

City of Phoenix



Business Intelligence (BI)

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Agenda

- ▶ History of BI at City of Phoenix
- ▶ BI Capabilities
- ▶ Tour of Developed Centralized TPT Dashboards
 1. Centralized Payment Analysis
 2. Centralized License Analysis
 3. Centralized Fund Analysis
 4. Centralized Deduction Analysis
 5. Centralized No Payment Analysis

History of BI in Phoenix

- ▶ Originally built for Public Works Department
- ▶ Transaction Privilege Tax (TPT) add on to foundation
- ▶ BI for TPT
 - ▶ Arizona Department of Revenue information (xml files) starting July 1st

Capabilities: Pre-Developed Interactive Dashboards

- ✓ Visualization of TPT data by key indicators like business activity to assist with month-end
- ✓ Flexible set of prompts allow you to filter data directly on each dashboard
- ✓ Drill down interactions open up advanced analysis capabilities for exposing and investigating anomalies
- ✓ Filtered information based on your city/identity (using security rules)
- ✓ Integrated master data definitions provide meaningful descriptions for DOR provided code values
- ✓ Export information to various Microsoft Office formats, including Excel for additional ad hoc analysis

Tour of Centralized TPT Dashboards - Landing Page

CentralizedTaxAnalytics Home Catalog Favorites Dashboards New Open Signed In As **Natasha Fenner**

About this Page

As of January 2017, it is anticipated that Arizona Department of Revenue (DOR) will collect and administer municipal privilege and use taxes for **all** Arizona cities and towns. As part of this anticipated change and changes that occurred for the June 2016 return for Program cities, DOR began providing access to data covering the amount of Taxes reported and the amount of Taxes distributed to cities and towns from July 1, 2016 forward. Phoenix is hosting this data and providing subscribers use of developed dashboards in the Business Intelligence system.

Transaction Privilege Tax Centralized Reporting

[Centralized Payment Analysis](#)
This dashboard provides visualization and detailed information about money that is distributed to your city (City Payment Journal Detail from DOR) by DOR, including the taxpayer, business code and period covered for each distribution.

[Centralized License Analysis](#)
This dashboard provides visualization and detailed demographic information (License Update Report and New License Report from DOR) for taxpayers that have a taxable location in Arizona.

[Centralized Fund Analysis](#)
This dashboard provides visualization and detailed information about money that is distributed to your city at the Fund Level (Fund Distribution Report from DOR), including the taxpayer, location code, business code and period covered for each distribution.

[Centralized Deduction Analysis](#)
This dashboard provides visualization and detailed information about Deductions (Deduction Report from DOR) that taxpayers have taken on their returns. The report reflects deductions taken for each location and each business code by jurisdiction.

[Centralized No Payment Analysis - this is test data](#)
This dashboard provides visualization and detailed information about a) taxpayers that have filed a no activity/zero return b) taxpayers that have not filed a return for a location for a city c) and taxpayers that have filed a return but failed to remit payment. The source is the No Money Report from DOR.

Support

Please send all user access requests and technical support questions to taxbi@phoenix.gov. Data questions should be referred to the Cities Liaison at the Arizona Department of Revenue.

Disclaimer

Information presented on these dashboard pages are considered confidential information and may not be distributed or copied. The data source for these dashboard is furnished by the Arizona Department of Revenue. Please note that City of Phoenix does not control and cannot guarantee the relevance, timeliness, or accuracy of this data and provides no warranty, expressed or implied, as to the accuracy, reliability or completeness of furnished data.

Centralized Payment Analysis Prompts

- **Filter:** The dashboard automatically filters your city payment journal data to your city region based on the user login
- **Flexible Prompts:** Business Activity, GL Accounting Period, Filing Frequency, DOR License Number, Entity Name, NAICS, Transaction Type, Transaction Sub Type, and Revenue Type all are preselected to show all data for the most recent accounting period but can be changed on the fly.
- **Search:** Flexible wildcard search option for each prompt allows you to quickly narrow results

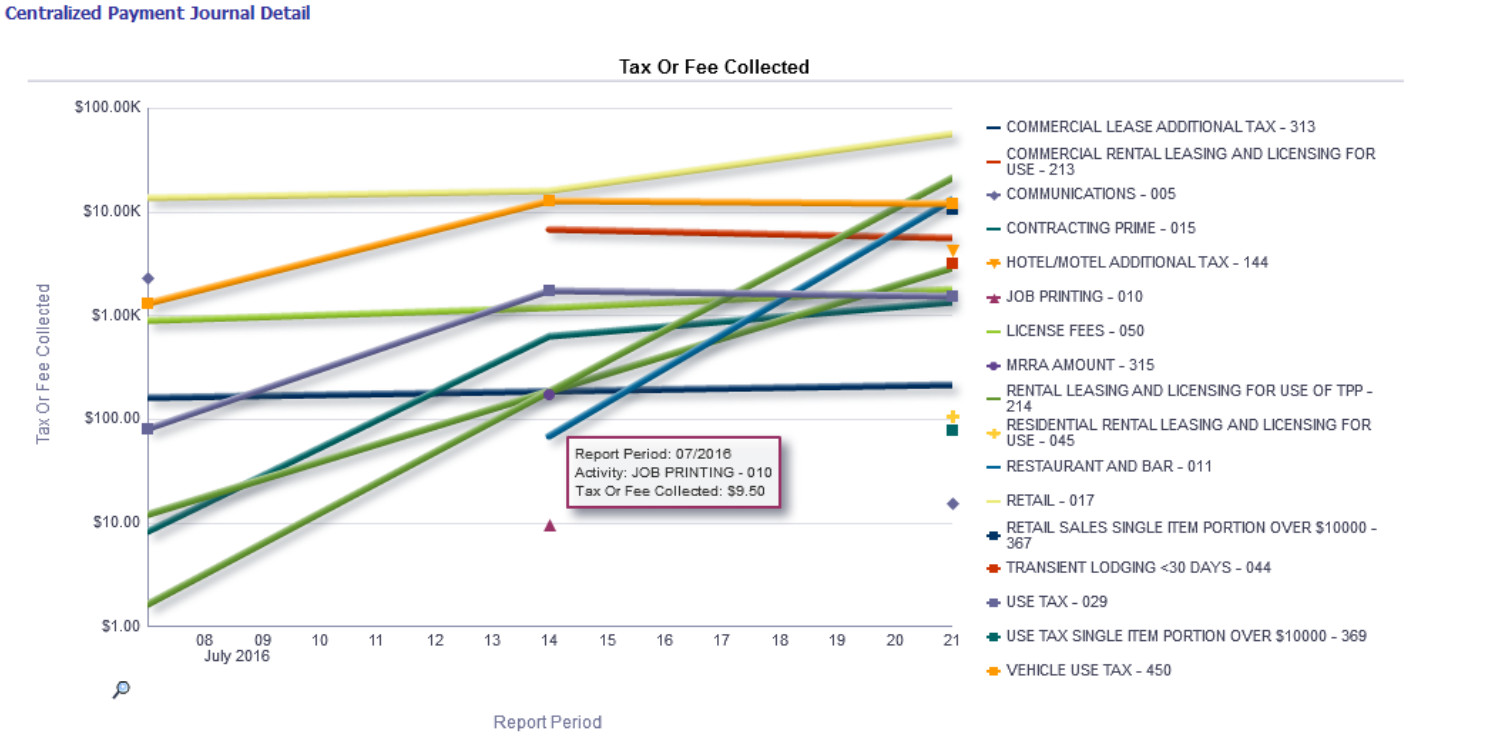
A screenshot of a dashboard filter menu. The menu is titled 'flexible prompts' and contains several filter categories, each with a dropdown arrow and a list of options. The categories and their options are: Activity (All Column Values), Gl Accounting Period (All Column Values), Filing Frequency (ADVERTISING - 018, ADVERTISING - 441), Dor License (AMUSEMENT - 012), Entity Name (COMMERCIAL LEASE - 013), NAICS (COMMERCIAL LEASE ADDITIONAL TAX - 313), Tran Type Description (COMMERCIAL RENTAL LEASING AND LICENSING FOR USE - 213), Tran Subtype Description (COMMUNICATIONS - 005), and Rev Type Description (All Column Values). A search box is located at the bottom of the menu, and the 'Apply' and 'Reset' buttons are at the bottom right.

