ZombieBytes

El Paso MPO Management System Candidate Classes and Responsibilities Version 1.0 3/6/2016

Document Control

Approval

The Guidance Team and the customer shall approve this document.

Document Change Control

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Distribution List

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Change Summary

The following table details changes made between versions of this document

Version	Date	Modifier	Description
.1	2/28/2016	ZombieBytes	Identified nouns/verbs and insert into
			candidate class/responsibility section
.2	2/29/2016	ZombieBytes	Categorized nouns as Obvious or Unsure.
			Discarded nouns removed from list
.3	3/1/2016	ZombieBytes	Write and edit the introduction
.4	3/2/2016	ZombieBytes	Created the crc cards
.5	3/3/2016	ZombieBytes	Categorized verbs as Obvious or Unsure.
		Discarded verbs removed from list	
.6	3/4/2016	ZombieBytes	Matched responsibilities to their respective
	class		class
.7	3/5/2016	3/5/2016 ZombieBytes Collaborations and super/subclasses identifications	
.8	3/5/2016	ZombieBytes	Write and edit the process description
1.0	3/6/2016	ZombieBytes	Review and finalize document

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1. Introduction

1.1. Purpose and Intended Audience

The purpose of this document is to describe the structure of the new El Paso Metropolitan Planning Organization (MPO) management system. This includes identifying the various classes, the responsibilities of each class, and the collaborations between classes that allow them to fulfill responsibilities. The intended audience of this document is the Software team and the Guidance team.

1.2. Project Description

The El Paso MPO currently uses Microsoft Access and Microsoft Excel to manage projects. The new system we are designing will be web-based. This system will streamline the old process by allowing users to create, view, update, and delete projects in one centralized location.

1.3. Overview

This document is comprised of three sections and supplemental CRC cards. The sections contained in this document, excluding the introduction, are the following:

<u>Process Description:</u> This section describes the process that was used to identify the

candidate classes and responsibilities described in section 3.

<u>Candidate Classes and Responsibilities:</u> This section lists the candidate classes and responsibilities in

alphabetical order in a table. This section also indicates the organization scale the software team used to classify each class. This is indicated by marking a class as obvious or unsure. The table also includes a section for comments the team made about a class or a responsibility. These comments are to give the team context about responsibilities and classes aiding them in

categorizing these later.

Additionally, this document will have accompanying CRC cards. These CRC cards are physical standard index cards that are used in the process of identifying classes, responsibilities, and collaborations. There are two main advantages to using index cards: the cards are portable, making it easy to arrange the classes and visualize relationships and collaborations. The second advantage being that the index card's limited space encourages only the necessary responsibilities and collaborations to be included.

1.4. References

[1] UTEP Team, "MPO System: Software Requirements Specification," 2016.

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2. Process Description

The development process for the CRC cards can be summarized in the following list of steps:

- Each member of the Software team was responsible for identifying nouns and verbs from approximately forty requirements each from the Software Requirements Specification (SRS) document.
- 2. In pairs of two, the identified nouns and verbs were organized. Comments about their context and important details were written. The intention of this was to make it easier to categorize the nouns and verbs later.
- 3. The Software team categorized each noun as unsure or obvious.
- 4. CRC cards were made for obvious classes. The purpose of each class was written on the back of its corresponding card.
- 5. The Software team categorized each verb as unsure or obvious.
- 6. These obvious responsibilities were added to their respective classes.
- 7. Collaborations and superclass/subclass relationships were established.

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3. Candidate Classes and Responsibilities

3.1. Candidate Classes

Below is a table for all of the classes that the Software team has identified and reviewed from the SRS [1]. Each class is categorized as either "Obvious" or "Unsure. This will be indicated by a "X"-mark in the appropriate cell of the table. The comments provide additional information about the class, for instance, the potential attributes the class may have.

