Apache Junction: Situational Analyses and Review of Current and Potential Municipal Revenue Streams Through a Comparison of Two Peer Towns: Town of Queen Creek and Oro Valley

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Abstract

This research represents two case studies to address the specific interests of Apache Junction city officials to explore potential ways to increase municipal revenue streams. City officials also requested a situational analysis be completed to clarify several factors thought to be affecting their financial position. Officials facilitated access to two peer cities in Arizona, Queen Creek and Oro Valley, to conduct in-person interviews with city managers. The goal of these interviews was to gain greater insight into the revenue streams these cities are using to generate revenues for their municipal funds. A comparison of the peer cities municipal revenue streams with those of Apache Junction was completed based information gathered from the structured interviews and review of publicly available financial documents. The situational analysis flows from specific concerns expressed by Apache Junction officials in several areas perceived as having a current negative impact on municipal revenue, as well as potential future threats.

Keywords: *municipal revenue sources, "Amazon effect", increasing revenue streams, municipal revenue threats, situational analysis*

Introduction/Background to Subject Matter of Proposal

The city of Apache Junction is located approximately 40 miles east of Phoenix, Arizona. With a long tradition of tourism due to its natural beauty and location near the Superstition Mountains, Apache Junction has historically relied on individuals from other states residing in the city during the winter season to maintain municipal tax revenues. Incorporated on November 24, 1978, before the recession of 2007, the City of Apache Junction was close to reaching their maximum build-out, thereby limiting growth and development (Meinerts,2017. xii). The city reported a $1,538,869 decline in municipal revenues between FY 2016 and FY2017 (Meinerts, 2017).

The city has a history of taking a conservative approach to managing their budget, resulting in a low level of bonded debt, traditionally utilizing a pay-as-you go approach to funding capital projects (Meinerts, 2017). While this has resulted in economic resiliency for the city, as seen by their ability to effectively adapt to the 2007 economic recession, they currently face challenges with maintaining adequate levels and diversity in their general fund levels, noting a heavy reliance on the local Walmart for existing sales tax revenues. There are also concerns with future scenarios that could further erode the city's share of state revenue.

As part of a situational analysis, Apache Junction officials have requested that the following be addressed in this project: a review of peer Arizona city responses to Public Safety Retirement System funding challenges (2% of AJ sales taxes currently going to fund this); threats from retail consolidation and growing online retail market (the 'Amazon effect'); and concerns surrounding the looming possibility that the adjacent community of San Tan Valley may succeed in becoming incorporated, resulting in the city facing a reduction in the amount of their state shared revenue by approximately $1,000,000. Apache Junction does not levy property taxes due to the expressed

unwillingness of residents to support the tax. Therefore, city officials expressed a desire not to have this factor included in the analysis and case study research.

In addition to a situational analysis, officials have requested an exploration of alternative ways to increase municipal revenue be completed to address the issues through two case studies that involve analyzing what revenue streams their peer cities are utilizing, thus allowing for a comparison. These case studies were conducted through structured interviews with the city managers of two peer cities, Queen Creek and Oro Valley, by reviewing their revenue streams to complete a comparison. The following research questions served as a guide for discussions with peer town officials for this project: 1. Where can I get the latest description of fees collected by your city? 2. What primary mechanisms does your city currently utilize to raise revenue for your municipal fund (e.g. primary/secondary property taxes, cooperative efforts, intergovernmental agreements)? 3. What do you see as the biggest threats to your municipal revenue streams? PSRPS funding? What strategies are you currently exploring to deal with any of these threats? 4. What opportunities and barriers do you currently feel exist for your city? What action has been taken to move these forward/ address these? Have they been effective? 5. Has your city taken any innovative approaches, either in the past or presently, to increasing your general revenue streams? 6. What are your views on the threat of incorporation of adjacent cities? Has your city experienced this? If so, what financial impact was there in your city? 7. What information, if any, do you feel would be beneficial to share with the City Officials of Apache Junction? What do you feel they could learn from your cities experiences regarding efforts to increase general revenue streams?

It should be noted that one purpose of case studies, which are often limited in scope, can be to enable decisionmakers within the public service sector to better understand and explore the

systems within which decisions are made (Eller, Gerber, Robinson, 2013). Towards this end, this comparative research of peer towns has been conducted. The literature review focuses on the following factors: the 'Amazon effect', the impact of state tax structures on local communities, the status and impact of incorporation by adjacent communities, and the funding of Public Service Retirement Pension Programs

Literature Review

The Amazon Effect

The City of Apache Junction is not alone in their felt need to increase municipal revenue sources due to a loss of retail sales tax revenue (Meis, 2017). Known as the 'amazon effect,' state and local governments nationwide are facing growing fiscal challenges due to the growth of e-commerce. By reviewing the impact of this phenomena, state and local governments can gain a deeper understanding of the breadth and scope of its impact on their future economic resiliency.

Figure 1 shows that according to a report by the U.S. Census Bureau/U.S. Department of Commerce report dated February 18, 2018, e-commerce sales for 2017 were estimated at $453.5 billion, an increase of 16.0 percent (±1.2%) from 2016, and accounted for 8.9 percent of total sales.

Estimated Quarterly U.S. Retail E-commerce Sales as a Percent of Total Quarterly Retail Sales:
1st Quarter 2008 – 4th Quarter 2017

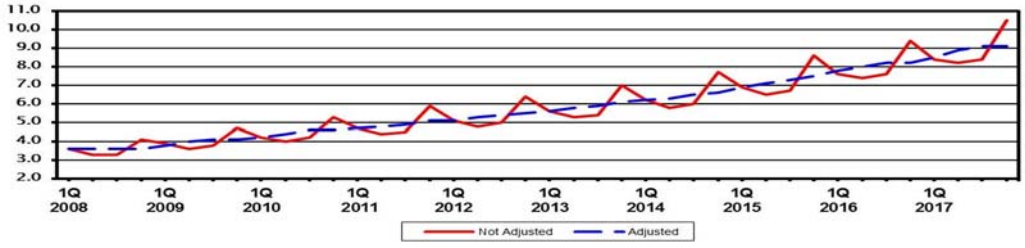


Figure 1 (Source: *U.S. Commerce Department (2018). Quarterly retail e-commerce sales -4th quarter 2017. Retrieved from https://www.census.gov/retail/mrts/www/data/pdf/ec_current.pdf)*

Hartung (2017), asserts that the effect of Amazon on brick-and-mortar retail can be clearly observed by the list of store closings and bankruptcies that occur every year. City officials in Columbia, Missouri took notice of the existing loophole in sales taxes on purchases made online and are speaking out in support of recent federal legislative actions to address the problem (Anderson, 2016). Although Amazon does not have a physical presence in Columbia, it is estimated that the state has "…lost more than $67 million in taxes to Amazon in 2014 of which $60 million of that was from sales tax, and $7 million was property tax loss due to the reduction in demand for retail space caused by the shift to online sales" (Anderson, 2016).

With the share of retail sales increasing quarterly, this loss to cities across the United States can be expected to grow. The need to address this problem at the federal versus the state level has occurred due to the inability of states to develop effective collection mechanisms due to the complexity and scope of the problem (Ter-Minassian, 2017). In an article entitled, "Promoting responsible and sustainable fiscal decentralization, author Teresa Ter-Minassian (2017) states, "…typically tax bases (goods and factors of production) are more mobile within the national territory than across the national border. This increases the scope for tax evasion, and for tax competition among subnational jurisdictions…ultimately undermining sub-national governments' ability to finance the delivery of key public goods and services for which they are responsible" (p. 446).

The Marketplace Fairness Act was introduced by U.S. Senators Mike Enzi, R-Wyo., Dick Durbin, D-Ill., Lamar Alexander, R-Tenn., and Heidi Heitkamp, D-N. D, on April 27, 2017 ("Bi-partisan group", 2017). This act seeks to address the reality that states are not able to collect taxes from purchases made online from remote businesses who do not have a physical presence in a state. This loophole results in a price disadvantage between out-of-state retailers and local

brick-and-mortar businesses, ultimately resulting in an erosion of state and local sales tax revenue. The Marketplace Fairness Act would give states the right to collect state sales taxes on purchases that are sold in their states. It should be noted that similar legislation failed to be enacted in 2013 and 2015 (Sales Tax Institute, 2017). The House of Representatives has also introduced legislation to address this issue.

Also on April 27, 2017, the House of Representatives, led by Reps. Kristi Noem (R-SD) and John Conyers, Jr. (D-MI) reintroduced H.R. 2193, the "Remote Transactions Parity Act". Like the Senate Marketplace Fairness Act, this Act seeks to close the sales tax loophole to put online business and local businesses on a level playing field ("Bipartisan Coalition', 2017). A bi-partisan coalition issued a report stating that "Taxes on remote sales are due and payable – but the current environment both encourages tax evasion and undercuts the budgets of cities, counties, and states" ("Bipartisan Coalition", 2017).

The Impact of State Tax Structure on Local Communities

Local communities increasingly rely on state shared revenues to maintain municipal revenues. The general fund for the Arizona State Government largely depends on sales and income taxes, which historically have been shown to fluctuate significantly with the economic cycle. According to a report by the Urban Institute, when unexpected fluctuations in state revenue occur it often leads to a discontinuity in public services and contributes to fiscal instability at the local level. This report goes on to state, "The increasing volatility of state tax revenues has made it difficult for states to accurately forecast revenues, contributing to deficit shocks and their resultant midyear spending cuts and tax increases" (Randall & Rubin, 2017, p. 9). Added to this existing volatility was the decision made by the Arizona legislature in the late 1990's, to reduce

tax rates, and add tax credits and tax exemptions, resulting in an approximately 30% reduction in revenue flowing to municipal funds (“Financing Arizona’s Future”, n.d.). The primary rationale provided for these tax law changes has been that tax reductions would boost economic growth. This is a common conservative viewpoint of taxation; lower taxes result in increased economic growth and is often cited as ‘trickle-down’ economics. However, according to the Tax Policy Center (2015), “Major recent studies reach almost every conceivable finding: tax cuts raise, reduce, do not affect, or have no clear effect on growth” (1st paragraph).

An additional concept when considering the effects of taxation is that of equity. Horizontal equity is an economic theory that states that individuals with similar income and assets should pay the same amount in taxes and should apply to individuals considered equal regardless of the tax system in place. Where horizontal equity is observed, taxes are considered progressive. Figure 2 shows that according to research conducted by the Institute on Taxation and Economic Policy (ITEP), Arizona ranks 8th in the nation in the level of having the most regressive state and local tax systems (2015). Characteristically, these states rely very heavily on regressive sales and excise taxes. ITEP states that while the national average is that 34% of tax revenue comes from these two categories, these states derive approximately half, if not more, of their tax revenue from regressive sales and excise taxes roughly half to two-thirds of their tax revenue from these taxes (ITEP, 2015). This report goes on to state that both morally and practically, “Unfair tax systems not only exacerbate widening income inequality in the short term, but they also will leave states struggling to raise enough revenue to meet their basic needs in the long term” (ITEP,

ITEP's Terrible 10 Most Regressive State & Local Tax Systems

Taxes as shares of income by income for non-elderly residents

Rank	State	Taxes as a % of Income on			Ratio of	
		Poorest 20%	Middle 60%	Top 1%	Poor to Top 1%	Middle to Top 1%
1	Washington	16.8%	10.1%	2.4%	686%	412%
2	Florida	12.9%	8.3%	1.9%	666%	429%
3	Texas	12.5%	8.8%	2.9%	435%	307%
4	South Dakota	11.3%	7.9%	1.8%	616%	431%
5	Illinois	13.2%	10.9%	4.6%	289%	238%
6	Pennsylvania	12.0%	10.1%	4.2%	286%	241%
7	Tennessee	10.9%	8.4%	3.0%	365%	280%
8	Arizona	12.5%	9.5%	4.6%	272%	207%
9	Kansas	11.1%	9.2%	3.6%	310%	258%
10	Indiana	12.0%	10.6%	5.2%	231%	204%

Note: States are ranked by the ITEP Tax Inequality Index. The ten states in the table are those whose tax systems most increase income inequality after taxes compared to before taxes. See page 134 for a full description of the Index. Total taxes as a share of income are post-federal offset.

Figure 2. ***(*Source*: Institute on Taxation Education and Policy (ITEP), 2015. Retrieved from https://itep.org/whopays/)***

Municipal Incorporation Threat

With revenues being threatened by numerous scenarios, understanding the risk of the incorporation of adjacent communities is vital to local communities to effectively plan for the future. Because Apache Junction officials have brought their concern over the possibility of the incorporation of San Tan Valley, a review of where this threat currently stands is reviewed.

The laws governing incorporation in Arizona are found in A.R.S. §9-101. A law passed by the Arizona legislature making it easier for towns to incorporate takes effect on August 9, 2018. Residents of San Tan Valley, a community adjacent to Apache Junction, are expected to vote on incorporation as early as November 2018, depending on the success of a resident petition campaign (Khairalla, 2017). A key driver for incorporation is that it would allow San Tan Valley residents to claim a share of State tax revenues. However, this necessarily results in a reduction

of shared states revenues for other communities, including Apache Junction, that could be as large as $1,000,000.

The adjacent cities of Queen Creek, Florence, and Apache Junction, have expressed concern over the boundaries of the proposed incorporation of San Tan Valley. Queen Creek has taken steps to reduce the incentive to incorporate through annexation of critical revenue generators (e.g. Banner Ironwood Medical Center) (Khairalla, 2017). In addition, there is internal disagreement amongst San Tan Valley residents as exemplified by two PAC's within San Tan Valley on opposing sides of the issue (Kincaid, 2018). This ongoing competition makes the outcome of San Tan Valley's attempts to incorporate unclear. However, taking steps to prepare for a success appears to be prudent for Apache Junction.

Funding for State Pensions (SRT's)

According to the Brookings Institution, the recent major tax reform passed in the United States will have a negative impact on the ability of state and local government in funding SRT's, stating, due to the restrictions placed on federal deductions for state and local taxes (SALT) (Pozen, 2018). Figure 3 shows that while the impact from this change will impact states with higher taxes more than those with lower taxes, such as Arizona, according to the Tax Policy Center, 1 in 5 Arizonians will be impacted (Tax Policy Center, 2018). The Brookings report goes on to predict that due to SALT reductions, it is likely that states may be forced to take up reforming state benefit plans because of the large unfunded liabilities. It further suggests that voters will most likely oppose tax increases or service cuts to address this liability, ultimately resulting in pressure on elected officials to seek ways to renegotiate plans (Pozen, 2018). This is already occurring in the State of Kentucky.

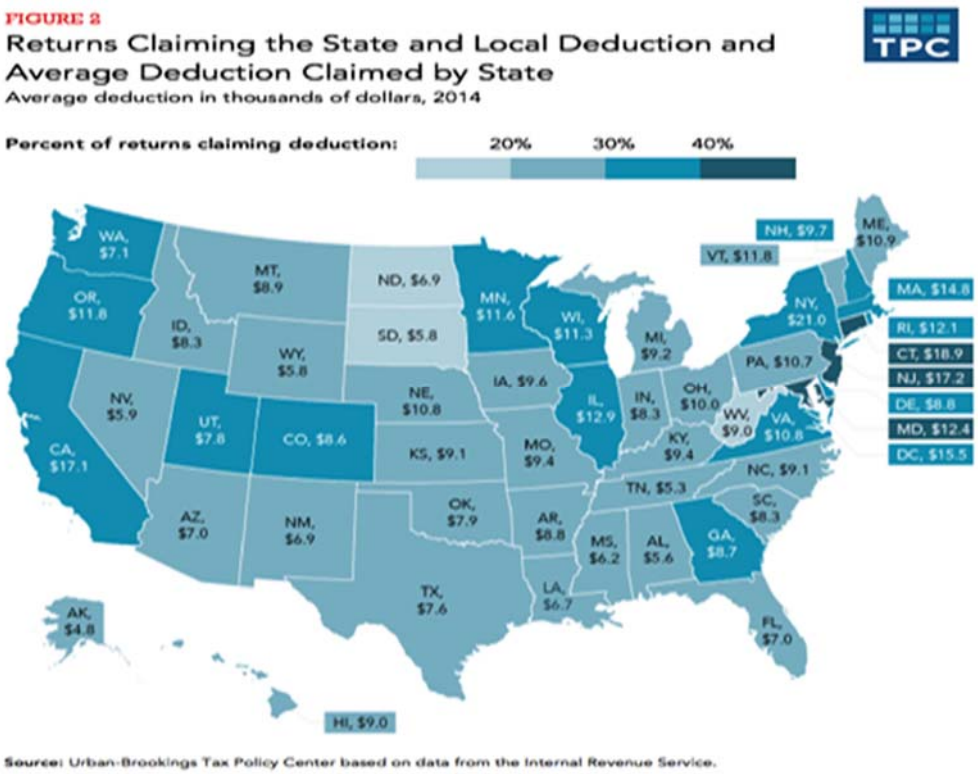


Figure 3. (Source: *Tax Policy Center. Retrieved from http://www.taxpolicyce*nter.org/briefing-*book/how-does-deduction-state-and-local-taxes-work***

On February 21, 2018, the Courier Journal newspaper in Frankfurt, Kentucky described Senate Bill 1 as being a, "…a revised pension reform bill will save taxpayers about $4.8 billion over the next 30 years and put Kentucky on course to resolving its massive pension crisis" (Lofthus, 2018). There has been major pushback from those who would be affected (e.g. teacher unions, and public employees) (Lofthus, 2018). This attempt at pension reform may be instructional for local and state governments facing a similar challenge to follow.

Methodology

This research project relied on conducting two case studies through structured qualitative interviews with the officials from the Town of Queen Creek, AZ and the Town of Oro Valley, AZ. These case studies were used as comparisons to the existing fees being collected in Apache

Junction to identify outliers that the peer cities are collecting. In addition, areas of interest specifically addressed by Apache Junctions were explored (e.g. mechanisms for funding of PSRPS's). The first stage of data collection involved accessing public financial documents for the towns and the City of Apache Junction. Sources of revenue streams were analyzed and compared prior to the structured interviews. Secondly, after writing a brief introduction of the project and purpose of the research for the interviewee, the following questions were written as a guide for the interviews to gain deeper insight into the financial data gleaned from financial documents:

1. Where can I get the latest description of fees collected by your city?
2. What primary mechanisms does your city currently utilize to raise revenue for your municipal fund (e.g. primary/secondary property taxes, cooperative efforts, intergovernmental agreements)?
3. What do you see as the biggest threats to your municipal revenue streams?

   SRT funding? What strategies are you currently exploring to deal with any of these threats?
4. What opportunities and barriers do you currently feel exist in your city? What action has been taken to move these forward/ address these? Have they been effective?
5. Has your city taken any innovative approaches, either in the past or presently, to increasing your general revenue streams?
6. What are your views on the threat of incorporation of adjacent cities? Has your city experienced this? If so, what fiscal impact was there in your city?
7. What information, if any, do you feel would be beneficial to share with the city officials of Apache Junction? What do you feel they could learn from your cities experiences regarding efforts to increase general revenue streams?

Case Study Findings and Recommendations

The findings for this project were based in part on an in-person meeting that occurred on March 28th, 2018 with the Queen Creek Assistant to the Town Manager, Accounting Manager, and Financial Services Analyst. The interaction with city officials from the town of Oro Valley occurred through email due to time constraints brought about by their financial report schedule. A thorough review of both towns recently adopted budgets contributed to a broad analysis of their revenue structure. During the meetings and correspondence, discussions surrounded the key areas outlined in the research questions found in the methodology section of this paper.

Sources of Revenue

Local Sales Tax

Queen Creek levies a 4% local sales tax. The revenues from this tax represent 54% of the overall revenue allocated to the general fund for the town ($20,687,890) ("Town of Queen Creek", 2018). The largest sources of revenue for this tax are construction and retail which represent approximately 75% of all revenue collected ("Town of Queen Creek", 2018). Figure 5 shows how this tax is distributed across 4 separate funds based on percentage: 70%, general revenue; 19%, construction sales tax; 9%, emergency management services and 2%, town district fund.

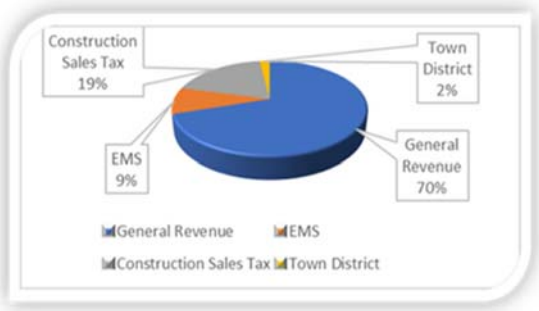
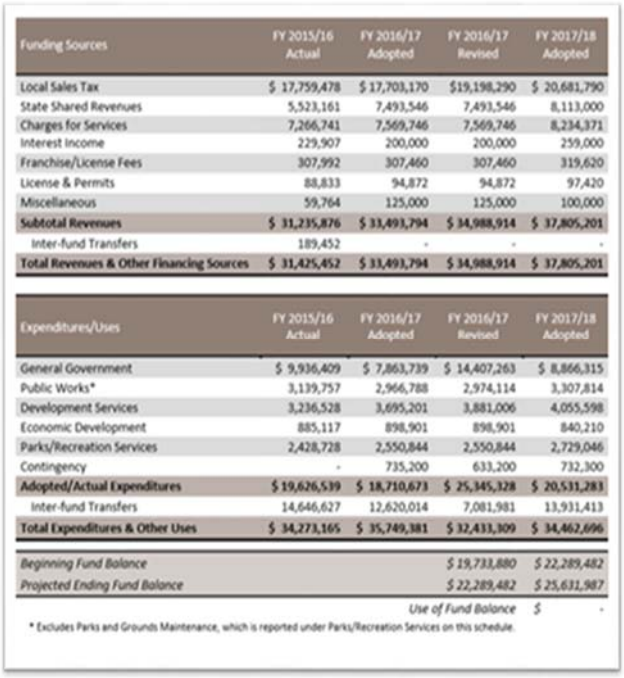


Figure 5. Allocation of 4% Local Sales Tax by Fund. (Source: *Town of Queen Creek, Arizona – Adopted Budget FY 2017-18. Retrieved from http://queencreek.org/home/showdocument?id=25260*

Figure 6 shows all funding sources for the general fund in Queen Creek (state shared revenue; charges for services; license and fees; franchise fees; interest income; and appropriations from anticipated debt service), and how this money is used ("Town of Queen Creek", 2018). According to the FY 2017-18 budget for the town, Queen Creek will be turning to funding mechanisms other than their traditional pay as you go funding that is provided by the Operating Budget. Due to future capital infrastructure projects, viewed as being necessary to respond to the rapid growth the town has experienced over the past decade, officials state that funding sources will require issuing debt or draw on funding from outside entities (state and federal grants.)



