



December 12, 2024

# Houston Comprehensive Engineering Consultant Contracts – Workflow and Tracking

## 2024 PEPS Conference

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# Presentation Topics

1

Why – Background Information

2

What – Review Tool

3

How - Implementation

# Why – Background Information

# Why – Problem Definition



## CEC Contract Type

- Large contracts
- Broad Scope
- Quick response assignments
- Need for transparency



## CEC Work Assignments

- Managed by multiple TxDOT WA PMs
- Work assignment requests from multiple sources

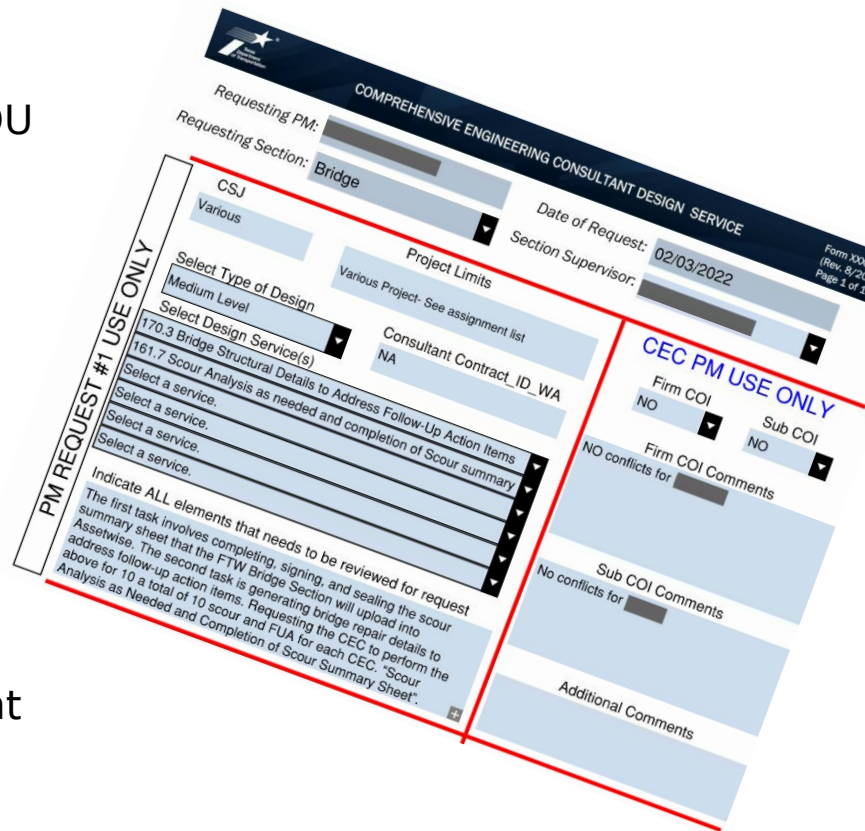


## Accountability

- Document Assignment
  - Request for Work
  - Scope
  - Level of Effort
  - Approval before work performed
- Monitor responsiveness during task assignment negotiations
- Monitor assignment budget status

# Why is Tool Needed?

- HOU selected 8 consultants / 5 dedicated to HOU
- Data Review: Ft Worth system
  - Documents scope/level of effort agreement
  - Tracks per assignment
- HOU Tool Purpose
  - Automated task assignment and approval process
  - Contract, work authorization and assignment monitoring and reporting



COMPREHENSIVE ENGINEERING CONSULTANT DESIGN SERVICE

Requesting PM: [Redacted]

Requesting Section: Bridge

Date of Request: 02/03/2022

Section Supervisor: [Redacted]

Form XXX (Rev. 8/2018) Page 1 of 2

Project Limits: Various Project. See assignment list

Consultant Contract\_ID\_WA: NA

**PM REQUEST #1 USE ONLY**

Select Type of Design: Medium Level

Select Design Service(s): 170.3 Bridge Structural Details to Address Follow-Up Action Items

161.7 Scour Analysis as needed and completion of Scour summary

Select a service. [Redacted]

Select a service. [Redacted]

Select a service. [Redacted]

Indicate ALL elements that needs to be reviewed for request summary sheet that the FTW Bridge Section will upload into Assetwise. The second task is generating bridge repair details to address follow-up action items. Requesting the CEC to perform the above for 10 a total of 10 scour and FUA for each CEC. "Scour Analysis as Needed and Completion of Scour Summary Sheet".

**CEC PM USE ONLY**

Firm COI: NO

Sub COI: NO


NO conflicts for [Redacted]

Sub COI Comments: No conflicts for [Redacted]

Additional Comments: [Redacted]

# Task Assignment Monitoring

- PS-CAMS tracks at contract and WA level
- PEPS Invoice Template
  - Provides for invoice by Task
  - Tracks at WA level
- HOU Tool: Monitor at Task Assignment Level
  - Approve LOE
  - Track invoice effort
  - Identify unused task effort (\$\$) and return to WA