Class	Obvious	Unsure	Comments
Administrator	X		
Agency		X	Types: State Local Sponsoring
			Attributes: Organization name Department name Contact first name Contact middle initial Contact last name Position title Work phone number Department phone number Email
Archived Project	X		
Category	X		Types: Category Funding Attributes: Category id Revenue by categories Revenue Growth rate % Inflation rate % Total rate % Justification note
Category Funding	X		Attributes: Period Funding category Revenue Amount \$ Justification note
CMAQ Analysis		X	Attributes: VOC (kgs/day) CO(kgs/day) NOX(kgs/day)
CMAQ Funds		X	Fields:

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Construction	Ī	W	A 44-25A
Construction Cost		X	Attributes:
			 FHWA to FTA transfers
			PE cost
			ROW cost
Construction Project		X	Attributes:
Cost			PE cost
			ROW cost
Cost		X	*Cost found in financial section of srs
			Type:
			• Construction cost
			 Construction project cost
			Construction operation cost
			• PE cost
			• ROW cost
			 Total Projects cost
			YOE cost
Database	X		
Error Log	X		Attributes:
			Unexpected errors
Estimated Local		X	Attributes:
Funding			• Sales tax
			Parking garages
			• Fares
E' 1D	37		Alternative fuel credit
Financial Report	X		Attributes:
			• Share (3 types)
			• Contribution (Lcl/State)
			Total Project Cost
			Funding Source
			• Area
			District
			• Status
			Fiscal Year
Financials		V	
Financials		X	Types:
			Hwy TX Financials
			Transit Financials
			NM Financials
Funded Project	X		Type:
			 Funded Transit project
			Archived Project
			Attributes:
			Amendment date
			• CN#
			• CSJ #
			• TIP name
n 11m : n :			TIP year
Funded Transit Project	X		Apportionment Year
			• Section 5309 id
			TDC amount requested
			Transit project type
			TDC Award Amount
			TDC Award Date
			- IDC II ward Date
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Funding	X		Comes from:
1 unumg	Λ		Funding revenue,
			Preliminary engineering revenue
			<u>Is either:</u> Traditional, Transit
			Types:
			Texas Highway Funding
			Texas Transit Funding
			New Mexico Funding
Funds		X	
GUI	X		
Highway/roadway fund		X	FHWA funds
project			Question: Is this different than funded project
			types?
Local Agency		X	
Map	X		Attributes:
			• Legend
			Marker:
			 Planning
			o Underway
			 Near completion
			 Completed
MPO Lead User	X		Is a combination of all users
MPO Staff	X		Attributes:
			 Proposed projects
			Submitted projects
			Archived projects
			1 3
			Responsible:
			Submit TPB approval letter
			Submit State approval letter
			Submit Federal approval letter
MTP Report	X		Attributes:
_			Air quality analysis-CO
			Air quality analysis-NOX
			Air quality analysis-VOC
			Area
			Capacity project
			• City
			• DOT district
			Federal fiscal year

			• Limit to
			Network year
			Number of existing lanes
			Number of miles
			Number of projected lanes
			 Project phases
			Project type
			 Remarks