Funding Sources	FY 2015/16 Actual	FY 2016/17 Adopted	FY 2016/17 Revised	FY 2017/18 Adopted
Local Sales Tax	$ 17,759,478	$ 17,703,170	$19,198,290	$ 20,681,790
State Shared Revenues	5,523,161	7,493,546	7,493,546	8,113,000
Charges for Services	7,266,741	7,569,746	7,569,746	8,234,371
Interest Income	229,907	200,000	200,000	259,000
Franchise/License Fees	307,992	307,460	307,460	319,620
License & Permits	88,833	94,872	94,872	97,420
Miscellaneous	59,764	125,000	125,000	100,000
Subtotal Revenues	**$ 31,235,876**	**$ 33,493,794**	**$ 34,988,914**	**$ 37,805,201**
Inter-fund Transfers	189,452	-	-	-
Total Revenues & Other Financing Sources	**$ 31,425,452**	**$ 33,493,794**	**$ 34,988,914**	**$ 37,805,201**

Expenditures/Uses	FY 2015/16 Actual	FY 2016/17 Adopted	FY 2016/17 Revised	FY 2017/18 Adopted
General Government	$ 9,936,409	$ 7,863,739	$ 14,407,263	$ 8,866,315
Public Works*	3,139,757	2,966,788	2,974,114	3,307,814
Development Services	3,236,528	3,695,201	3,881,006	4,055,598
Economic Development	885,117	898,901	898,901	840,210
Parks/Recreation Services	2,428,728	2,550,844	2,550,844	2,729,046
Contingency	-	735,200	633,200	732,300
Adopted/Actual Expenditures	**$ 19,626,539**	**$ 18,710,673**	**$ 25,345,328**	**$ 20,531,283**
Inter-fund Transfers	14,646,627	12,620,014	7,081,981	13,931,413
Total Expenditures & Other Uses	**$ 34,273,165**	**$ 35,749,381**	**$ 32,431,309**	**$ 34,462,696**
Beginning Fund Balance			*$ 19,733,880*	*$ 22,289,482*
Projected Ending Fund Balance			*$ 22,289,482*	*$ 25,631,987*
			Use of Fund Balance	$ -

* Excludes Parks and Grounds Maintenance, which is reported under Parks/Recreation Services on this schedule.

Figure 6. Funding Sources and Expenditures/Uses for Queen Creek. (Source: *Town of Queen Creek Budget, p. 36. Retrieved from http://www.queencreek.org/home/showdocument?id=25342)*

Figure 7 is the budget overview for the Town of Oro Valley showing that over half of their annual budget revenues are the following: 24%, sales taxes; 17% state shared revenues; 14%, charges for services; and 14% for water sales. The local sales tax rate in Oro Valley is 2.5% (4% on construction and utility services). Two-percent of the 2.5% local sales tax, as well as the 4% utility sales tax, are used for various general governmental purposes. The additional 0.5% local

sales tax, which was implemented in 2015, is used towards funding the Town's Community Center operations. The town also levies a 6% tax on lodging that is "…used to support economic development and tourism efforts", and will increase to 8% in 2018 ("Town of Oro Valley", p. 87).

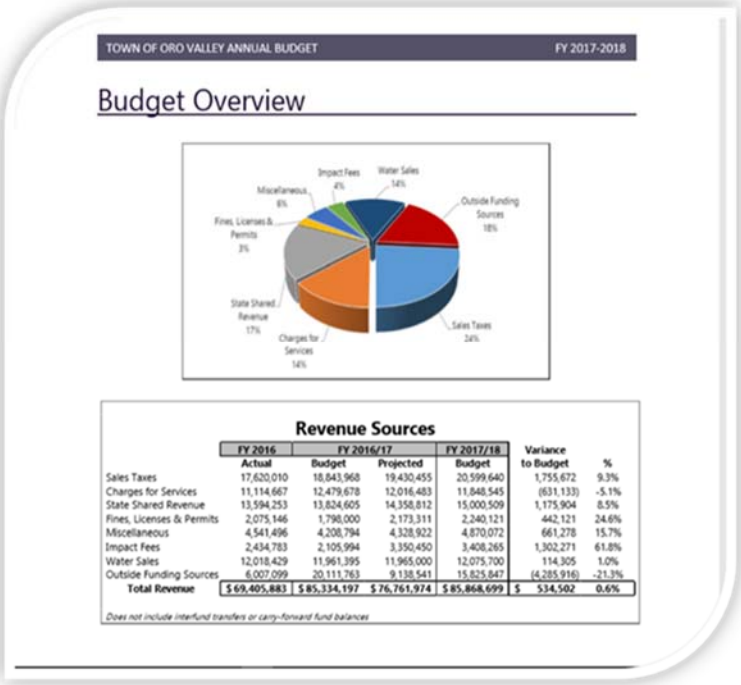


Figure 7. Revenue Sources for Town of Oro Valley. (Source: *Town of Oro Valley FY 2017-18 Budget. Retrieved from https://www.orovalleyaz.gov/sites/default/files/media/docs/2018/adopted-budget-fy17- 18.pdf. p. 58).*

Property Tax

In 2007, Queen Creek voters approved a $1.95 property tax rate. Queen Creek began levying this "limited" property tax in 2008, with 100% of revenues ($6,189,464) allocated to the Emergency Management Services Fund. When initiated, this fund contributed to payment for public safety including contracted services for police and fire in Maricopa County. Queen Creek is the only jurisdiction of the three to levy a "limited" property tax.

Charges for Services

Charges for Services refers to fees charged to individuals for a broad range of services provided by the city. Each town/city structures their services to fit the unique needs depending in part on the characteristics of their community (e.g. median income of residents, quality of facilities available). Decisions are made by elected leaders on how to best allocate funding, therefore, differences between communities are common. This revenue accounts for the following percentage of overall revenue for each town/city: Queen Creek 15%; Oro Valley, 14%; Apache Junction, 11%.

Queen Creek 'charges for services' revenue is largely allocated to the Enterprise Fund ($23,938,199). Enterprise funds represent funds that are obtained exclusively through fees in exchange for good and services and in return, the money in this fund can only be used for the services that generated the revenue, typically utility services. (Beasley, 2017).

Fees, or charges for services, for each town were acquired online by viewing the breakdown for each program (e.g. Parks and Recreation, Licenses and Permits). There was no singular compilation of individual fees collected by the towns available for review. The following represent departments in which significant discrepancies in fees (higher in the comparison city) were observed: Park and Recreation fees for sports field set-up and use; and water services. A comparative overview of all funding sources follows this discussion.

Parks and Recreation Fees

Parks and Recreation programs in Queen Creek and Oro Valley structure their fees based on resident status and business status (non-profit vs. commercial use). Table 1 shows that Queen Creek has higher charges for meeting room and sports fields for both prep and usage than Apache Junction. Oro Valley charges a flat $5/fee for residents/non-profits to use any fields, and

$10/fee for non-residents or commercial patrons on several of their fields, and $10/residents $20/non-residents for others (“Town of Oro Valley”, 2018). Oro Valley’s rates are more in-line with Apache Junction. The Parks and Recreation program in Queen Creek offers pre-school and kindergarten programs catering to the younger families moving into the town.

According to the most recent update to the Queen Creek Parks and Recreation Master Plan, two new parks are slated for development; West Park Site (48 acres due to open in the Fall of 2018), and East Park Site (78-80 acres- no opening date noted). The finance plan regarding funding for the East Park Site states, “These improvements have not been included in the cost estimate based on the assumption PLANNED PARKS & RECREATION FACILITIES 162 0 09 FUNDING & FINANCE that funds for the improvements could come from other sources such as transportation, water, and wastewater accounts” (QC Parks and Recreation Master Plan, 2017, p. 163).

Table 1- *Fees for Meeting and Classroom Spaces/Fees for Sports*

Parks and Rec **Meeting and Classroom Spaces**	**Queen Creek Parks and Rec fees**	**Apache Junction Parks and Rec fees**
Multi-purpose Room		$60/hr.
Large Classroom/Meeting Room	$81/hr - resident; $122/hr- non-resident; set-up fees based on group size	$30/hr.
Medium Classroom/Meeting Room	$45-61/hr. - resident/non-profit; $23 off-peak;$68-92/hr. non-resident/commercial ; $41 off-peak ; set-up fee based on group size	N/A
Small Classroom/Meeting Room	$27/hr - resident; $14/hr. off peak; $41/hr non-resident; $21/hr. off peak; set-up fees based on group size	$20/hr.
Large Art Room	$45-62/hr - resident and non-profit; $68-92/hr. Non-resident/Commerical	N/A
Small Arti Room	$45-62/hr - resident and non-profit; $68-92/hr. Non-resident/Commerical ; set-up fee based on group size	N/A
Council Chambers (can be rented for other meetings)	$61/hour - residents; $92-hour non-residents; set-up fee based on group size	N/A
Sport Fees		
Field Prep - Softball/Baseball	$32- resident & non-profit; non-resident & commerical - $48;	$30.00 per field

Field Prep - Soccer/Football	Soccer resident $91; non-resident - $137; Youth soccer fields prep- resident $61; non-resident - $92: Football- resident & non-pofit- $117; non-resident & commerical- $176; Youth football fields resident $79; non-resident $119	$60.00 per field
Daytime Sports Field Usage	$10/hr; $15/hr non-resident	$10.00 per hour
Evening Sports Field Usage	(Light usage **additiona**l cost) Residents: $18 ball fields & multi-purpose half-fields, $30 multi-pupose full fields; Non-residents: $27 ball fields & multi-purpose half-fields, $45 multi-purpose full field.	$17.00 per hour
Small Ramada	(20 person capacity) $10/hour resident; $15/hr. non-resident	$10.00 per hour
Large Ramada		$15.00 per hour

Parks and Rec **Meeting and Classroom Spaces**	Queen Creek Parks and Rec fees	Apache Junction Parks and Rec fees
Pre-School Services		
ABC/123 Lil' Apples: M,W,F, 2.5 Hr Sessions for 5 weeks	Resdient fee $178; non-resident fee $188; Supplies,	N/A
Kinder Prep	Resdient fee $178; non-resident fee $188; Supplies,	N/A
Kinder Summer Camp	Resdient fee $198; non-resident fee $208; Supplies,	N/A
Fitness Classes	Drop-in; range from $5 - 55 for various age groups	

According to their FY2017-28 budget**,** Oro Valley has significantly increased their investment in Parks and Recreation through the building of an Aquatics Center and a new Community Center as well as investing in cultural resources (e.g. Preservation of historical sites and strengthening of community heritage) (“Town of Oro Valley”, 2018). They continue to make the investment through the addition of two new lit multi-use fields; artificial turf installation at their large dog park; improvements at their Aquatic Center, golf courses, tennis courts, and community center.

Water Service Fees

A discussion on the importance of water in the Southwest cannot be overstated. Both the Town of Queen Creek and Oro Valley hold water rights for their towns. In 2008 Queen Creek succeeded in purchasing the privately held water company for just under $37 million (In-person meeting on 3/28/18). City officials state this has had a positive impact on the Town's revenues and allows a larger degree of control over service fees. In addition, it is perceived as crucial in allowing them to move forward with their broader plan for the town (In-person meeting on 3/28/18). Figure 8 shows the water rates and fees for Queen Creek. Figure 10 details the major revenue sources for the Town showing that water is a large source of revenue.

Water Rates and Fees

The minimum monthly rates shown in the chart below include the first 1,000 gallons of usage and is based on the size of your meter. The commodity charge is then added depending on the usage over the first 1,000 gallons. If you do not know the size of your meter, please call 480-358-3450 for assistance.

Meter Size	Charges	Gallons
3/4"	$18.33	1,000
1"	$31	1,000
1-1/2"	$46	1,000
2"	$77	1,000
3"	$184	1,000
4"	$305	1,000
6"	$1,345	1,000

Commodity charge (excess of minimum)
$1.77 per 1,000 gallons for 1,001 gallons to 10,001 gallons
$2.37 per 1,000 gallons for 10,001 gallons to 20,000 gallons
$2.96 per 1,000 gallons for 20,001 gallons and above

Service Charges

Establishment	$25
Establishment after hours	$35
Same Day Service Fee	$35
After Hours Call Out	$35
Delinquent Account Fee	$30
NSF Check	$25

Meter reread / if correct	$15
Meter Test / if correct	$25
Late Fee	$5
Deposit	$125

Hydrant Meter/HydrantFees

Monthly Hydrant Meter Rental Fee	$100
Per 1,000 gallons for 1,001 gallons and above	$4.00
Security Deposit (refundable upon payment of all outstanding invoices)	$1,500
Relocation Charge (per move)	$20
Unauthorized Relocation of Hydrant Meter	$150
Lost/Stolen/Damaged Breakaway	$350

http://www.queencreek.org/departments/utilities/water/water-rates-and-fees 1/2

Figure 8. Water Rates and Fees for the Town of Queen Creek (Source: *http://www.queencreek.org/departments/utilities/water/water-rates-and-fees)*

Long-Range Financial Plan

Forecasted Major Revenue Sources (000)s

At the outset of the budget development process the table below identifies the long range revenue forecast for all major revenue sources:

Revenue Category	FY18 Projection	FY19 Projection	FY20 Projection	FY21 Projection	FY22 Projection
Sales Tax (excluding Construction)	$ 17,068	$ 20,102	$ 22,242	$ 24,198	$ 25,894
Construction Sales Tax	11,608	13,410	14,031	12,304	10,617
State Sales Tax	3,561	3,844	4,273	4,719	5,232
Income Tax	4,553	4,695	4,856	5,047	5,320
Vehicle License Tax	1,441	1,564	1,735	1,914	2,092
HURF	2,277	2,342	2,425	2,508	2,593
Property Tax	6,189	6,820	7,550	8,320	9,130
Building Revenues	5,704	6,392	6,674	5,959	5,082
Other Charges for Services	5,700	5,755	5,916	6,412	6,588
Impact Fees	8,461	9,644	11,004	9,478	7,940
Capacity Fees	11,330	12,174	12,661	12,332	11,475
Water	21,161	22,642	24,227	25,923	27,737
Sewer	6,332	6,648	6,981	7,330	7,696
Solid Waste	2,644	2,829	3,027	3,238	3,465

*Includes all Town sales tax

Figure 9. Long Range Financial Plan: Forecasted Major Revenue. (Source*: *Town of Queen Creek Budget, p. 36. Retrieved from http://www.queencreek.org/home/showdocument?id=25342)*

The Town of Oro Valley experienced challenges after gaining their water rights. With declining water levels in wells and aquifer, the town developed renewable water supplies and began to deliver the reclaimed water in 2005, and their Central Arizona Project (CAP) water in 2012. This has resulted in a 50% reduction in well water use, "…from 3.3 billion gallons in 2004, to just 1.6 billion gallons in 2015" (Saletta, P., 2016). This development serves to protect and preserve the towns groundwater supplies for future generations (Salette, P., 2016). Figure 10 shows the current rates for potable (drinking) water for the Town of Oro Valley:

Current and proposed monthly base rates for potable water use are provided in Table 1 below:

Table 1

Meter Size (in inches)	Current Base Rate	Proposed Base Rate	Monthly Increase
5/8	$ 14.62	$ 16.45	$ 1.83
3/4	$ 21.93	$ 24.67	$ 2.74
1	$ 36.54	$ 41.11	$ 4.57
1.5	$ 73.08	$ 82.22	$ 9.14
2	$ 116.94	$ 131.56	$ 14.62
3	$ 233.86	$ 263.09	$ 29.23
4	$ 365.41	$ 411.09	$ 45.68
6	$ 730.83	$ 822.18	$ 91.35
8	$1,169.32	$1,315.49	$146.17

Cost per month.

The financial impact of the proposed rates for a customer with a 5/8-inch meter is an increase of $1.83 per month. Since this is a base rate increase only, the increase will be the same for all customers with this meter size regardless of the volume of water used. Customers with a 5/8-inch meter represent 88 percent of the total customer base and include residential, commercial and irrigation classifications with the vast majority of those being residential.

The Water Utility presents this Water Rates Analysis in support of the proposed rates contained in the Preferred Financial Scenario. The Oro Valley Water Utility Commission and Water Utility staff recommend approval of rate increase detailed in the Preferred Financial Scenario.

- 2 -

Figure 10. Oro Valley Water Utility Report ***(*****Source*****: Retrieved from https://orovalleyaz.gov /sites/default/files/media/docs/2018/water-rates-analysis-report-march-2018.pdf (p. 2).***

Potential Threats to Municipal Revenue Streams

Incorporation of San Tan Valley

Queen Creek and Apache Junction city officials both cited the potential incorporation of San Tan Valley as a significant threat to their municipal revenue streams. It is thought that incorporation would lead to retail growth in San Tan Valley thereby threatening current levels of sales tax revenues, particularly for Queen Creek. Queen Creek officials, while viewing the incorporation of San Tan Valley as a threat to municipal revenue, maintain the view that it is the right of those citizens to pursue incorporation. However, the focus of their opposition to incorporation lies in the way the incorporation map is being drawn. Currently, Queen Creek officials are opposed to the boundaries being suggested as it impacts their general plan for growth. (3/28/18 in-person meeting with Queen Creek officials).

Figure 11 shows the sales tax history and projection for Queen Creek has nearly doubled over the past ten years with a projection of continued, albeit slowing, growth. City officials estimate that approximately 30% of sales tax revenue is generated from non-residents, mainly the estimated 100,000 residing in San Tan Valley.

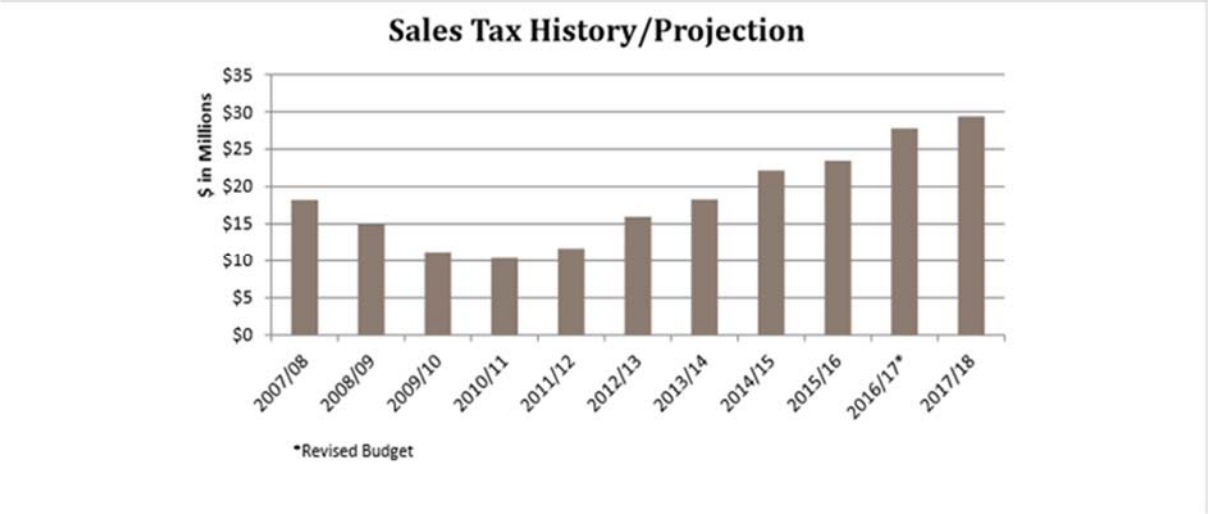


Figure 11. Sales Tax History/Projection. (Source*: Town of Queen Creek – Adopted Budget FY 2017-18. p. 8. Retrieved from http://www.queencreek.org/departments/finance-/budget/budget-documents)*

Unfunded Liability - Public Pension Funding

In 2016, Queen Creek formed a task force to address reforming their public pension system. During a meeting with Queen Creek officials on March 28, 2018, they relayed that leaders decided to take an approach to deal with the unfunded liability by viewing it as a debt and therefore created a plan to pay down the liability. The previous system operated by utilizing a two-tier system. In May of 2016, Proposition 124 was passed allowing for statutory adjustments. These reforms established a Tier-3 that is believed will result in savings to the town. Currently, at the end of the fiscal year, the town writes a check to the fund that is currently 88.9% funded. There are stipulations attached to the PSPRS including a limit on the cost of living increases that do not take effect until the funding level reaches 90%.

