

40/20/40

Resourcing GIS at ODOT

GIS Steering Committee

8/9/10

40 / 20 / 40

- 40 % Operations and Essential Maintenance (OEM)
- 20% Small project requests
- 40% Larger projects
 - > 40 hour effort
 - GIS SC governance

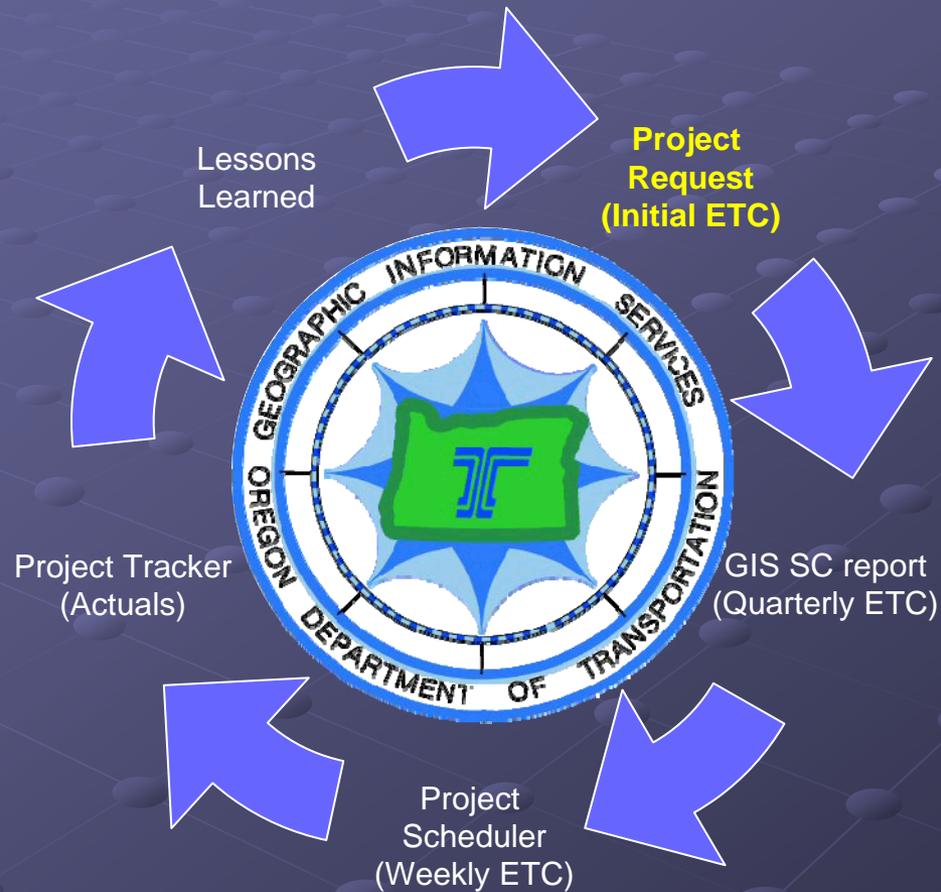
- Do we have:
 - An effective distribution (40 / 20 / 40) ?
 - An efficient project threshold (> 40 hours) ?