flexible prompts

A screenshot of a 'Select Values' dialog box. The dialog has a title bar with a question mark and a close button. It is divided into two main sections: 'Available' and 'Selected'. The 'Available' section has a search bar with the text 'Name Starts com' and a 'Search' button. Below the search bar is a list of search results: 'COMMERCIAL LEASE - 013', 'COMMERCIAL LEASE ADDITIONAL TAX - 313', 'COMMERCIAL RENTAL LEASING AND LICENSING FOR USE - 213', and 'COMMUNICATIONS - 005'. The 'Selected' section is currently empty and contains the text '(All Column Values)'. There are four arrow buttons between the sections: a single right arrow, a double right arrow, a single left arrow, and a double left arrow. At the bottom right, there are 'OK' and 'Cancel' buttons.

Centralized Payment Analysis Visualization

- The time series chart provides a visual representation of the payment data set.
- It also allows interaction; hover over a data point to see a summary of that value.
- Users with drill down security can right click to drill into taxpayer details that make up the dollar measure.



Centralized Payment Analysis Drill Detail

- The drill down views provide a deeper detailed view of the payment summary with individual taxpayer information.
 - Executives can be added to a group that will not allow drill down details
- Drill views are exportable to Excel if the user wishes to do additional analysis.
- Sort ascending or descending on the fly


ORACLE Business Intelligence

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Payment Journal Drill Down Payment Details

Every header allows the user to sort dynamically ascending or descending



Gl Accounting Period	Report Start Date	Report End Date	Period End Date	Filing Frequency	Dor License	Location Code	Entity Name	Location	Location	Location State	Location Zip	NAICS	Activity	Tax Or Fee Collected	Gross Receipts	Total Deductions	Net Taxable	Pni Collected	Audit Collections	Pmt Loc Nbr	Tran Type
201607	07/08/2016	07/14/2016	06/30/2016	M	[REDACTED]	0000	[REDACTED]	[REDACTED] W BETHANY HOME RD	PHOENIX	AZ	850131519	UNKNOWN - 323100	JOB PRINTING - 010	\$4.30	\$187.00	\$0.00	\$187.00	\$0.00	\$0.00	[REDACTED]	PMT PAY
					Total									\$4.30	\$187.00	\$0.00	\$187.00				
					[REDACTED]	0001	[REDACTED]	[REDACTED] 47TH PLACE	PHOENIX	AZ	85018	UNKNOWN - 541613	JOB PRINTING - 010	\$5.20	\$243.68	\$18.68	\$225.00	\$0.00	\$0.00	[REDACTED]	PMT PAY
					Total									\$5.20	\$243.68	\$18.68	\$225.00				
														\$9.50	\$430.68	\$18.68	\$412.00				

Refresh -Print **Export** Create Bookmark Link

Centralized Payment Analysis Tables

- Payment data is provided in a table view for a quick view by business activity and NAICS code
- Drill into details provides the same detailed data view into individual taxpayer details as the drill link from the chart.

Activity	Collected	
COMMERCIAL LEASE ADDITIONAL TAX - 313	\$165.54	
COMMERCIAL RENTAL LEASING AND LICENSING FOR USE - 213	\$12,250.86	
COMMUNICATIONS - 005	\$2,334.96	
CONTRACTING PRIME - 015	\$1,982.39	
HOTEL/MOTEL ADDITIONAL TAX - 144	\$4,144.16	
JOB PRINTING - 010	\$9.00	
LICENSE FEES - 050	\$3,876.00	Drill to Details
MRRA AMOUNT - 315	\$168.56	Drill to Details

NAICS	Activity	Tax Or Fee Collected	
APPAREL MANUFACTURING - 315000 Total		\$50.60	
APPAREL PIECE GOODS AND NOTIONS MERCHANT WHOLESALERS - 424300	LICENSE FEES - 050	\$50.00	
APPAREL PIECE GOODS AND NOTIONS MERCHANT WHOLESALERS - 424300 Total		\$50.00	Drill to Details
ARCHITECTURAL AND STRUCTURAL METALS MANUFACTURING - 332300	RETAIL - 017	\$562.15	
ARCHITECTURAL AND STRUCTURAL METALS MANUFACTURING - 332300 Total		\$562.15	Drill to Details
AUTOMOBILE DEALERS - 441100	RETAIL - 017	\$271.08	
AUTOMOBILE DEALERS - 441100 Total		\$271.08	

Centralized License Analysis Prompts

- **Filter:** The dashboard automatically filters new license and update license data to your jurisdiction/region based on the user login.
- **Flexible Prompts: Jurisdiction (based on security), Business Activity, NAICS, Location Zip, DOR License Number, ID Type Number, Entity Name, Location Name, Location Street, Location City, Location Add/End Dates, Close Code, Filing Frequency, AZ Start Date, Issue Date and Run Date** are all preselected to show all data but can be changed on the fly.
 - Enforcement and auditors can be added to a group that will allow users to select data for any Jurisdiction
 - Other staff can be added to a more restricted group that will not allow flexible selection of the jurisdiction
 - Executives can be added to a group that will not allow drill down details