For the Town of Oro Valley, their budget states, "For Fiscal Year 2017/18, the Town contribution rate for PSPRS increases from 23.66% to 34.85%, resulting in an estimated $845,000 impact to the General Fund. It is expected that the Town contribution rate will remain at, or close to, this level for the foreseeable future, putting pressure on the Town's continued ability to expand staffing and provide continued pay raises at current levels" (p. 3). An effort to address this challenge is being taken by the town updating their financial policies to add in the goal of "…dedicating one-time surplus funding, if possible, each year to paying down the unfunded liabilities" (electronic correspondence from Stacey Lemos, 2018). This is like steps begin taken by Queen Creek officials.

Perceived Adverse State Legislation

Action by the state legislature that would reduce or eliminate local control over how revenues are established or collected was noted as being a potential threat to municipal revenues. More specifically, this would include any changes to the tax code that would eliminate categories of

revenues received by local governments or change the methods that local government's use to calculate how taxes are reported, or creating exclusionary categories (electronic correspondence from Stacy Lemos, 2018).

Increase in Online Retail

City officials from both peer towns acknowledged the threat online retail poses to their local tax revenue. However, both feel that due to increased growth in their community over recent years, they feel positive about the ability to manage this threat, pointing to the need that additional residents bring in the areas of dining and other retail establishments popular among residents

Strategies to Deal with Threats to Municipal Revenue Streams

Refinancing of large debt

Facing high interest rates on debt, Queen Creek recently consolidated two large loans to significantly reduce the amount of interest they will pay in the long run (In-person meeting on 3/28/18).

Hiring Reduction

Oro Valley states that in response to the increase in unfunded liabilities in the public safety fund they have had to be cautious about adding personnel and have instead added more duties for existing employees (electronic correspondence with Stacy Lemos, 2018).

Seek Opportunities for Partnerships

Oro Valley has several public-non-profit partnerships as referenced in the Innovative Approaches section of this paper. They are continuously looking to expand their partnerships

whenever possible with the following entities: County, tourism agencies, other surrounding entities. Partnerships allow the town to leverage shared resources (electronic communication with Stacy Lemos, 2018).

Diversification of Retail

As growth continues, seek to bring in retail that is congruent with the wants and needs of your community. In addition, researching and understanding what companies are more resilient to e-commerce, cities, and towns can draw in businesses that are resilient to this effect.

Innovative Approaches to Increasing General Revenues

Public-Non-Profit Partnerships

The Town of Oro Valley has continued funding for several public-non-profit partnerships in their town. These partnerships include the Children's Museum of Oro Valley which was funded in FY 2014/15 ($200,000 in one-time startup capital contribution and $37,500 operational contribution). The current budget continues funding with an annual contribution of $75,000 to the museum ("Town of Oro Valley", 2018).

Oro Valley has also partnered with the Southern Arizona Arts & Cultural Alliances (SAADA) through continuing funding of $21,400 to help support concert events throughout the community (Oro Valley Marketplace, the Oro Valley Community Center and Steam Pump Ranch, as well as the Oro Valley Festival of the Arts and a Spring Festival) ("Town of Oro Valley", 2018).

Horseshoe Park and Equestrian Center – Queen Creek

The Town of Queen Creek funded the building of the 36-acre Horseshoe Equestrian Park using general fund revenues. The revenue from this venue is in turn, used to maintain the park

with any additional revenue paid back into the general fund. In addition to providing a community arena for public use only, this venue provides a home for several prestigious organizations including the Arizona Cutting Horse Association; car and RV shows; and concerts, and a whole host of other events ("Parks & Recreation Master Plan", 2087). Queen Creek has also partnered with the city of Mesa on the "Visit Mesa" campaign to increase tourism, thereby generating revenue throughout the community in the form of increased retail sales.

Employee Wellness and Wisdom – Oro Valley

Oro Valley has taken an innovative approach to proactively manage the towns employees' health with an increased focus on wellness. This approach has included educating employees on how to become more educated consumers of healthcare (p. 5 of Budget doc). It is hoped that this approach will result in lower healthcare expenses for public employees.

Vehicle Replacement Fund – Oro Valley

While not directly adding to the general fund, Oro Valley developed a planning system in relation to purchasing vehicles for the town to reduce the impact on the operating budget from this one-time expense. Beginning in FY 2012/13, whenever a vehicle was purchased, beginning in the following year, they began to set aside funding in order to be able to replace the vehicle by the time it was expected to retire. In the current budget, this has resulted in a set-aside of $375,000 into the "Fleet Fund" for the replacement of vehicles in the future." ("Town of Oro Valley", 2018, p. 5).

Recommendations

Annually Review User Fees for Parks and Recreation Program

Apache Junction may benefit by re-evaluating their fees for sport field rentals and preparation fees keeping in mind that both Queen Creek and Oro Valley charge different fees for the programs based on residency and business classification (non-profit vs. commercial use). A transparent, open communication process with residents is needed when looking to possibly increase service fees on citizens. This allows residents to understand how the town is "…investing existing resources back into the community programs and infrastructure (electronic communication with Stacy Lemos, 2018). Queen Creek and Oro Valley are proactively in the process of expanding their park services, some of which involve partnering with non-profit entities to draw individuals with families who are looking for a high-quality recreational opportunity for their children.

Targeting the Needs of the Community for Possible Additional Park Programs:

Queen Creek officials stated most incoming residents to the town are young families with small children. Therefore, the addition of pre-school and kindergarten services to the Parks and Recreation program is filling a felt need within the community. Apache Junction may consider creatively develop quality park programs geared towards the 55+ part-year residents that come to Apache Junction over the winter months and thereby increase revenue for their general fund. Other areas where a service gap may exist for residents could also be explored.

Seek to diversify retail based on needs and wants of citizens

While the Amazon effect is real, it is not equally pervasive across all segments of retail. As shown by the steadily increasing sales tax revenue being experienced by Queen Creek, selectively diversifying the towns retail base through bringing in popular, yet established name

brands (e.g. Sprouts, Pita Jungle) can lead to increasing the economic resiliency of the community, lessening the financial impact should one retailer pull out.

Begin Planning for Eastward Moving Growth

Oro Valley indicated that they are currently reaching their expansion limit and are currently seeking to annex additional lands. They are working with the Arizona State Land Management to annex 800 acres of State land into the Town for future growth opportunities. Queen Creek officials stressed the importance of planning and policy development in creating forward looking and sustainable future for the town. Officials were quick to mention that growth in the valley is moving eastward towards Apache Junction. The Town's revenue management policy highlights developing diverse and reliable revenue sources; annually examining user fees for all categories of operations; and reviewing development fees for capital expenses related to new development

("Town of Queen Creek – Adopted Budget, 2018)

Conclusion

Cities and towns are face many challenges as well as opportunities in relation to managing revenues. Swiftly changing fiscal environments demand ever-increasing creativity from officials as they seek to plan their futures. Technology and access to information have proven beneficial in many ways, however, they have also complicated the contexts in which officials operate. As this study has revealed, local governments are often subject to the decisions made at the state and federal levels, however, many opportunities to shape their communities remain. Whether local officials are working on solutions to counter the effect e-commerce is having on local sales taxes, or facing the effects of ever increasing decentralization of government services, it is a dynamic,

albeit challenging time. This research project points to the importance of local public officials to clearly envision the desired future for their communities considering the values and needs of the residents who they are privileged to serve. Lastly, these case studies show the benefit of learning from other jurisdictions what innovative approaches are possible.

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Municipal Revenue Sources for the city of Apache Junction, AZ

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Abstract

The task of raising funds and building up reserves is a common but worthy challenge for many municipalities. The purpose of this project is to help Apache Junction, AZ, a small city outside of Phoenix find new ways to generate revenue. This is a unique city, which makes certain revenue streams more suitable than others. This paper discusses common ways that small cities can raise revenues. In order to answer the question, “are there ways to generate more revenue in Apache Junction?”, this project examined the budgets of two nearby cities, Maricopa and Chandler, to examine whether they have implemented any revenue raising regulations that may work in Apache Junction.

Introduction

Lack of revenues is an ongoing problem at all levels of government. Local governments especially are at risk because of restrictions on their revenue generating possibilities due to government regulations and public resistance. However, local governments, and in particular city governments provide many of the everyday services that people have come to rely on. This means that city officials often must go about the disagreeable task of securing funds.

Apache Junction, AZ is a community of approximately 40,000 permanent residents. It also has a large “snow-bird” population who spend the winter months in Arizona. Apache Junction has a much older average population as compared to other Phoenix suburbs, with a median age of 50.9 years old. This compares to other neighboring cities of similar size such as Queen Creek, Mesa and Avondale which have a median age of 30 years old (U.S. Census, 2018). The median household income is also significantly lower at $38,053 compared to the same cities with median incomes starting at $48,000. These demographics have and will affect what revenue streams are possible in Apache Junction.

Some of Apache Junction’s stated goals are to continue growth by encouraging entrepreneurship and attracting new jobs. Other goals are to improve schools and increase community engagement in order to attract a younger populace. If successful in doing these things, Apache Junction can grow their economic base and create a permanent and stable increase in revenue.

Apache Junction presents an interesting situation in that it does not have a city property tax, which is typically the largest revenue source in most cities. It does have a sales tax, but at a total combined rate of 9.6 % (2.4% for the city, 1.1% for Pinal County and 5.6% for Arizona state) it is unlikely to increase further. Given that these are unrealistic ways to increase revenue,

the city must look for other creative ways to do so. The question that this paper attempts to answer is: are there ways that Apache Junction can raise revenue that are not yet implemented?

To determine whether there are untapped revenue sources, this research will examine the revenues of two nearby cities, Chandler and Maricopa, AZ. Both cities are located in the Phoenix metropolitan area and are likely to be impacted by similar social and economic factors as Apache Junction. All revenue streams will be compared for revenue differences. These differences will be further analyzed for suitability for implementation in Apache Junction.

Literature Review

Local governments are responsible for providing the majority of civil services. They spend a greater amount of funds on civil services than the federal government. Major expense categories include: education, transportation, trash collection and police and fire services. However, in order to ensure that these services are available, sufficient revenues must be raised from the locality's constituents. Depending on the source of funds, this can be challenging to do as there is often resistance to increasing taxation.

Raising revenues can be even more challenging in a small town. Small and rural towns are less able to implement a flexible range of revenues (Mattson, 2017). While local governments obtain 87.7% of their revenue from taxes with the majority being from property taxes (Fox, 2010), small towns are less likely to place a high tax burden on its citizens. The reason being is that there is greater involvement in small town affairs, and city officials are more sensitive to citizen feedback. Instead, officials are more likely to shift the cost of services through privatization, to non-residents, or to make use of intergovernmental grants (Mattson, 2017).

Common revenue raising measures are raising user fees, permits and licenses (Mattson, 2017). Since the 1970s local user charges have been the fastest growing revenue stream for local

governments (Aronson & Hilley, 2010). There are a numerous types of fees that cities can charge their residents. Examples are recreation fees, hunting licenses, building permits and franchise fees.

Service fees are viewed as more equitable because the people who are utilizing the services are the ones are paying for it. Such fee increases are easier to implement because they do not need voter approval and instead are approved by city council. Another benefit to relying on user fees and permits is that non-residents who are visiting can be charged when they make use of local services. One major drawback of raising user fees is that it is considered a regressive approach. They have a greater adverse impact on low-income users because these fees make up a greater percentage of their income. For those who struggle to make ends meet, this could cause an undue burden on them. There are ways, however, that fees can be restructured so that they are more progressive. This may take some creative thinking on the side of policy-makers. One way to help low-income individuals is to offer tax rebates, if fees are causing undue hardship. Another example, is to institute conservation pricing. This means that larger amounts of service usage will be charged at higher rates. By doing so, businesses and larger institutions will pay more for services than a home owners or low-income users would (Sebastien & Kumodzi, 2015). Another is to be sure that high income earners are paying their fair share of the burden especially if it is for a service that benefits them. One example is special assessment fees. Special assessments fees are fees that are charged to pay for infrastructure projects. They may fund sidewalks, storm water drains, traffic lights or improvements of transportation to name just a few eligible projects. It is levied against to property owners who stand to benefit from the projects by increasing their property values. Payments can be a one-time, or a special tax just for the

improvement and are determined based on the amount of increase of the owner's property value (Center for American Progress Action Fund, 2014).

One major area where there is a loss of revenue are tax exempt properties such as religious institutions and schools. Cities can try and make-up this loss in revenue by asking these tax exempt property owners to make a contribution. Such programs are voluntary. These are known as payments in lieu of taxes (PILOTS). Types of payments are arranged individually between the city and individual tax-exempt organizations (Center for American Progress Action Fund, 2014).

Sponsorship are another revenue source and can be used to raise funds for special projects. For example, if the city is considering creating a new park, residents may be invited to make donations. Sponsorships may go towards the planting of a tree, or the purchase of a park bench or building some other structure. (Schaumleffel, Smith & O'Dell, 2004). Other revenue sources include fund raising projects to pay for town improvements. Additionally, some small towns, to cut costs have solicited citizen volunteers to help. Volunteers can be used for even for clean-up projects, library helpers and even in fire protection (Husak, 1983).

Another area that a city may look into when investigating revenue sources are intergovernmental grants. There are many federal matching grants for which a city could apply. One example of a government agency that sponsor grants is the Environmental Protection Agency (EPA), which awards four billion dollars in grants each year. Examples of available grants are the Healthy Places for Healthy Families grant, for development of walkable downtown areas, or the Cool and Connected grant which provides technical assistance and funds to for broad band service infrastructure. Other federal sources are the Federal Highway Administration,

U.S. Economic Development Administration (EDA) and the U.S. Department of Housing and Urban Development (HUD) which all have grants to promote economic development.

Some major reforms that would assist in revenue generation need to be made at the state level. This would require working collectively with other cities. One area that would need collective action is the collection of online sales tax. The trend of online shopping has resulted in a decrease in the collection of sales taxes for governments**.** As of 2012, it was estimated that states were losing about 23.3 billion dollars a year in uncollected sales taxes due to online shopping. While in-state sellers and large retailers such as Amazon, do collect and remit taxes to the state, out-of-state online sellers do not. While there has been attempts to pass legislation in Congress, little progress has been made. It has been left to the states to address this problem and there is little that can be done on a local level (Journal of Legal, Ethical and Regulatory Issues, 2016).

Fees, permits and similar charges only make up a small part of city revenues. Economic development is a key area to generating more revenue. Investments in the local economy can attract new jobs or through small business development create new ones. Economic growth can increase spending which in return increases tax receipts (Bowen, Haynes & Rosentraub, 2006). However, these types of solutions can require more long-term commitments and substantial financial investment.

A recent EPA report recommends focusing on three areas to grow the local economy. First is supporting local businesses and to start where there is momentum, the second is to invest in workforce development, and the third is to support the quality of life in the community (Environmental Protection Agency, 2016). Strategies that have been employed to encourage economic growth include downtown revitalizations. In particular, historic downtowns, can be a

very strong asset for developing economic growth centers. Rezoning can also be considered by turning business areas into mixed use areas. This allows for more vibrant, livable business districts (Johnson, Kackar, Kramer, 2015). Methods used to improve these areas can include partnering with developers and business owners, and offering tax incentives to encourage development. Graduated tax schedules can be offered for a period of time to lessen the tax burden (Johnson, Kackar, Kramer, 2015). A city could also attract young people by providing opportunities to students in the form of internships, or encouraging entrepreneurs through information sharing and creating relationship ties with city government, or providing grants or low-interest loans. Strategies to improve quality of life can include making sure that there are cultural and arts centers, community gathering places, mixed types of housing for different stages of life, and open spaces and parks. Inviting artists and creative types also can help with the creation of these types of areas and environments.

Tax exporting is another preferred method to raise revenue. Tax exports refer to taxes paid for by visitors and is often the results from tourism. For towns that have invested in economic development, an increase in tourism may be one result from such efforts. City officials in Paduca, KY, a small town of approximately 25,000 people, invested heavily in redeveloping their downtown and cultivating local attractions. While some efforts began as early as 1989, major revitalization started in 2000. By 2007, Paduca had nearly 400,000 visitors come through their town for event related purposes. These visitors spend up to five times the amount that a local would during their visit (Johnson, Kackar, Kramer, 2015). Increasing tourism can have drawbacks however, as it can affect the quality of life and increase the cost of living in a city. Also jobs that are created from tourism tend to be low-paying ones.

While the above mentioned methods are all viable ways to raise revenues, for this project the budgets from Maricopa and Chandler, AZ will be examined as sample cities for the purpose of finding new revenue streams for Apache Junction. These cities are likely to share many similarities with Apache Junction, being that they are in a close proximity to downtown Phoenix, share the same climate, and are likely to attract similar type of people to their cities.

Methods section

In attempting to answer how Apache Junction can increase revenues, revenue data will be gathered from two cities, Maricopa and Chandler, AZ. This information will be examined to see if there are different revenue streams in those cities, than the ones utilized in Apache Junction. Further analysis will investigate these different revenue streams to see if they would be suitable for Apache Junction.

This research is exploratory in nature, however, examining suitability for implementation in Apache Junction will require some quantitative analysis. These cities may have different fiscal capacities, which is a city's ability to raise funds. While they are all located in the Phoenix metropolitan area and may share similarities with Apache Junction, differences in demographic and city regulations may affect whether new revenue measures will be successful. Strengths of an exploratory study is that it will allow for a more in-depth look at the characteristics of these cities which will make it easier to determine whether their revenue streams make sense for Apache Junction. It also reveals more revenue options for Apache Junction's officials to consider.

The drawbacks are that there are limitations in studying only two cities. While this project is in conjunction with other projects, with a total of nine cities being studied it is still a small sample. These cities have qualitative differences from Apache Junction and therefor will not be

directly comparable. For example, according to city officials, Apache Junction has restrictions on population growth due to its geographic location. This is a limitation that other cities may not have. Also, cities may have different goals and objectives, which will make some sources of revenue unsuitable. On the other side, Apache Junction may also have assets that these cities do not, such as being near the Superstition Mountains and hiking options. It is also known for its Old West character. This location and image can lend itself to more tourist opportunities. These opportunities may not be reflected by examining other cities. Another drawback is that exploratory research will not provide definitive answers as to whether Apache Junction's city officials should pursue a specific revenue stream, but rather it serves as a starting point as to where more research is needed.

The cities selected for this study are Maricopa, AZ and Chandler, AZ. Maricopa is located in Pinal County and is bordered by two Native American reservations. It was incorporated in 2003 with 1,040 residents, and has experienced tremendous growth since then. Current population is at approximately 50,000 residents although growth has slowed in recent years. The city is quite diverse with about 56.29% of the population being white, and 25.13% of the population being Hispanic. The median household income is higher than the national average at $68,888 and the median age is 34. Educational attainment is very high in Maricopa, with over 92.2% of residents with a high school diploma and 24% with a bachelors degree (U.S. Census, 2016). Maricopa and Apache Junction are about equal distance from downtown Phoenix with Maricopa south of downtown and Apache Junction located east of downtown.

Chandler is a larger city, with approximately 250,000 residents. It is also a suburb of Phoenix with a median age of 31.7 years and a median household income around $74,000 (U.S. Census, 2016). As of 2012 there were 20,607 registered businesses. Chandler also is home to

several large and nationally known employers. Chandler is slightly less diverse, with a 73.3% white population, 21.9% Hispanic population, 8.2% Asian, 4.8% African American and 1.5% Native American. Educational attainment is also very high in Chandler where 92% of residents have a high school diploma and 41% of residents have at least a bachelor's degree (U.S. Census Bureau, 2016). Chandler is located southeast of downtown Phoenix, in-between Maricopa and Apache Junction.

It is hypothesized that these cities will have different revenue streams which may be of benefit to Apache Junction. Apache Junction's goals are to grow their economy, increase revenues, and attract a younger population and new employers. Because of qualitative differences in these cities, these suggestions may need to be tailored to account for Apache Junction's unique characteristics. It may be more helpful to use some revenue strategies from cities that better match Apache Junction's in population age, income and opportunities.

Findings

In order to grow revenues there are several main paths that Apache Junction can take. One is to tax its residents further, another to tax outsiders, such as tourists and visitors, and a third is to look to other government resources such as grants. Taxing its residents further is the path that most cities including Chandler and Maricopa take, through the form of a property tax. An initial review of Maricopa's 2016-17 budget reveals general fund revenues for Maricopa are $37,620,424 whereas Apache Junction was $23,964,528. These are two cities of similar population size with approximately 40,000 to 50,000 people. The main reason for the difference in revenue is that Maricopa charges a property tax which Apache Junction does not. Maricopa is a newer city, and the primary property tax was approved in 2006 for public safety funding. In 2008, Maricopa passed a secondary property tax to pay for parks and recreation bonds and these

funds go towards debt service. Maricopa's property tax of 6.4818%, brought in $10,256,423 in their general fund in 2017 and $3,732,776 towards their debt service fund. After accounting for property taxes Maricopa brought in about $3.4 million more in revenue than Apache Junction. Intergovernmental revenues make up a large part of the remainder with Maricopa receiving $2.6 million more in funds than Apache Junction.

The primary revenue producing source in Apache Junction are sales taxes which brought in revenues of $11,337,335 for 2017. In Maricopa, sales taxes brought in $9,445,692. Maricopa's tax rate is 8.7% whereas Apache Junction's rate was 9.1%.