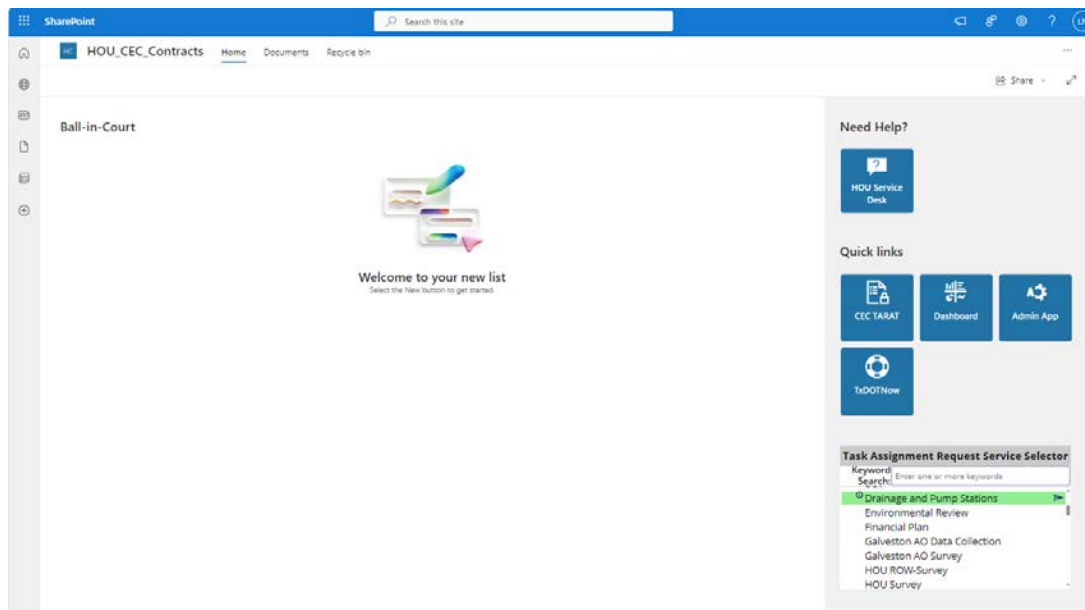
		Provider Invoice No.	WA#-XXX
		Combined Invoice Template Log No.	
<b>WORK AUTHORIZATION</b>			
<b>FINANCIAL STATUS SUMMARY</b>			
<b>SR-UC Payment Method</b>			
Provider Name:	XYZ Consultant	Legacy Contract No.	
Provider ID No.	XXX	Legacy WA No.	
<b>Work Authorization Financial Summary</b>			
Authorized Amount			\$500,000.00
Previous Invoiced Amount			\$100,000.00
Amount of this Invoice			\$20,000.00
Total Combined Invoice Amount (including any supplemental invoices, if applicable)			\$20,000.00
Total Invoiced to Date (including this invoice and any supplemental, if applicable)			\$120,000.00
Balance Remaining			\$380,000.00

Assignment 005			
	Assigned	Invoiced	Remaining
Prime	\$ 63,465.66	\$ 26,583.08	\$ 36,882.58
Sub1	\$ 83,604.58	\$ 33,190.61	\$ 50,413.97
Sub2		\$ -	\$ -
Sub3	\$ 27,159.58	\$ 11,469.12	\$ 15,690.46
Sub4		\$ -	\$ -
<b>Total</b>	<b>\$ 174,229.82</b>	<b>\$ 71,242.81</b>	<b>\$ 102,987.01</b>

# What – Review Tool

# CEC Sharepoint Tool

- Task Assignment Request and Approval Tool
- Dashboard





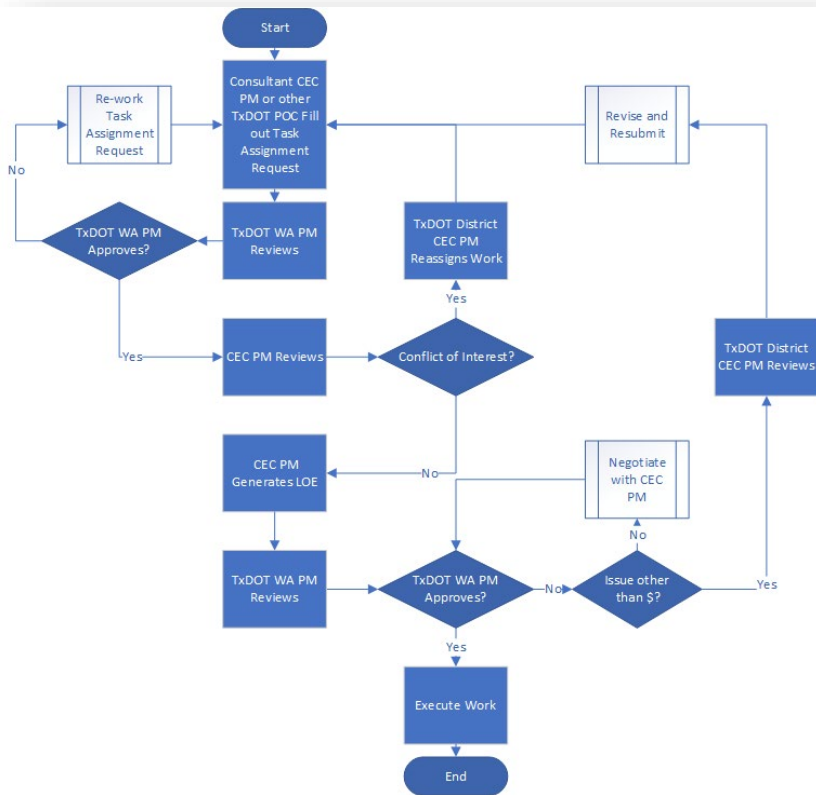
# What – System Requirements

- Built and hosted on TxDOT Sharepoint Site
  - Maintained by TxDOT
  - PowerBI coordinated with ITD
- Access Control
  - Consultant can only see their own information (LOEs/invoices)
- Requires Active –C account
  - Does not require TxDOT laptop
  - Does not work with –O account
  - Requires PowerApp license
  - CEC Email Address for notifications

# Process Administration - TxDOT

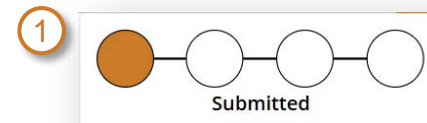
- Update contracts (supplemental agreements)
- Add/Update Work Authorizations
- Add/Update Scopes, Work Types
- Add/Update Firms
- Add/Update CSJs

