

# Data Fellows Program

April 2023



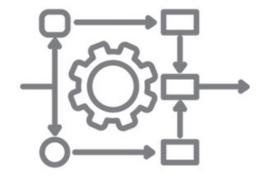
# Our Goal is to support data-based decision making at Harris County

## This Program provides resources that tackle key data challenges









#### **Operational guidance**

Help departments build data tools and reporting to manage day-to-day operations

#### **Performance tracking**

Support Performance reporting for budget process and department meetings

#### **County-wide support**

Building integrations for reporting on Countywide measures

#### **Automation**

Creating workflows to connect different data sources for better reporting, or operational functioning



## A number of agencies have demonstrated interest



**Operational guidance** 

# Pretrial Services Data Fellow for expense forecasting:

Pretrial Services is requesting a data fellow to help understand the monitoring caseloads and predict and project their associated device costs for the upcoming months. This would require a bottom up historical analysis of the existing monitoring trends, a mapping of the variables that contribute to these and model to demonstrate the fiscal impact in the upcoming year(s)



**Performance tracking** 

## Pretrial Services Data Fellow for Performance tracking:

Pretrial Services would appreciate a resource to help clean the data in their new case management system, CSS. One of the areas precluding the agency from providing a clean report on current metrics is the excessive backlog of closed cases. They would need a person to support data clean-up and set policy for closing of cases.



**County-wide support** 

#### Purchasing Data Fellow for Bid Pricing and Contract Renegotiation

- Creating a bid price range using tools like GovSpend to determine the potential cost of a project. This would help better understand the cost outlay associated with an RFP and appropriate necessary funding as well as provide a guide for costs when negotiating
- Review existing contracts against prevailing market contract costs to identify those ripe for renegotiation

**/EXAMPLES** 



**Automation** 

# **Community Service Department**

Creating reimbursement tracking for multi-family programs for the various stakeholders (CSD, DEEO, contractors) to ensure a clear understanding of where specific projects are in their lifecycle of operations and that remunerations are made on time. The project would be to automate this end to end view using tools such as Monday.com for the front end view and custom code to connect to department project management software on the back end



## **Project Scope and Impact**

### **Costs**

Labor: \$530,000

4 Data Fellows = \$400,000

\$65,000 (base) + ~\$35,000 (benefits) \*

1 Program Manager = \$130,000

\$90,000 (base) + ~\$40,000 (benefits) \*

Non-Labor: \$38,000

Set up cost per person = \$6,000\*5 = \$30,000 Training resources = \$2,000\*4 = \$8,000

Total: \$568,000

## **Success Metrics**

- 1. Number of projects achieving success metrics
- 2. Number of Data Fellows in a full time role with the County after the completion of the program
- 3. Cost savings from projects
- 4. Revenue accretion from projects



## Background and position description for Data Fellows

#### Broadly, we're looking for

- Passionate about data-driven performance in County government and dedicated to serving fellow citizens of Harris County
- Majors in Mathematics, Economics, Computer
   Science, Information Management, Data
   Management or Statistics.
- Preferably 1-2 years of work experience
- Ability to derive insights from data and communicate effectively to non-technical audiences

Data models, database design development, data mining and segmentation techniques

Reporting packages (Business Objects etc.), databases (SQL etc.), programming (Python, XML, Javascript, or ETL frameworks)

Statistics and experience using statistical packages for analyzing datasets (Excel, SPSS, SAS, R etc.)

Visualization acuity with tools such as Tableau, PowerBI, Sisense along with some experience using PowerPoint



## Department allocation will be on a first come first serve basis

#### Introduction

Office of Performance and Data will send an email covering the details of the program, the process to request fellows and the expectations from departments

# Request process

The request for a resource will be made using a survey covering:

- 1. Details on the specific project(s) the fellow will be working on
- 2. What success would look like on completion

Survey is here: https://forms.gle/g1uxmhpNmW37eQc6A

# Review and Assignment

The fellows will be assigned on a **first come first serve basis** with the qualification that there needs to be a clear description of the work they will be doing and what success looks like