40 / 20 / 40

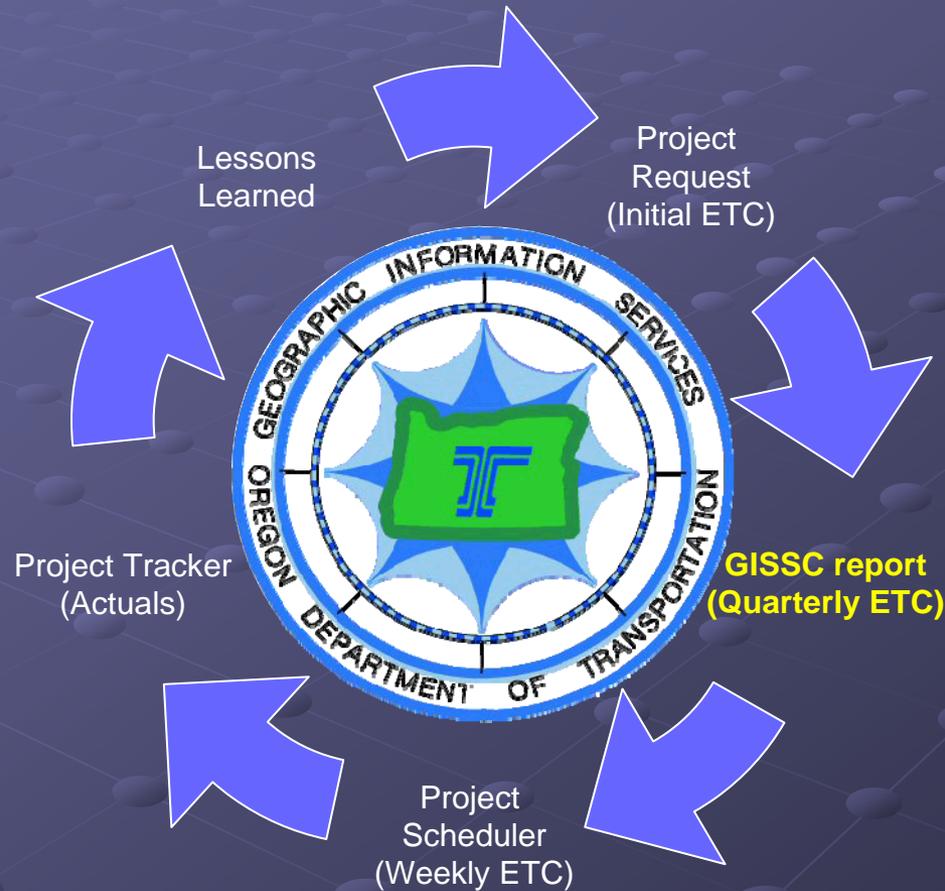
- 40 % Operations and Essential Maintenance (OEM)
- 20% Small project requests
- 40% Larger projects
 - > 40 hour effort
 - GIS SC governance

- How do we best:
 - effectively meet prioritized goals?
 - maintain capacity for completing projects?