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	1	1	
			Scope of work
			State system road
			Transit information
New Mexico Funding	X		Attributes:
			 Total NM roadway revenues
			Total construction cost
			PE cost
			ROW cost
			Total projects costs
			Total NM balance with carry over
Organization	X		
Organization	Λ		Attributes:
			Contact person's first name
			Contact person's middle initial
			 Contact person's last name
			 Contact person's position title
			 Department contact number
			Department name
			Work contact number
			• Email
			Organization name
			Organization type (state, local, sponsoring)
			Organization type (state, rotal, sponsoring)
PE Cost		X	Tymoge
re Cost		Λ	Types:
			• Local
			• State
Project	X		Types:
			Submitted Project
			 Proposed Project
			Funded Project
			Attributes:
			 Air quality analysis-CO
			 Air quality analysis-NOX
			 Air quality analysis-VOC
			Area
			Capacity project
			• City
			• County
			DOT District
	I	1	 Federal Fiscal Year
			E 1 1E . 101
			Federal Functional Classification
			Fund Project Type
			Fund Project TypeHighway/roadway name
			Fund Project TypeHighway/roadway nameLimit from
			Fund Project TypeHighway/roadway name
			 Fund Project Type Highway/roadway name Limit from Limit to
			 Fund Project Type Highway/roadway name Limit from Limit to Network year
			 Fund Project Type Highway/roadway name Limit from Limit to Network year Number of existing lanes
			 Fund Project Type Highway/roadway name Limit from Limit to Network year Number of existing lanes Number of miles
			 Fund Project Type Highway/roadway name Limit from Limit to Network year Number of existing lanes Number of miles Number of projected lanes
			 Fund Project Type Highway/roadway name Limit from Limit to Network year Number of existing lanes Number of miles

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		1	
			Project name
			 Project phases
			Project type
			Remarks
			Scope of work
			Sponsor agency
			State system road
			Transit information
Project Cost		X	*Needed for each project
110,000 0000		11	Attributes:
			Construction Cost
			Construction Engineering Cost
			Contingencies Cost
			FTA Transfer Cost
			Non Construction Project Cost Detection Classes Contact
			Potential Change Order Cost
			Preliminary Engineering Cost
			Right of Way Cost
Project Funding Basic		X	
Project Funding		X	Attributes:
Detailed			 Funding source
			Federal share
			State share
			 Local share
			 Local contribution
			Total funding by share
			YOE cost
Project ID		X	Would generate the ID
Project Lead	X		Responsible:
3			Edit proposed projects
			Submit proposed projects
Project Readiness		X	Contains:
115Jeet 1teachiess		11	Estimated start date
			Estimated finish date
			% progress
			Responsible agency
			1
			Sub-Elements: • Schematic
			Environmental document
			ROW maps
			• ROW
			• Utilities
			• PS&E
			Public involvement
			District review
			Agreement(LPFA)
			Procurement process
			Let date
			Performance end date
			Construction
			Following are usually Transit
			• Execution

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			a Activo
			o Active
			o Contract
			o Delivery
D : (D		37	• Other
Project Report		X	*Project Report may be same as report
			Attributes
			Attributes:
			• Termini
			• Network
			• YOE
			Total project cost
			Funding source
			• Area
			District status
			 Fiscal year
			 Information
			 Project readiness
			 Project completion
			Detail project
Proposed Capacity	X		Attributes:
Project			Number of existing lanes
			Number of projected lanes
			Number of miles
			Highway/roadway name
Proposed Project	X		Types:
J. C.			Proposed Transit Project
			Proposed Capacity Project
			Troposed Supucity Project
			Attributes:
			Approved project id
			Project Readiness Elements
			Project selection info
			Submission Deadline
			 Submission Deadine Submission Type
			Work Flow Status
Duamagad Tuamgit	X		
Proposed Transit	Λ		Attributes:
Project			Apportionment Year Section 5200 id.
			• Section 5309 id
			TDC amount requested
			Transit project type
Registered User	X		<u>Types</u> :
			Project Lead
			MPO Staff
			Administrator
			MPO Lead User
			Attributes:
			• First name
			Middle initial
			Last name
			Organization
			Department
			Position title
	1	l	- 1 Obliton title