An area where Maricopa does bring in more revenue is in fees, permits, and business licenses. Maricopa's total is for 2017 was $1,590,827. This compares to $581,088 collected by Apache Junction. Higher revenue from fees seems to be a trend in this category with Maricopa bringing $1.2 million in 2016 and $747,242 in 2015.

One fee that may account for this difference are construction permits. For example, the cost for a permit to build a single family home in Maricopa is $5,514. However, in Apache Junction, pricing is varied and determined by home value. A rough estimate for a residential permit for the average sized American home at 2500 square feet is $2,946. This revenue stream is based on growth, however, and any slowdown would impact the amount revenue received. Therefore this could be considered an unreliable revenue source.

Apache Junction has brought in more revenue from issuing business licenses. In 2015, revenues were $270,000 compared to Maricopa's $50,000. However, Maricopa also charges more for several Special Business permits than Apache Junction (See Appendix A) and this is an area where additional funds could be raised. Additionally, in 2017, franchise fees brought in $109,451 in Apache Junction compared to $1.3 million in Maricopa.

Maricopa also makes a greater return on its investments than Apache Junction. For the year 2016 investment earnings were $771,820. In 2017, investment earnings decreased to $259,040. This compares to Apache Junction's $56,580 in 2016 and $14,421 in 2017. Both cities invest with the Arizona State Treasurer's Local Government Investment Pool (LGIP). This difference could be based on having higher reserves/higher principal.

Maricopa also raises funds through user fees. Their Department of Parks and Recreation brought $466,111 in 2015. Apache Junction brought in a similar amount from their fees. But one notable service the city of Maricopa has provided is their state-of-the-art Copper Sky Recreation Center, built in 2014. In 2015, it brought in $1,311,699 and 2016 it brought in $2,753,265, however these revenues do not yet cover the cost of the center. Apache Junction has a similar recreation center called the Multi-Generational Center. From comparing fees, we see that Maricopa does charge higher monthly memberships as well as charging higher rates from room rentals. Maricopa also charges a non-resident fee which Apache Junction does not. (See Appendix B for additional examples.)

Maricopa also has focused on growing its economy by recruiting in the technology sector with employers in Agri-tech, research and manufacturing. The city has plans for a business park and is seeking to attract more high paying jobs. It also has the benefit of being near Harrah's Ak-Chin Resort, which is a major employer for its residents. Maricopa appears to have more room for growth than Apache Junction, with nearby land available for annexation. This can allow for population growth as well as make room for bigger industry. It's likely that this growth will increase property values and thereby increasing property tax revenues.

Apache Junction has stated a similar goal of attracting more jobs to their city, particularly in manufacturing. Because there is no property tax, it does seem to have an advantage over other

cities in the region. However, Apache Junction may need to focus on building up other assets that employers look for, such as having a diverse workforce, good public schools and safe neighborhoods. For example, Apache Junction has a slightly lower high school graduation rate at 85.2% and a lower college graduation rate at 14.6% (U.S. Census, 2016) compared to the other cities and this is an area where city officials could focus on.

Even with Maricopa's higher-income population and more larger-scale employers, there are not significant differences in revenues. While there may be some opportunity to raise revenues through charging higher fees, this typically does not make a large difference in revenues. However, an area where there may be more to learn is how Maricopa planned and is planning for future growth.

Chandler is a larger and wealthier city, with approximately 250,000 people. For the 2016-2017 fiscal year, general fund revenues for Chandler were $246,390,000. Chandler also levies a property tax and collected $28,592,000 for the same year. This represented 11.6% of Chandler's general revenues funds.

The bulk of their tax collections were from sales taxes (including licenses), which brought in $110,610,000. This is nearly 10x the amount that Apache Junction collects. However, the population of Chandler is only 6.1 times bigger than Apache Junction. Additionally, the sales tax rate in Chandler is lower at only 7.8%. The fact that the residents have a median income higher than those in Apache Junction may account for this difference. Chandler also has several large shopping complexes, including the Chandler Fashion Center within its city limits. These shopping centers likely attract shoppers from other cities. Apache Junction has fewer retailers also which means that their residents must do some of their shopping elsewhere.

One area where Chandler has funds that were not seen in either Apache Junction or Maricopa's budget was through their special revenue funds. Chandler was awarded several grants through the U.S. Department of Housing and Development (HUD). The city was awarded multiple grants to develop affordable housing in both 2016 and 2017. They include the Public Housing Authority (PHA) Family Sites Grant, PHA Management Grant, PHA Capital Program Grant. They totaled over $13 million in 2016. Because Apache Junction has limited room for growth, building affordable housing may not be one of the city's goals. However, with further research, Apache Junction may find grants that are more in line with their objectives.

Chandler also charges higher business related fees. For example, to obtain a license to sell liquor on average costs $1400 in Chandler. This compares to an average rate of $250 in Apache Junction. Not all fees have such a large discrepancy but are worth examining (Appendix A can be referred to for more examples).

Recommendations

It is important to look at the unique qualities that Apache Junction has and what the city's goals are for their community. With those factors in mind, officials can strategize a plan to raise revenues that works for their community. Apache Junction earns similar revenues to Maricopa, when excepting property tax revenues. As noted, it would be difficult to raise revenue in Apache Junction because of the number of low income families living there. However, it may be worthwhile for Apache Junction to revisit the idea of charging a property tax if it can attach the tax to a specific want or need of the community. Another option to consider is to only charge a secondary tax for payments toward debt service, which is capped at a lower rate. Finally, there are ways to make a tax more palatable, by offering a rebate or "circuit breaker" to retirees who

may be on a fixed income. This rebate would be offered to residents who have an income under a certain threshold.

Fees were an area where Apache Junction consistently charged lower rates. There are specific fees that Apache Junction could consider raising, such as special business permits, or recreation fees. There also some fees that the city does not charge at all and could consider implementing. One example is the Tobacco Retail fee charged in Maricopa.

Another area Apache Junction should further look into are federal grants. Grants exist for economic development, education and environmental sustainability. While grant funding is not guaranteed, they can be a substantial source of funds. Grants are distributed by department and can be found at grants.gov.

Because Apache Junction has lower income residents, Apache Junction should attempt to attract outside money from either new employers or visitors. Commonly cited attributes that employers look for when scouting locations are good schools, a well trained workforce and a low crime rate. These are areas that Apache Junction can develop. Further research will likely be needed to determine what other qualities Apache Junction has that would attract employers. By actively working in these areas, Apache Junction cannot only attract better employers but also families who may otherwise consider a neighboring city.

Attracting more visitors, is an area where Apache Junction might have a competitive advantage with The Superstition Mountains and western themed attractions in its vicinity. Encouraging tourism is also advisable because Apache Junction has limited room for population growth. Apache Junction could also work focus on growing its retail sector by working with small businesses to build a more boutique retail industry. This could attract more local visitors.

These types of shops make shopping more of an experience, thus their stores become more of a sought out destination.

As far as making Apache Junction a more desirable place to live, the city should survey residents for what amenities they would like to see, as well as what types of changes that they would like to see in their community in terms growth. These are the major changes that could affect their community life. If these changes are successfully implemented, the increase in community satisfaction may also have the added benefit of attracting new residents to Apache Junction.

Conclusion

Our class examined nine Arizona cities in an effort to learn new and different way to raise city revenue. These cities all shared similarities of social, economic, and demographics characteristics. However, based on these findings there are limited options as far as actions that Apache Junction can take to raise revenues in the immediate future. Applying for grants and raising fees are short-term solutions. A broader study should be conducted that would sample other similar size cities across the region and possibly across the country.

As far as long term solutions are concerned, the most opportunity to raise revenues would be based on economic growth. Such a path would largely be dependent on the vision Apache Junction residents has for their city. Apache Junction should (1) work on attracting new employers, preferably higher paying employers, (2) creating an environment that would appeal to the younger population with higher incomes, 3) build up their retail sector, and (4) create more tourism attractions. Again these avenues will not guarantee an increase in revenue. Apache Junction officials will have to weigh their options, and plan a specific strategy in order to carry out any one of these methods of revenue generation.

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Appendix A

Special Business Fees

Special Fees	Maricopa	AJ	Chandler
Categories:			
Business permits:			
Liquor License			
Peddler			
Pawnshop/Second hand			
Mobile food			
Massage			
Tobacco Retail			
fingerprints			
Alarm Permit			
False Alarm Fee			

Appendix B

Recreation & Rental Fees

Special Fees	Maricopa- Copper Sky Complex	AJ- Multi-Gen. Center	Chandler Community Center	
Adult Monthly pass	$35.00	$27.00	NA	
Youth Monthly pass	$25.00	$16.00	NA	
Non- resident fee	$44.00			
Family Fee	$65.00	$60.00	NA	
Annual Fee-Adult	$238.00	$198.00	NA	
Annual Fee- Youth	$190.00	$132.00	NA	
Facility Rental				
Classroom size-25ppl	$20.00		$25.00	
Large room 75-100 ppl	$30.00	$50.00	$56.00	
Large room 200 ppl	$60.00	NA	$85.00	
*** Chandler also has commercial rates for room rentals, Maricopa has non-resident rates**				

Benchmarking Revenue Sources of Mesa and Avondale For Apache Junction, Arizona

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Abstract

The importance of this project stems from fiscal and economic challenges of most local governments. It so happens that this paper is focused on Apache Junction, a city at the border of Maricopa and Pinal counties, in Arizona. There are current and looming economic problems impacting this 35-square mile city. One that is most concerning is the online shopping trend that is said to have caused the closures of many brick and mortar retail businesses and decreased sales tax revenue. But most of Apache Junction's revenues come from sales taxes.

The city's director of Development Services has partnered with various organizations at Arizona State University to identify solutions. As part of the collective effort, this project is tasked to find new revenue sources by evaluating all revenue sources in two peer cities. In essence, this project is a case study for Apache Junction and the benchmark cities of Mesa and Avondale, in Arizona. Figure 1 shows Apache Junction to the right (in yellow) next to its peer cities of Mesa (orange) and Avondale on the left. Although these cities are often referred to as "peer cities," the term is obviously a misnomer in many respects, including its size and location.

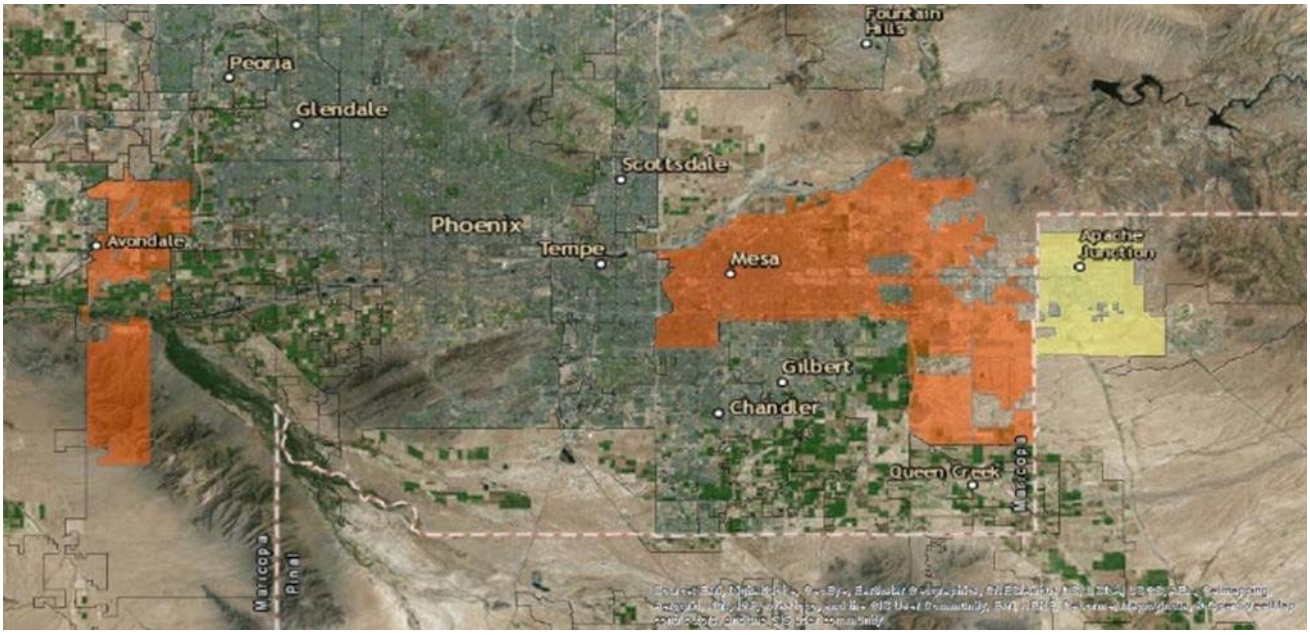


Figure 1. City of Apache Junction and two benchmark cities

Benchmarking Revenue Sources of Mesa and Avondale For Apache Junction, Arizona.

Apache Junction is a city in Pinal County in the state of Arizona. The city, located about 40 miles east of Phoenix, was incorporated on November 24th, 1978. An estimated 40,030[1] people live in the 34.8-square-mile city (a). Ninety-One percent (91%) of the city's population is White with a median age of 52 years (a).

The concern is the city of Apache Junction needs additional revenue. Unlike its neighboring benchmark cities, the city of Apache Junction does not have a primary property tax, as mandated by its incorporation in 1978. The city's age, size, and location set it apart from some of its peers. Unlike its neighbors to the west, Apache Junction has most of its service districts, e.g. fire, water, wastewater, garbage, electric, run by private companies. But like its peer cities, Apache Junction relies on sales tax revenue. Lately, Apache junction has been using its sales tax revenue that is earmarked for development to fund a retirement pension obligation.

Dwindling Sales Taxes

Sales taxes and other on-going revenues are under threat. "External forces in the sales of merchandise are trending dramatically toward online shopping and there are daily announcements of retail merchants filing for bankruptcy or shedding retail facilities or shuttering altogether" (Goggin 2018). Compounded with the loss of businesses and the tax revenues they generate is the city's overwhelming obligation to the Public Safety Retirement System, which uses up the general revenue, hindering discretionary spending (Goggin 2018). There is also a possibility that an additional city, San Tan Valley, will be incorporated in the Pinal County, which would possibly result in a $1,000,000 reduction in state-shared revenue for Apache Junction (Goggin 2018). The

[1] 2017 Population estimate from Arizona Office of Economic Opportunity. See ref (h)

city is also “landlocked” as most the undeveloped lands within and surrounding its borders are owned by federal, state and a handful of private owners.

Purpose

The purpose of this project is to help Apache Junction evaluate its service charges and fees, benchmarking those of the cities of Avondale and Mesa. The initial goal is to provide a broad perspective on Apache Junction’s plight for solutions. Benchmarking should always take into consideration the differences in demographics. Ultimately, this project will identify new fees and rates for the client. Local governments face tremendous economic and financial challenges, therefore general revenue must be analyzed so better policies can be made to improve revenue sources. This project will attempt to contribute to this cause.

Goal & Objective

The approach to solving this complex problem is multifaceted in researching policy solutions for counteracting the loss of sales taxes from the online shopping trend as well as to analyze alternative revenue sources of Apache Junction and comparing them with its peer cities of Mesa and Avondale. The client is interested to find different revenue sources to incorporate into its system or to find means of improving its current fees structure. This is in the hopes of finding new revenues that may offset sale-tax revenue losses.

It is important to point out that the two benchmark cities were preselected by the project coordinators and do not reflect any preliminary analysis by the author. Consequently, descriptive analysis of the demographics of all three cities would also provide the groundwork and comprehensive understanding of the general fund revenue of the respective cities. From this approach, we will explore general fund revenue to determine the most significant and effective of fees that may be of interest to the client. We will apply descriptive and evaluative analysis to

determine whether higher population and median household income increase the general fund and finally which revenue source significantly increase the general fund.

Literature Review

There aren't many peer-reviewed journals that analyze Apache Junction's revenue sources. Consequently, this project mostly relied on the comprehensive annual financial reports of the client and its two peer cities, as well as, a few other studies that were conducted by consulting firms for the city. In seeking pertinent solutions, literature on previous efforts on addressing the problem of online shopping on sales taxes and the local economy were reviewed. Previous efforts to addressing the impacts of online shopping on dwindling sales taxes and the local retail industry may provide the general revenue that Apache Junction seeks.

In 2008, $356,100,000 in total sales was generated in Apache Junction, which exceeds its total potential sales estimate by $8,888,358(C.Kelly 2008). In 2016, the estimated total potential retail has exceeded actual sales by $616, 372, 261 (d). The substantial loss of sales may be ubiquitous. States are losing billions of dollars in revenue from their inability to collect sales tax sold remotely, online by mail order.

Online Shopping Trend

The ability to tax online sales is crucial for states to keep up with the modern economy. Some states, like Alabama, have recently enacted laws to address the lack of tax on remote sales (ITS 2017). Arizona has complex laws that impose Transaction Privilege Tax(TPT) and use tax collection responsibility on out-of-state vendors when the vendor has sufficient presence in Arizona. However, the standards in distinguishing the nexus requirement for the TPT and the use tax is unclear. To determine which tax applies, whether TPT or use tax, the decision must be made on whether the types of activities that establish nexus are related or unrelated to the business activity sought to be taxed. In the case it is unrelated, the nexus requirement for use tax may be

satisfied through local activities that are unrelated to the business activity sought to be taxed by the state (AZ Dept of Revenue 2017). The underlying reason for the complexity in imposing such taxes is due to a supreme court ruling in Quill vs North Dakota.

With a physical presence in California, Georgia, and Illinois, Quill Corporation was a mail-order distributor of office equipment and supplies that sold its products through ads, catalogs, and telemarketing. Except for the three states, the company did not maintain any locations, warehouses, employees, in most states. Essentially, Quill had no physical presence in North Dakota. The company shipped Customer orders to North Dakota, through the U. S. Mail or a designated common carrier (Bell-Jacobs 2018). The conflict began when North Dakota Office of State Tax Commissioner attempted to require Quill to collect and pay use tax on sales shipped into the state. Quill sued North Dakota and the United States Supreme Court reasoned that the uncoordinated actions of the states have created such a complex system that to require out-of-state vendors to collect use tax would place an unconstitutional burden on interstate commerce. The Supreme Court ruled that remote vendors cannot be required to collect use tax in states where they do not have a physical presence. While the ruling may make some sense, the decision produces results that violate common sense and accepted norms of tax policy. For example, the results of the ruling mean that remote vendors are favored more compared to local merchants, horizontal and vertical equity are violated, and the tax base is undermined. Impartiality would require that the Quill doctrine on traditional remote commerce be extended to the electronic commerce and this notion causes considerable apprehension on Main Street and in state capitals (McLure 2000).

As it stands, Quill will be the law of the land until such time it is overturned. On the contrary, some leaders are not content with the status quo as they would like to codify the judicial ruling on Quill and perhaps extend the protection it provides. For example, Senator John McCain

of Arizona has introduced legislation that would amend the Internet Tax Freedom Act (ITFA) to limit state and local governments from imposing sales or use taxes for domestic or foreign goods or services acquired through electronic commerce. A virtually identical prohibition called the "Internet Tax Elimination Act" (I-TEA) was also proposed. The two republican proposed bills would exempt all electronic commerce, even if conducted by a vendor that has a physical presence in the state (McLure 2000).

Solution

The solution to the e-commerce problem is largely dependent on court rulings and policies at the national and state level. For the sake of an elusive principle of simplicity for tax policy, this project focuses on local governments and does not attempt to recommend further complicating the current confusing tax system or argue for more municipal authority over revenue to tax remote vendors outside local jurisdictions. Instead, this project will focus on practical solutions for the local government. More specially, the project will scrutinize general revenues generated from fees and service charges, which currently produces less than half the revenue of sales taxes. Improving existing sources of general revenue or developing new ones can be beneficial to providing city services. The additional revenue may be used to absorb the current retirement pension obligation, procure much-needed public safety or community services, or counter the current and future fiscal impacts of online shopping on the general fund and local economy. The revenue from fees may not replicate overnight the substantial amount of revenue generated by sales taxes, but it may eventually serve as a buffer for alleviating fiscal shortfalls and various adverse economic trends.

Methods

Since the three peer cities in this study differ in many ways, it is important that we have a comprehensive understanding of the demographics in relation to the general revenue. The following are the questions of this research:

- RQ 1 Do higher population and median household income increase the general fund?
- RQ 2 Which revenue source significantly increase the general fund?

The initial question will involve the first segment of the investigative process as it will try to lay out the groundwork for answering the second question, identifying the significant fees. However, to answer these questions will require the gathering of data on three cities to be analyzed. The data is gathered from various online sources and from city employees. In case a data is an estimate but is not available, analytic methods will be used to produce estimates for this project.

This case study will initially analyze the correlation of general revenue to various demographics by using regressions. With a more holistic understanding, we can then identify significant fees that city governments regularly charge. Specifically, we will analyze the general attributes of the fees and the revenue per capita they generate.

CAFR and other sources

The revenue figures within this study were extracted from each of the cities' Comprehensive Annual Financial Reports, from 2008 to 2017, except for Avondale which has yet to publicize its 2017 CAFR. The general fund revenue figures for Avondale in 2017 were instead extracted from the city's 2017 Annual Budget & Financial Plan. The population and median household income are estimates from US Census, except for 2017. Population estimates for 2017 were extracted from the Arizona Office of Economic opportunity, while Holt's Trend-Corrected Forecast Analysis was utilized to produce the median income for 2017.