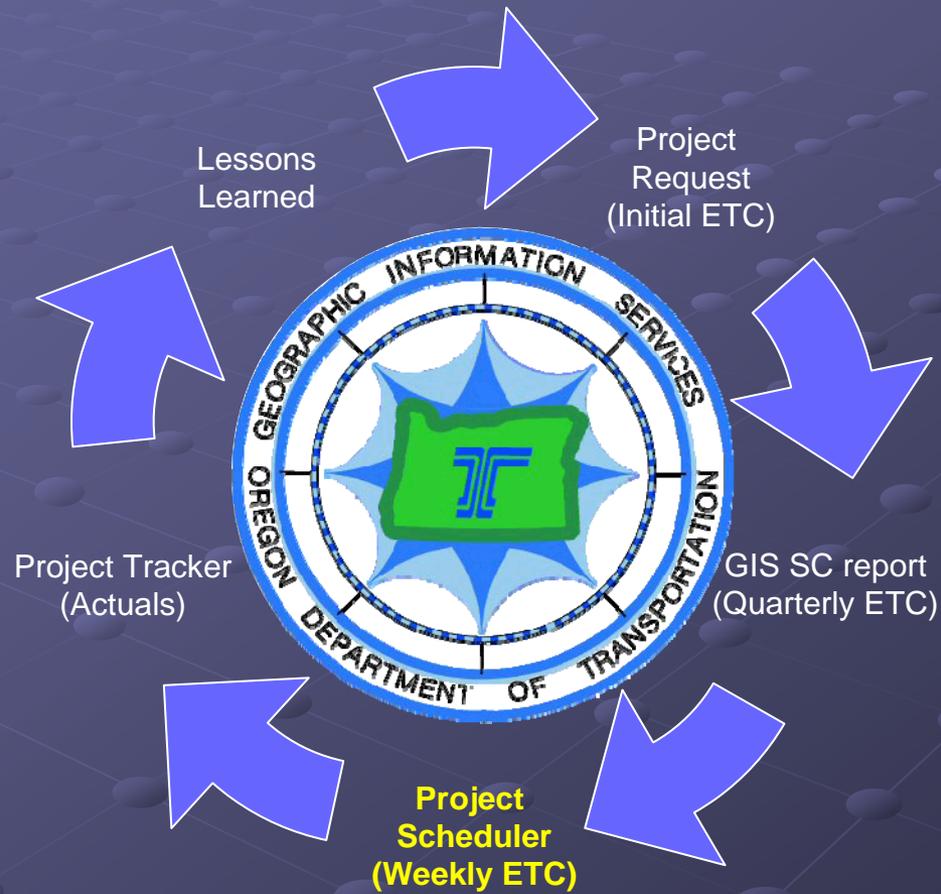
Informing the process



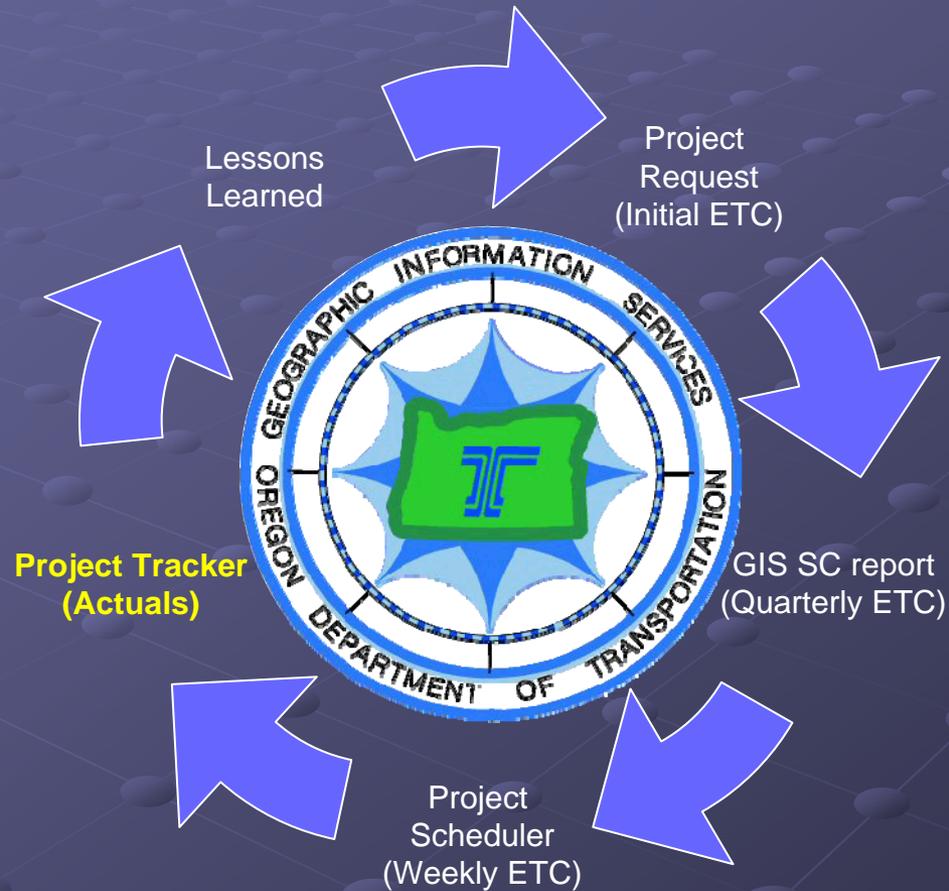
Informing the process



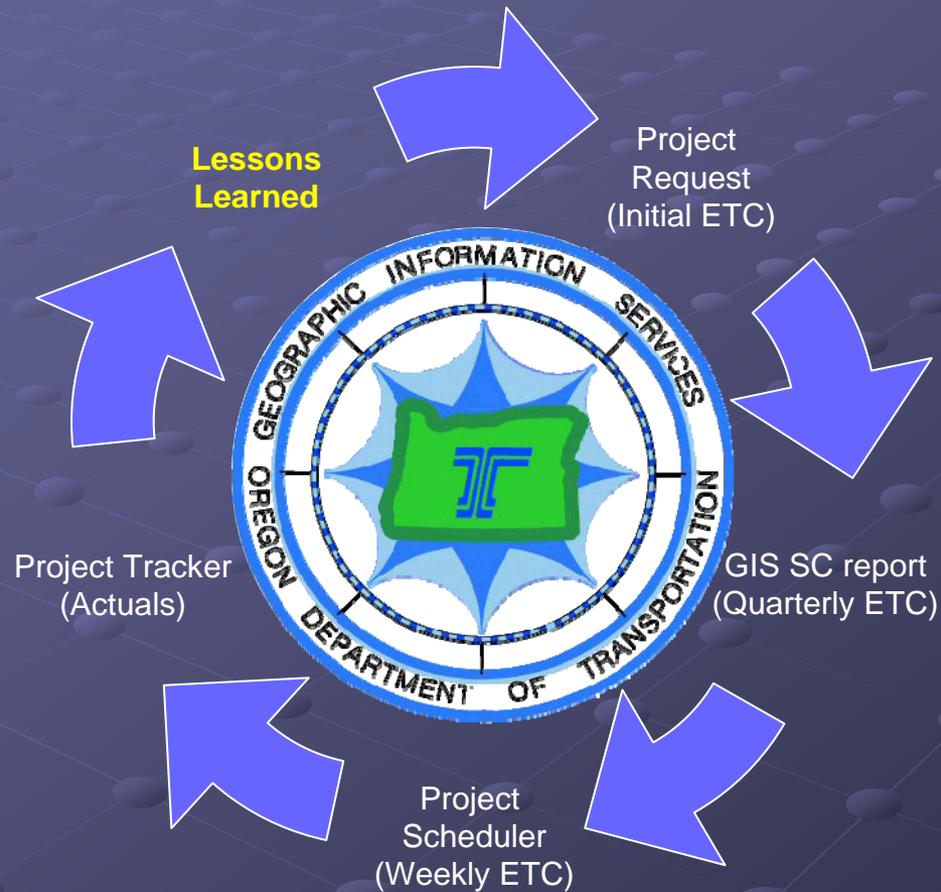
Informing the process



Informing the process



Informing the process



Project Request

Asset Mgmt – OTMS\GIS Project Request

Risk:

- GIS data may be incomplete, requiring additional resources to update datasets.
- Inadequate ODOT Highway, TDD or IS resources levels may cause delays.

Dependencies: *(Relationship to other projects)*

- Oregon Coordinate Reference System (OCRS) distortion levels directly read from shapefiles via Geometronics.
- ArcGIS server and SQL server support and ODOT standard web GIS template and tools availability.

Estimated Project Funding Needed: Phase 1

\$ Funds Available: none identified at this time

Projected FTE Effort	Months	Phases 1 - 3
Project Manager	0.150	
Analyst	0.250	
Developer	0.250	Date Needed: To be determined
Database Administrator	0.025	
Tech. Management	0.025	Total Duration Of Project: 2 months
Business	0.100	
Total	0.800	
Resource start date		

Project Request

- Format: Word Document
- Target Audience: GIS Steering Committee, project team and key stakeholders
- Provides: Project sponsorship, description, and initial estimated effort in (FTE)

Estimated Project Funding Needed: Phase 1		
\$ Funds Available: none identified at this time		
Projected FTE Effort	Months	Phases 1 - 3
Project Manager	0.150	
Analyst	0.250	
Developer	0.250	Date Needed: To be determined
Database Administrator	0.025	
Tech. Management	0.025	Total Duration Of Project: 2 months
Business	0.100	
Total	0.800	
Resource start date		