The screenshot shows a filter form with the following fields and values:

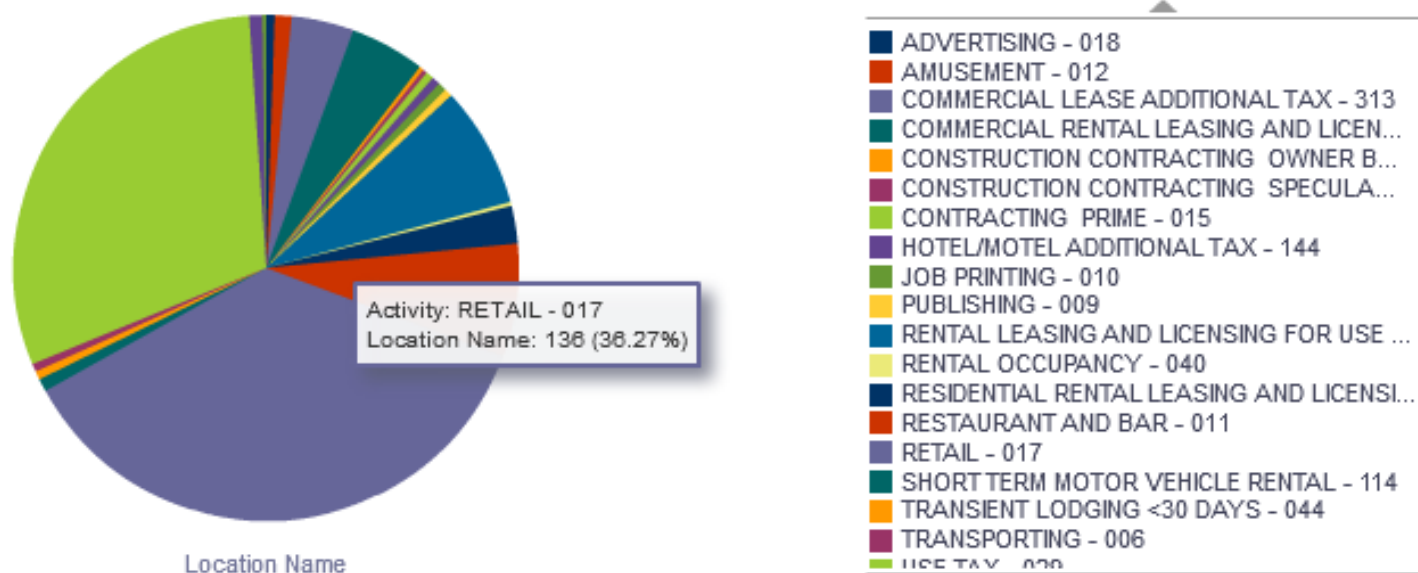
- Jurisdiction: PX - PHOENIX
- Activity: (All Column Values)
- NAICS: (All Column Values)
- Location Zip: (All Column Values)
- Dor License: (All Column Values)
- Id Type Nbr: (All Column Values)
- Entity Name: (All Column Values)
- Location Name: (All Column Values)
- Location Street: (All Column Values)
- Location City: (All Column Values)
- Location Address Add Date: (All Column Values)
- Location Address End Date: (All Column Values)
- Close Code: (All Column Values)
- Filing Freq: (All Column Values)
- Arizona Start Date: (All Column Values)
- Issue Date: (All Column Values)
- Run Date: (All Column Values)

Buttons: Apply, Reset

Centralized License Analysis Visualization

- The pie chart provides a visual representation of the demographic of licensed locations by activity for the selected jurisdiction(s).
- It also allows interaction; hover over a data point to see a summary of that count.
- Users with drill down security can right click to drill into taxpayer details that make up the location count measure.

Arizona Locations by Business Activity



Centralized License Analysis Location Details

- The drill down views provide a deeper detailed view of the license location summary with individual taxpayer information.
- Drill views are exportable to Excel if the user wishes to do additional analysis.
- Sort ascending or descending on the fly

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Centralized License Location Details

Jurisdiction	Activity	Entity Name	Dor License	Location Code	Location Name	Ownership Type	Id Type	Id Type Nbr	NAICS	Filing Freq	Location Address	Location City	Location State	Location Zip	Location Address Add Date	Location Address End Date
PX - PHOENIX	RETAIL - 017	[REDACTED]	[REDACTED]	0001	[REDACTED]	LLC	FEDERAL EMPLOYER IDENTIFICATION NUMBER - EIN	[REDACTED]	RESTAURANTS AND OTHER EATING PLACES FROM 7221 - 722500	MONTHLY - M	[REDACTED]	PHOENIX	AZ	85041	7/5/2016	12/31/99
		[REDACTED]	[REDACTED]	0002	[REDACTED]	LLC	FEDERAL EMPLOYER IDENTIFICATION NUMBER - EIN	[REDACTED]	OTHER PROFESSIONAL SCIENTIFIC AND TECHNICAL SERVICES - 541900	MONTHLY - M	[REDACTED]	PHOENIX	AZ	85019	7/12/2016	12/31/99
		[REDACTED]	[REDACTED]	0001	[REDACTED]	CORPORATION	FEDERAL EMPLOYER IDENTIFICATION NUMBER - EIN	[REDACTED]	UNKNOWN - 454111	MONTHLY - M	[REDACTED]	DADE CITY	AZ	33523	1/1/2015	12/31/99

Centralized License Analysis Entity Details

- Need more license details? View entity information through a secondary drill down on the entity name.

DORLicenseDetailsAnalysis2

Jurisdiction	Entity Name	Activity	Dor License	Owner Title	Owner Name	Owner Title	Owner Name2	Owner Title3	Owner Name3	Primary Address	Primary Location City	Primary Location State	Primary Location Zip	Primary Location Add Date	Primary Location End Date	Mailing Phone	Mailing Address	Mailing City	Mailing State	Mailing Zip	Mailing Country	Mailing Address Add Date	Mailing Address End Date
PX - PHOENIX	[REDACTED]	RETAIL - 017	[REDACTED]	MEMBER	[REDACTED]	MEMBER	[REDACTED]			[REDACTED] SOUTHERN AVENUE [REDACTED]	PHOENIX	AZ	85041	7/5/2016	12/31/9999	[REDACTED]	[REDACTED] 65TH DRIVE	LAVEEN	AZ	85339	USA	7/5/2016	12/31/9999

Want to check if the taxpayer has made a payment? View entity information through a third drill down on the license number.

