

**ADOT**



# Follow the Money

Steve Boschen  
IDO Division

October 25, 2018

## What is IDO Division?

- Infrastructure Development & Operations
- 28,000 Lane Miles
- 50 Maintenance Camps
- 7 Districts

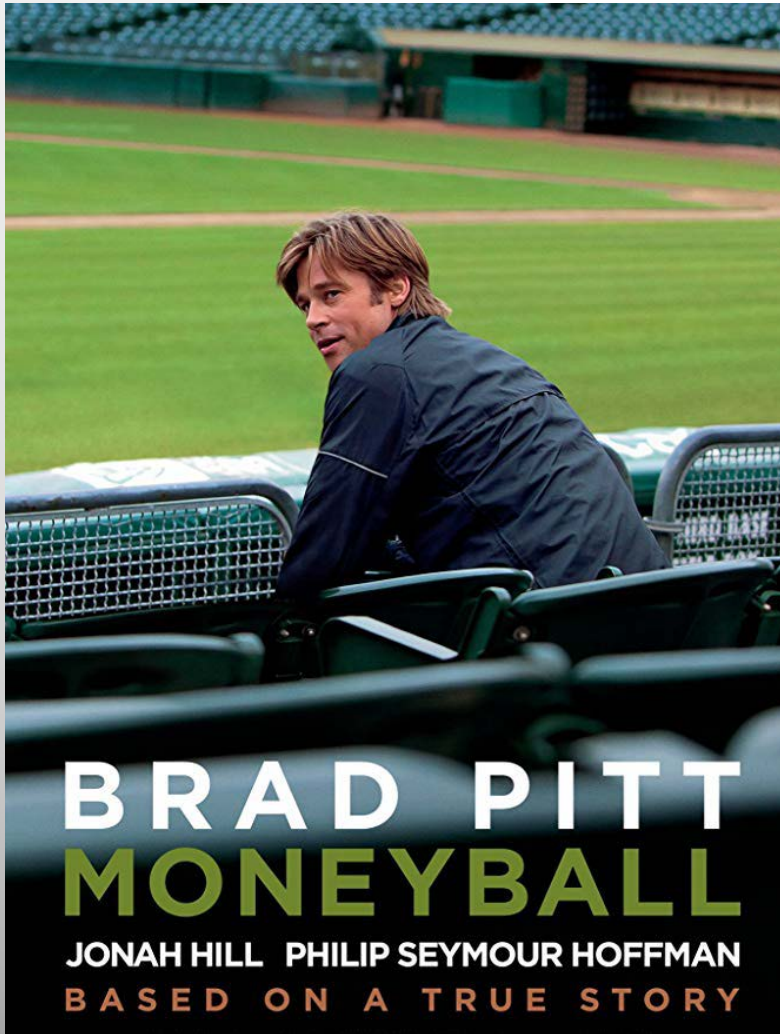


**Where in Midwest on October 21, 2018?**

# Short Video on Money



**ADOT**



**BRAD PITT**  
**MONEYBALL**

**JONAH HILL PHILIP SEYMOUR HOFFMAN**  
**BASED ON A TRUE STORY**

ARIZONA DEPARTMENT OF TRANSPORTATION

# Why Money Ball

- AMS
- Metrics
- Business

# Follow the Money

- **ADOT 20-30-30-20**
- **Revenue Stream**
- **What Increases Costs**
- **Design Fees**

