the effects of one firm switching. Still, if we assume the typical motorized raft takes up 112 user days, we can construct a series of outcomes that reflect the low end of the profit situation presented in the previous section. If the owners could switch without impacting their profit, it would seem that they would have done so, just to earn some goodwill. So, we can presume that it will take some positive payment to compensate them for lost profit if such a switch is made. Where we used $25, $75, and $125 as the profit per user day earlier, for this switching outcome, we will presume that profit will fall by $10, $30, or $50 per user day as our low, medium, and high scenarios. Using the same discount rates and time horizons, the results are shown in Tables 6-8.

Table 6: Low Profit Scenario

years\rate	2%	5%	8%
10	$20,121	$17,297	$15,031
20	$36,627	$27,915	$21,993
50	$70,389	$40,893	$27,403

Table 7: Medium Profit Scenario

years\rate	2%	5%	8%
10	$40,242	$34,593	$30,061
20	$73,254	$55,831	$43,985
50	$140,778	$81,787	$54,806

Table 8: High Profit Scenario

years\rate	2%	5%	8%
10	$60,363	$51,890	$45,092
20	$109,882	$83,746	$65,978
50	$211,167	$122,680	$82,209

To entice the transition from one motorized raft on the Colorado River for a seven day trip to a non-motorized raft, for the same amount of user days, would cost between $15,000, if the owner has a short time horizon and a high discount rate, to $210,000, if the owner has a long time horizon and a low discount rate. For the medium profit scenario, at 5% discount rate, and with a twenty year time horizon, the cost would be about $56,000.

As noted above, there is a current allotment of approximately 72,690 user days for motorized rafts, which would account for about 650 motorized raft trips per year, at the average trip length of seven days. To persuade all of them to switch to non-motorized rafts would likely cost about $9.8 million, and may cost over $137 million. For the medium profit scenario, at 5% discount rate, and with a twenty year time horizon, the cost would be about $36 million.

CONCLUSION

Contentious issues raised in the debate over the allocation of Grand Canyon river use has been between those that oppose, and those that support, motorized river travel. Those opposing motorized travel have become more vocal in their desire for nonmotorized only trips. In addition, some would prefer to ban all river travel.

[7] The NPS Record of Decision on the Colorado River Management Plan EIS (2006) allows for 429 motorized launches per year. This would imply that a launch may consist of more than one motorized raft.

This paper explored varying economic scenarios for effectively enticing rafting companies to either switch from motorized to nonmotorized rafting or for buying out rafting companies completely.

These scenarios considered economic factors exclusively. This leaves room for other areas of exploration. These include consumer preferences, environmental impact, strategic objectives for National Park usage, etc. All of these are areas for future research.

DISCUSSION QUESTIONS

1. Discuss the nonbusiness noneconomic differences in motorized and nonmotorized river trips.
2. Discuss the business or economic differences in motorized and nonmotorized river trips.
3. Can a case be made for motorized vs. nonmotorized river trips? If so, provide rational for that position. Be sure to include the following viewpoints:
    a. Clients
    b. Business Owners
    c. National Park users
    d. Non business stakeholders (for example environmentalists)

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REFERENCES

1. Cleveland.com. (2013, March 9). *Grand Canyon rafting down the Colorado River: How to get there*. Retrieved from http://blog.cleveland.com/pdextra/2013/03/grand_Available at http://www.nps.gov/foia.htm
2. Grand Canyon National Park News Release. (2007, February 9). *16 companies selected for award of concession contracts for river running at Grand Canyon National Park*. Retrieved from http://www.nps.gov/grca/parknews/upload/2.9.07%2016%20Companies%20selected%20for%20award%20of%20river%20contracts.pdf
3. Grand Canyon River Outfitters Association. (2007, April 1 through October 31). Commercial Recreational Use – Annual Summary.
4. Grand Canyon River Outfitters Association website. (2007). Available at http://gcroa.org/
5. NPS Record of Decision – Colorado River Management Plan Environmental Impact Statement, U.S. Department of the Interior, National Park Service. (2006, February 17). Available at http://www.nps.gov/archive/grca/crmp/documents/FinalROD.pdf

APPENDIX – ORIGINAL DATA SET

(Source: Freedom of Information Act from the National Park Service)