Page 2 Sec 1 2/2 At Ln Col REC TRK EXT OVR

Loading over three months

Microsoft Excel - GISSC_projects_rev_Aug3.xls

File Edit View Insert Format Tools Data Window Help

Type a question for help

MS Sans Serif 10 B I U

B36

	A	B	C	D	E	F	G	H	I	J	K
1	For the months of July, August, September 2010										
2			Chad B			Chad C			Sam H		
3	Project #	Project / Activity Description	Month 1	Month 2	Month 3	Month 1	Month 2	Month 3	Month 1	Month 2	Month 3
4	GIS 11	Infrastructure (11 series)	6	6	6	49	49	49	49	49	49
5	GIS 23	Operations and small projects (23 series)	4	4	4	60	60	60	64	64	64
6	GIS23-90	Access Management ArcPad data collection							16	16	16
7	GIS23-91	Statewide Solar Site Analysis									
8	GIS23-92	Regional Trip Planner (RTP) Map Feature Editor									
9	GIS23-93	Oregon Household Activity Survey - GIS Data Viewer									
10	GIS23-94	Pipe Outfalls									
11	GIS 19-8	Pooled fund Project - Phase 8	5	5	20						
12	GIS 19-9	OR-Trans Project - Phase 9	60	60	60						
13	GIS 21	GIS Data Development and Maintenance				12	12	12	8	8	8
14	GIS 44	SPIS Pilot (using OrTrans)	12	12	12						
15	GIS 52	TPOD									
16	GIS 56	ArcGIS ODOT GUI Update - contracted									
17	GIS 61	FACS-STIP Tool - Phase 3									
18	GIS 65	Environmental Data Management System (FY 09-11)									
19	New 2	Oregon Coordinate Reference System (OCRS) Web App.									
20	New 5	Crash Locator Tool (CLT) Re-write	34	34	20						
21	New 6-GIS23-92	Regional Trip Planner (RTP) Map Feature Editor									
22	New 8	Unstable Slope Data Web Application									
23	Total allocation (hrs)		121	121	122	121	121	121	121	121	121
24	(%)		70%								
25											
26											
27											