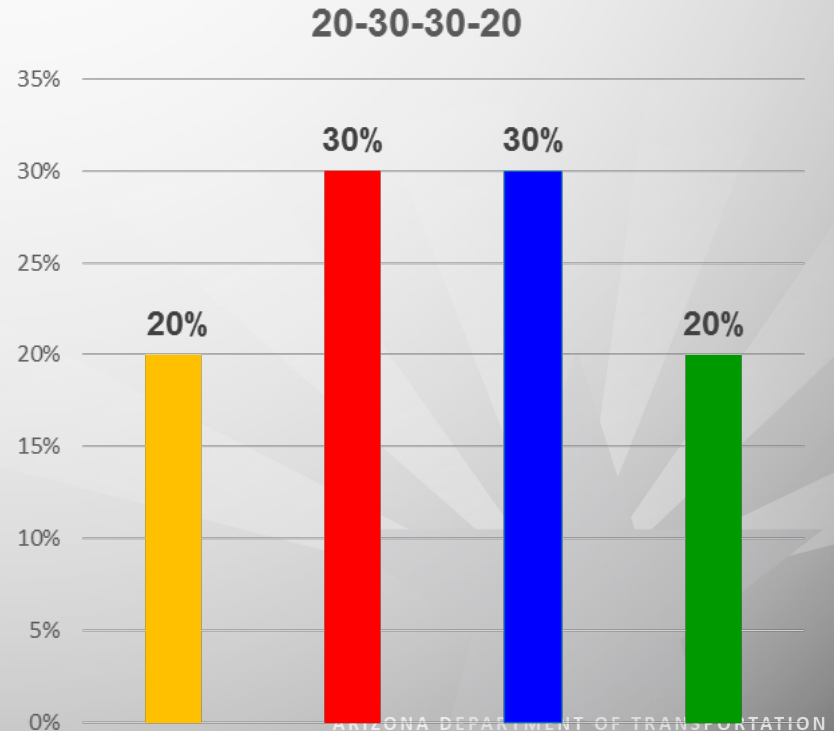
**20-30-30-20**

# **Project Delivery**

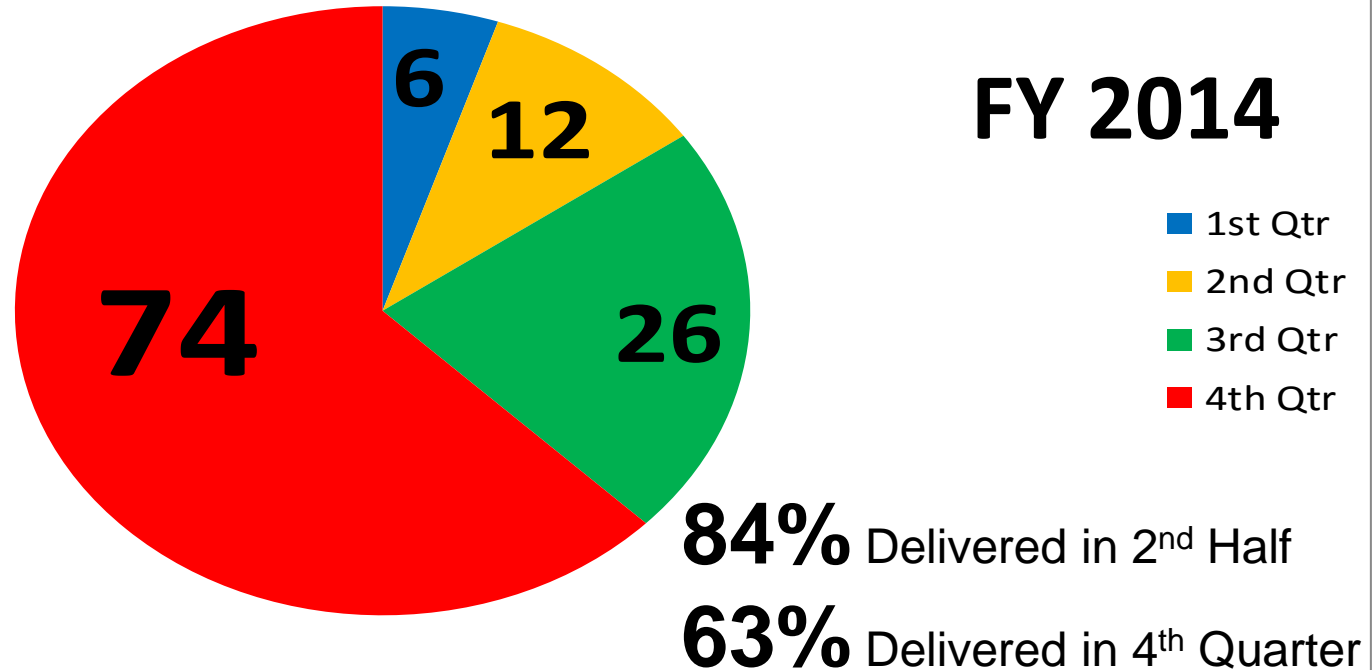
**March 13, 2015**

# What is 20-30-30-20 Project Delivery?

**Flattened Delivery Curve**



## Projects Delivered – MAG, PAG, Greater AZ



# Project Delivery Partnership with ACEC Member Firms

- ▶ Prepare & Manage Real Risk Based Schedules
- ▶ Clearances, Clearances, Clearances (Not just PS&E)
- ▶ Utilize Stage Submittal Checklists with ADOT PM
- ▶ Complete, On-Time, Quality Deliverables
- ▶ Prime PM **actively engaged** with ADOT PM on **Results & Progress**
- ▶ *Advertise for Construction in the **Month** ~~Quarter~~ Scheduled*