Holt's Trend-Corrected Forecast

The 2017 median household income estimates were not available in the US Census website where previous years' estimates were extracted. Holt's Trend-Corrected Forecast model was used to estimate median household income for that year only. This method uses the data provided from the US Census in the previous years to forecast the median household income in 2017. Microsoft Excel spreadsheet was used to generate the estimate as illustrated in Apache Junction's example in figure 2.

t	demand	level estimate	Trend	one step forecast	Forecast Error	Squared Error
0		62,605	(854)			
2008	39,186	50,468.58	(6,495.14)	61,751	(22,565)	5.09E+08
2009	37,369	40,671.22	(8,146.25)	43,973	(6,604)	43618595
2010	39,467	35,995.99	(6,410.74)	32,525	6,942	48191754
2011	40,010	34,797.62	(3,804.55)	29,585	10,425	1.09E+08
2012	38,393	34,693.04	(1,954.57)	30,993	7,400	54758939
2013	37,403	35,070.73	(788.44)	32,738	4,665	21757872
2014	36,771	35,526.65	(166.26)	34,282	2,489	6193641
2015	35,671	35,515.69	(88.61)	35,360	311	96479.56
2016	38,053	36,740.04	567.87	35,427	2,626	6895420
2017	37,307.91					
2018	37,875.79					
2019	38,443.66					
2020	39,011.53					
2021	39,579.40					
2022	40,147.27					
2023	40,715.14					

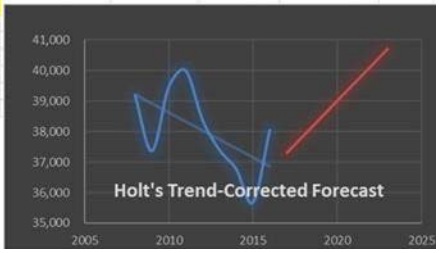


Figure 2.Holt's Trend Corrected Model

Timeline	Values	Forecast	Lower Confiden	Upper
2008	39,186			
2009	37,369			
2010	39,467			
2011	40,010			
2012	38,393			
2013	37,403			
2014	36,771			
2015	35,671			
2016	38,053	38,053	38,053	38,053
2017		36,544	34,447	38,640

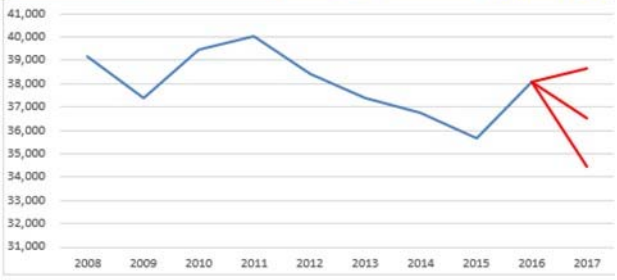


Figure 3. AAA Version ETS Forecast

Due to the erratic trend of the median income shown in figure 2, another forecast model, portrayed in figure 3, was used to compare with Holt's Trend-Corrected Forecast. This model uses existing time-based data and the AAA version of the Exponential Smoothing (ETS) algorithm to predict future values. As a result, Holt's Trend Corrected Forecast predicted within the confidence interval of the second ETS model. Consequently, this project used the initial model estimates of Household Median Income in 2017 to answer the first research question.

STATA 15

With the information extracted from various sources, a dataset consisting of longitudinal data from 2008 to 2017 is imported into Stata. Stata is used to describe the various demographics of the three cities.

Descriptive Analyses

The first sets of graphs will give the readers a more in-depth perspective of the differences in basic demographics between the three cities. This information will provide the reader a better understanding of the revenues that this project will ultimately analyze. It is impractical to compare tax revenue with perceived peers without first contemplating the differences in the tax base. Figure 5 illustrates the total population of the three cities in 2017. Avondale is about twice the population size of Apache junction while Mesa is over ten times more populated than Apache Junction.

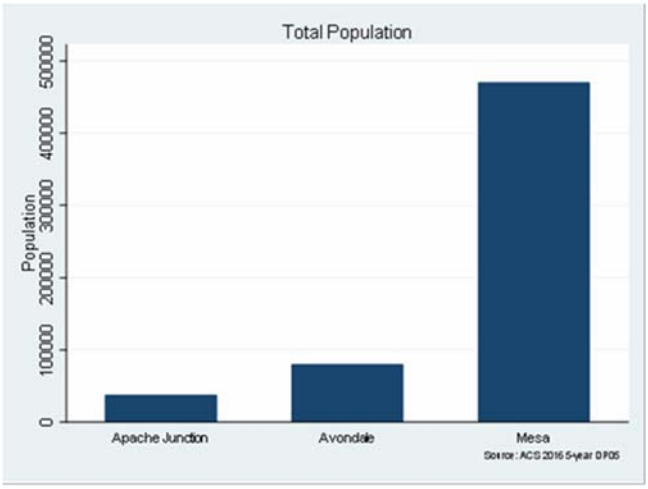


Figure 5. Population 2017

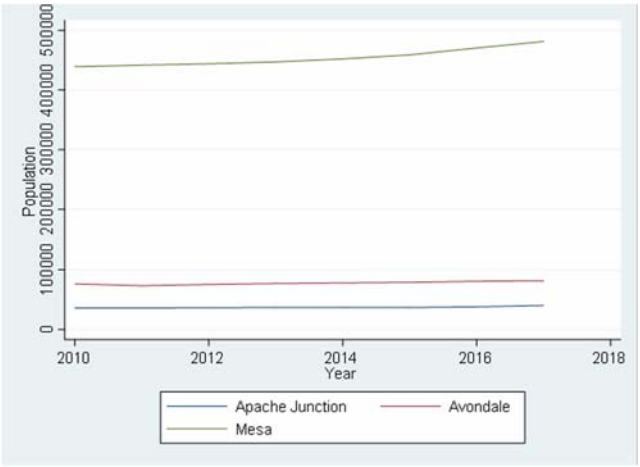


Figure 4. Population 2008 to 2017

The population estimates for Mesa has been rising in the past several years as depicted in figure 4, while the other two cities have steady populations over the years. The median household income, as shown in figure 6, shows more erratic trends. The negative slope shows that the Median Household Income has been declining for Avondale, while Mesa and

Apache Junction seems closer to reaching its pre-Great Recession levels. Another peculiarity is Apache Junction's erratic dip right after the last recession, probably suggesting a more vulnerable median household income.

When comparing the raw amounts on the graph in figure 6, it is obvious that Apache Junction has a far lower median household income compared to the other two cities. It may be important to take note of these distinct quantitative differences when seeking new revenue sources from the resident populace. According to a progressive policy strategy published in 2015, conservative pricing of fees should be established so lower-income households pay a lower rate and bulk users, such as commercial and industrial, pay higher rates (Sebastian, et al 2015).

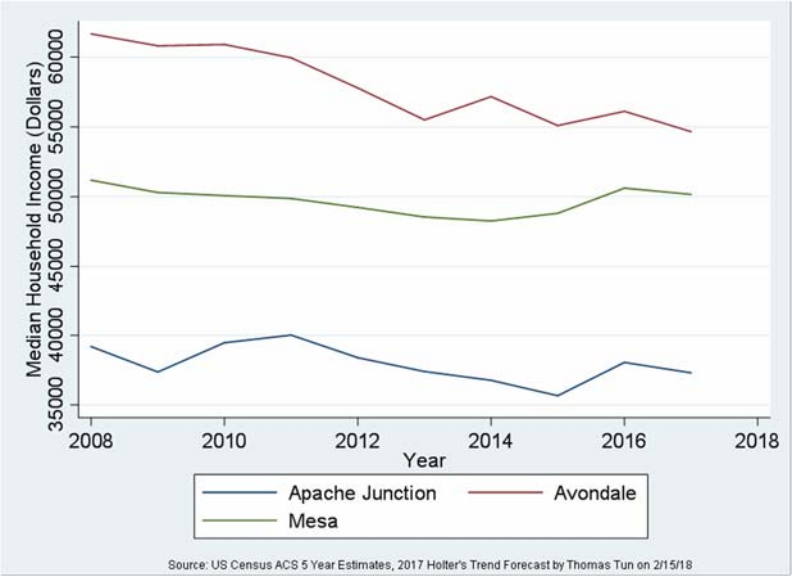


Figure 6. Median Household Income 2008-2017

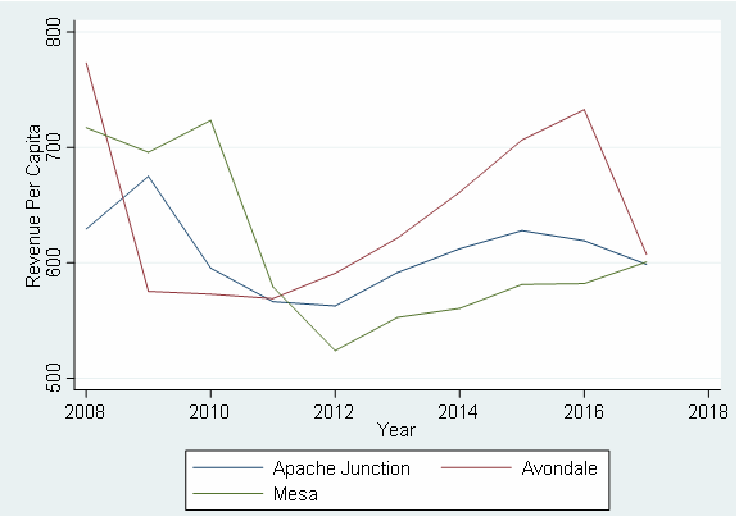


Figure 7. Revenue Per Capita. 2008-2017

General Revenue

This project looked at four types of general revenue: sales taxes, Permits and Licenses, fees and service charges and total general revenue. There are other substantial sources of general revenue which were not included in this report but are captured in the total general revenue figures (See Appendix D). Since the total

amount of general revenue of all three cities differs significantly, populations of the peer cities were used to standardize the revenue amounts. Though population growth may influence the revenue trend, it nonetheless provides a holistic perspective on the wealth of the city. As shown in figure 7, revenue per capita will allow the descriptive analysis to hone in on the detail characteristics of the general revenue while comparing all three cities on the same graph.

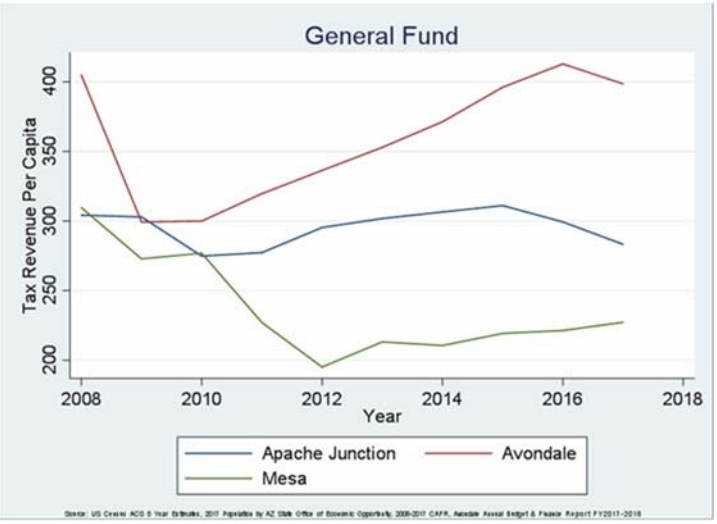


Figure 9. Tax Revenue Per Capita. 2008-2017

For the past several years, tax revenue per capita has been on a steady increase in Mesa while the opposite may be said about Apache Junction. In figure 9, a gradual decline of tax revenue is observed for Apache Junction, since 2015. The other decline in Avondale may be due to its 2017 data which were extracted from a different annual budgetary report rather than the comprehensive annual financial report of previous years. Otherwise, the negative slope between 2016 and 2017 for Avondale mimics that of Apache Junction. Comparatively, Avondale's slope is more recent and prone to accounting variances from different accounting reports, while the decline of Apache

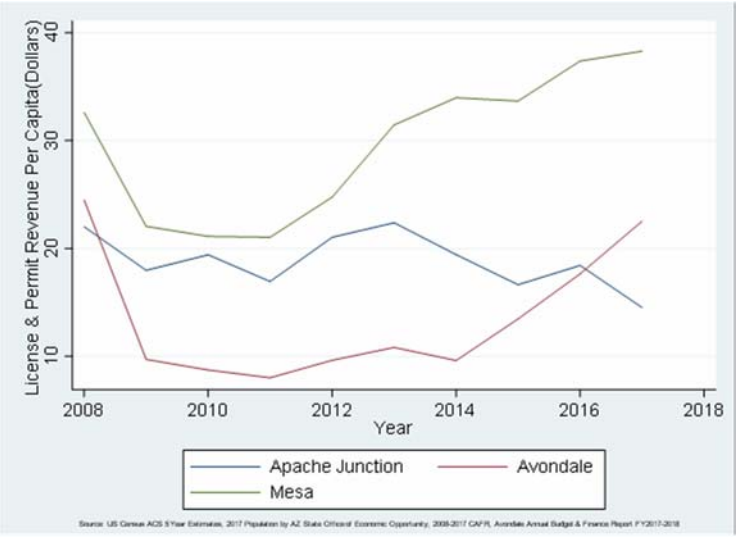


Figure 8. Licenses & Permits Revenue Per Capita

Junction's tax revenue per capita extends back to 2015, and all its figures are taken from the comprehensive annual financial reports of 2008 to 2017.

The graph in figure 8 depicts a decline in the general revenue per capita from License and Permits, in Apache Junction. The current level of revenue per capita from license and permits has reached the lowest point in the last ten years. This may justify the purpose and approach of this research in finding means to enhance revenues from license, permits, fees and service charges as requested by the client.

Figure 10 shows a steady decline, for the past nine years, in revenues per capita from service charges and fees. The negative slope, however, may be partially attributed to the gradual increase of Apache Junction's population since 2009. In 2009, the population of Apache Junction was estimated at its lowest point in the last decade, with 33.5 thousand residents. The population has since grown to 40 thousand people in 2017(a). The next segment of the research will use evaluative analyses to determine the relationship between the various variables and how they affect the total general revenues.

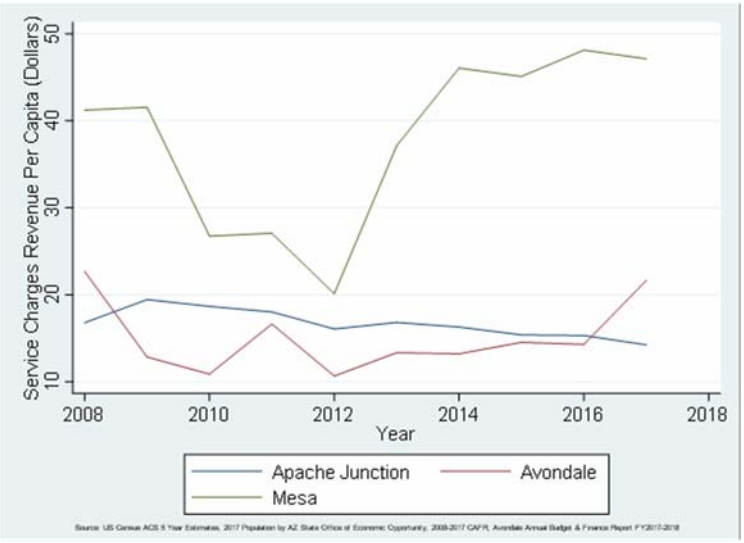


Figure 10. Charges for Services Revenue Per Capita

Evaluative Analyses

Stata was used to run evaluative regression analyses to determine the relation of the demographics and service charges to total general revenue. Using multiple regression models in appendices A and B provided a better understanding of the descriptive analysis, as these models can provide the relationship between the general revenue and the revenue source as well as the demographics.

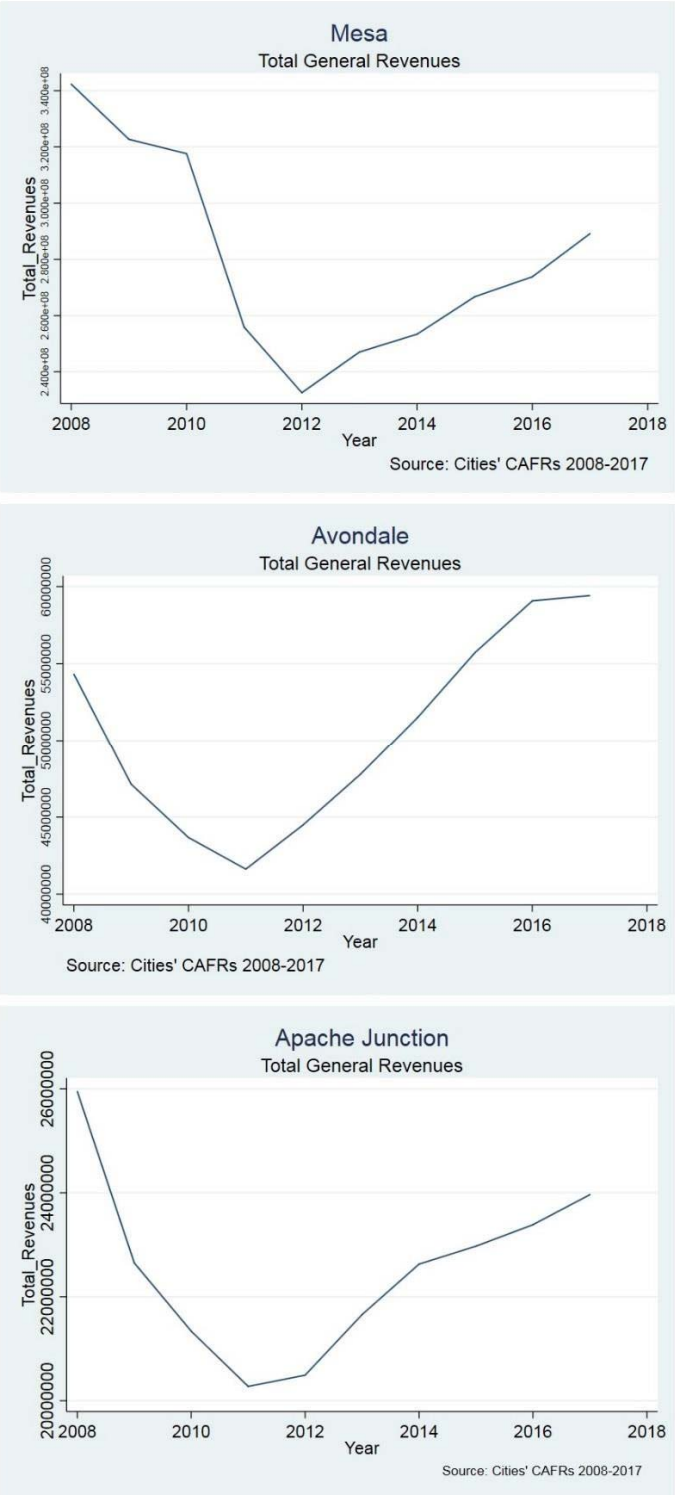
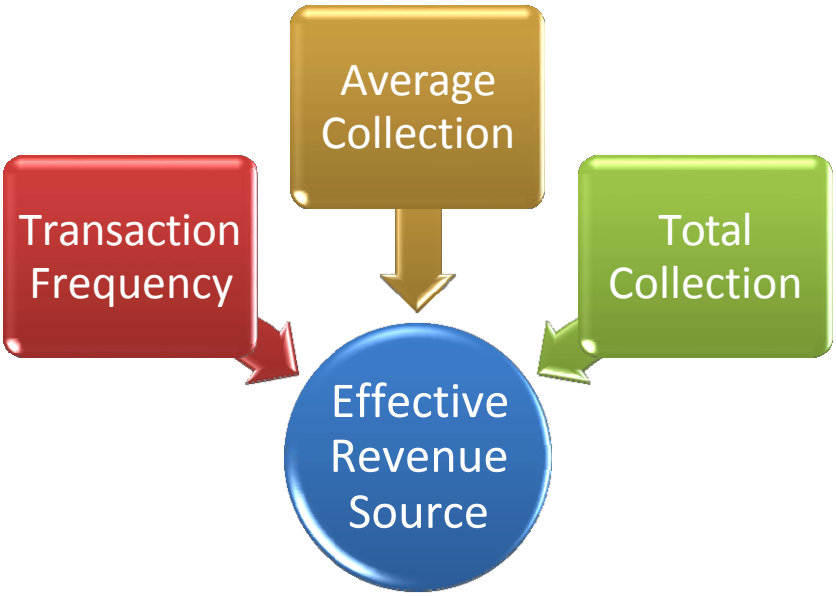


Figure 11. Total General Revenues. 2008-2017

For example, the output of a muliple regression analysis (see Appendix B) uses total general revenue as the dependent variable. This shows the independent variable of taxes as the most stistically significant (P=0.002 to 0.003) and strongest predictor (Beta value=1) of revenue source. The coefficients of the predictor variables attest to effects upon total revenue. In the model in Appendix A, population increases revenue on average by $239 for every person. Median household income has a negative relationship with the revenue. This possibly due to Apache Junction in the model, in

Appendix A, which included data from its two peer cities. This is further suggested in the muliple regression model in Appendix B, which analyzes each city separately and where Apache Junction is the only city with a negative value. Unlike in Appendix A, the coefficient for median household income in the model in Appendix B (P=0.70) is unreliable. This is because the sample size is too small, since the datatset consists of summarized data from 2008 to 2017 comprehensive annual financial reports of all three cities (See appendix C). The larger datasets on the specific fees in Avondale and Apache Junction extracted from their cities' respective open data, provided a more indepth look at the specific licenses, permits, services charges, and fees in the three cities and their performance. From the available data consisting of previous transactions, we analysed the frequency of the transactions, the average amount collected per revenue source and finally the total sum collected per revenue source.