Commercial Concessions - Gross Receipts 1994 - 2006

Key:						Gross Receipts								
Company	**User Days**	**1994 G**	**1995 G**	**1996 G**	**1997 G**	**1998 G**	**1999 G**	**2000 G**	**2001 G**	**2002 G**	**2003 G**	**2004 G**	**2005 G**	**2006 G**
ALS	9546	$1,654,225	$1,695,780	$1,874,637	$1,959,738	$2,018,492	$2,037,836	$2,299,613	$2,301,419	$2,132,894	$1,694,502	$1,472,403	$1,700,717	$1,864,066
ARA	10,368	$1,728,515	$1,682,137	$1,825,436	$1,781,506	$1,966,280	$1,965,587	$2,097,325	$2,142,779	$2,253,254	$2,205,698	$2,285,031	$2,376,909	$2,538,906
ARR	11,099	$2,194,779	$2,275,309	$2,814,583	$2,959,349	$3,108,141	$3,123,212	$3,242,798	$3,206,835	$3,266,688	$3,375,599	$3,511,032	$3,770,815	$3,892,324
C	4403	$965,599	$1,103,007	$1,039,037	$1,104,155	$1,132,992	$1,155,589	$1,164,447	$1,246,089	$1,276,199	$1,325,443	$1,299,753	$1,376,267	$1,404,997
CE	4063	$658,590	$703,167	$711,708	$782,279	$739,052	$784,005	$777,716	$888,574	$723,556	$721,749	$951,054	$987,515	$1,050,136
CRT	2848	$493,306	$513,795	$459,135	$537,879	$572,734	$572,833	$602,765	$604,276	$914,188	$897,347	$602,605	$661,931	$686,667
DRA	7203	$981,962	$1,063,656	$1,168,119	$1,250,049	$1,503,630	$1,457,606	$1,591,688	$1,694,980	$1,612,824	$1,730,040	$1,763,275	$1,725,467	$1,787,996
Ex-CE	2960	$574,948	$621,692	$639,219	$624,986	$591,980	$568,757	$650,855	$634,846	$678,674	$652,163	$679,071	$688,809	$739,517
GCD												$775,929	$759,287	$781,365
GCE	13,967	$2,424,860	$2,526,385	$2,489,720	$2,584,153	$2,611,684	$2,784,408	$2,801,731	$2,923,130	$3,026,879	$2,465,952	$2,951,647	$2,930,526	$3,215,463
HRE	11,027	$1,406,145	$1,774,344	$1,820,915	$1,851,656	$1,835,770	$1,997,684	$2,033,111	$2,073,648	$2,139,260	$2,348,870	$2,362,706	$2,508,834	$2,770,691
HDA	3323	$488,160	$492,714	$492,714	$542,378	$640,096	$647,773	$773,692	$670,421	$841,074	$528,857			
MMRE	3693	$544,681	$646,387	$644,303	$693,170	$679,528	$725,619	$825,573	$773,782	$850,661	$873,883	$787,834	$940,157	$947,346
OARS	7355	$889,048	$1,520,887	$1,619,189	$1,681,078	$1,759,574	$1,815,033	$1,918,125	$1,859,688	$1,999,942	$1,849,815	$2,172,749	$2,159,320	$2,245,125
OU	4821	$498,320	$1,019,940	$965,965	$1,101,098	$1,133,203	$1,157,397	$1,161,626	$1,285,967	$1,240,697	$1,192,330	$1,235,993	$1,163,753	$1,204,810
TW	4823	$967,804	$950,642	$860,010	$938,007	$994,501	$977,137	$926,586	$928,156	$1,074,928	$962,380	$989,971	$1,028,847	$1,320,766
WRE	14,001	$4,313,518	$4,441,224	$4,665,580	$5,093,133	$4,866,663	$5,027,847	$5,280,530	$5,638,212	$5,606,724	$5,981,263	$5,830,769	$6,143,830	$6,891,032
TOTALS	**115,500**	**$20,784,460**	**$23,031,066**	**$24,090,270**	**$25,484,614**	**$26,154,320**	**$26,798,323**	**$28,148,181**	**$28,872,802**	**$29,638,442**	**$28,805,891**	**$29,671,822**	**$30,922,984**	**$33,341,207**