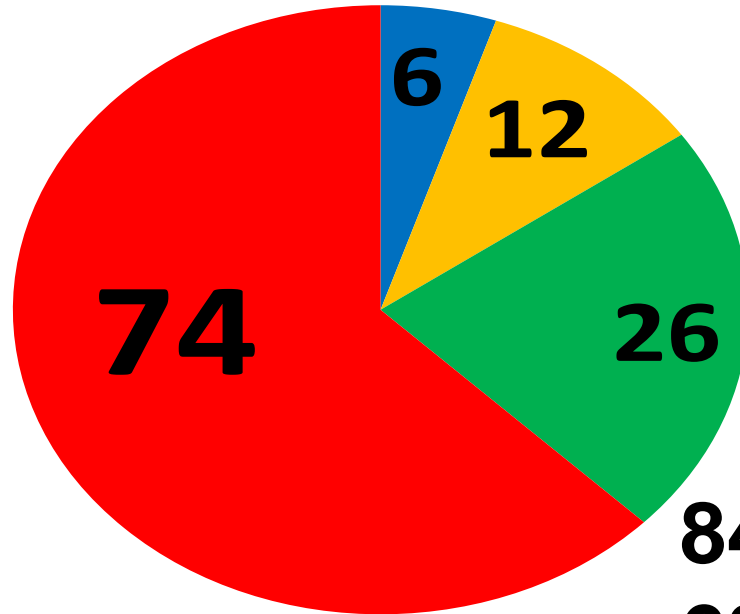
# IDO Score Card

Performance Metric Titles	Custom Field	JOP	YTD	Jan	Feb	Mar	Apr	May	June	
<b>Breakthrough Metrics</b>										
Task Order Execution	Speed	7/1/2017	Target	50	50	50	50	50	50	50
		69	Actual		52	34	65	33	51	72
Contract Execution	Speed	7/1/2017	Target	90	150	135	120	110	100	90
		234	Actual		194	143	91	0	55	0
<b>Operational / Sustainment Metrics</b>										
On-Time Construction Delivery	Speed	7/1/2017	Target	75%	63%	67%	70%	72%	74%	75%
		45%	Actual		78%	63%	75%	57%	67%	73%
On-Time Development Delivery	Speed	7/1/2017	Target	100%	90%	95%	100%	100%	100%	100%
		58%	Actual		8%	21%	50%	50%	11%	36%
Pavement Treatments (Miles)	Speed	7/1/2017	Target	3000	0	200	100	400	300	200
		2680	Actual		157	213	219	628	390	465
On-Budget Construction Delivery	Cost	7/1/2017	Target	90%	90%	90%	90%	90%	90%	90%
		72	Actual		78%	75%	100%	100%	67%	60%
Bridge Condition	Quality	7/1/2017	Target	37%	37%	37%	37%	37%	37%	37%
		35.50%	Actual		37%	37%	37%	37%	37%	37%

Custom Field Legend	
Speed	Go Faster (Respond, Decide, Resolve)
Quality	Compliance, Customer Satisfaction
Cost	Dollars Saved
People	Retain Employees / Safe Employees

Performance to Targets Color Coding:	
<span style="background-color: green; width: 20px; height: 10px; display: inline-block;"></span>	100% of Target
<span style="background-color: yellow; width: 20px; height: 10px; display: inline-block;"></span>	Within 75% - 99% of Target
<span style="background-color: red; width: 20px; height: 10px; display: inline-block;"></span>	Within 0% - 74% of Target