Actual Revenues:

It may be important to point out that the actual performance of the general fund since the great recession have not all been the same. Only Avondale has attained its pre-recession general revenue level. As you can see in Figure11, Mesa and Apache junction have not fully recovered back to their revenue levels in 2008.

Actual revenues collected from Licenses and Permits are gradually increasing for Mesa and Avondale beyond their 2008 levels. A less favorable trend is observed in figure 12, where the trend of revenue growth has been erratic and currently in decline in Apache Junction.

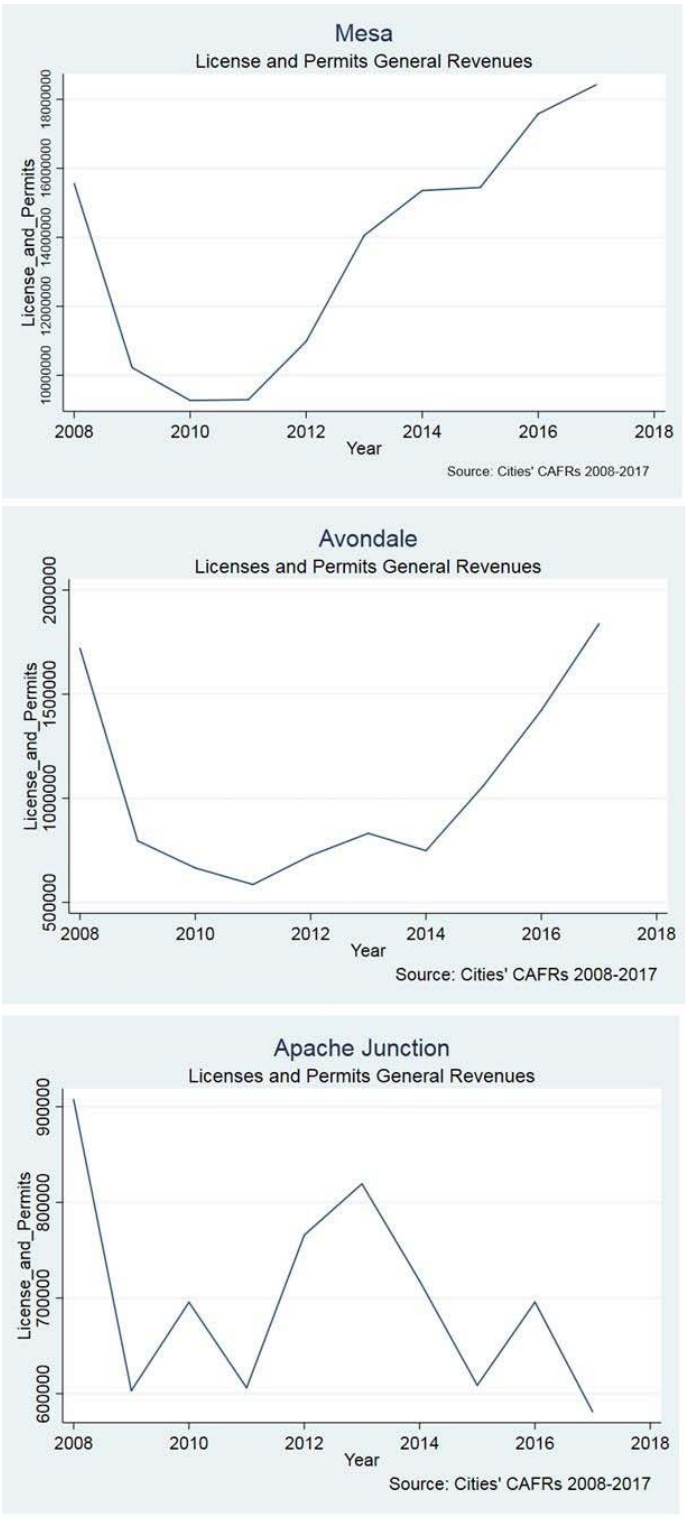


Figure 12. Licenses and permits revenue. 2008-2017

The revenue from charges for services has also increased for both Mesa and Avondale. On the contrary, Apache junctions revenues from charges for services has been on a gradual decline. See Figure No. 13.

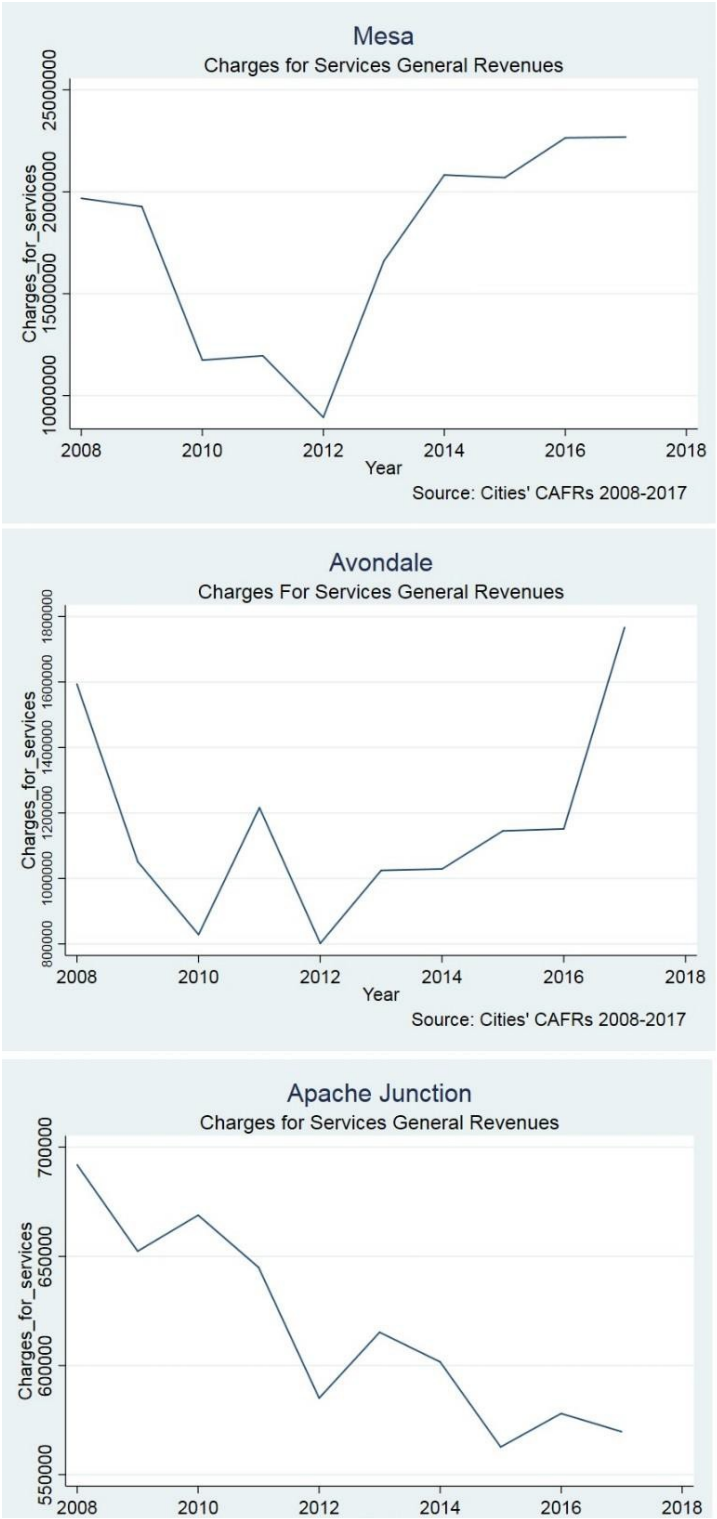


Figure 13. Charges for Services Revenue. 2008-2017

While the two benchmark cities have surpassed their 2008 balance, revenue from Charges for Services in Apache Junction hasn't shown any promising sign recovery since the previous recession. Except for these three years since the recession: 2010, 2013 and 2016, the revenue from charges for services continue to decline.

Most general revenue transactions were recorded for License and Permits in Mesa, while in Avondale Charges for services exceeded licenses and permits. Though the number of transactions does not imply the revenue amounts collected, the frequency of the transactions goes to distinguish the most frequently collected fees. According to Figure No.14, Licenses, Fees, Permits, and Charges for Services are the most collected revenue sources in the two peer cities.

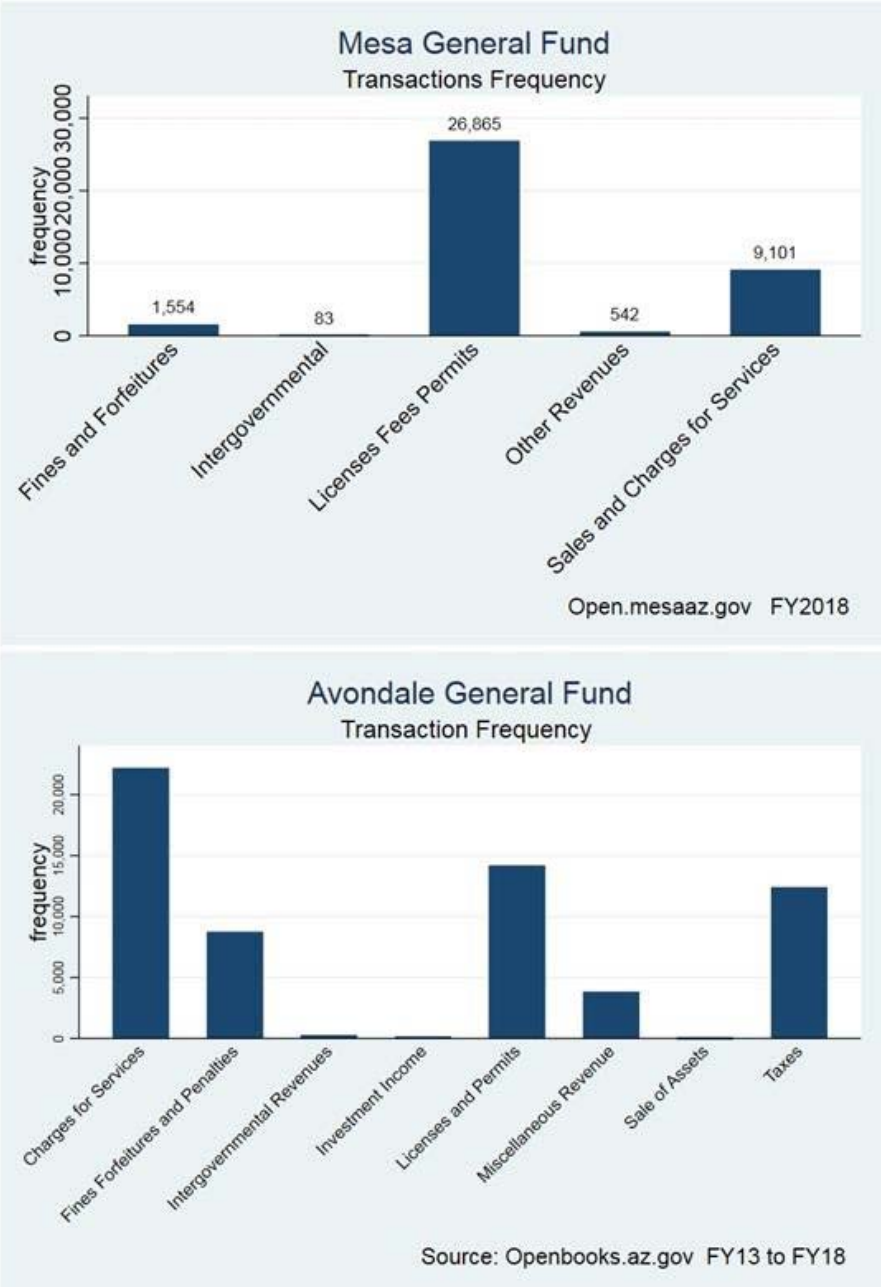
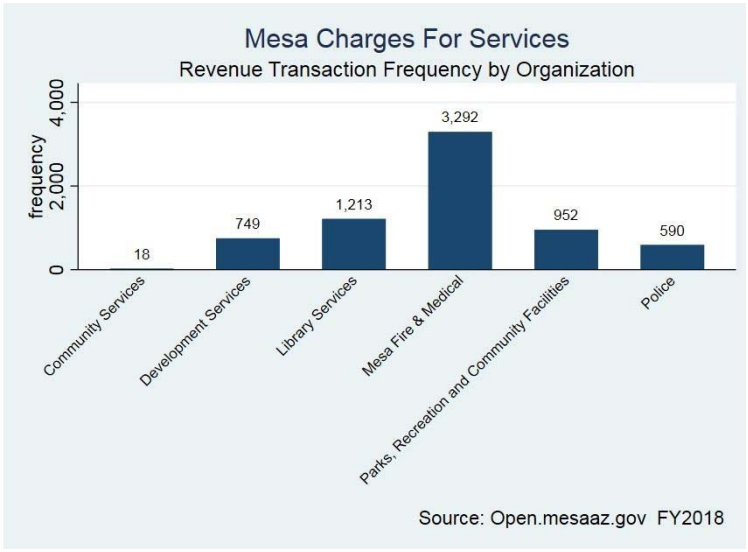


Figure 14. Frequency of Transaction by Revenue Category

Departments with most frequent Charges for Services collection

The most actively collected Charges for Services in Mesa belong in the fire department. Since Apache Junction does not have this department, the second and third ideal options would be Library Services and Parks, Recreation and Community Facilities. In Avondale, the city clerk is most active in collecting Charges for services for the general fund. This, however, does not suggest that the city clerk collects the highest amount of general revenues as we will find out in later graphs that the high frequency of transactions by the city clerk is due to passport processing services.



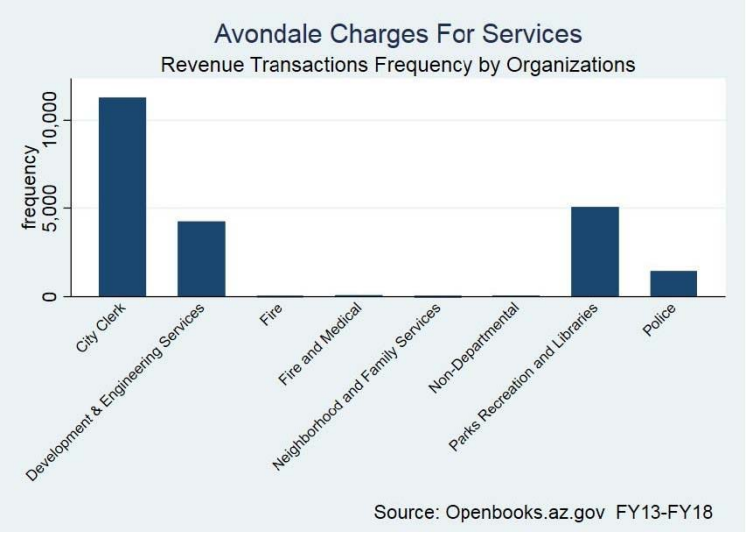
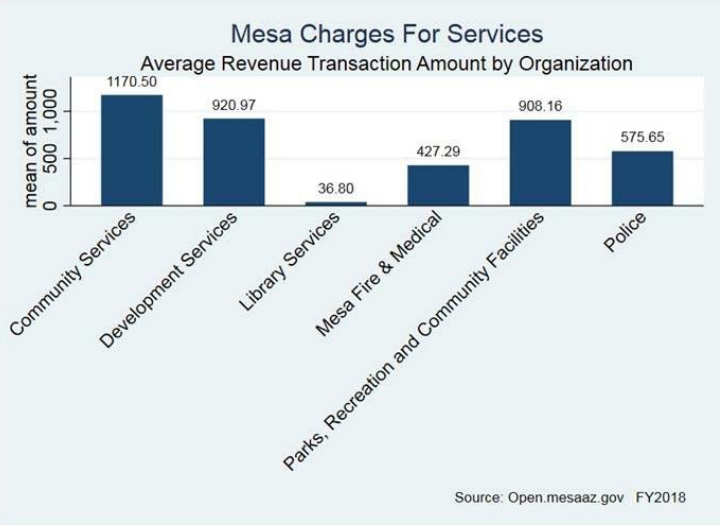


Figure 15. Charges for Services Collection Frequency by Department

Average Charges for Services collected by department.

The average amount of Charges for Services collected by a department provides a more comprehensive perspective of which fee is most effective. In Mesa, the highest amount of fees are collected by the Community Services, the Development Services and the Parks, Recreation and Community Facilities departments. In Avondale, the highest average amount of fees are collected by fire and medical and Neighborhood and Family Services. The project considers other departments since the city of Apache Junction does not manage fire and medical departments.



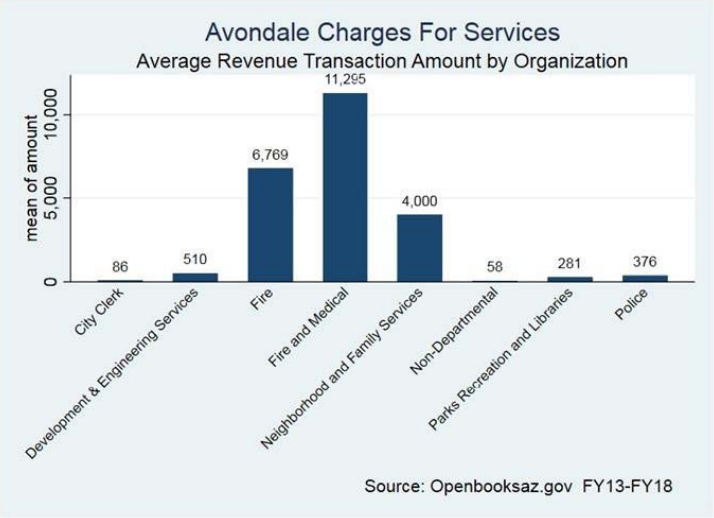


Figure 16. Charges for Services Average Collection Amount by Department

Most frequently collected Charges for Services

The number of times a fee is collected provides us the perspective of how much time and labor is spent in collecting the fee, but it does not reflect the amount of revenue collected. In Mesa, the most collected Charges for Services fee are fire inspection fees which are inapplicable to Apache Junction. However, rentals and library sales are also frequently collected. For Avondale's

general fund, the most frequently collected charges for service is the passport processing fee, followed by facilities rentals and plan check fees.

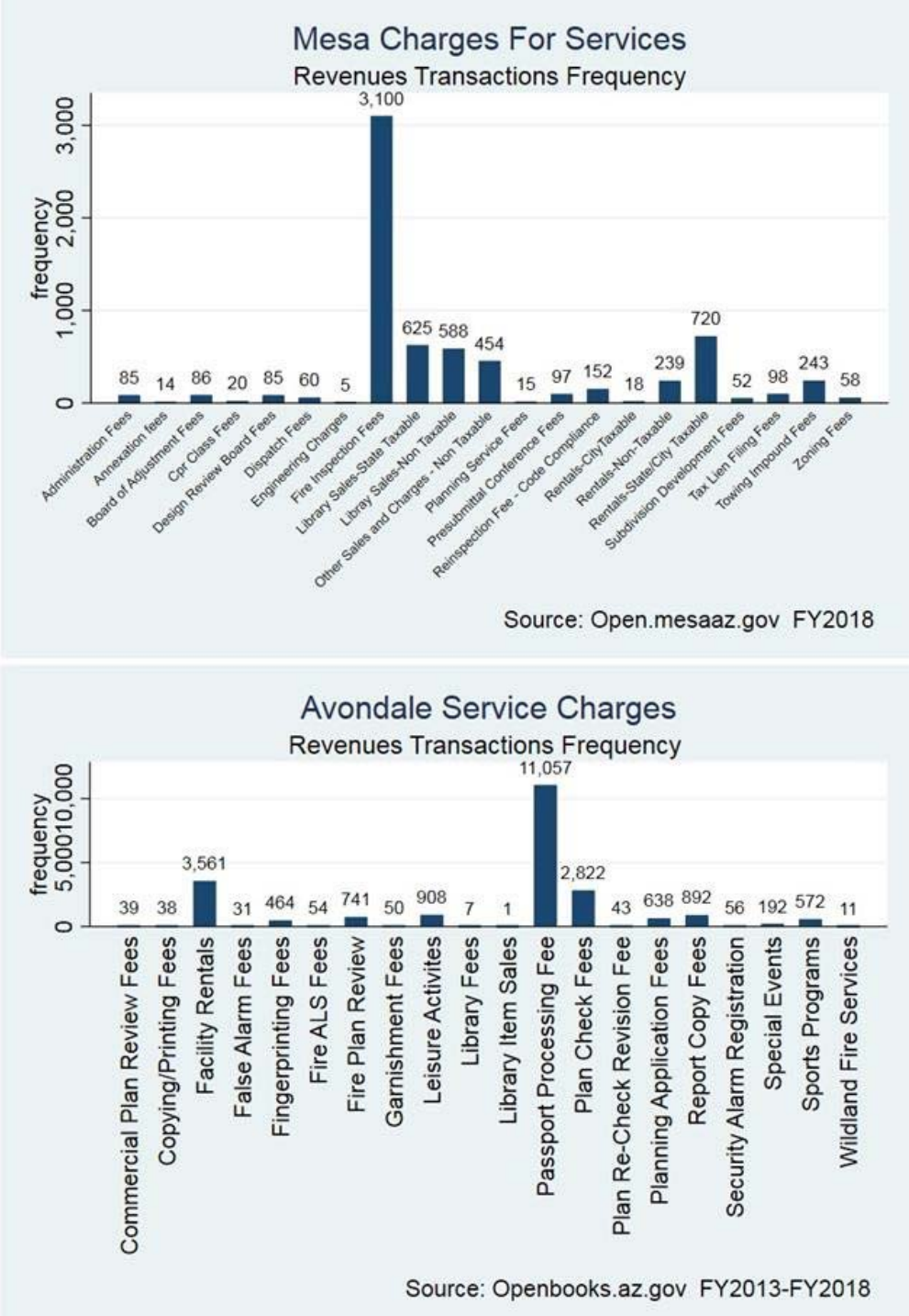


Figure 17. Charges for Services collection frequency per revenue source

Highest Average Charges for Services collected

The highest average charges for services collected are for the fire department in Avondale. More applicable fees with high average collection amounts, in Mesa, are zoning fees and subdivision development fees. The higher average fees collected for fire services are inapplicable to Apache Junction since the city does not have a fire district. However, the security alarm registration fee, a false alarm fee, and dispatch fee may be applicable to Apache Junction's police department.