## Training and support will be ongoing

#### **Training Plan for Data Fellows**\*

Day	Description	Hours
Day 1	Initial set up - badges, laptops	5
Day 1	Introduction to Harris County (goals, priority outcomes, departments)	3
Day 2	Performance and Budgeting at Harris County	4
Day 2	PB Advantage Training	4
Day 3	HR session	3
Day 3	Excel Data Organization	5
Day 4	Excel Modeling	8
Day 5	Excel for Analysis	8
Day 6	PowerBI – Introduction	8
Day 7	PowerBI – Data Cleaning and Transformation	8
Day 7	OR Introduction to department and review of project	1.5
Day 8	PowerBI – Data Visualization and techniques	8
Day 8	OR Introduction to department and review of project	1.5
Day 9	SQL Overview and Introduction	8
Day 9	OR Introduction to department and review of project	1.5
Day 10	First embedded day with departments	8

#### **Fellowship Support Model**

- 1-1 check in and support: Program managers will be 100% accessible for check ins and ongoing questions both data fellows and department leads to understand progress on projects and to answer any technical questions
- Cohort Communications: create a teams group, and build programming and resources to answer ongoing questions about projects to the cohort, through in-house support as well as using appropriate resources from Universal Services/Auditor's office
- **Team Building:** Monthly lunches with the group to be able to build a sense of camaraderie and connection
- Course trainings support: Provide access to online content to continue to build skills



## Timeline for the process





## Questions?



Budget Management Form 3441 Harris County, TX (06/01/2021)