### Projects Delivered – MAG, PAG, Greater AZ



**FY 2014**

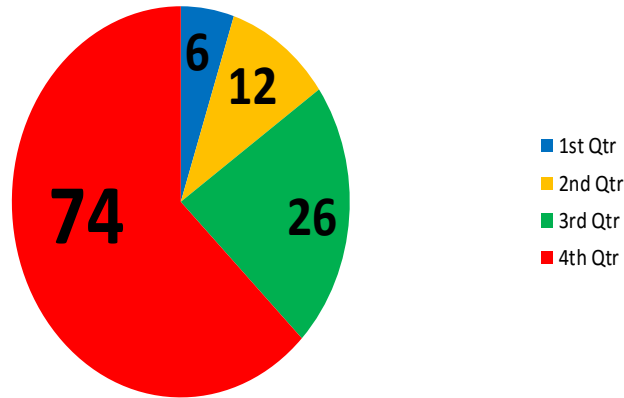
- 1st Qtr
- 2nd Qtr
- 3rd Qtr
- 4th Qtr

**84%** Delivered in 2<sup>nd</sup> Half

**63%** Delivered in 4<sup>th</sup> Quarter

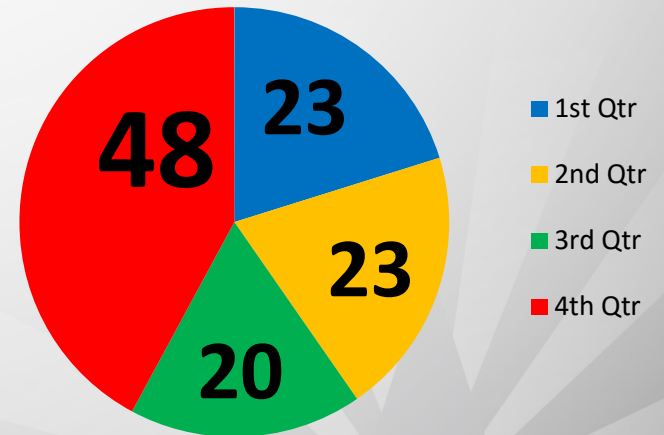
## 2014

Projects Delivered – MAG, PAG, Greater AZ

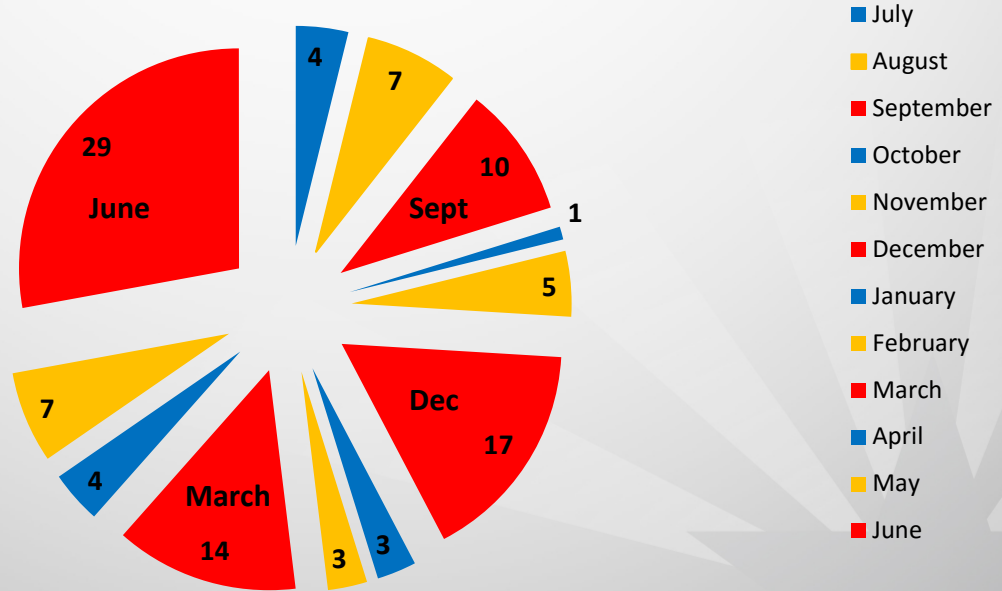


## 2018

Projects Delivered, MAG, PAG, Greater AZ



## Projects Delivered by Month Hockey Stick at Quarter End



# Revenue Stream

- How many streams make up the HURF tank?

# ARIZONA DEPARTMENT OF TRANSPORTATION

## FY 2018 HURF ACTUAL REVENUE DISTRIBUTION FLOW

(Millions of Dollars)

**NOTES:**

/1. Arizona Revised Statutes 28-5926 and 28-5927 transfer 1.6 percent of gas tax revenues to the State Lake Improvement Fund (SLIF) and 0.55 percent of gas tax revenues to the Off-Highway Vehicle Recreation Fund (OHVRF). The \$527.4 million of gas tax revenue is before of a total \$11.3 million transferred to the above two funds.

/2. In FY 2018, \$656,100 was appropriated to MVD for the vehicle registration enforcement and 3rd party programs.