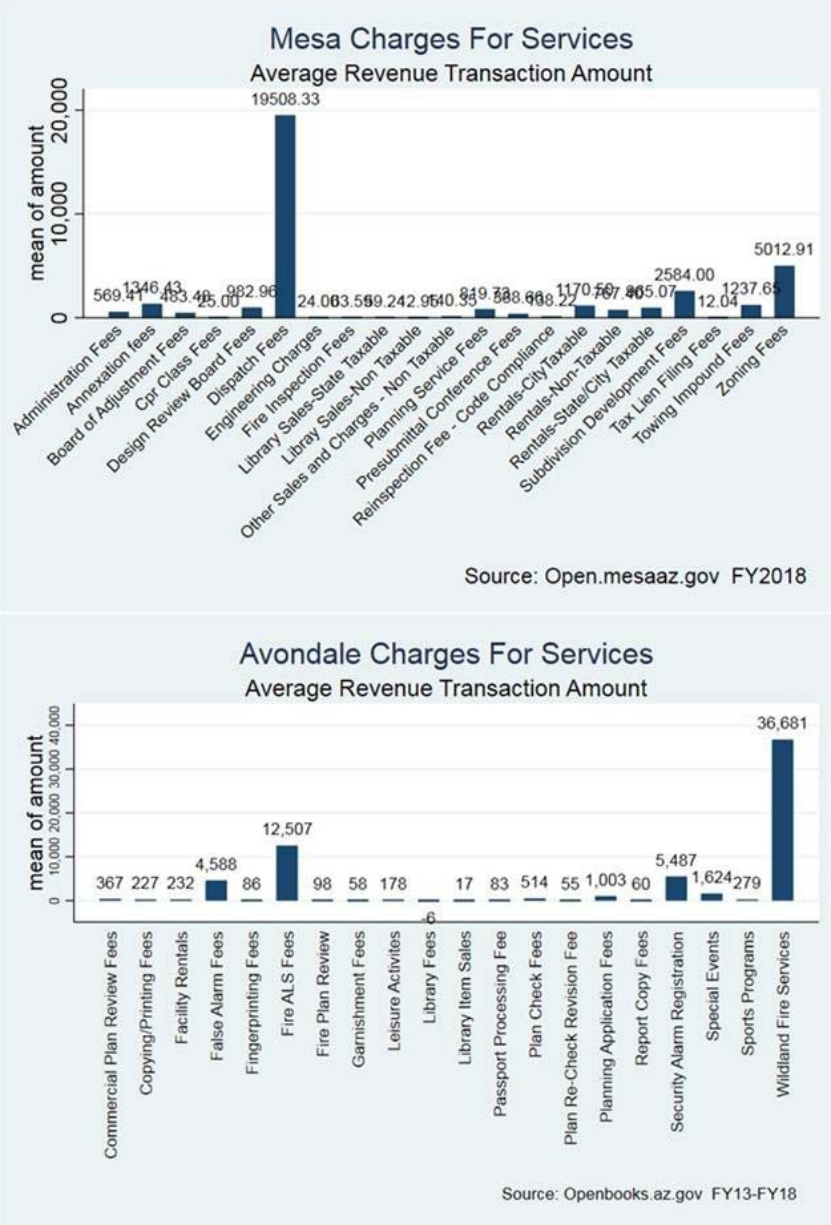
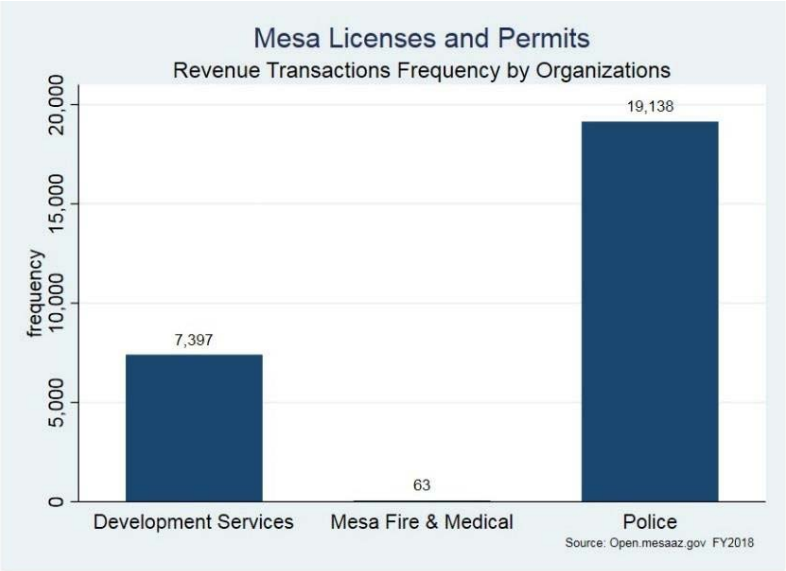


Figure 18. Charges for Services Average Collection Amount per revenue source

Departments with most frequent collections of Licenses and Permits

The department that most frequently collected general revenues from licenses and permits, in Mesa, is the police department followed by development services. In Avondale, the Development and Engineering Sevices most frequently collected revenues in the licenses and permits category. The type of departments that collected revenue most frequently in the peer cities also exist in Apache Junction. This looks promising for Apache Junction. However, the frequency of collection doesn't necessarily equate to higher proceeds. Frequency of collection only suggests that the department is actively collectingrevenue. This is a good indicator that the revenue sources for these departments are effective in collection of revenue but not necessarily in increasing the general fund.



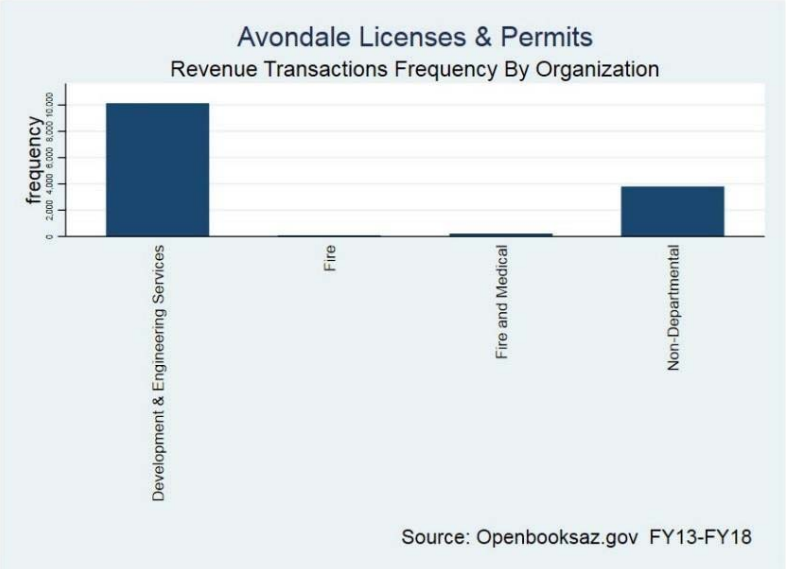


Figure 19. Licenses&Permits transaction frequency by department

Average amount Licenses and Permits collected by department

When it comes to the department with highest average collection amount in licenses and permits, the development services department in both cities are by far the departments with the highest average amount of revenue collected from licenses and permits. In Avondale, the average amount of collection by Development Services ($563) is not as high as in Mesa ($975). The average amounts of revenue collected from licenses permits, in the fire departments, are much higher in Avondale, compared to Mesa. But this department does not apply to Apache Junction which doesn't have a fire department.

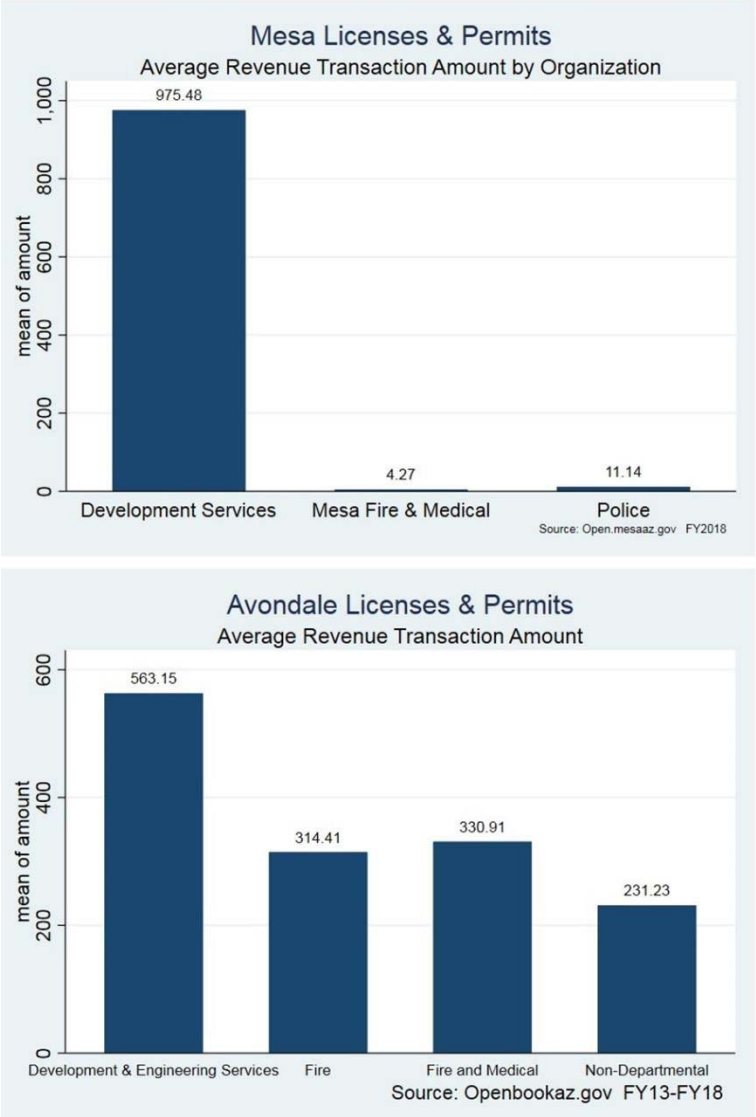


Figure 20. Licenses&Permits Average Collection Amount by department

Most frequently collected Licenses and Permits

The most frequently collected revenue in the permits and licenses category, in Mesa, are Alarm Permits and Assessments collected by the police. The second most frequently collected revenue source in this area is the residential building permits. In Avondale, the most frequently collected licenses and permits is the electrical permits followed by the occupational License fees, building permits and plumbing fees. Avondale seems to have more diversified revenue sources from licenses and permits.

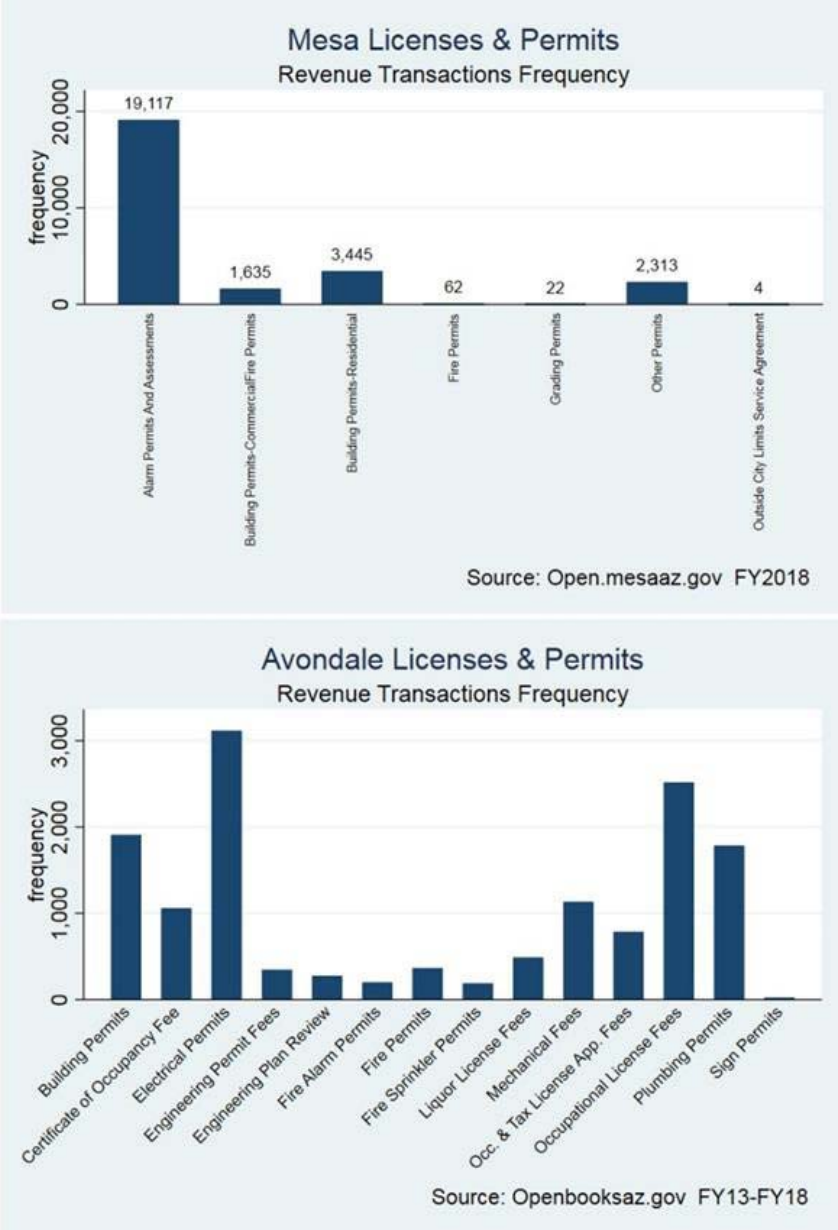
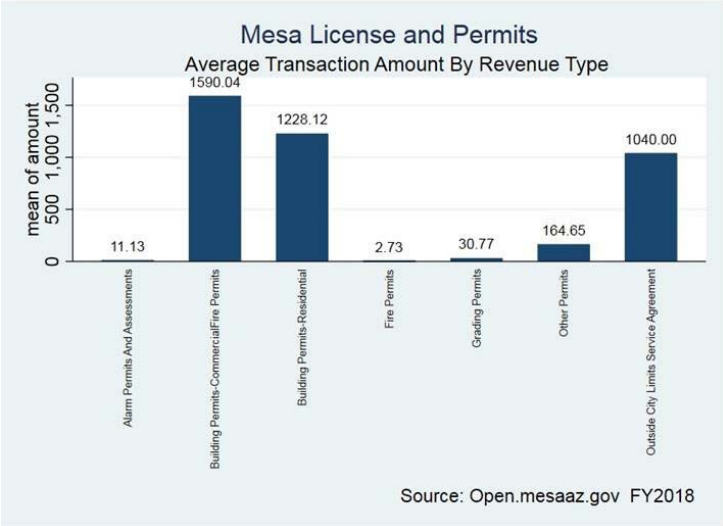


Figure 21. Licenses&Permits Collection Frequency by revenue source

Highest Average amount collected (Licenses and Permits)

In Mesa, the highest average amount collected from licenses and permits is from building permits. Other applicable fees with high average amounts are the zoning fees and subdivision development fees. In Avondale, the highest average amount collected for licenses and permits is from engineering plan review, engineering permit fees, and building permits.



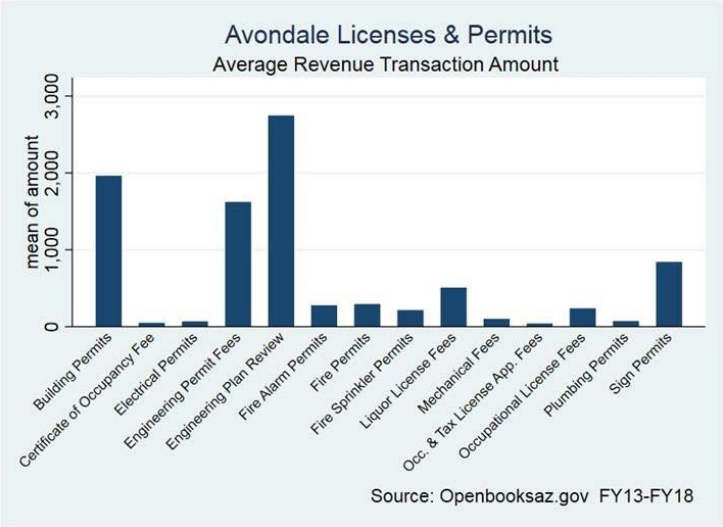


Figure 22. Licenses&Permits Average Collection Amount by revenue source

Total Revenue Collected in 2018 (Licences & Permits and Charges for Services

After comparing the collection frequencies and mean collection amounts per revenue source under each of the two categories of general revenue, the total sums of collection per revenue are compared. The transactions that were included in this segment of analysis are from the beginning of fiscal year 2018(July 1st) to February 28th. Figures 23 shows the Charges and Services and figure 24 illustrates Licenses and Permits in the two peer cities for

FY 2018. These figures represents the total sum collected per revenue source of interest thus far in this fiscal year.

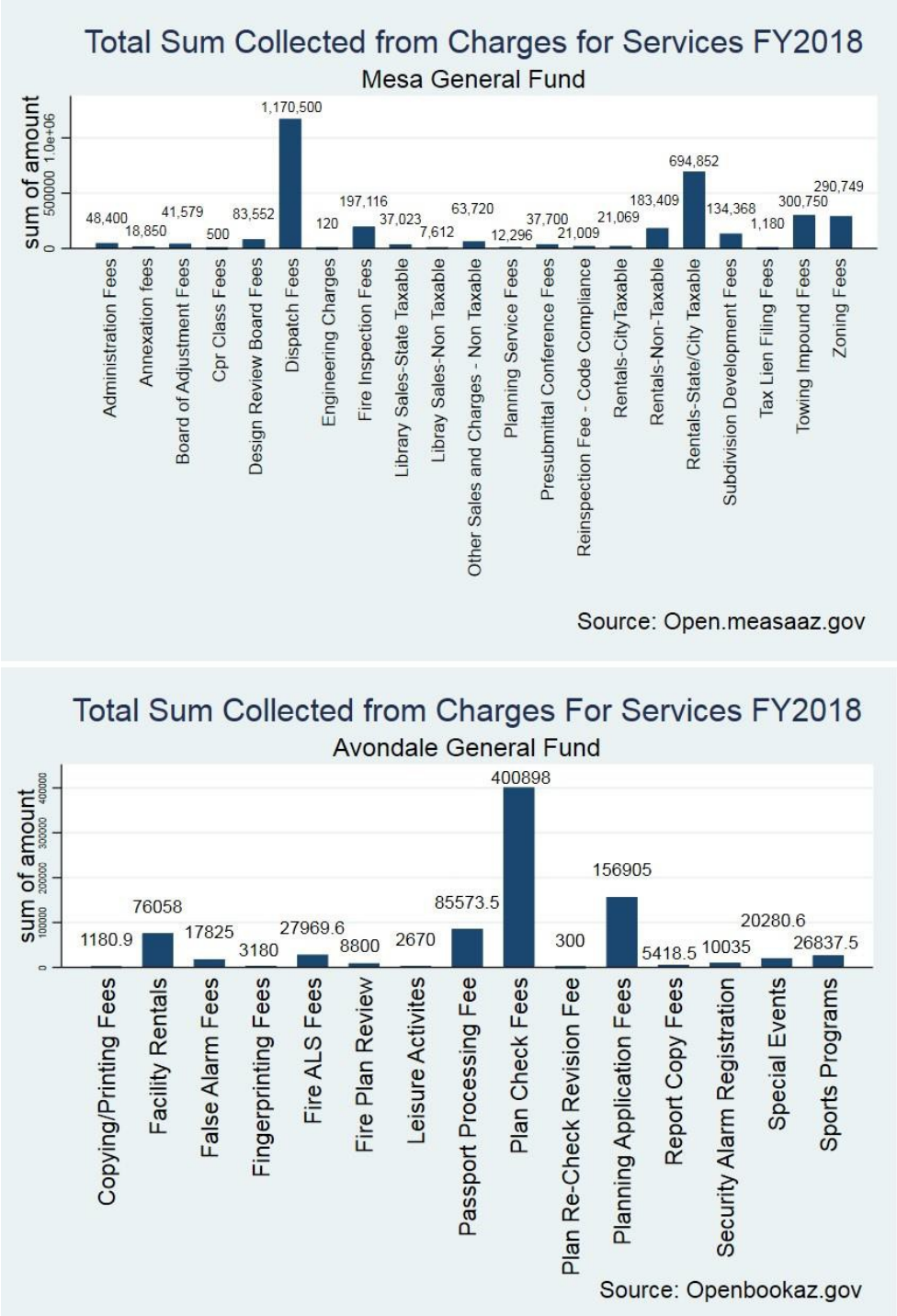
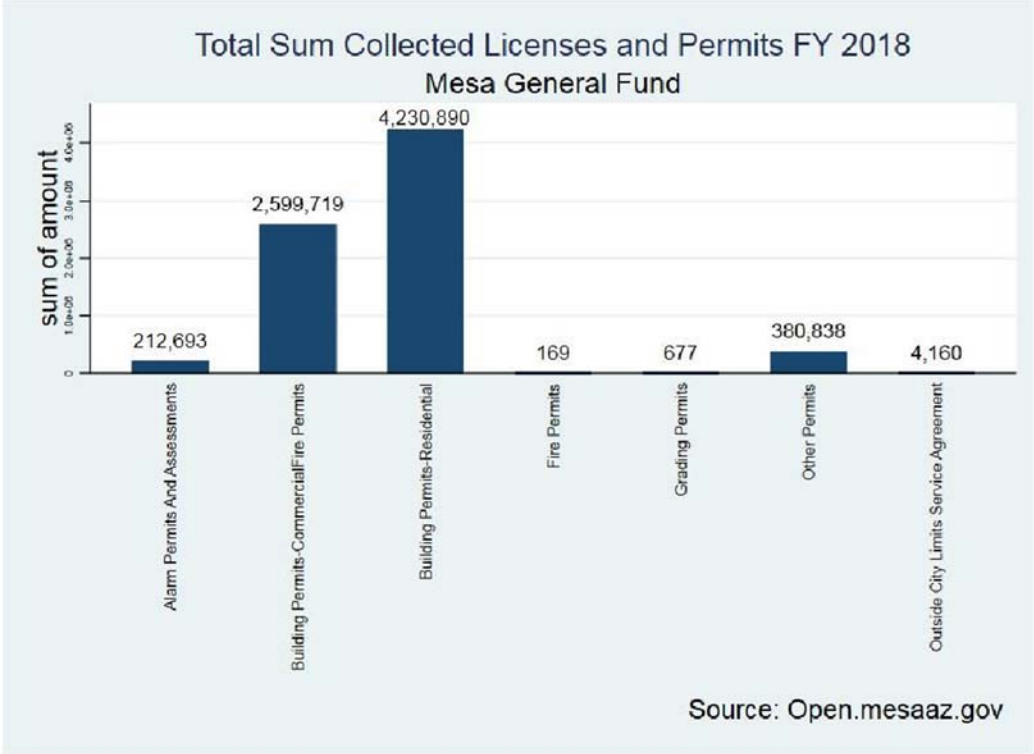