Scheduler / Sheet1 / ACTIVE_GIS_projects /

Draw AutoShapes

Ready NUM

Loading over three months

Microsoft Excel - GISSC_projects_rev_Aug3.xls

File Edit View Insert Format Tools Data Window Help

Type a question for help

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	A	B	BR	BS	BT	BU	BV	BW	BX	BY	BZ
1	For the months of July, August, September 2010										
2											
3	Project #	Project / Activity Description	Project #	Initial ETC	Current ETC	3 month effort	Projected ETC	DUE			
4	GIS 11	Infrastructure (11 series)	GIS 11	40%	40%	1292	40%	Ongoing			
5	GIS 23	Operations and small projects (23 series)	GIS 23	20%	20%	2224.5	20%	Ongoing			
6	GIS23-90	Access Management ArcPad data collection	GIS23-90	693	693	0	693	Fall 2010			
7	GIS23-91	Statewide Solar Site Analysis	GIS23-91	173	173	0	173				
8	GIS23-92	Regional Trip Planner (RTP) Map Feature Editor	GIS23-92	35	35	0	35				
9	GIS23-93	Oregon Household Activity Survey - GIS Data Viewer	GIS23-93	173	173	0	173				
10	GIS23-94	Pipe Outfalls	GIS23-94	173	0	0	0	Done			
11	GIS 19-8	Pooled fund Project - Phase 8	GIS 19-8	N/A	129	129	0				
12	GIS 19-9	OR-Trans Project - Phase 9	GIS 19-9	N/A	183	183	0				
13	GIS 21	GIS Data Development and Maintenance	GIS 21	N/A	148	148	0				
14	GIS 44	SPIS Pilot (using OrTrans)	GIS 44	42	42	42	0				
15	GIS 52	TPOD	GIS 52	0	0	0	0	9/1/2008			
16	GIS 56	ArcGIS ODOT GUI Update - contracted	GIS 56	260	38	38	0				
17	GIS 61	FACS-STIP Tool - Phase 3	GIS 61	459	186	186	0	9/31/2010			
18	GIS 65	Environmental Data Management System (FY 09-11)	GIS 65	12480	6240	432	5808	6/30/2011			
19	New 2	Oregon Coordinate Reference System (OCRS) Web App.	New 2	128	128	128	0				
20	New 5	Crash Locator Tool (CLT) Re-write	New 5	347	399	399	0				
21	New 6-GIS23-92	Regional Trip Planner (RTP) Map Feature Editor	New 6	35	35	35	0				
22	New 8	Unstable Slope Data Web Application	New 8	44	44	44	0	TBD			
23	Total allocation (hrs)										
24	(%)										
25											
26											
27											
28											
29											
30											
31											
32											
33											
34											
35											
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41											
42											
43											

Schedular Sheet1 ACTIVE_GIS_projects /

Draw AutoShapes

Ready NUM

Loading over three months

The baseline estimate from the project request form, and the projected work load estimate over a three month span are shown below.

Project #	Project / Activity Description	Project #	Initial ETC	Current ETC	3 month effort	Projected ETC	DUE
GIS 11	Infrastructure (11 series)	GIS 11	40%	40%	1292	40%	Ongoing
GIS 23	Operations and small projects (23 series)	GIS 23	20%	20%	2224.5	20%	Ongoing
GIS23-90	Access Management ArcPad data collection	GIS23-90	693	693	0	693	Fall 2010
GIS23-91	Statewide Solar Site Analysis	GIS23-91	173	173	0	173	
GIS23-92	Regional Trip Planner (RTP) Map Feature Editor	GIS23-92	35	35	0	35	
GIS23-93	Oregon Household Activity Survey - GIS Data Viewer	GIS23-93	173	173	0	173	
GIS23-94	Pipe Outfalls	GIS23-94	173	0	0	0	Done
GIS 19-8	Pooled fund Project - Phase 8	GIS 19-8	N/A	129	129	0	
GIS 19-9	OR-Trans Project - Phase 9	GIS 19-9	N/A	183	183	0	
GIS 21	GIS Data Development and Maintenance	GIS 21	N/A	148	148	0	
GIS 44	SPIS Pilot (using OrTrans)	GIS 44	42	42	42	0	
GIS 52	TPOD	GIS 52	0	0	0	0	9/1/2008
GIS 56	ArcGIS ODOT GUI Update - contracted	GIS 56	260	38	38	0	
GIS 61	FACS-STIP Tool - Phase 3	GIS 61	459	186	186	0	9/31/2010
GIS 65	Environmental Data Management System (FY 09-11)	GIS 65	12480	6240	432	5808	6/30/2011
New 2	Oregon Coordinate Reference System (OCRS) Web App.	New 2	128	128	128	0	
New 5	Crash Locator Tool (CLT) Re-write	New 5	347	399	399	0	
New 6-GIS23-92	Regional Trip Planner (RTP) Map Feature Editor	New 6	35	35	35	0	
New 8	Unstable Slope Data Web Application	New 8	44	44	44	0	TBD
Total allocation (hrs)							
(%)							