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	Department contact numberWork contact numberEmail
	 Email
	• User name
	 Password
	 Access level
Report X	Type:
	 Project Report
	 MTP Report
	 TIP Document
	 Financial Report
	Attributes:
	Project ID
	Project ID Project description
	Project descriptionProject Title
	 Federal Functional Classification
Revenue X	Sponsoring Agency Type 22
Revenue	Types:
	Funding RevenuePreliminary Engineering Revenue
ROW Cost X	· · ·
ROW Cost	Types: • Local
	• State
Share X	
Share	Types:
	• State
	• Local
	Local
	Attribute:
	Total funding by share
Sponsoring Agency X	Total fallening by bliance
State Agency X	
	Attributes:
	Approval letters
	O TPB approval
	 Federal approval
	 State approval
	Submission Status
Texas Highway X	Attributes:
Funding	Total revenue
	 Construction cost
	 Total project cost
	Total balance
Texas Transit Funding X	Attributes:
	• 7 categories for large cities
	Subtotal Transportation Programs
	Subtotal Est. Local Funding
	• Subtotal for facilities and equipment funds
	Total Transit Revenues
	• Cost
	Total Transit Balance
TIP Amendment X	Maybe Attributes:

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			A mandmont Tyres
			Amendment Type Area
			• Area
TIP Document	X		Consist of: TIP Amendment, TIP Report
			Attributes:
			Federal Fiscal Year
			Project type
			Maybe Attributes:
			Approval letter
			Meeting minutes
TIP Report	X		Attributes:
			Capacity project
			• City
			• County
			DOT district
			• Fund project type
			Highway/roadway name
			• Limit from
			Limit to
			Network year
			Number of existing lanes
			Number of miles
			Number of projected lanes
			Project phase
			• Remarks
			Transit info
			Project cost
			Project funding
Transit fund project		X	FTA funds
			Question: Is this different than funded project types?
Transportation Program			
1 misportation i rogitim			
User	X		†
Transportation Program User	X		Types: Regular User

3.2. Candidate Responsibilities

Below is a table for all of the responsibilities that the Software team has identified and reviewed from the SRS [1]. Each responsibility is categorized as either "Obvious" or "Unsure". This will be indicated by a "X"-mark in the appropriate cell of the table. The comments provide additional information about the responsibility, for instance, describing what items the responsibility is associated with.

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Responsibility	Obvious	Unsure	Comments
Access		X	Privileges
Add	X		Category
			Category Funding
Added		X	Total Project Cost
Archive	X		Project
Associated		X	Project
Authenticate			
Change		X	Workflow status
Classify		X	Project
Convert	X		Addresses
			Geographical coordinates
Create	X		XLSX worksheet
Create, View, Edit,			Project
Delete			User Account
Deducting		X	Funds from sales taxes
Defined		X	Transit by FTA
Display	X		label
			pages
			form
			heading
			element
			map
			table
			information
			homepage
			error message
			dialog box
			input box
			pdf report
			text
Follow		X	Traditional funding follow UTP program
Generate	X		Error log
			Report
Identify		X	General location of project
			Funding coming from revenue
Implement		X	Facility/Transit Service/Program
Maintain		X	fund award amount
			fund award date
			federal share
			cost
			funding category
			local contribution
			local share
			regional share state share
			metadata:
			• change date
			_
			commentsidentifier
			• user id
			workflow status
Manage	X		Funding Project
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Mark	X		Map
Notify		X	Project Lead
Provide		X	Authentication Mechanism
Receive	X		Email alerts
Remove	X		Active projects
Review	X		Submission
			Model
Search		X	Items
			Data
Search	X		Project
Send		X	Account request
			Message
Sort		X	Column
Store		X	Project information
Store	X		Archived projects
Submit		X	For review
			For approval
			To agencies
			Approval letter link
Submit	X		Proposed project
			Proposed project review
Upload		X	File
Use		X	Google Maps JS API
			Google Maps Geocoding API
Zoom	X		Map

3.3. CRC Cards

Class Name: Map

Below is a digital version of the CRC cards that the Software team has developed. The cards consist of a class name, superclass, subclass, description, responsibilities, collaborations, and comments.