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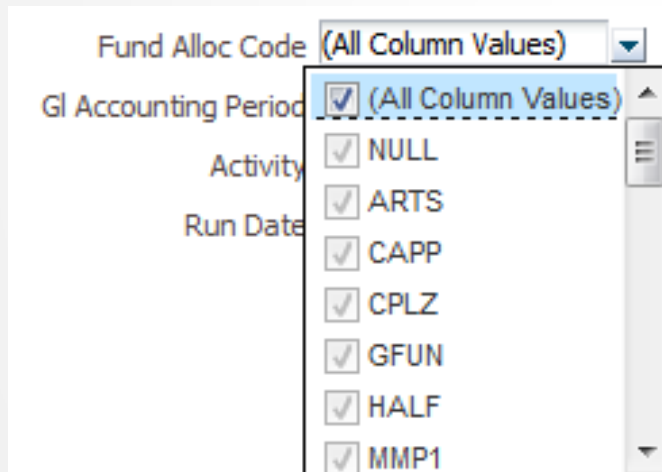
Dor License: [REDACTED]

Payment Details

Jurisdiction	Activity	NAICS	Entity Name	Dor License	Location Code	Location Address	Filing Frequency	Gl Accounting Period	Payment Process Date	Period End Date	Pmt Loc Nbr	Tax Or Fee Collected	Transaction Type	Revenue Type	Transaction Subtype
PX - PHOENIX	050 - LICENSE FEES	RESTAURANTS AND OTHER EATING PLACES FROM 7221 - 722500	[REDACTED]	[REDACTED]	0001	[REDACTED]	M	201607	7/6/16	9/2/16	[REDACTED]	\$50.00	PMT - PAYMENT	LICF - PAY LIC FEE	- UNKNOWN

Centralized Fund Analysis - Prompt

- **Filter:** The dashboard automatically filters fund data to your jurisdiction/region based on the user login.
- **Flexible Prompts:** Fund Allocation Code, Activity, and Run Date

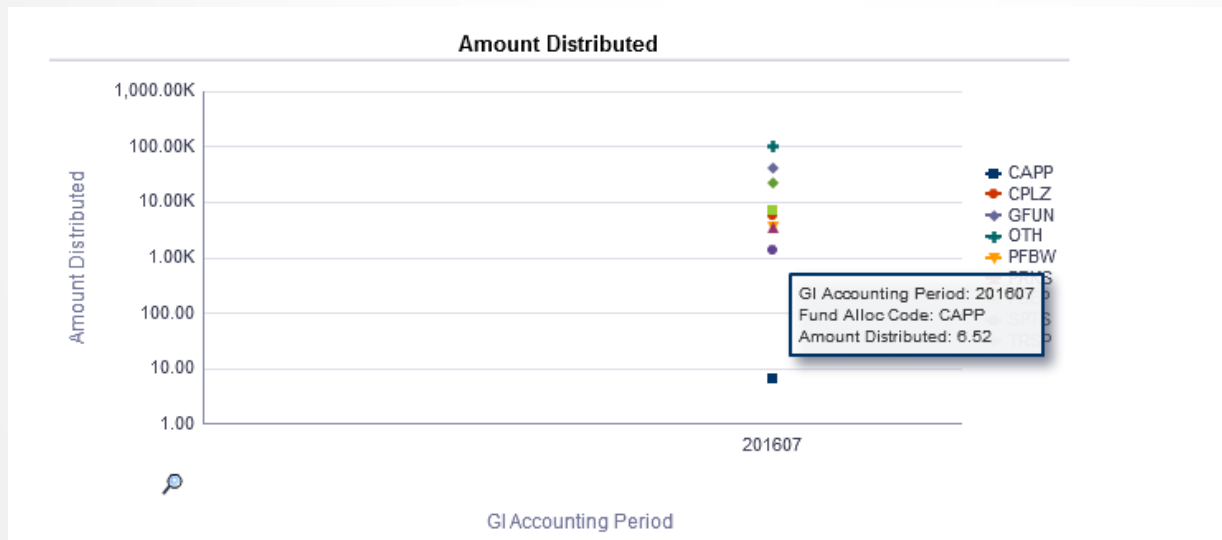


The image shows a screenshot of a web form with the following elements:

- Fund Alloc Code:** A dropdown menu currently set to "(All Column Values)".
- Gl Accounting Period:** A dropdown menu currently set to "(All Column Values)".
- Activity:** A list of checkboxes with the following options: NULL, ARTS, CAPP, CPLZ, GFUN, HALF, and MMP1. All checkboxes are checked.
- Run Date:** A label for a date input field, which is currently empty.

Centralized Fund Analysis - Visualization

- The time series chart provides a visual representation of the distribution data set.
- It also allows interaction; hover over a data point to see a summary of that value.
- Users with drill down security can right click to drill into taxpayer details that make up the dollar measure.



Centralized Fund Analysis - Drill

- The drill down views provide a deeper detailed view of the distribution summary with individual taxpayer information.
 - Executives can be added to a group that will not allow drill down details
- Drill views are exportable to Excel if the user wishes to do additional analysis.
- Sort ascending or descending on the fly


DOR Fund Details Analysis

Report Start Date	Report End Date	Fund Alloc Code	Activity	Amount Distributed	Entity Name	Dor License	Location Code	Period End Date	Location Name	Payment Proc Date	Return Rcvd Date	Payment Rcvd Date	Doc Loc Nbr
07/01/2016	07/07/2016	CAPP	017 - RETAIL	0.18	[REDACTED]	[REDACTED]	0001	06/30/2016	[REDACTED]	07/06/2016	07/06/2016	07/07/2016	[REDACTED]
		CAPP Total		0.18									
07/08/2016	07/14/2016	CAPP	017 - RETAIL	0.17	[REDACTED]	[REDACTED]	0001	06/30/2016	[REDACTED]	07/14/2016	07/14/2016	07/15/2016	[REDACTED]
				0.02	[REDACTED]	[REDACTED]	0001	06/30/2016	[REDACTED]	07/12/2016	07/11/2016	07/13/2016	[REDACTED]