# CEC Task Assignment Request and Reporting Process

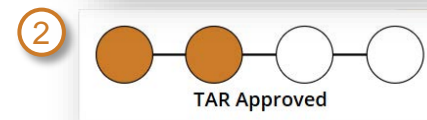


## 4-step review/approval process

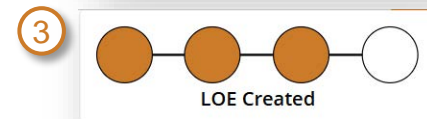
TxDOT/CEC Submits Request



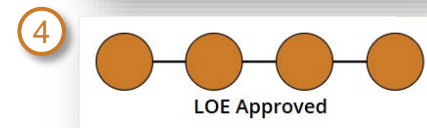
TxDOT WA PM Task Assignment Approval



Consultant LOE Creation



TxDOT WA PM LOE Approval



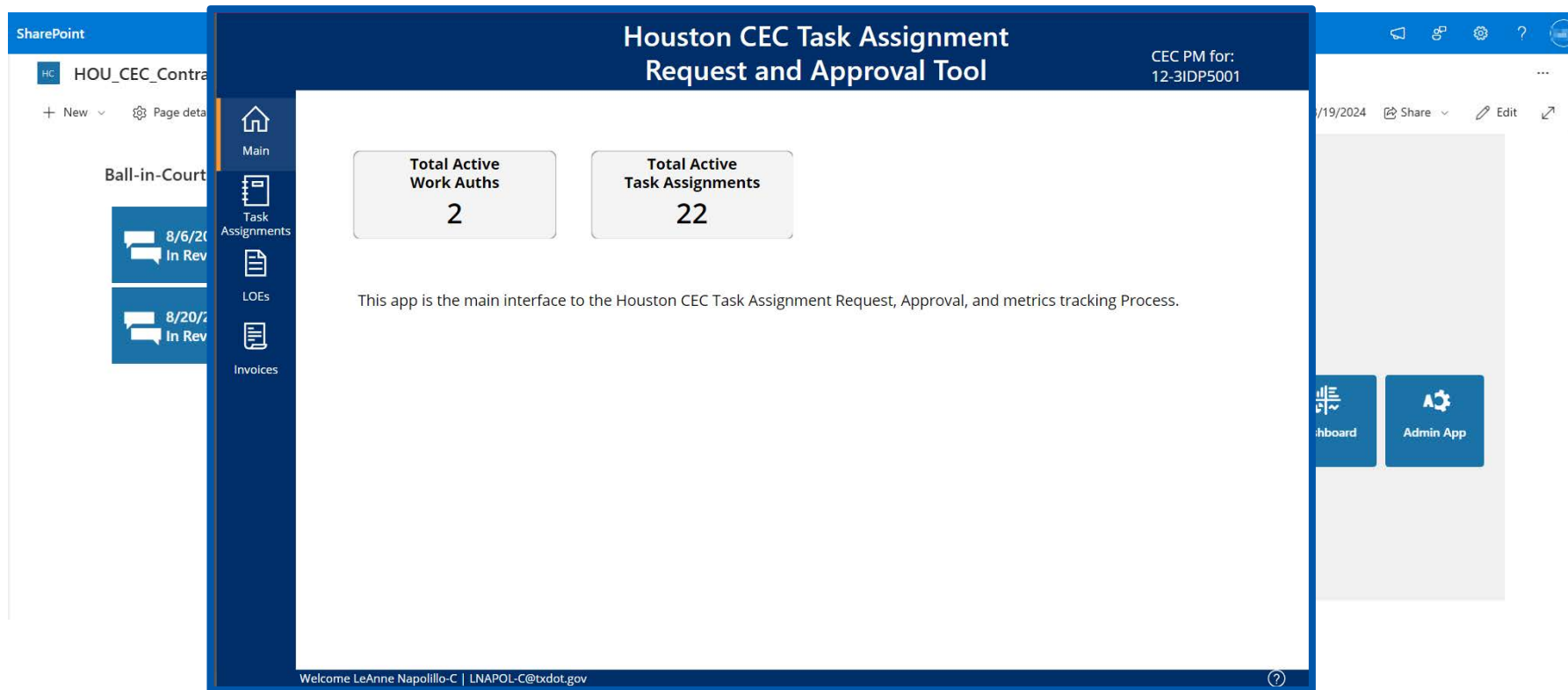
# Home Page

The screenshot shows a SharePoint Home Page for the 'HOU\_CEC\_Contracts' site. The page features a 'Ball-in-Court' section with a list of tasks. A blue box highlights the top two tasks, and a larger blue box highlights the bottom two tasks. The top two tasks are 'CEC PM Review for TA 014 WA #1\_ for Contract 12-3IDP5001' (due 10/15/2024, In Progress) and 'Consultant CEC PM Review for Task Assignment 000 WA #00 for Contract 00-0XXX0000' (due 8/16/2024, In Progress). The bottom two tasks are 'TxDOT WA PM Review for Task Assignment 999 WA #00 for Contract 00-0XXX0000' (due 8/12/2024, OverDue) and 'HOU ROW-Survey HOU Survey'.

Due Date	Status	Task Description
10/15/2024	In Progress	CEC PM Review for TA 014 WA #1_ for Contract 12-3IDP5001
8/16/2024	In Progress	Consultant CEC PM Review for Task Assignment 000 WA #00 for Contract 00-0XXX0000
8/12/2024	OverDue	TxDOT WA PM Review for Task Assignment 999 WA #00 for Contract 00-0XXX0000
		HOU ROW-Survey HOU Survey

2 Business Days for each Task

# Task Assignment Request Process App



The screenshot displays the 'Houston CEC Task Assignment Request and Approval Tool' interface within a SharePoint environment. The app title is prominently displayed at the top center. On the right side of the header, it identifies the user as 'CEC PM for: 12-3IDP501'. The main content area features two summary cards: 'Total Active Work Auths' with a value of 2, and 'Total Active Task Assignments' with a value of 22. Below these cards, a descriptive text states: 'This app is the main interface to the Houston CEC Task Assignment Request, Approval, and metrics tracking Process.' The interface includes a left-hand navigation pane with options for 'Main', 'Task Assignments', 'LOEs', and 'Invoices'. The top right corner of the app window shows standard SharePoint controls like 'Share', 'Edit', and 'Inboard'. At the bottom left, a welcome message reads 'Welcome LeAnne Napolillo-C | LNAPO-L-C@txdot.gov'.