Figure 23. Charges for Service Collection Amount, JUL01, 2017-FEB28, 2018



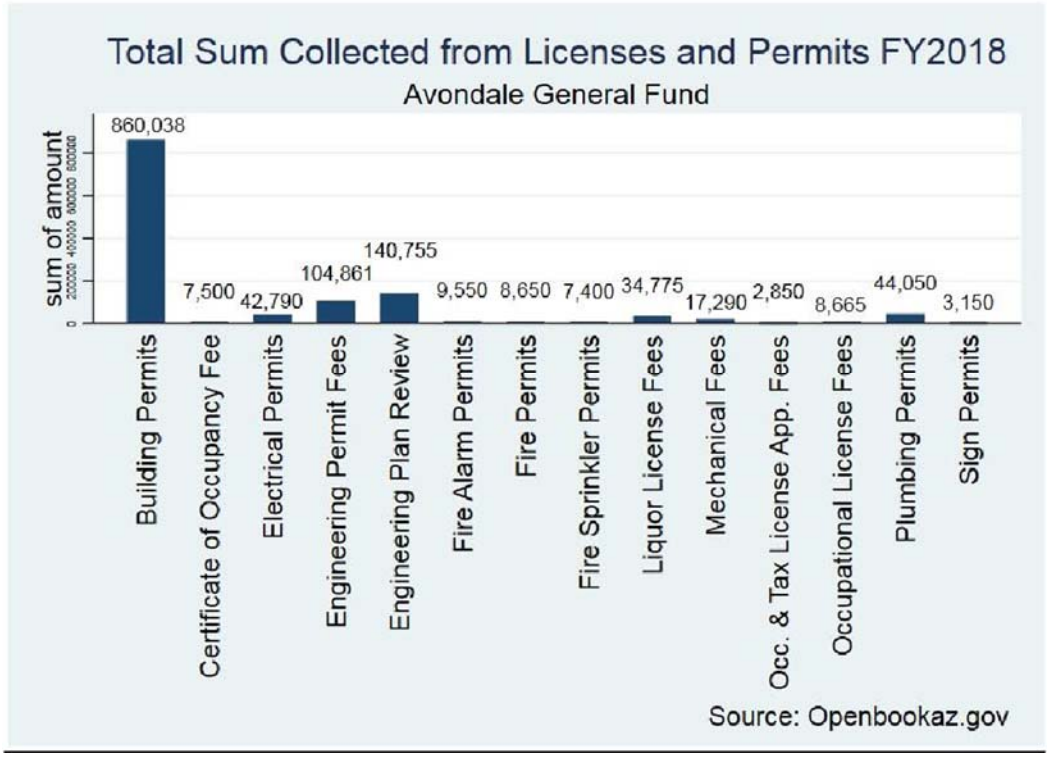


Figure 24, Licenses &Permits Collection amount JUL01,2017 to FEB28, 2018

Majority of the revenue sources shown in the following summary table that generate the highest amounts of revenues are related to development.

Table 1
Summary of most effective fees in Avondale and Mesa

	Licenses & Permits		**Charges for Services**	
	Mesa	Avondale	Mesa	Avondale
Most Frequently collected	Alarm Permits and Assessments	Electrical Permits	Rentals-State/ City Taxable*	Passport processing fee
Hghiest Average Collection	Building Permits	Engineering Plans Review	Zoning Fees	Security Alarm Registration**
Highest Collected Balance	Building Permits	Building Permits	Rentals-State/ City Taxable*	Plan Check Fees
*Dispatch fees from fire and medical is the most frequent revenue source with the highest collected sum in Mesa thus far in FY2018. However, that revenue source is not applicable to Apache Junction since the city does not have a fire or medical district.				
**The first two revenue sources with highest average collection belong to the Fire district and thus is inapplicable to Apache Junction.				

Discussion

In order to increase Apache Junction's general revenue from fees, consideration should be placed on the relationship between the general revenue and Licenses & Permits and Charges for Services. From the analyses, one may conclude that the decline of the general revenue is partially attributed to these two categories of general revenue sources. The evaluative analyses, though lacking much data thus precision, suggest a negative relationship between some of the fees and the general revenue possibly due to their smaller collection amounts when analyzed with other greater revenue sources such as intergovernmental revenues. When observing the general revenues per transactions, these two sources are "small peanuts" when compared to other revenue sources with substantial revenue per transaction. The trend line of the fees and charges for services seldom ascending above a plain but often declining also contribute to the negative association with the general fund.

Fees may need be restructured so that higher amounts can be collected. More revenue collected from licenses and permits and charges for services may help replenish the general fund. However, licenses and permits and charges for services are often a subject of public scrutiny. They are susceptible of being decreased due to policy at various levels of government that limit collection and expenditures. For example, local policies that appeal to the public and the private sector can sometimes contribute to the decrease of revenue. Resolution No. 14-27 and Ordinance No. 1399 decreased development fees ranging from 30% up to 58% based on the land use category (residential, commercial, industrial, etc.). Single-family development fees went from $9,139 to $4,925, which is a 46% reduction (Johnson 2014). This brings to question whether the client should pursue increasing fees or to wait for the proceeds of their previous economic stimulus. This project did not look into the effects of such policies, such as the cut in development fees in 2014.

A future project should look into the effects of such policies to determine whether or not fees and charges for services should be raised. It is a simple question with a complicated answer since policies are dependent on myriad of factors to take effect. With sufficient data, future research can determine how such policies stimulate the economy or perhaps reduce the general fund.

Recommendations

Due to the low median household income, fees should be progressive in design to reflect those who are willing to pay and those who cannot afford to pay. Fees should not be decreased due to their downward trends since 2008. Further analyses and modification of the effective revenue sources, which were provided in table1, are needed so the aforementioned points are inclusive in their replication processes. The impacts of the online shopping trend may not be offset by the small

portion of the general revenue generated by these fees, but by improving these revenue sources cities become better prepared for tomorrow by covering existing costs today.

Appendix A

```
. . reg total_revenues license_and_permits charges_for_services taxes populatio
> n medianhouseholdincome
```

Source	SS	df	MS	Number of obs	=	30
				F(5, 24)	=	3129.23
Model	4.1139e+17	5	8.2278e+16	Prob > F	=	0.0000
Residual	6.3104e+14	24	2.6293e+13	R-squared	=	0.9985
				Adj R-squared	=	0.9981
Total	4.1202e+17	29	1.4208e+16	Root MSE	=	5.1e+06

total_reve~s	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
license_an~s	-2.34062	.9811808	-2.39	0.025	-4.365677	-.3155621
charges_fo~s	1.252172	.6672789	1.88	0.073	-.1250236	2.629368
taxes	1.76634	.1096838	16.10	0.000	1.539964	1.992716
population	238.7986	32.88222	7.26	0.000	170.933	306.6642
medianhous~e	-518.9314	122.5324	-4.24	0.000	-771.8258	-266.0369
_cons	1.45e+07	5661555	2.56	0.017	2810597	2.62e+07

Appendix B

```
. regress total_revenues license_and_permits charges_for_services taxes medianhouseholdincome if ci
> ty =="Apache Junction", beta
```

Source	SS	df	MS	Number of obs	=	10
				F(4, 5)	=	11.18
Model	2.3492e+13	4	5.8730e+12	Prob > F	=	0.0104
Residual	2.6263e+12	5	5.2525e+11	R-squared	=	0.8994
				Adj R-squared	=	0.8190
Total	2.6118e+13	9	2.9020e+12	Root MSE	=	7.2e+05

total_revenues	Coef.	Std. Err.	t	P>|t|	Beta
license_and_permits	-9.015306	3.42441	-2.63	0.046	-.5653058
charges_for_services	21.50903	7.746517	2.78	0.039	.5693987
taxes	2.464798	.4326101	5.70	0.002	1.187423
medianhouseholdincome	-106.544	267.4119	-0.40	0.707	-.083157
_cons	-7408731	1.07e+07	-0.70	0.518	.

```
. regress total_revenues license_and_permits charges_for_services taxes medianhouseholdincome if ci
> ty =="Avondale", beta
```

Source	SS	df	MS	Number of obs	=	10
				F(4, 5)	=	62.69
Model	3.6906e+14	4	9.2266e+13	Prob > F	=	0.0002
Residual	7.3593e+12	5	1.4719e+12	R-squared	=	0.9804
				Adj R-squared	=	0.9648
Total	3.7642e+14	9	4.1825e+13	Root MSE	=	1.2e+06

total_revenues	Coef.	Std. Err.	t	P>|t|	Beta
license_and_permits	2.777637	2.683351	1.04	0.348	.1963307
charges_for_services	-.4578775	2.719171	-0.17	0.873	-.0216977
taxes	1.647805	.3047394	5.41	0.003	.9580279
medianhouseholdincome	430.8883	283.9689	1.52	0.190	.177137
_cons	-2.26e+07	2.30e+07	-0.98	0.370	.

```
. regress total_revenues license_and_permits charges_for_services taxes medianhouseholdincome if ci
> ty =="Mesa", beta
```

Source	SS	df	MS	Number of obs	=	10
				F(4, 5)	=	29.82
Model	1.1567e+16	4	2.8917e+15	Prob > F	=	0.0011
Residual	4.8484e+14	5	9.6969e+13	R-squared	=	0.9598
				Adj R-squared	=	0.9276
Total	1.2052e+16	9	1.3391e+15	Root MSE	=	9.8e+06

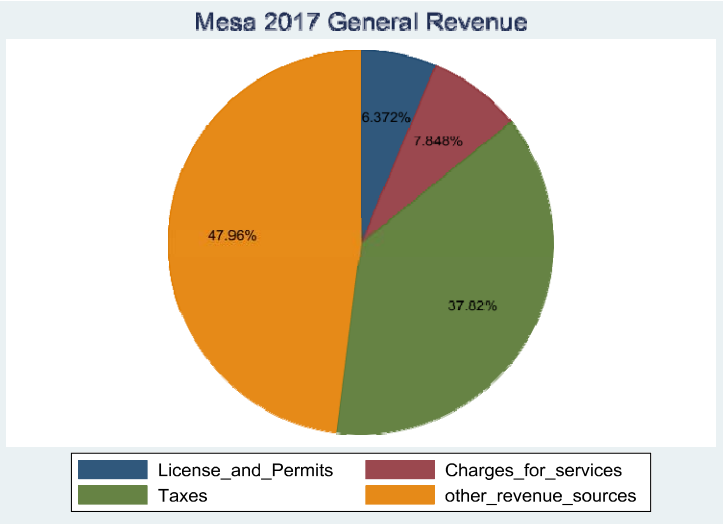
total_revenues	Coef.	Std. Err.	t	P>|t|	Beta
license_and_permits	-2.03744	1.932321	-1.05	0.340	-.19037
charges_for_services	1.561411	1.378664	1.13	0.309	.2113567
taxes	1.744256	.3187688	5.47	0.003	.8730358
medianhouseholdincome	2391.185	5568.074	0.43	0.685	.062349
_cons	-2.80e+07	2.51e+08	-0.11	0.916	.

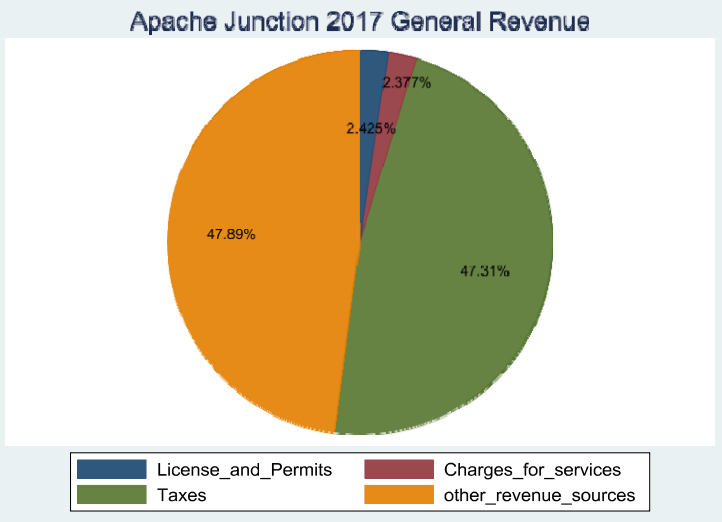
.

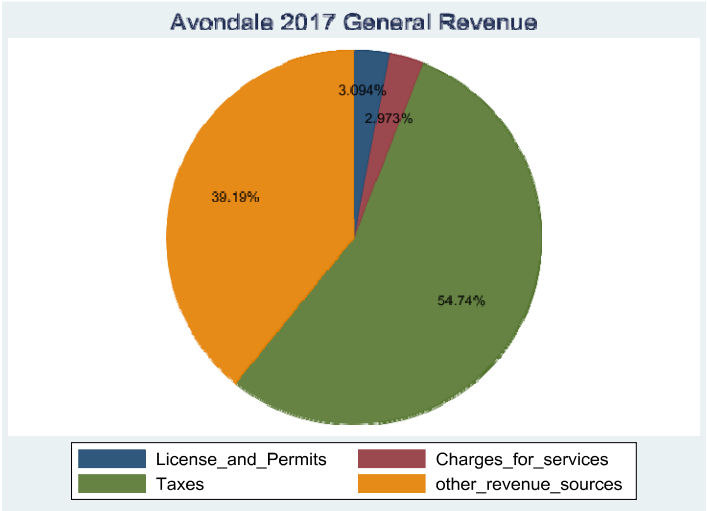
Appendix C

Year	License_and_Pe	Charges_for_	Taxes	Total_Revenue	Population	Median Housel	Fund	Fiscal year e	Fiscal Source
2008	1,720,280	1,593,665	28,438,100	54,323,093	70,244	61,665	General Fund	6/30/2008	STATEMENT OF REVENUES, CAFR2008
2009	795,479	1,051,422	24,516,314	47,126,925	81,916	60,810	General Fund	6/30/2009	STATEMENT OF REVENUES, CAFR2009
2010	665,303	828,580	22,866,928	43,674,092	76,238	60,907	General Fund	6/30/2010	STATEMENT OF REVENUES, CAFR2010
2011	585,780	1,216,256	23,381,535	41,623,079	73,148	59,953	General Fund	6/30/2011	STATEMENT OF REVENUES, CAFR2011
2012	725,215	801,764	25,325,953	44,491,297	75,298	57,791	General Fund	6/30/2012	STATEMENT OF REVENUES, CAFR2012
2013	831,813	1,024,595	27,130,540	47,775,002	76,872	55,506	General Fund	6/30/2013	STATEMENT OF REVENUES, CAFR2013
2014	748,475	1,028,755	28,928,951	51,519,457	77,912	57,170	General Fund	6/30/2014	STATEMENT OF REVENUES, CAFR2014
2015	1,061,651	1,145,323	31,242,323	55,722,611	78,872	55,100	General Fund	6/30/2015	STATEMENT OF REVENUES, CAFR2015
2016	1,422,437	1,151,276	33,290,011	59,078,388	80,631	56,120	General Fund	6/30/2016	STATEMENT OF REVENUES, CAFR2016
2017	1,838,245	1,766,841	32,529,715	59,422,368	81,621	54,663	General Fund	6/30/2017	Annual Budget & Financial Plan, Sum
2008	907,586	691,931	12,541,885	25,949,014	41,233	39,186	General Fund	6/30/2008	STATEMENT OF REVENUES, CAFR2008
2009	603,054	652,367	10,166,409	22,651,572	33,563	37,369	General Fund	6/30/2009	STATEMENT OF REVENUES, CAFR2009
2010	695,649	668,901	9,848,143	21,338,198	35,840	39,467	General Fund	6/30/2010	STATEMENT OF REVENUES, CAFR2010
2011	606,176	644,930	9,926,934	20,275,778	35,803	40,010	General Fund	6/30/2011	STATEMENT OF REVENUES, CAFR2011
2012	765,820	585,061	10,755,792	20,492,454	36,421	38,393	General Fund	6/30/2012	STATEMENT OF REVENUES, CAFR2012
2013	819,360	615,241	11,049,726	21,657,957	36,616	37,403	General Fund	6/30/2013	STATEMENT OF REVENUES, CAFR2013
2014	717,839	601,672	11,329,227	22,628,950	36,965	36,771	General Fund	6/30/2014	STATEMENT OF REVENUES, CAFR2014
2015	608,744	562,684	11,381,271	22,973,896	36,586	35,671	General Fund	6/30/2015	STATEMENT OF REVENUES, CAFR2015
2016	695,751	578,036	11,306,907	23,387,455	37,775	38,053	General Fund	6/30/2016	STATEMENT OF REVENUES, CAFR2016
2017	581,088	569,695	11,337,335	23,964,528	40,030	37,308	General Fund	6/30/2017	STATEMENT OF REVENUES, CAFR2017
2008	15,563,330	19,683,954	147,762,866	342,330,230	477,325	51,180	General Fund	6/30/2008	STATEMENT OF REVENUES, CAFR2008
2009	10,223,883	19,277,450	126,519,701	322,718,889	463,795	50,300	General Fund	6/30/2009	STATEMENT OF REVENUES, CAFR2009
2010	9,271,058	11,739,505	121,556,751	317,625,330	439,041	50,079	General Fund	6/30/2010	STATEMENT OF REVENUES, CAFR2010
2011	9,291,101	11,958,110	100,283,750	255,854,905	441,711	49,872	General Fund	6/30/2011	STATEMENT OF REVENUES, CAFR2011
2012	10,984,707	8,931,869	86,576,717	232,557,623	443,875	49,233	General Fund	6/30/2012	STATEMENT OF REVENUES, CAFR2012
2013	14,054,431	16,603,223	95,278,535	247,037,527	447,002	48,547	General Fund	6/30/2013	STATEMENT OF REVENUES, CAFR2013
2014	15,356,000	20,829,000	95,177,000	253,397,000	452,091	48,259	General Fund	6/30/2014	STATEMENT OF REVENUES, CAFR2014
2015	15,446,000	20,700,000	100,594,000	266,721,000	458,860	48,809	General Fund	6/30/2015	STATEMENT OF REVENUES, CAFR2015
2016	17,580,000	22,649,000	104,116,000	273,819,000	470,456	50,615	General Fund	6/30/2016	STATEMENT OF REVENUES, CAFR2016
2017	18,425,000	22,691,000	109,364,000	289,143,000	481,275	50,164	General Fund	6/30/2017	STATEMENT OF REVENUES, CAFR2017

Appendix D


Mesa 2017 General Revenue
6.372%
7.848%
47.96%
37.82%
License_and_Permits
Charges_for_services
Taxes
other_revenue_sources


Apache Junction 2017 General Revenue
2.377%
2.425%
47.89%
47.31%
License_and_Permits
Charges_for_services
Taxes
other_revenue_sources


Avondale 2017 General Revenue
3.094%
2.973%
39.19%
54.74%
License_and_Permits
Charges_for_services
Taxes
other_revenue_sources

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