/3. The \$99.4 million appropriation to DPS in FY 2018 has been netted of a \$0.1 million reversion from DPS to HURF for unused FY 2017 appropriations.

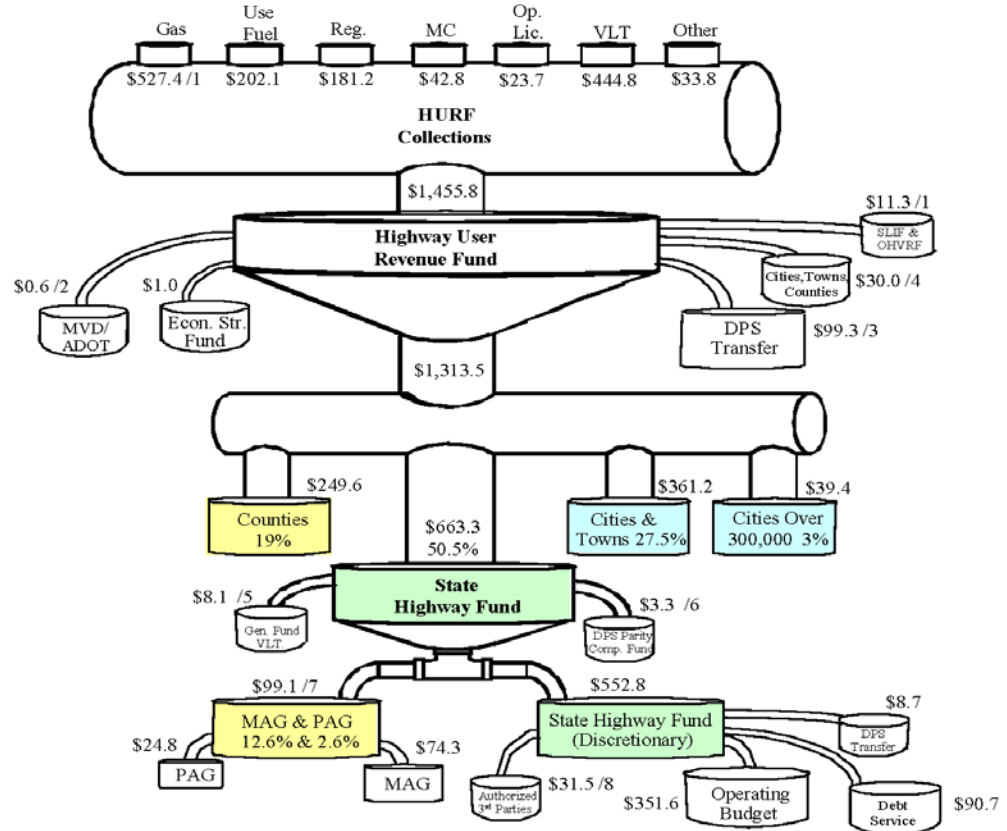
/4. Starting in FY 2015, special off-the-top distributions to cities, towns and counties have been made each fiscal year. Laws 2016, 2nd Regular Session, Chapter 125 (HB 2708) distributes \$30.0 million to cities, towns and counties in FY 2018. Actual FY 2018 distributions: 1. Cities over 300,000 persons - \$1.6 million, 2. Cities/Towns - \$14.4 million, 3. Counties over 800,000 persons - \$4.0 million, 4. Counties - \$10.0 million. Counties over 800,000 persons distribution was deposited into the MAG and PAG 12.6% accounts within the State Highway Fund.

/5. Laws 2011, 1<sup>st</sup> Regular Session, Chapter 28 (SB 1616) transfers from the State Highway Fund share of VLT generated the difference in the two-year and five-year VLT to the state general fund which totaled \$1.8 million. Laws 2010, 7<sup>th</sup> Special Session, Chapter 12 (HB 2012) an amount equal to 90 percent of the fees collected under 28-4802 (A) and 60 percent of the fees collected under 28-4802 (B) shall be transferred from the State Highway Fund share of VLT to the State General Fund which totaled \$6.3 million.

/6. Per Arizona Revised Statutes 28-5808, 1.51 percent of the State Highway Fund share of HURF VLT is distributed to the DPS Parity Compensation Fund.

/7. The 12.6% (statutory) and 2.6% (non-statutory) allocations from the State Highway Fund share of HURF distributions.