# Task Assignment Request – Step 1

Power Apps | HOU CEC TARAT

## Consultant XYZ Task Assignment Request #005

Requesting PM: Elie Alkhoury | Requesting Section: Hydraulics | Section Supervisor: | Date of Request: 8/19/2024

CSJs: 0027-07-032 | 0050-04-027 | Selected CSJ(s): 0027-07-032 | 0050-04-027 | Project Limits: I-10 at Patterson

County | Department Budget Account Source: Harris | Estimated Cost: < \$50K | Type of Work: Design | \* Work Auth Number: 12-3IDP5007\_1  
WA01 TEST 1

Services: Design | Add Service | Remove Service | Selected Service(s): Design



\* Request Notes: Review draft pump station report

Submit Task Assignment Request

HCTARAT v1.0.8

# Task Assignment Email Notifications

HOU CEC Task Assignment Request 12-3IDP5007\_1\_004 Received

 HOU\_CEC-Notifications  
To: 

Matthew Summers, C.,

Your request for UNSPECIFIED under Work Auth #1 on contract 12-3IDP5007 has been received and is being reviewed for approval.

This process should take no longer than **2** business days.






Reply



Forward

New HOU CEC Task Assignment Request Submitted

 HOU\_CEC-Notifications  
To: 

TA 004 requesting UNSPECIFIED service(s) has been submitted by .

This is for Work Auth #1 on contract 12-3IDP5007

Please review the submitted Task Assignment Request located [HERE](#)



Reply



Forward

# Task Assignment Request Review – Step 2

Ready for LOE Generation



HOU\_CEC-Notifications

To: [Redacted]

TA 004 request has been approved by the TxDOT WA PM and is ready to have an LOE generated for review.

This is for Work Auth #1 on contract 12-3IDP5007

**WA PM Comments:**

Reviewed. All looks good.

Review the Task Assignment Request and generate the LOE [HERE](#)

Reply

Forward




# Task Assignment Request - Rejection

HOU CEC Task Assignment Request 12-3IDP5007\_1\_003 Rejected



HOU\_CEC-Notifications


To: 

 High importance

TA 003 has been **rejected**. A new Task Assignment Request will need to be submitted if this work is still required.

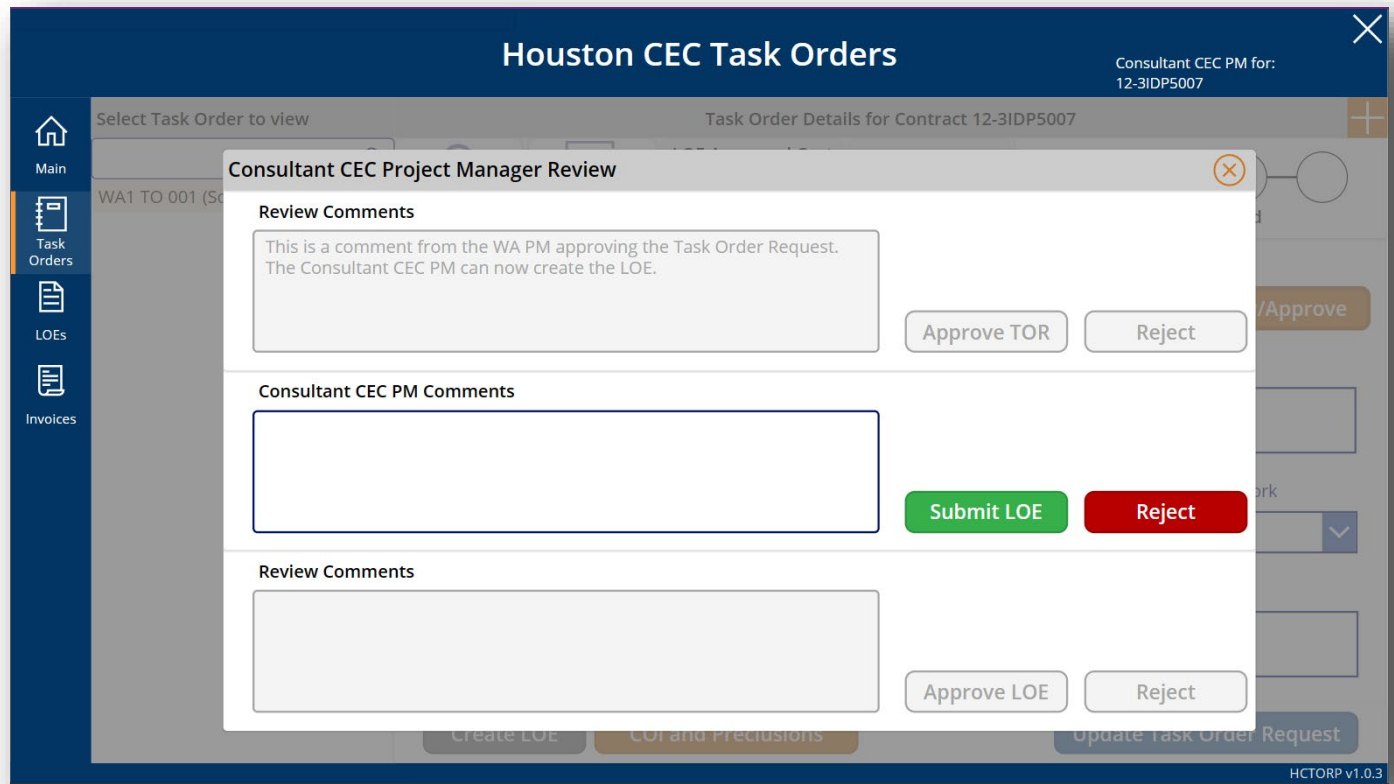
Rejection notes:

Rejected. Not enough available funds to handle this level of work under this Work Auth.