Class Name: GUI		
Superclass: N/A		
Subclass: N/A		
Description: The purpose of this class is to display information to the user, and receive user input.		
Responsibilities:	Collaborations:	
- Display Information	-	
- Receive Input	- User	
Comments:		

Class Name: Database		
Superclass: N/A		
Subclass: N/A		
Description: The purpose of the database is to keep records of information. The database must keep track of		
stored project, reports and user account details.		
Responsibilities:	Collaborations:	
- Knows stored projects	-	
- Knows stored reports		
- Knows stored user accounts		
Comments:		

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Class Name: User

Superclass: N/A		
Subclass: N/A		
Description: The purpose of this class is to represent geographic locations using graphics. For example it will		
mark the locations of projects.		
Responsibilities:	Collaborations:	
- Marks Project Location	- Project	
- Zoom In/Out	- GUI	
- Convert Addresses	- Project	
- Convert Geographical Coordinates - Project		
Comments:		
Attributes found in the candidate class table.		

Class Name: Error Log		
Superclass: N/A		
Subclass: N/A		
Description: This class is responsible for logging all errors that occur within the system.		
Responsibilities:	Responsibilities: Collaborations:	
- Generate error log	-	
Comments:		
Would this collaborate with everyone???		
Attributes found in the candidate class table.		

Superclass: N/A			
Subclass: Registered User			
Description: This class is mainly responsible for general	rating reports, searching projects, viewing projects, and		
viewing reports. This class will collaborate frequently	with the GUI and the database.		
Responsibilities:	Responsibilities: Collaborations:		
- Generate Report	- Report		
- View Project - GUI, Database			
- View Report	- GUI, Database		
- Search Project	- Database		
Comments:			
Attributes found in the candidate class table.			

Class Name: Registered User			
Superclass: User			
Subclass: Project Lead User, MPO Staff User, Administrator User			
Description: This class' main responsibility involves keeping track of information regarding all registered users. Registered users include the Project lead, MPO staff, and administrator.			
	Collaborations: -Organization		
Comments: Registered user information is the attributes listed in the candidate class table.			

Class Name: Organization
Superclass: N/A
Subclass: N/A
Description: This class has a main responsibility of keeping track of organization information such as
department name and contact number.

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Responsibilities:	Collaborations:
- Knows organization information	-
Comments:	
Organization information is the attributes list	ed in the candidate class table

Class Name: Project Lead User			
Superclass: Registered User	Superclass: Registered User		
Subclass: MPO Lead User			
Description: Represents a user who is in charge of a property of the propert	roject or multiple projects within the system. This user is		
responsible for creating, editing, and deleting projects.			
Responsibilities:	Collaborations:		
- Create project	- Project		
- Edit project	- Project, Database		
- Delete project	- Database		
- Receive email alert -			
Comments:			
Attributes found in the candidate class table.			

Class Name: MPO Staff User	
Superclass: Registered User	
Subclass: MPO Lead User	
Description: This class represents a user who is a men	nber of the MPO Staff. This user is responsible for
approving, managing, and submitting various types of	projects, models, and funding.
Responsibilities:	Collaborations:
- Approve project	- Project, Database
- Review model	-
- Manage funding	- Funding
- Add Category, Category Funding	 Category, Category Funding
- Archive project	- Project, Database
- Receive email alert	-
- Submit proposed project	- Proposed Project
- Submit proposed project review	- Proposed Project

	Aundutes	Toulia	Ш	me	candidate	C
Ī						

Comments:

We are unsure what model is.
Attributes found in the candidate class table.

Class Name: Administrator User	
Superclass: Registered User	
Subclass: MPO Lead User	
Description: This class represents the administrator of	the system. This class is responsible for creating,
editing, and deleting user accounts.	
Responsibilities:	Collaborations:
- Create user account	- Registered User
- Edit user account	- Registered User, Database
- Delete user account	- Database
Comments:	
Attributes found in the candidate class table.	

Class Name: MPO Lead User
Superclass: Project Lead User, MPO Staff User, Administrator User
Subclass: MPO Lead User
Description: This class represents a super-user who has the same privileges as every other user in the system.