/8. Revenues to the State Highway Fund are reduced by the amount retained by Authorized Third Parties for the collection of VLT.



# What are the challenges of Existing Revenue Stream?

## Comparison of HURF Revenue Forecasts: 2006 vs. 2017



# What Increases Costs?

- **Lowballed Estimates compared to SOW (No. 1 Reason)** (Common District Engineer practice)
- **Unforeseen Scope**
- **Right-of-Way**
- **Perfection – Over review**
- **Current Infrastructure Delivery Market**

## What Increases Costs?

- **Desire to hit budget and not Scope**
- **Time and Money to go to Council or County Board**
- **2018 Labor and Materials – 15% plus**

# Design Fees

**44**

# Design Fees

**44**

As Presented to Arizona Association of County Engineers (AACE) Board of Director's Meeting on August 16, 2018

# Design Fees

~~44~~

As Presented to Arizona Association of County Engineers (AACE) Board of Director's Meeting on August 16, 2018

## FY15 - FY17 Project Close out Expenditure Analysis Projects \$1 Million or Less

Fiscal Year	State or Local	Values					Design % (Dev + R/W)
		Count of TRACS	Sum of DEV_Exp	Sum of Land_Acq	Sum of CON_Exp	Sum of TOTAL_Exp	
15	Local	33	\$6,430,921	\$0	\$12,269,217	\$18,700,138	52.42%
	State	24	\$5,589,162	\$0	\$9,590,903	\$15,180,065	58.28%
<b>15 Total</b>		<b>57</b>	<b>\$12,020,083</b>	<b>\$0</b>	<b>\$21,860,120</b>	<b>\$33,880,203</b>	<b>54.99%</b>
16	Local	15	\$1,776,130	\$0	\$7,035,532	\$8,811,662	25.25%
	State	23	\$4,134,939	\$2,461	\$10,990,413	\$15,127,813	37.65%
<b>16 Total</b>		<b>38</b>	<b>\$5,911,070</b>	<b>\$2,461</b>	<b>\$18,025,944</b>	<b>\$23,939,475</b>	<b>32.81%</b>
17	Local	9	\$1,108,563	\$0	\$2,704,287	\$3,812,850	40.99%
	State	14	\$1,753,051	\$0	\$5,133,655	\$6,886,706	34.15%
<b>17 Total</b>		<b>23</b>	<b>\$2,861,615</b>	<b>\$0</b>	<b>\$7,837,942</b>	<b>\$10,699,557</b>	<b>36.51%</b>
<b>Grand Total</b>		<b>118</b>	<b>\$20,792,767</b>	<b>\$2,461</b>	<b>\$47,724,066</b>	<b>\$68,519,235</b>	<b>43.57%</b>

3 year average

**Note:** Does not include Project CAX Sub Phases  
 Phases ending in R are designated as Right of Way  
 Phases ending in C are designated as Construction  
 All Other Phases are designated as Development  
 Design Percentage calc includes Dev and R/W Cost

Data Source: AFIS Accounting System, PRO Databases and FAST

# Design Fees Overall FY 15-17

**18**

# Design Fees

## Overall FY 15-17

Local Projects	90	14.97%
<u>State Projects</u>	<u>267</u>	<u>18.18%</u>
<b>All Projects</b>	<b>357</b>	<b>18.05%</b>

# Design Fees

## Overall FY 15-17

Close out FY	State or Local	Count of TRACS	DEV Exp	R/W	CONS Exp	TOTAL Exp	Design % (Dev + R/W)
15	Local	22	\$3,019,287	\$100,000	\$21,942,925	\$25,062,213	14.22%
	State	82	\$130,545,293	\$52,199,294	\$1,037,870,011	\$1,220,614,599	17.61%
<b>15 Total</b>		<b>104</b>	<b>\$133,564,581</b>	<b>\$52,299,294</b>	<b>\$1,059,812,937</b>	<b>\$1,245,676,812</b>	<b>17.54%</b>
16	Local	40	\$3,887,151	\$500,000	\$29,352,604	\$33,739,756	14.95%
	State	103	\$75,823,142	\$7,999,614	\$447,291,491	\$531,114,248	18.74%
<b>16 Total</b>		<b>143</b>	<b>\$79,710,294</b>	<b>\$8,499,614</b>	<b>\$476,644,096</b>	<b>\$564,854,004</b>	<b>18.51%</b>
17	Local	28	\$4,032,003	\$100,000	\$26,470,538	\$30,602,541	15.61%
	State	82	\$58,416,603	\$7,578,634	\$343,738,345	\$409,733,582	19.20%
<b>17 Total</b>		<b>110</b>	<b>\$62,448,606</b>	<b>\$7,678,634</b>	<b>\$370,208,883</b>	<b>\$440,336,123</b>	<b>18.94%</b>
<b>Grand Total</b>		<b>357</b>	<b>\$275,723,480</b>	<b>\$68,477,543</b>	<b>\$1,906,665,915</b>	<b>\$2,250,866,938</b>	<b>18.05%</b>