Commercial Concessions - Franchise Fees and Colorado River Fund Fees 1994 - 2006

Key: **F= Franchise Fees**

Company	**1994 F**	**1995 F**	**1996 F**	**1997 F**	**1998 F**	**1999 F**	**2000 F**	**2001 F**	**2002 F**	**2003 F**	**2004 F**	**2005 F**	**2006 F**
ALS	$81,619	$81,619	$77,738	$93,928	$96,415	$99,691	$118,791	$107,665	$188,015	$97,563	$113,749	$141,261	$160,475
ARA	$47,868	$49,058	$94,773	$90,772	$105,136	$104,672	$113,048	$192,760	$205,567	$200,362	$208,534	$218,416	$236,128
ARR	$131,687	$136,519	$175,167	$186,748	$198,651	$199,587	$209,424	$324,820	$332,003	$345,072	$361,324	$392,498	$407,079
C	$52,685	$60,509	$27,840	$31,724	$33,259	$34,260	$35,519	$76,465	$80,137	$84,618	$81,211	$88,939	$92,116
CE	$12,892	$14,174	$11,065	$15,031	$12,667	$14,415	$14,237	$46,171	$34,457	$34,636	$47,444	$47,935	$52,385
CRT	$26,275	$27,327	$4,591	$5,379	$5,727	$8,644	$10,138	$28,342	$44,357	$41,687	$28,208	$32,954	$34,933
DRA	$53,026	$57,437	$37,750	$44,354	$57,431	$56,891	$70,534	$131,088	$104,508	$103,372	$113,717	$124,640	$135,453
Ex-CE	$7,857	$8,286	$4,039	$4,039	$9,011	$6,181	$10,305	$27,346	$34,294	$32,173	$32,126	$34,614	$31,188
GCD											$40,775	$39,114	$40,944
GCE	$141,193	$147,470	$149,178	$156,724	$158,935	$172,753	$174,139	$290,776	$303,225	$235,914	$294,198	$291,663	$325,589
HRE	$71,304	$109,110	$76,974	$79,775	$76,552	$91,625	$88,225	$150,351	$157,238	$183,690	$184,175	$195,542	$224,111
HDA	$20,414	$21,258	$4,928	$7,119	$8,281	$7,036	$13,455	$26,902	$38,764	$18,007			
MMRE	$16,180	$19,921	$8,182	$9,964	$9,997	$11,322	$15,459	$33,258	$39,992	$41,445	$35,087	$45,957	$46,930
OARS	$19,177	$32,037	$75,450	$81,571	$86,542	$92,856	$99,959	$156,134	$167,584	$156,573	$196,008	$192,425	$207,528
OU	$10,283	$21,055	$28,105	$32,052	$36,817	$38,167	$46,962	$87,674	$82,380	$76,757	$81,406	$72,208	$78,230
TW	$42,815	$41,148	$12,539	$44,782	$23,725	$50,350	$23,711	$50,929	$57,584	$56,990	$59,198	$63,462	$83,382
WRE	$206,059	$211,997	$287,783	$286,569	$301,871	$316,426	$337,306	$565,884	$556,885	$591,659	$573,493	$609,734	$649,091
TOTALS	**$941,334**	**$1,038,925**	**$1,076,102**	**$1,170,531**	**$1,221,017**	**$1,304,876**	**$1,381,212**	**$2,296,565**	**$2,426,990**	**$2,300,518**	**$2,450,653**	**$2,591,362**	**$2,805,562**

Key:					**C= Colorarado River Fund**					
Company	**1994 C**	**1995 C**	**1996 C**	**1997 C**	**1998 C**	**1999 C**	**2000 C**	**2001 C**	**2002 C**	**2003 C**
ALS			$53,343	$61,964	$63,207	$64,846	$74,395	$68,833	$2,616	
ARA			$62,387	$60,386	$67,568	$67,366	$71,524			
ARR			$102,583	$108,374	$114,326	$11,928	$119,712			
C			$28,704	$30,862	$31,630	$32,130	$32,759			
CE			$21,745	$24,521	$22,867	$24,090	$23,966			
CRT			$13,774	$16,136	$17,182	$17,186	$18,083			
DRA			$33,875	$37,177	$43,716	$43,446	$50,267			
Ex-CE			$12,118	$12,166	$17,407	$15,709	$18,183			
GCD										
GCE			$89,589	$93,362	$94,487	$101,376	$102,069			
HRE			$53,487	$54,888	$53,276	$60,813	$59,113			
HDA			$14,784	$16,371	$16,968	$16,221	$20,073			
MMRE			$16,909	$17,979	$17,998	$18,793	$21,276			
OARS			$52,725	$55,785	$58,136	$61,428	$65,170			
OU			$28,863	$31,026	$33,408	$34,083	$38,481			
TW			$19,523	$24,293	$26,235	$26,381	$26,227			
WRE			$160,034	$158,285	$165,935	$173,213	$183,653			
TOTALS	**$0**	**$0**	**$764,443**	**$803,575**	**$844,346**	**$769,009**	**$924,951**	**$68,833**	**$2,616**	**$0**

Concessionaires and Key Codes:

Company	Key	Notes:
Aramark Leisure Services	ALS	aka Wilderness River Adventures
Arizona Raft Adventures	ARA	
Arizona River Runners	ARR	
Canyoneers	C	
Canyon Explorations	CE	
Colorado River and Trails	CRT	
Diamond River Adventures	DRA	
Expeditions (Canyon Expeditions)	Ex-CE	
Grand Canyon Discovery	GCD	Assumed user day allotment from HDA in 2004
Grand Canyon Expeditions	GCE	
Hatch River Exeditions	HRE	
High Desert Adventures	HDA	User day allotment transferred to Grand Canyon Discovery in 2004.
Moki Mac River Expeditions	MMRE	
OARS (Includes GC Dories)	OARS	
Outdoors Unlimited	OU	
Tour West	TW	
Western River Exeditions	WRE	

NOTES