#### **POSITION MANAGEMENT REQUEST FORM**

		SECTION I -	– TYPE (	OF REQUEST		
Function	n	Check Applicable		Comments		
Position Update		177		May require Commissioners Court a	pproval	
Position Reclassification				May require Commissioners Court a		
New Position Request		Requires Commissioners Court approval		oval		
Is additional office space requi	red?	Yes	No			
		SECTION II – F	REASON	FOR REQUEST		
	Pro	gram				
		SECTION III – DR	OPOSE	D EFFECTIVE DATE		
	•	SECTION III TH	OI OJE	D EFFECTIVE DATE		
Proposed Effective Date	Date must be the beginning of a pay period. For requests requiring Commissioners Court approval, the earliest effective date will be the first pay period after approval					
Grant Effective Date	From:	To:				
		SECTION IV	V – POS	ITION DATA		
	Current			Proposed		
		) to complete all fields		Complete all fields for a new position or change appropriate field(s) for existing position.		
Use "Pos_List_File" (PCN	Downloady to com	piete ali fielas	C			
Use "Pos_List_File" (PCN	bowinday to com	piete ali fielas	Num	existing positions		
Use "Pos_List_File" (PCN  Position Description (Title)	Downloady to com	piete ali fielas	Num Posi	existing positions citing Description (Title-30 Spaces Max)		
Use "Pos_List_File" (PCN  Position Description (Title)  Job Code Description	Downloady to com	piete ali fielas	Num Posi	existing positions ber of Positions cion Description (Title-30 Spaces Max) Code Description		
Position Description (Title) Job Code Description Position Number	Downloady to com	piete ali fielas	Num Posit Job (	existing positions ber of Positions cion Description (Title-30 Spaces Max) Code Description cion Number (HRRM Use Only)		
Position Description (Title) Job Code Description Position Number Company (CS, FC, HC, JV or PA)	Download) to com	piete all fielas	Num Posit Job ( Posit Com	existing positions tion Description (Title-30 Spaces Max) Code Description tion Number (HRRM Use Only) pany (CS, FC, HC, JV or PA)		
Position Description (Title) Job Code Description Position Number Company (CS, FC, HC, JV or PA) Business Unit	Download) to com	piete all fielas	Num Posit Job 0 Posit Com Busi	existing positions ber of Positions cion Description (Title-30 Spaces Max) Code Description cion Number (HRRM Use Only)		
Position Description (Title) Job Code Description Position Number Company (CS, FC, HC, JV or PA) Business Unit Home Department ID Number	Download) to com	piete all fielas	Num Posit Job 0 Posit Com Busi	existing positions ther of Positions tion Description (Title-30 Spaces Max) Code Description tion Number (HRRM Use Only) pany (CS, FC, HC, JV or PA) thess Unit e Department ID Number		
Position Description (Title) Job Code Description Position Number Company (CS, FC, HC, JV or PA) Business Unit Home Department ID Number Location		piete all fielas	Num Posit Job ( Posit Com Busi Hom Loca	existing positions ther of Positions tion Description (Title-30 Spaces Max) Code Description tion Number (HRRM Use Only) pany (CS, FC, HC, JV or PA) thess Unit e Department ID Number		
Position Description (Title) Job Code Description Position Number Company (CS, FC, HC, JV or PA) Business Unit Home Department ID Number Location Full Time, Part Time or Temporal Budgeted Hours		piete ali fielas	Num Posit Job ( Posit Com Busi Hom Loca	existing positions there of Positions tion Description (Title-30 Spaces Max) Code Description tion Number (HRRM Use Only) pany (CS, FC, HC, JV or PA) thess Unit e Department ID Number tion		
Position Description (Title) Job Code Description Position Number Company (CS, FC, HC, JV or PA) Business Unit Home Department ID Number Location Full Time, Part Time or Temporal Budgeted Hours Salary Range Maximum		piete ali fielas	Num Posit Job ( Posit Com Busi Hom Loca Full Budg Sala	existing positions there of Positions tion Description (Title-30 Spaces Max) Code Description tion Number (HRRM Use Only) pany (CS, FC, HC, JV or PA) thess Unit the Department ID Number tion Time, Part Time or Temporary the geted Hours Ty Range Maximum		
Position Description (Title) Job Code Description Position Number Company (CS, FC, HC, JV or PA) Business Unit Home Department ID Number Location Full Time, Part Time or Temporal Budgeted Hours Salary Range Maximum FLSA Code		piete ali fielas	Num Posit Job ( Posit Com Busi Hom Loca Full Budg Sala FLSA	existing positions there of Positions tion Description (Title-30 Spaces Max) Code Description tion Number (HRRM Use Only) pany (CS, FC, HC, JV or PA) thess Unit the Department ID Number tion Time, Part Time or Temporary ty Range Maximum Code		
Use "Pos_List_File" (PCN  Position Description (Title) Job Code Description Position Number Company (CS, FC, HC, JV or PA) Business Unit Home Department ID Number Location Full Time, Part Time or Temporal Budgeted Hours Salary Range Maximum FLSA Code Reports To Position Number		piete ali fielas	Num Posit Job ( Posit Com Busi Hom Loca Full Budg Sala FLSA Repo	existing positions there of Positions tion Description (Title-30 Spaces Max) Code Description tion Number (HRRM Use Only) pany (CS, FC, HC, JV or PA) thess Unit the Department ID Number tion Time, Part Time or Temporary ty Range Maximum Code total Code		