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This class is also responsible for approving user account	nt requests.		
Responsibilities: Collaborations:			
- Approve user account request	- Database		
Comments:			
We are assuming that all incoming request are stored in	n the database.		
Attributes found in the candidate class table.			
Class Name: Funding			
Superclass: N/A			
Subclass: Texas Highway Funding, Texas Transit Fun	ding, New Mexico Funding		
	ling. Particularly three different types: Texas Highway,		
Texas transit, New Mexico.	<i>y</i> , ,		
Responsibilities:	Collaborations:		
- Knows types of fundings	<< Not used at this time >>		
Comments:	1		
Attributes found in the candidate class table.			
Class Name: Texas Highway Funding			
Superclass: Funding			
Subclass: N/A			
	at is responsible for providing information exclusive to		
Texas Highway Funding.	at is responsible for providing information exercisive to		
Responsibilities:	Collaborations:		
- Knows Texas Highway Funding information	<< Not used at this time >>		
This we remain right way I distantly missimumon	COLOR BOOK AN MILE MILE AND		
Comments:			
Texas Highway Funding information is the attributes li	isted in the candidate class table.		
Class Name: Texas Transit Funding			
Superclass: Funding			
Subclass: N/A			
	at is responsible for providing information exclusive to		
Texas Transit Funding.	at is responsible for providing information exerusive to		
Responsibilities:	Collaborations:		
- Knows Texas Transit Funding information	< Not used at this time >>		
- Knows Texas Transit Funding information	140t used at this time //		
Comments:			
Texas Transit Funding information is the attributes list	ed in the candidate class table		
Texas Transit Landing information is the attributes list	ed in the candidate class table.		
Class Name: New Mexico Funding			
Superclass: Funding			
Subclass: N/A			
	at is responsible for providing information exclusive to		
	at is responsible for providing information exclusive to		
New Mexico Funding.	Collaborations:		
Responsibilities: Knows Naw Maxico Funding information	< Not used at this time >>		
- Knows New Mexico Funding information	NOT used at this time >>		

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Comments:

New Mexico Funding information is the attributes listed in the candidate class table.

Submitted project information is the attributes listed in the candidate class table.

Proposed project information is the attributes listed in the candidate class table.

Class Name: Project				
Superclass: N/A				
Subclass: Submitted Project, Proposed Project, Fu	nded Project			
Description: This class represents a project in the	system. This class is responsible for knowing information			
that is common between all types of projects.	that is common between all types of projects.			
Responsibilities:	Collaborations:			
- Knows project information	<< Not used at this time >>			
Comments:				
Project information is the attributes listed in the candidate class table.				

Class Name: Submitted Project	
Superclass: Project	
Subclass: N/A	
Description: This class represents a submitted projec	t in the system. This class is responsible for knowing
information that is specific to proposed project.	
Responsibilities:	Collaborations:
- Know submitted project information	<< Not used at this time >>
Comments:	

Class Name: Proposed Project	
Superclass: Proposed Project	
Subclass: Proposed Transit Project, Proposed Ca	pacity Project
Description: This class represents a proposed pro	oject in the system. This class is responsible for knowing
information that is specific to proposed project.	
Responsibilities:	Collaborations:
- Knows proposed project information	<< Not used at this time >>
Comments:	

Class Name: Proposed Transit Project		
Superclass: Proposed Project		
Subclass: N/A		
Description: Knows and keeps track of information s	uch as section id, and apportionment year.	
Responsibilities: Collaborations:		
- Knows proposed transit project information	<< Not used at this time >>	
Comments:		
Proposed transit project information is the attributes listed in the candidate class table.		