# Design Fees

\$1M Construction and less

**Greater AZ and Local FY 15-17**

**19**

# Design Fees

\$1M Construction and less

## Greater AZ and Local FY 15-17

Local Projects	90	14.97%
State Projects	70	28.59%
<b>All Projects</b>	<b>160</b>	<b>18.97%</b>

# Design Fees

## \$1M Construction and less

### Greater AZ and Local FY 15-17

Close out FY	State or Local	Count of TRACS	Dev Exp	R/W Exp	Cons Exp	Total Exp	Design % (Dev + R/W)
15	Local	22	\$3,019,287	\$100,000	\$21,942,925	<b>\$25,062,213</b>	14.22%
	State	17	\$1,759,102	\$95,205	\$8,309,359	<b>\$10,163,667</b>	22.32%
<b>15 Total</b>		<b>39</b>	<b>\$4,778,389</b>	<b>\$195,205</b>	<b>\$30,252,285</b>	<b>\$35,225,879</b>	<b>16.44%</b>
16	Local	40	\$3,887,151	\$500,000	\$29,352,604	<b>\$33,739,756</b>	14.95%
	State	34	\$4,542,231	\$396,998	\$15,283,932	<b>\$20,223,162</b>	32.32%
<b>16 Total</b>		<b>74</b>	<b>\$8,429,383</b>	<b>\$896,998</b>	<b>\$44,636,536</b>	<b>\$53,962,917</b>	<b>20.89%</b>
17	Local	28	\$4,032,003	\$100,000	\$26,470,538	<b>\$30,602,541</b>	15.61%
	State	19	\$2,475,617	\$863	\$8,830,932	<b>\$11,307,412</b>	28.04%
<b>17 Total</b>		<b>47</b>	<b>\$6,507,620</b>	<b>\$100,863</b>	<b>\$35,301,470</b>	<b>\$41,909,953</b>	<b>18.72%</b>
<b>Grand Total</b>		<b>160</b>	<b>\$19,715,392</b>	<b>\$1,193,066</b>	<b>\$110,190,291</b>	<b>\$131,098,749</b>	<b>18.97%</b>

# Design Fees – Potential Root Causes:

- Project SOW and Economy of Scale
- Sample Set of Plans not provided
- Too many Submittals for Type of Project
- 80% of ADOT work now performed by Consultants
- Scope Changes
- Use of Local Stds Good – Do not ADOTize
- ADOTization – Not enough interest in Project from local – just do it
- NEPA can be a pain

## Design Fees – Potential Counter Measures:

- Skin in Game – Day one
- Sample Set of Plans
- Agreement on SOW Early
- Number of Submittals
- Local Standards (No ADOTizing) and Inspection
- Streamlining of NEPA
- Ask Why? Engage
- **HURF Exchange**
- Others?

## **Project Closeout:**

- **Greater Emphasis on Closing Out Projects**
- **Inactive is 180 days or more**
- **Reprogram Dead Money**

## **Challenges with Closeout:**

- **Personnel changes at local and ADOT**
- **Construction personnel have moved on to next project**

## Quiz

- 1. What is 20-30-30-20?**
- 2. When does a project hit the inactive list?**
- 3. What was gap in HURF projections from 2006?**
- 4. Number One Cause of Increased Delivery Cost of Project?**
- 5. Would a Sample set of plans be a good countermeasure for reduced Design Fees?**

## Quiz

1. What is 20-30-30-20? **(Flattened Delivery Curve)**
2. When does a project hit the inactive list? **(180 days)**
3. What was gap in HURF projections from 2006? **(\$17B)**
4. Number One Cause of Increased Delivery Cost of Project? **(Lowballed Estimate to Scope)**
5. Would a Sample Set of Plans be a good countermeasure for reduced Design Fees? **(Yes)**

**ADOT**



# Follow the Money Questions?