Centralized Fund Analysis - Table

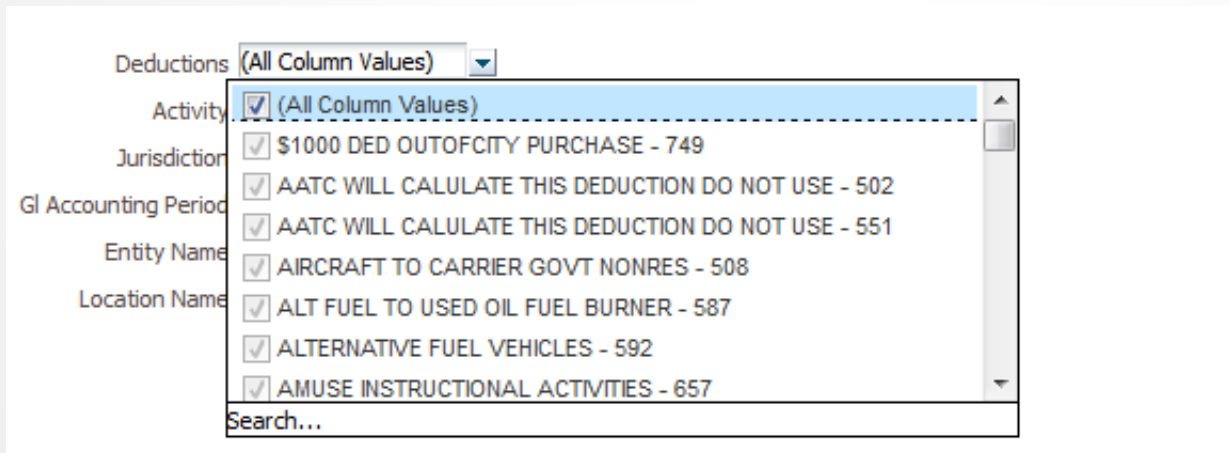
- Distribution data is provided in a table view for a quick overall view of activity by business activity
- Drill into details provides the same detailed data view into individual taxpayer details as the drill link from the chart.

Jurisdiction	Fund Alloc Code	Activity	Amount Distributed
PX - PHOENIX	CAPP	005 - COMMUNICATIONS	6.52
	CAPP Total		6.52
	CPLZ	010 - JOB PRINTING	2.06
		011 - RESTAURANT AND BAR	2,874.7
		015 - CONTRACTING PRIME	296.07

 Drill to fund details

Centralized Deductions Analysis - Prompt

- **Filter:** The dashboard automatically filters deduction data to your jurisdiction/region based on the user login.
- **Flexible Prompts:** Deduction, Business Activity, Jurisdiction (based on security), GL Accounting Period, Entity Name, Location Name all are preselected to show all data but can be changed on the fly.
 - Enforcement and auditors can be added to a group that will allow users to select data for any Jurisdiction
 - Other staff can be added to a more restricted group that will not allow flexible selection of the jurisdiction



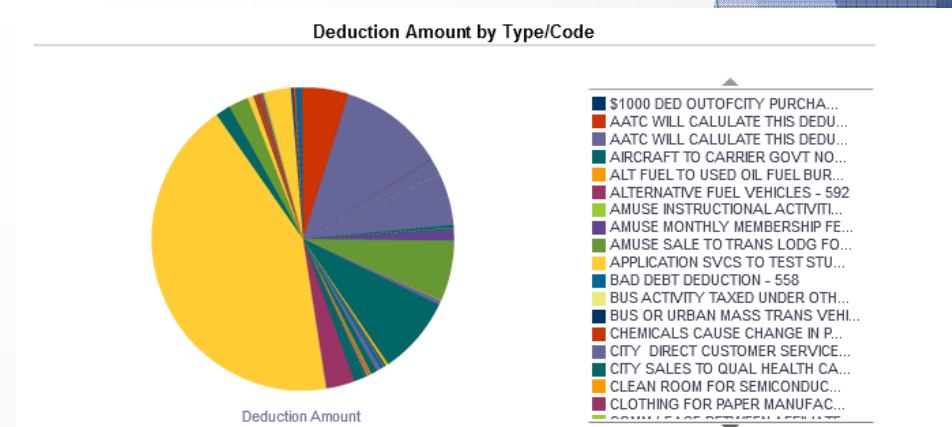
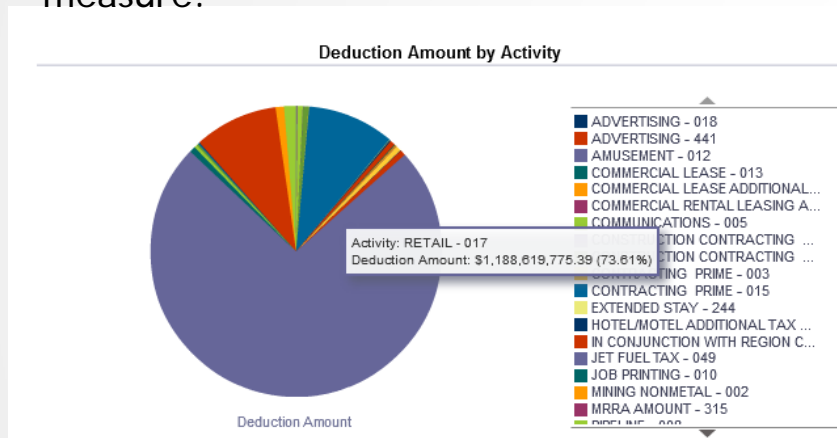
The screenshot displays a software interface with a dropdown menu for 'Deductions' set to '(All Column Values)'. The menu is open, showing a list of items with checkboxes, all of which are checked. The items are:

- Activity: (All Column Values)
- Jurisdiction: \$1000 DED OUTOFCITY PURCHASE - 749
- GL Accounting Period: AATC WILL CALCULATE THIS DEDUCTION DO NOT USE - 502
- Entity Name: AATC WILL CALCULATE THIS DEDUCTION DO NOT USE - 551
- Location Name: AIRCRAFT TO CARRIER GOVT NONRES - 508
- ALT FUEL TO USED OIL FUEL BURNER - 587
- ALTERNATIVE FUEL VEHICLES - 592
- AMUSE INSTRUCTIONAL ACTIVITIES - 657

At the bottom of the menu is a search field labeled 'Search...'.