Position Description (Title) Job Code Description Position Number Company (CS, FC, HC, JV or PA) Business Unit Home Department ID Number Location Full Time, Part Time or Temporal Budgeted Hours Salary Range Maximum FLSA Code Reports To Position Number Fund Code	ry	piete ali fielas	Num Posit Job ( Posit Com Busi Hom Loca Full Budg Sala FLSA Repo	existing positions there of Positions tion Description (Title-30 Spaces Max) Code Description tion Number (HRRM Use Only) pany (CS, FC, HC, JV or PA) these Unit the Department ID Number tion Time, Part Time or Temporary ty Range Maximum Code total Code		
Position Description (Title) Job Code Description Position Number Company (CS, FC, HC, JV or PA) Business Unit Home Department ID Number Location Full Time, Part Time or Temporal Budgeted Hours Salary Range Maximum FLSA Code Reports To Position Number Fund Code Funding Department ID Number	ry		Num Posit Job ( Posit Com Busi Hom Loca Full Budg Sala FLSA Repo	existing positions there of Positions there of Positions there of Positions there of Position (Title-30 Spaces Max) Code Description the Description the Department (Lamber of Part Time or Temporary the Part Time or Temporary the Department of	ion.	
Position Description (Title) Job Code Description Position Number Company (CS, FC, HC, JV or PA) Business Unit Home Department ID Number Location Full Time, Part Time or Temporal Budgeted Hours Salary Range Maximum FLSA Code Reports To Position Number Fund Code Funding Department ID Number Account (Same for all Business U	ry inits) 5100:		Num Posit Job ( Posit Com Busi Hom Loca Full Budg Sala FLSA Repo Fund Fund Acco	existing positions there of Positions there of Positions there of Positions there of Position (Title-30 Spaces Max) Code Description the Description the Department ID Number I Code the Department ID Number		
Position Description (Title) Job Code Description Position Number Company (CS, FC, HC, JV or PA) Business Unit Home Department ID Number Location Full Time, Part Time or Temporal Budgeted Hours Salary Range Maximum FLSA Code Reports To Position Number Fund Code Funding Department ID Number Account (Same for all Business U Business Unit PC (Projects or Gra	nits) 5100:		Num Posit Job ( Posit Com Busi Hom Loca Full Budg Sala FLSA Repo Fund Accc Busi	existing positions there of Position (Title-30 Spaces Max) Code Description there of Position there of Position there of Position Time, Part Time or Temporary there of Position there of Position Number there of Position	ion.	
Position Description (Title) Job Code Description Position Number Company (CS, FC, HC, JV or PA) Business Unit Home Department ID Number Location Full Time, Part Time or Temporal Budgeted Hours Salary Range Maximum FLSA Code Reports To Position Number Fund Code Funding Department ID Number Account (Same for all Business U Business Unit PC (Projects or Grants)	nits) 5100:		Num Posit Job ( Posit Com Busi Hom Loca Full Budg Sala FLSA Repo Func Accc Busi Proje	existing positions there of Position (Title-30 Spaces Max) Code Description there of Position there of Position there of Position Time, Part Time or Temporary there of Position there of Position Time, Part Time or Temporary the total Position Time, Part Time or Temporary the Description	ion.	
Position Description (Title) Job Code Description Position Number Company (CS, FC, HC, JV or PA) Business Unit Home Department ID Number Location Full Time, Part Time or Temporal Budgeted Hours Salary Range Maximum FLSA Code Reports To Position Number Fund Code Funding Department ID Number Account (Same for all Business U Business Unit PC (Projects or Grants Activity ID (Projects or Grants on	inits) 5100: ints only) is only)		Num Posit Job ( Posit Com Busi Hom Loca Full Salat FLSA Repo Func Accc Busi Proje Activ	existing positions there of Position (Title-30 Spaces Max) Tode Description the Description the Department (The Description of Position of Positio	ion.	
Position Description (Title) Job Code Description Position Number Company (CS, FC, HC, JV or PA) Business Unit Home Department ID Number Location Full Time, Part Time or Temporal Budgeted Hours Salary Range Maximum FLSA Code Reports To Position Number Fund Code Funding Department ID Number Account (Same for all Business U Business Unit PC (Projects or Grants)	inits) 5100: ints only) is only)		Num Posit Job ( Posit Com Busi Hom Loca Full Salat FLSA Repo Func Accc Busi Proje Activ	existing positions there of Position (Title-30 Spaces Max) Code Description there of Position there of Position there of Position Time, Part Time or Temporary there of Position there of Position Time, Part Time or Temporary the total Position Time, Part Time or Temporary the Description	ion.	
Position Description (Title) Job Code Description Position Number Company (CS, FC, HC, JV or PA) Business Unit Home Department ID Number Location Full Time, Part Time or Temporal Budgeted Hours Salary Range Maximum FLSA Code Reports To Position Number Fund Code Funding Department ID Number Account (Same for all Business U Business Unit PC (Projects or Grants Project/Grant (Projects or Grants on	inits) 5100: ints only) is only)		Num Posit Job ( Posit Com Busi Hom Loca Full Salat FLSA Repo Func Accc Busi Proje Activ	existing positions there of Position (Title-30 Spaces Max) Tode Description the Description the Department (The Description of Position of Positio	ion.	