 Reply

 Forward

# Submit Level of Effort – Step 3

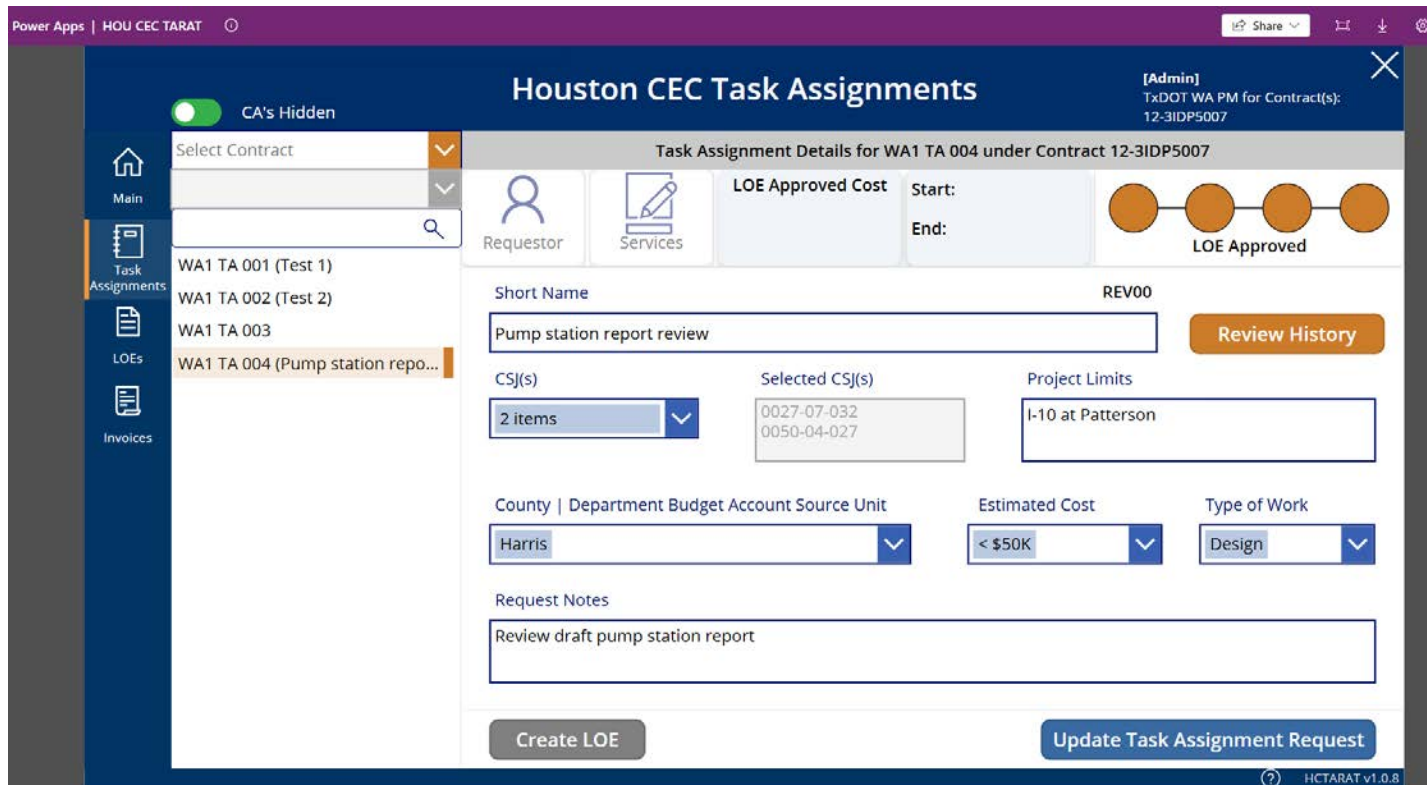


The screenshot displays the 'Houston CEC Task Orders' application interface. A modal dialog box titled 'Consultant CEC Project Manager Review' is open, overlaying the main task order details. The dialog contains three sections:

- Review Comments:** A text area containing the message: "This is a comment from the WA PM approving the Task Order Request. The Consultant CEC PM can now create the LOE." Below this are 'Approve TOR' and 'Reject' buttons.
- Consultant CEC PM Comments:** An empty text input field. Below it are 'Submit LOE' (green) and 'Reject' (red) buttons.
- Review Comments:** An empty text input field. Below it are 'Approve LOE' and 'Reject' buttons.

The background interface shows 'Task Order Details for Contract 12-3IDP5007' and a sidebar with navigation options: Main, Task Orders, LOEs, and Invoices. The bottom right corner of the application window displays 'HCTORP v1.0.3'.

# Task Assignment Request (LOE Approved)



The screenshot displays the 'Houston CEC Task Assignments' web application. The interface includes a top navigation bar with 'Power Apps | HOU CEC TARAT' and a 'Share' button. A left sidebar contains navigation options: 'Main', 'Task Assignments', 'LOEs', and 'Invoices'. The main content area is titled 'Houston CEC Task Assignments' and shows details for 'Task Assignment Details for WA1 TA 004 under Contract 12-3IDP5007'. A 'CA's Hidden' toggle is visible. The task details include:
 

- Requestor**: [User Icon]
- Services**: [Pencil Icon]
- LOE Approved Cost**: [Field]
- Start:** [Field]
- End:** [Field]
- LOE Approved**: [Progress indicator with 4 orange circles]
- Short Name**: REV00
- Pump station report review**: [Text field]
- Review History**: [Orange button]
- CSJ(s)**: 2 items [Dropdown]
- Selected CSJ(s)**: 0027-07-032, 0050-04-027
- Project Limits**: I-10 at Patterson
- County | Department Budget Account Source Unit**: Harris [Dropdown]
- Estimated Cost**: < \$50K [Dropdown]
- Type of Work**: Design [Dropdown]
- Request Notes**: Review draft pump station report
- Create LOE**: [Grey button]
- Update Task Assignment Request**: [Blue button]

 The bottom right corner shows a help icon and the version 'HCTARAT v1.0.8'.