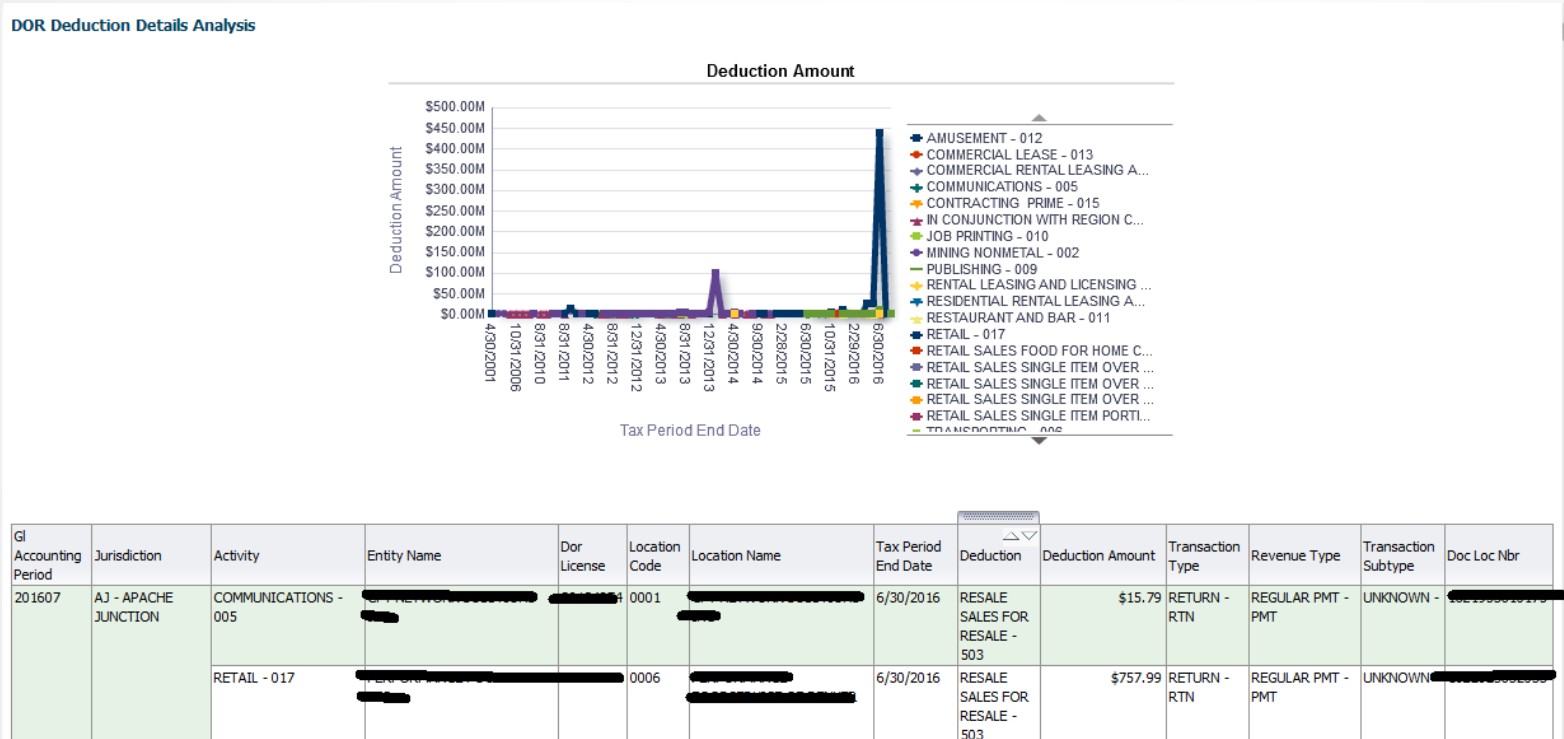
Centralized Deductions Analysis - Visualization

- The charts provide a visual representation of the deduction data set.
- It also allows interaction; hover over a data point to see a summary of that value.
- Users with drill down security can right click to drill into taxpayer details that make up the dollar measure.



Centralized Deductions Analysis - Drill

- The drill down views provide a deeper detailed view of the deduction summary with individual taxpayer information.
- A visualization by business code is also provided on a tax period time series basis



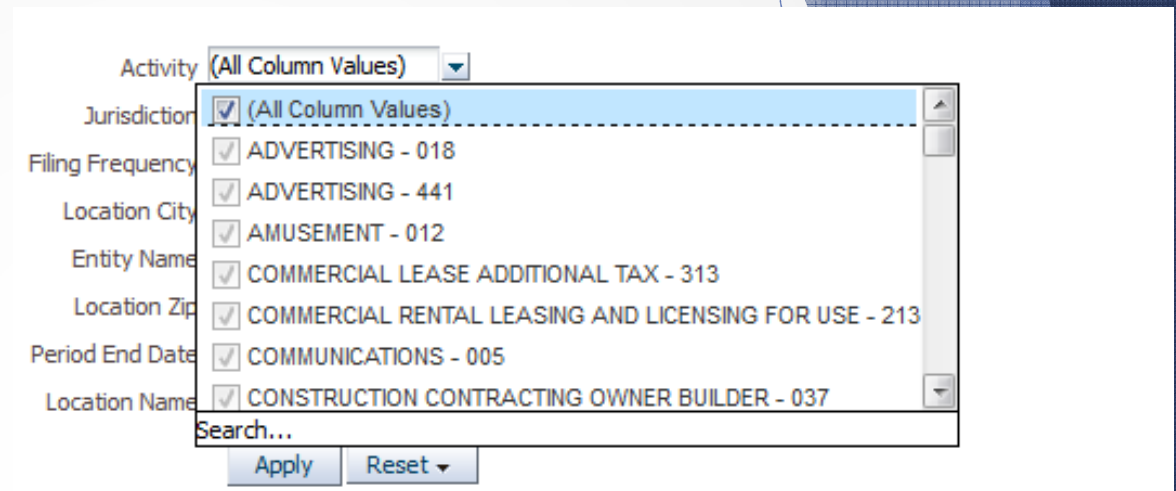
Centralized Deductions Analysis - Table

- Deduction data is provided in a table view for a quick overall view of deductions by business activity
- Drill into details provides the same detailed data view into individual taxpayer details as the drill link from the charts.