Budget Management Form 3441 Harris County, TX (06/01/2021)

#### **POSITION MANAGEMENT REQUEST FORM**

		SECTION I – TY	PE OF REQUEST			
Function		Check Applicable	Comments			
Position Update			May require Commissioners Court approval			
Position Reclassification			May require Commissioners Court a	proval		
New Position Request			Requires Commissioners Court approval			
Is additional office space required	?	Yes No				
	SE	CTION II – REAS	SON FOR REQUEST			
	SECT	ION III – PROPO	OSED EFFECTIVE DATE			
Proposed Effective Date	Date must be the beginning of a pay period. For requests requiring Commissioners Court approval, the earliest effective date will be the first pay period after approval					
Grant Effective Date	om:	То:				
		SECTION IV – F	POSITION DATA			
Current Use "Pos_List_File" (PCN Download) to complete all fields			Proposed  Complete all fields for a new position or change appropriate field(s) for existing position.			
			Number of Positions			
		I 1				
, , ,			Position Description (Title-30 Spaces Max)			
lob Code Description			Job Code Description			
lob Code Description Position Number			Job Code Description Position Number (HRRM Use Only)			
Job Code Description Position Number Company (CS, FC, HC, JV or PA)			Job Code Description Position Number (HRRM Use Only) Company (CS, FC, HC, JV or PA)			
lob Code Description Position Number Company (CS, FC, HC, JV or PA) Business Unit			Job Code Description Position Number (HRRM Use Only) Company (CS, FC, HC, JV or PA) Business Unit			
Job Code Description Position Number Company (CS, FC, HC, JV or PA) Business Unit Home Department ID Number			Job Code Description Position Number (HRRM Use Only) Company (CS, FC, HC, JV or PA)			
Job Code Description Position Number Company (CS, FC, HC, JV or PA) Business Unit Home Department ID Number Location			Job Code Description Position Number (HRRM Use Only) Company (CS, FC, HC, JV or PA) Business Unit Home Department ID Number			
Job Code Description Position Number Company (CS, FC, HC, JV or PA) Business Unit Home Department ID Number Location Full Time, Part Time or Temporary			Job Code Description Position Number (HRRM Use Only) Company (CS, FC, HC, JV or PA) Business Unit Home Department ID Number Location			
Job Code Description Position Number Company (CS, FC, HC, JV or PA) Business Unit Home Department ID Number Location Full Time, Part Time or Temporary Budgeted Hours			Job Code Description Position Number (HRRM Use Only) Company (CS, FC, HC, JV or PA) Business Unit Home Department ID Number Location Full Time, Part Time or Temporary			
Job Code Description Position Number Company (CS, FC, HC, JV or PA) Business Unit Home Department ID Number Location Full Time, Part Time or Temporary Budgeted Hours Salary Range Maximum			Job Code Description Position Number (HRRM Use Only) Company (CS, FC, HC, JV or PA) Business Unit Home Department ID Number Location Full Time, Part Time or Temporary Budgeted Hours			
Job Code Description Position Number Company (CS, FC, HC, JV or PA) Business Unit Home Department ID Number Location Full Time, Part Time or Temporary Budgeted Hours Salary Range Maximum FLSA Code			Job Code Description Position Number (HRRM Use Only) Company (CS, FC, HC, JV or PA) Business Unit Home Department ID Number Location Full Time, Part Time or Temporary Budgeted Hours Salary Range Maximum FLSA Code Reports To Position Number			
Job Code Description Position Number Company (CS, FC, HC, JV or PA) Business Unit Home Department ID Number Location Full Time, Part Time or Temporary Budgeted Hours Salary Range Maximum FLSA Code Reports To Position Number Fund Code			Job Code Description Position Number (HRRM Use Only) Company (CS, FC, HC, JV or PA) Business Unit Home Department ID Number Location Full Time, Part Time or Temporary Budgeted Hours Salary Range Maximum FLSA Code Reports To Position Number Fund Code			