# Invoice View

Power Apps | HOU CEC TARAT

Share

## Houston CEC Task Assignment Request Invoice Process

[Admin]  
TxDOT WA PM for Contract(s):  
12-3IDP5007

Invoice Details for Contract 12-3IDP5007

12-3IDP5007

WA01 TEST 1

Provider Invoice Number: Invoice 1

Total Invoice Amount: \$300,000.00

Work Auth Number: 12-3IDP5007\_1

Begin Service Date: 7/1/2024

End Service Date: 7/31/2024

Update Invoice

Invoice 1

Invoice 2

Invoice 3

### TA 001 (Test 1) - Firm/Function Code Breakdown

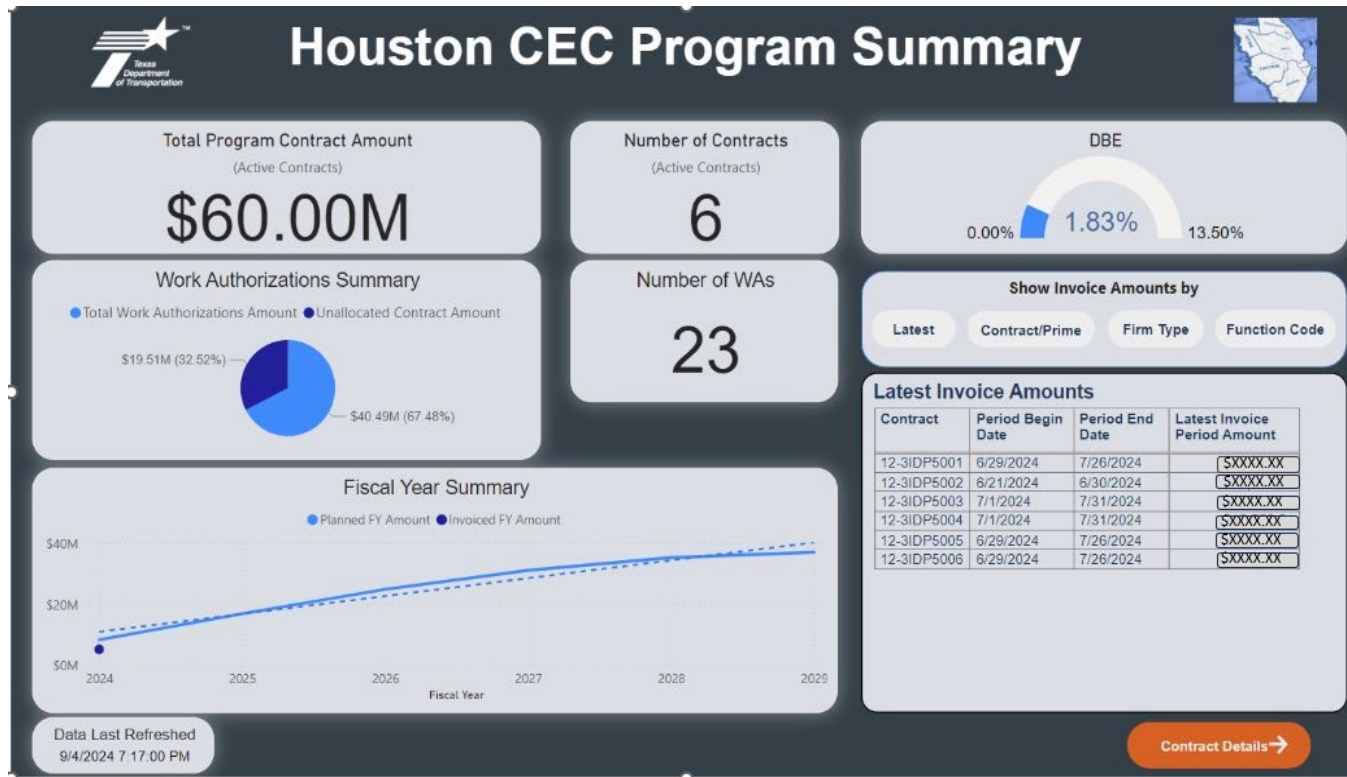
Contract ID	Code	Description	Amount
12-3IDP5007_1_000		Prime	\$195,000.00
12-3IDP5007_1_001	Function Code: 145		\$195,000.00
		Sub1	\$100,000.00
	Function Code: 145		\$100,000.00
		Sub2	\$0.00
	Function Code: 145		\$0.00
		Sub3	\$0.00
	Function Code: 145		\$0.00

HCTARAT v1.0.8

# Dashboard

- Created to monitor program
- Shows data for:
  - Overall program
  - Contracts
  - Work Authorizations
  - Task Assignments
- Access Control:
  - TxDOT WA PM has access to their WA
  - CEC PM can only see their contract info