Class Name: Proposed Capacity Project
Superclass: Proposed Project
Subclass: N/A

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Comments: Proposed capacity project information	Responsibilities:	Collaborations:
Proposed capacity project information is the attributes listed in the candidate class table. Class Name: Funded Project		
Class Name: Funded Project Subclass: Project Subclass: Project Archived Project Description: A type of project made up of transit and archived projects. Keeps track of TIP name and TIP year Responsibilities: - Knows funded project information Comments: Funded project information is the attributes listed in the candidate class table. Class Name: Funded Transit Project Superclass: Funded Project Subclass: N/A Description: This class represents a funded transit project in the system. This class is responsible for knowing information that is specific to funded transit project. Responsibilities: - Knows funded transit project information Comments: Funded transit project information is the attributes listed in the candidate class table. Class Name: Archived Project Subclass: N/A Description: This class represents an archived project in the system. This class is responsible for knowing information that is specific to archived project information that is specific to archived project. Responsibilities: - Know archived project information Comments: - Know archived project information Class Name: Report Subclass: N/A Subclass: Project Report, MTP Report, TIP Document, Financial Report Description: This class represents a report in the system. This class is responsible for knowing information that is common between all types of reports. Responsibilities: - Collaborations:		
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is common between all types of reports. Responsibilities: Collaborations:		
Responsibilities: Collaborations:		
		Collaborations:
	Comments:	

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Report information is the attributes listed in the candidate class table.

Class Name: Project Report	
Superclass: Report	
Subclass: N/A	
Description: This class represents a project report in the	ne system. This class is responsible for knowing
information that is specific to project report.	
Responsibilities:	Collaborations:
- Know project report information	<< Not used at this time >>
Comments:	
Project report information is the attributes listed in the	candidate class table.

Class Name: MTP Report	
Superclass: Report	
Subclass: N/A	
Description: This class represents an MTP r	eport in the system. This class is responsible for knowing
information that is specific to MTP report.	
Responsibilities:	Collaborations:
- Knows MTP report information	<< Not used at this time >>
_	
Comments:	
MTP report information is the attributes liste	d in the candidate class table

Class Name: Financial Report	
Superclass: Report	
Subclass: N/A	
Description: This class represents a financial in	report in the system. This class is responsible for knowing
information that is specific to financial report.	
Responsibilities:	Collaborations:
- Knows financial report information	<< Not used at this time >>
Comments:	
Financial report information is the attributes list	sted in the candidate class table.

Class Name: TIP Document	
Superclass: Report	
Subclass: N/A	
Description: This class represents a TIP Document. T	his class is responsible for knowing information that is
specific to TIP Document.	
Responsibilities:	Collaborations:
- Knows TIP document information	<< Not used at this time >>
Comments:	
TIP Document information is the attributes listed in th	e candidate class table.

Class Name: TIP Report				
Superclass: N/A				
Subclass: N/A				
Description: This class represents a TIP report in the system. This class is responsible for knowing information				
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Candidate Classes and Responsibilities

that is specific to TIP Report.	
Responsibilities:	Collaborations:
- Knows TIP report information	<< Not used at this time >>
-	
Comments:	
TIP report information is the attributes listed in the can	ndidate class table.
Class Name: TIP Amendment	
Superclass: N/A	
Subclass: N/A	
Description: This class represents a TIP amend. This of	class is responsible for knowing information that is
specific to TIP Amendment.	
Responsibilities:	Collaborations:
- Knows TIP amendment information	<< Not used at this time >>
Comments:	
TIP amendment report information is the attributes list	ed in the candidate class table.
Class Name: Category	
Superclass: N/A	
Subclass: N/A	
Description: Keeps track of information such as grow	
Responsibilities:	Collaborations:
- Knows Category information	<< Not used at this time >>
Comments:	
Category information is the attributes listed in the cand	lidate class table.
Class Name: Category Funding	
Superclass: N/A	
Subclass: N/A	
Description: Keeps track of growth and inflation rates	
Responsibilities:	Collaborations:
- Knows Category Funding information	<< Not used at this time >>
Comments:	
Category funding information is the attributes listed in	the candidate class table.

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