Job Code Description Position Number Company (CS, FC, HC, JV or PA) Business Unit Home Department ID Number Location Full Time, Part Time or Temporary Budgeted Hours Salary Range Maximum FLSA Code Reports To Position Number Fund Code Funding Department ID Number			Job Code Description Position Number (HRRM Use Only) Company (CS, FC, HC, JV or PA) Business Unit Home Department ID Number Location Full Time, Part Time or Temporary Budgeted Hours Salary Range Maximum FLSA Code Reports To Position Number Fund Code Funding Department ID Number			
Job Code Description Position Number Company (CS, FC, HC, JV or PA) Business Unit Home Department ID Number Location Full Time, Part Time or Temporary Budgeted Hours Salary Range Maximum FLSA Code Reports To Position Number Fund Code Funding Department ID Number Account (Same for all Business Unit	<i>'</i>		Job Code Description Position Number (HRRM Use Only) Company (CS, FC, HC, JV or PA) Business Unit Home Department ID Number Location Full Time, Part Time or Temporary Budgeted Hours Salary Range Maximum FLSA Code Reports To Position Number Fund Code Funding Department ID Number Account (Same for all Business Units)	510010		
Job Code Description Position Number Company (CS, FC, HC, JV or PA) Business Unit Home Department ID Number Location Full Time, Part Time or Temporary Budgeted Hours Salary Range Maximum FLSA Code Reports To Position Number Fund Code Funding Department ID Number Account (Same for all Business Unit Business Unit PC (Projects or Grants	only)		Job Code Description Position Number (HRRM Use Only) Company (CS, FC, HC, JV or PA) Business Unit Home Department ID Number Location Full Time, Part Time or Temporary Budgeted Hours Salary Range Maximum FLSA Code Reports To Position Number Fund Code Funding Department ID Number Account (Same for all Business Units) Business Unit PC (Projects or Grants only)	510010		
Job Code Description Position Number Company (CS, FC, HC, JV or PA) Business Unit Home Department ID Number Location Full Time, Part Time or Temporary Budgeted Hours Salary Range Maximum FLSA Code Reports To Position Number Fund Code Funding Department ID Number Account (Same for all Business Unit Business Unit PC (Projects or Grants or	only)		Job Code Description Position Number (HRRM Use Only) Company (CS, FC, HC, JV or PA) Business Unit Home Department ID Number Location Full Time, Part Time or Temporary Budgeted Hours Salary Range Maximum FLSA Code Reports To Position Number Fund Code Funding Department ID Number Account (Same for all Business Units) Business Unit PC (Projects or Grants only) Project/Grant (Projects or Grants only)	510010		
Position Description (Title) Job Code Description Position Number Company (CS, FC, HC, JV or PA) Business Unit Home Department ID Number Location Full Time, Part Time or Temporary Budgeted Hours Salary Range Maximum FLSA Code Reports To Position Number Fund Code Funding Department ID Number Account (Same for all Business Unit Business Unit PC (Projects or Grants or Project/Grant (Projects or Grants only) Activity ID (Projects or Grants only)	only)		Job Code Description Position Number (HRRM Use Only) Company (CS, FC, HC, JV or PA) Business Unit Home Department ID Number Location Full Time, Part Time or Temporary Budgeted Hours Salary Range Maximum FLSA Code Reports To Position Number Fund Code Funding Department ID Number Account (Same for all Business Units) Business Unit PC (Projects or Grants only) Project/Grant (Projects or Grants only) Activity ID (Projects or Grants only)	510010		
Job Code Description Position Number Company (CS, FC, HC, JV or PA) Business Unit Home Department ID Number Location Full Time, Part Time or Temporary Budgeted Hours Salary Range Maximum FLSA Code Reports To Position Number Fund Code Funding Department ID Number Account (Same for all Business Unit Business Unit PC (Projects or Grants or	only)		Job Code Description Position Number (HRRM Use Only) Company (CS, FC, HC, JV or PA) Business Unit Home Department ID Number Location Full Time, Part Time or Temporary Budgeted Hours Salary Range Maximum FLSA Code Reports To Position Number Fund Code Funding Department ID Number Account (Same for all Business Units) Business Unit PC (Projects or Grants only) Project/Grant (Projects or Grants only)	510010		