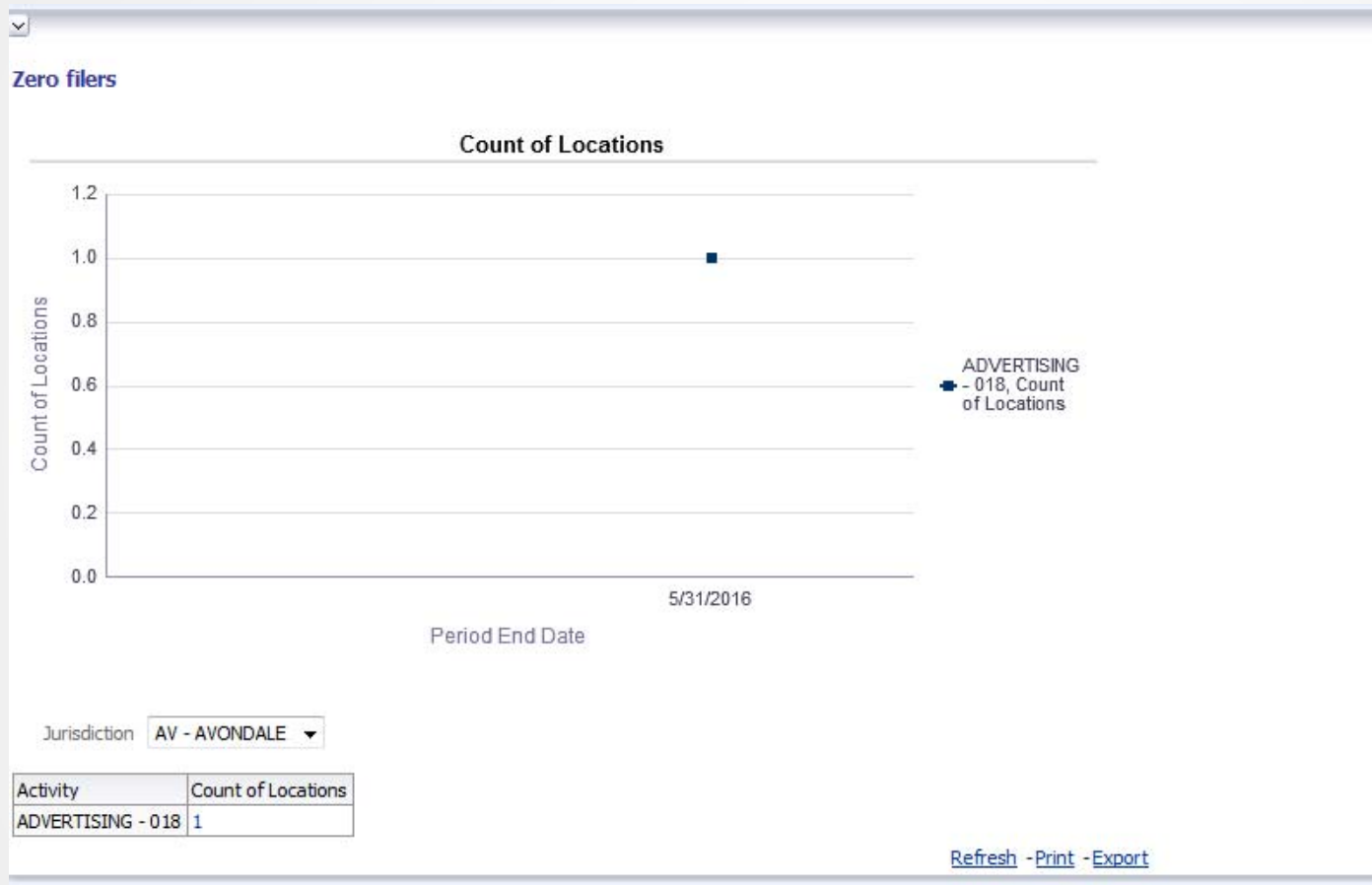
Activity	Deduction	Count of Entities	Deduction Amount
COMMUNICATIONS - 005	AATC WILL CALULATE THIS DEDUCTION DO NOT USE - 551	1	\$3.77
	RESALE SALES FOR RESALE - 503	1	\$15.79
CONTRACTING PRIME - 015	AATC WILL CALULATE THIS DEDUCTION DO NOT USE - 502	3	\$1,126.52
	AATC WILL CALULATE THIS DEDUCTION DO NOT USE - 551	2	\$178.35
	PC SUBCONTRACTING INCOME - 550	1	\$1,400.00
IN CONJUNCTION WITH REGION CODE PH - 000	AATC WILL CALULATE THIS DEDUCTION DO NOT USE - 502	1	\$0.00

No Money Analysis - Prompts

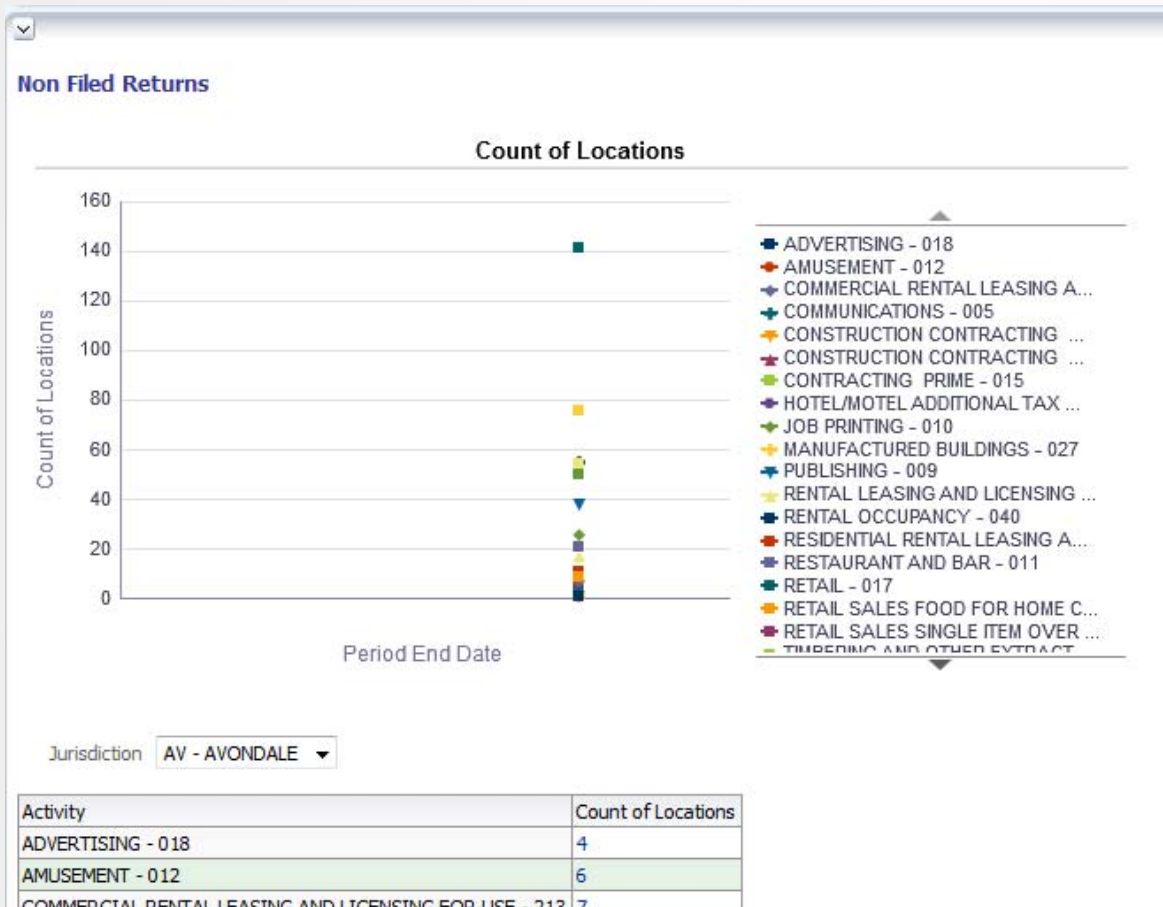
- **Filter:** The dashboard automatically filters no money data to your jurisdiction/region based on the user login.
- **Flexible Prompts:** Business Activity, Jurisdiction (based on security), Filing Frequency, Location City, Entity Name, Location Zip, Location Name, and Period End Date all are preselected to show all data but can be changed on the fly.
 - Enforcement and auditors can be added to a group that will allow users to select data for any Jurisdiction
 - Other staff can be added to a more restricted group that will not allow flexible selection of the jurisdiction