Weekly Project Scheduler

Microsoft Excel - weekJune21toJune25.xls

File Edit View Insert Format Tools Data Window Help

Type a question for help

100%

Reply with Changes... End Review...

Arial 10

AB27

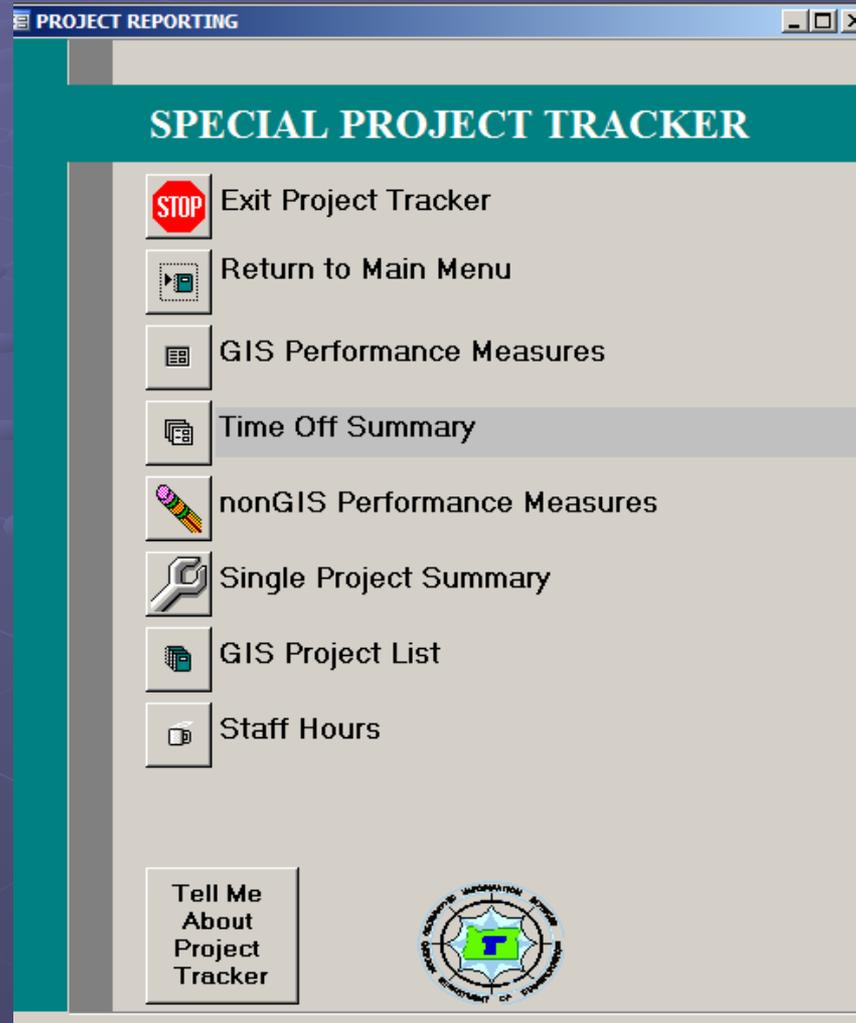
	A	Q	R	S	T	U	V	W	X	Y	Z	AA	AB
1	r the week of June 21, 2010 - June 25, 2010												
2	Susan M			Casey R			Phil S			Shawn S			
3	Max target load?		70%		70%		70%		70%		70%		70%
4	Total hours working this week?	Project	Priority	40	Project	Priori	40	Project	Prior	40	Project	Priority	40
5	Project / Activity	GIS 61	4	2	GIS Support	3	12	Meetings	5	4	GIS 19	1	28
6		mtg/adm	8	21	ArcPad/Sma Changes	1	5	GIS11's	4	4	GIS 23-80		
7		GISSC reports	2	4	Figure out hardware specs for TransInfo demo	4	5	GIS23's	3	4	GIS 11-22	2	4
8		data	5	1	GIS65	6	2	GIS65	1	6	GIS 21		
9		gui	6	1	Sdc-20 database management	5	2	GPS-Accessl	2	10	GIS 11-01		
10		sftwr lic	7		ArcPad/Biology mitigation monitoring Changes	2	2						
11		Web GIS desgr	3	1									
12		ROW data agre	9										
13		GIS11-24	1										
14		MS proj	10										
15		training	1										
16													
17													
18													
19													
20	Total allocation (hrs)			30			28			28			32
21	Total allocation (%)			75%			70%			70%			80%
22	Over allocated ? (Committed > 70%)			YES			no			no			YES
23													