# Dashboard – Program Summary



# Dashboard – Contract Summary

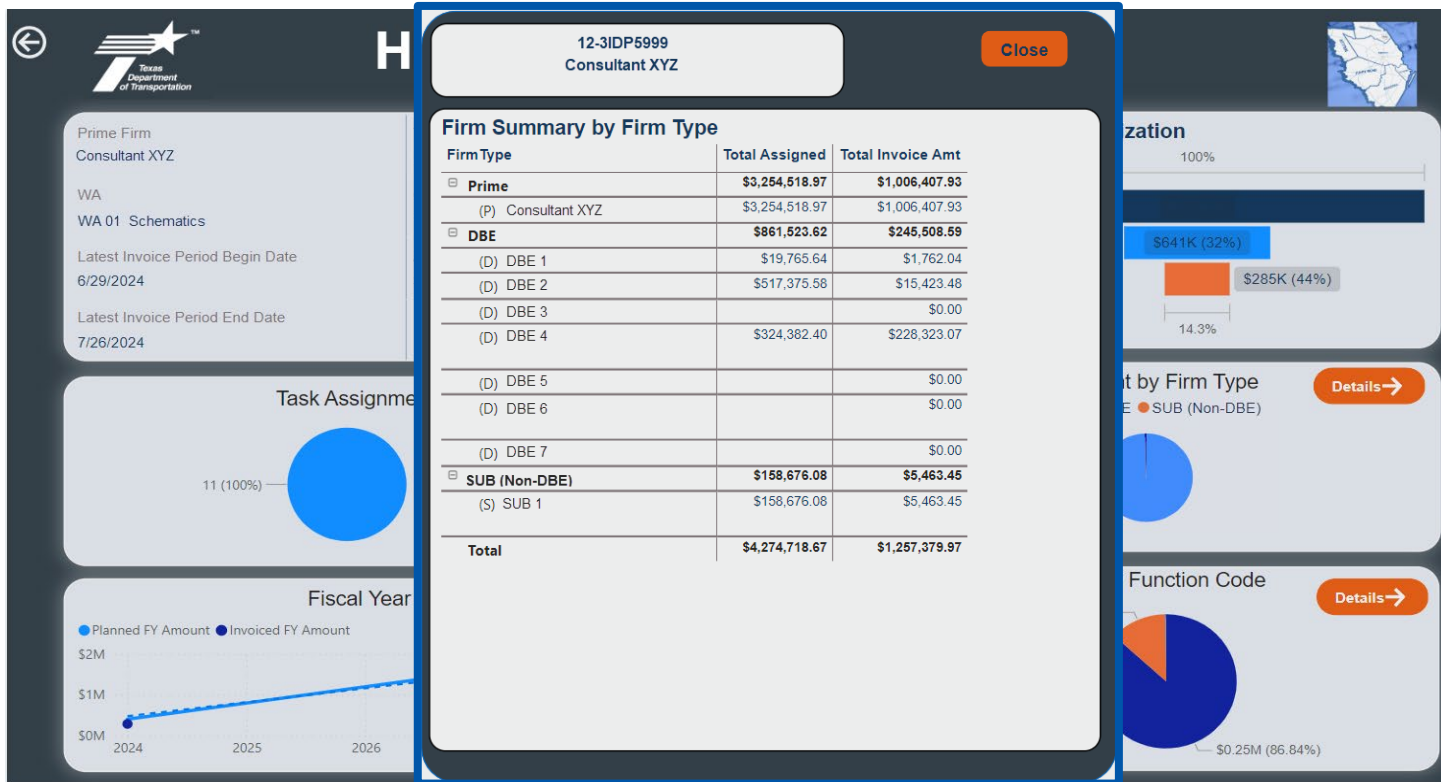


# Dashboard – Contract Summary





# Dashboard – WA Summary



# Dashboard – Task Assignment Summary

Consultant XYZ

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WA02 Design

See Details
Close


### Task Assignment Summary

Task	Status	Amount	Invoice Amount	Remaining
Contract Administration	LOE Approved	\$100,000.00	\$100,000.00	(\$100,000.00)
Task 1 - PowerBI Dashboard/Forms	LOE Approved	\$200,000.00	\$200,000.00	(\$200,000.00)
Task 2 - FM 646 ORD Support	LOE Approved	\$100,000.00	\$100,000.00	(\$100,000.00)
Task 3 - ORD DU Training #1	LOE Approved	\$500,000.00	\$500,000.00	(\$500,000.00)
Task 4 - APD ORD Training #1	LOE Approved	\$200,000.00	\$200,000.00	(\$200,000.00)
Task 5 - FBAO ORD Training #1	LOE Approved	\$100,000.00	\$100,000.00	(\$100,000.00)
Task 6 - CDD ORD Training #1	LOE Approved	\$100,000.00	\$100,000.00	(\$100,000.00)
Task 7 - I-10 W Schem	LOE Approved	\$100,000.00	\$100,000.00	(\$100,000.00)
Task 8 - FBAO Training #2	LOE Approved	\$100,000.00	\$100,000.00	(\$100,000.00)
Task 9 - ORD Plan Review Training	LOE Approved	\$100,000.00	\$100,000.00	(\$100,000.00)
Task 10 - GP at Ft Bend Tollway Exhibit	LOE Approved	\$100,000.00	\$100,000.00	(\$100,000.00)
<b>Total</b>		<b>\$1,800,000.00</b>	<b>\$1,800,000.00</b>	<b>(\$1,800,000.00)</b>

# Dashboard – Task Assignment Summary

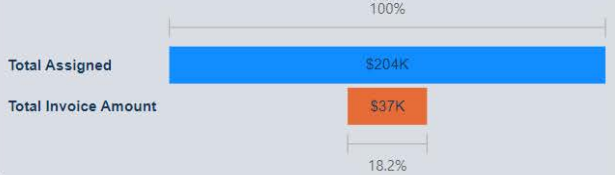



## Houston CEC Task Assignment Summary



Prime Firm Consultant XYZ	WA WA01 Schematic
Task Order TA 007	

### Utilization



Total Assigned: \$204K (100%)

Total Invoice Amount: \$37K (18.2%)