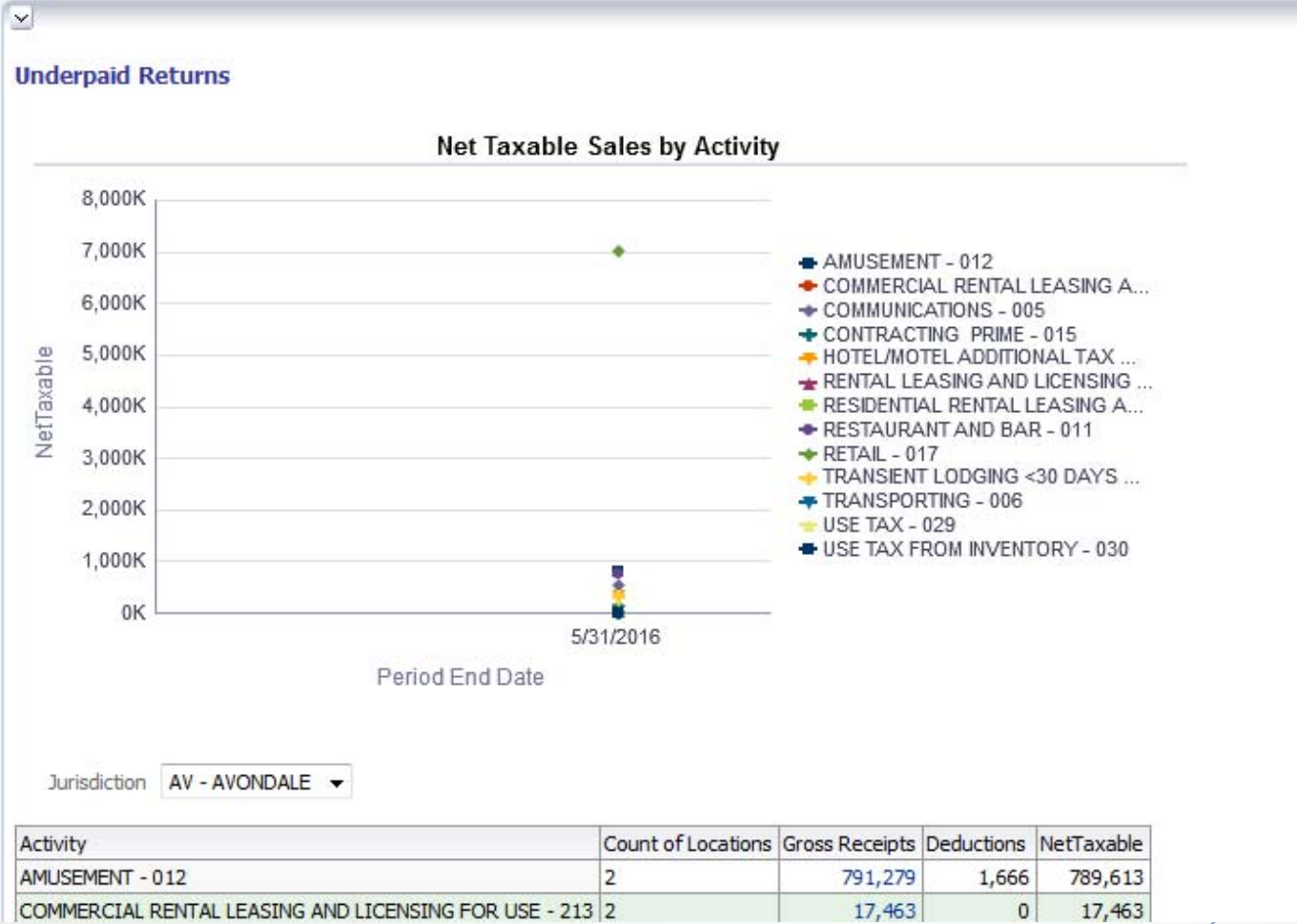
No Money Analysis - Zero Filers



No Money Analysis - Non Filers



No Money Analysis - Unpaid Return Filers



No Money Analysis - Drill

- The drill down views provide a deeper detailed view of the no money summary with individual taxpayer information.

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Centralized No Money License Details

GI Accounting Period	Jurisdiction	Activity	Filing Frequency	Entity Name	Dor License	Location Code	Location Name	Street	Location City	Location Zip	Period End Date	Audit Collections	Gross Receipts	Deductions	Net Taxable	Transaction Type	Revenue Type	Transaction Subtype	Doc Loc Nbr
201606	[REDACTED]	AMUSEMENT - 012	M	[REDACTED]	[REDACTED]	0001	[REDACTED]	[REDACTED] STE 109 --	QUEEN CREEK	85142	5/31/2016	\$0.00	\$32,939.92	\$1,666.00	\$31,273.92	RETURN - RTN	UNKNOWN -	PAPER - PAP	[REDACTED]
				[REDACTED]	[REDACTED]	0001	[REDACTED]	[REDACTED] AVE --	AVONDALE	85392	5/31/2016	\$0.00	\$758,339.07	\$0.00	\$758,339.07	RETURN - RTN	UNKNOWN -	PAPER - PAP	[REDACTED]
Grand Total													\$791,278.99	1,666	\$789,612.99				

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Questions?



Contact Information

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