Sheet1 / Sheet2 / Sheet3

Draw AutoShapes

Ready NUM

Project Tracker



Project Tracker

- Format: Access Database
- Target Audience: GIS team members, project managers, and GISSC
- Provides:
 1. Team members a record of project tasks, hours, and notekeeping
 2. Project manager status reports
 3. Manager reports on project summaries and trends
 4. A location for integrating additional ODOT GIS project records

Project Tracker

Project EDITS and UPDATES

Rev. 03-09-09 **Basic Project ID:** Project Name: **GIS 65 EDMS: Enhance-Fiscal 2009-2011** RecordNo: **2269**

Find using Project Record Number
Find using Project NUMBER / NAME
Find using Project KEY WORD

Return to Main Menu

Customer Name: _____
Customer Office or Agency: **Environmental Section**
Category Name: **ENVIRONMENTAL**
Key Words: **Environmental, EDMS, Rez Raz**
Description: **Mapping, Data Collab, GPS Data collection, Web app**
File Name(s): _____
Project Location: _____
Original Data File: _____
DataSource: _____
GIS No./Name: **65-EDMS: Enhance-Fiscal 2009-2011**
Web Product?: _____

Your Name: **CHRIS WRIGHT** **Enter NEW Hours** **EDIT This record** **SAVE EDITS**

Your team role: **Analyst** **2269**

Work Task/SubProject:
Provide Support: GIS Tools, Software

Your Work Record

Work Date (mmddyy): **2/12/2010** **Activity Hours:** **5.00**
Number maps, shapefiles produced: **0** **Worked on GIS layer?**
Enter your specific activity, data file worked or map product, if applicable: **Outfall Project for Patti and Paul W. Setup mxd and did initial stream buffer. Includes meeting time**

SubProject Details

Project/data/mxd location: _____

Keywords for SubProject: _____

Sub Project Beg Date (mmddyy): _____
Sub Project End Date (mmddyy): _____

Customer Statistics

Group: _____
Customer: _____
Customer Phone: _____
EA#: _____

Record: **12** of 457

View each record of activity for this project using the record selectors above.

Record: _____ of 2217

Project Tracker

Team members keep records of project tasks and hours.

These are submitted each month to the GIS manager with employee timesheets.

Project EDITS and UPDATES

Rev. 03-09-09 **Basic Project ID:** Project Name **GIS 65 EDMS: Enhance-Fiscal 2009-2011** RecordNo: **2269**

Your Name: **CHRIS WRIGHT**

Your team role: **Analyst**

Work Task/SubProject:
Provide Support: GIS Tools, Software

Your Work Record

Work Date (mmddyy)	<input type="text" value="2/12/2010"/>	Activity Hours:	<input type="text" value="5.00"/>
Number maps, shapefiles produced	<input type="text" value="0"/>	Worked on GIS layer?	<input type="radio"/>
Enter your specific activity, data file worked or map product, if applicable:		Outfall Project for Patti and Paul W. Setup mxd and did initial stream buffer. Includes meeting time	

SubProject Details

Project/data/mxd location:

Keywords for SubProject:

Sub Project Beg Date (mmddyy)

Sub Project End Date (mmddyy)

Customer Statistics

Group:

Customer:

Customer Phone:

EA#:

Record: of 457

View each record of activity for this project using the record selectors above.