### Firm Summary by Function Code

Firm Type	Total Assigned	Total Invoice Amt
<input checked="" type="checkbox"/> Prime	\$204,317.54	\$37,148.52
<input checked="" type="checkbox"/> Consultant XYZ	\$204,317.54	\$37,148.52
110	\$116,867.56	\$0.00
145	\$87,449.98	\$0.00
160		\$37,148.52
<input checked="" type="checkbox"/> DBE		\$0.00
<input checked="" type="checkbox"/> DBE 1		\$0.00
110		\$0.00
145		\$0.00
160		\$0.00
<input checked="" type="checkbox"/> DBE 2		\$0.00
110		\$0.00
145		\$0.00
160		\$0.00
<b>Total</b>	<b>\$204,317.54</b>	<b>\$37,148.52</b>

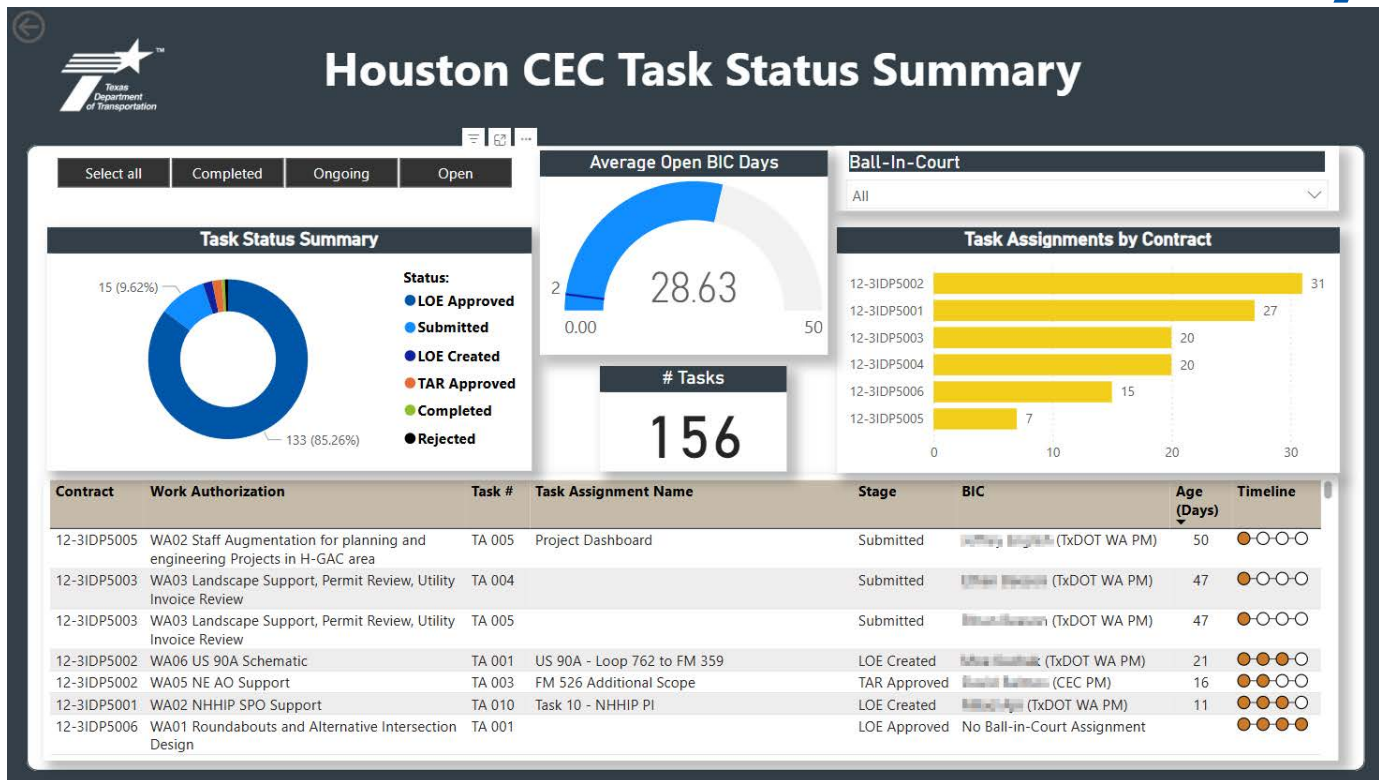
Remaining in LOE

\$167,169.02

Request Notes:

Schematic Revisions

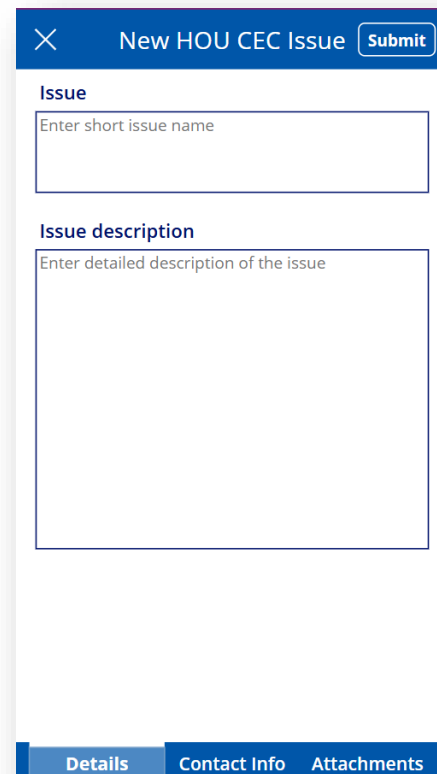
# Dashboard – Task Status Summary



# How – Implementation

# Implementation

- In person training for TxDOT and CEC PMs
- CEC PM Feedback
  - One on One Consultant CEC Onboarding
  - Service Desk through App
- TxDOT Feedback
- Next Steps



✕ New HOU CEC Issue **Submit**

**Issue**  
Enter short issue name

**Issue description**  
Enter detailed description of the issue

**Details** Contact Info Attachments

# Questions and Discussion