Record: of 2217

Project Tracker

frmGISprojects_forcommenting
_ _ X

FIND By Project Number/Name

Project Number and Name:

GIS_status:

Project Name:

Project Description:

EDIT Project Basics

SAVE Record Changes

Exit Form

189

GIS65

Project Importance:

Project Start Date:

Preliminary End Date:

Lead:

GISSC STATUS REPORT COMMENT ENTRY:

Comment Date	Your Name	Project Status Comment
7/12/2010	PHIL SMITH	Available resources were heavily impacted end of June through early July for GPS training and roll out activities, resourcing has since returned to normal work level. 1) RES/RAZ maps for Region 5 currently in draft. 2) GEAR

Record: of 9

GISSC STATUS REPORT ADJUSTED END DATE

Adjusted End Date:

GISSC STATUS COLOR Indicator

Status Month: Status Year: Status Code Letter:

Record: of 8

Record: of 213

Project Tracker

frmGISprojects_forcommenting

Project managers submit comments regarding project status for the GIS steering committee.

GISSC STATUS REPORT COMMENT ENTRY:

Comment Date	Your Name	Project Status Comment
7/12/2010	PHIL SMITH	Available resources were heavily impacted end of June through early July for GPS training and roll out activities, resourcing has since returned to normal work level. 1) RES/RAZ maps for Region 5 currently in draft. 2) GEAR

EDIT This Comment Add NEW Comment Save Comment

Record: 1 of 9

GISSC STATUS REPORT ADJUSTED END DATE

Adjusted End Date:

Add Revised End Date Save Revised Date

Record: 1 of 213

GISSC STATUS COLOR Indicator

Status Month	Status Year	Status Code Letter
June	2010	G

Record New Status Edit Status Save Entry

Record: 1 of 8

Project Tracker

Status	Project Name/Description	Project Number	Project Priority	March	April	May	Start Date	Preliminary End Date	Adjusted End Date	Projected Status	Comments	Lead
A	<u>GIS Infrastructure Support - Training</u>	GIS11-01	H				1/4/2006				<p>1/25/2010: TRAINING RECEIVED: Sam Hargrave - Emergency Management ICS 100,200,700 (12/09)</p> <p>TRAINING DELIVERED: Access Management Road Approach Tool 10 students (10/09)</p> <p>7/6/2010 4:12:32 PM: TRAINING DELIVERED: ArcPAD for Access Management (06/10)</p> <p>TRAINING RECEIVED: Intro to ArcGIS Server GIS Unit (06/10) IMS Project: Susan Mead (05/10) Mobile GIS Using ArcPad & GPS Analyst: Shawn S. and Sam H. (06/10) Developing Apps with ArcGIS Server: GIS Unit (06/10) Oregon Project Managers Certification Program: Chris Wright (6/10) ArcGIS Geoprocessing with Python: Chad N. (06/10)</p>	IN PROGRESS
A	<u>GIS Infrastructure Support - Demonstrations</u> (6 month drop-off cycle) Target OTC, Area Managers, Project Managers, Additional PBLT groups, Doug Tindall, Hwy Div Manager	GIS11-02	H				1/4/2006				<p>1/25/2010: DEMONSTRATIONS DELIVERED: RES/RAZ products, workshop update for TOD admin - Chris W (01/10) Wetlands Mitig and Monit web app at ODOT DSL qtrly mtg - Chris W (01/10)</p>	IN PROGRESS
A	<u>GIS Infrastructure Support - Customer Support</u>	GIS11-03	H				1/4/2006				<p>7/6/2010: CUSTOMER SUPPORT HOURS: 63.0 (04/10) 72.5 (05/10) 57.0 (06/10)</p>	IN PROGRESS
A	<u>GIS Infrastructure Support - Metadata</u>	GIS11-04	H				1/4/2006				<p>7/7/2010 9:23:40 AM: In Progress: Annual Average Daily Traffic Flow Map Automatic Traffic Records ITS</p> <p>Completed: Aggregate Sites (05/10) Bridges 2010 (06/10) Certified Fagger Locations (05/10) Extremely Hazardous Sites (05/10) Fire Stations (05/10) State Highways (06/10) OR Trans (06/10)</p>	IN PROGRESS
A	<u>GIS Infrastructure Support - Software Evaluate / Purchase / Implement</u>	GIS11-06	H				1/4/2006				<p>7/7/2010 9:29:26 AM: In Progress: LP360 for ArcGIS (LIDAR Tools)</p> <p>On Hold: No Activity</p> <p>Complete: No Activity</p>	IN PROGRESS

Project Results

GIS Report

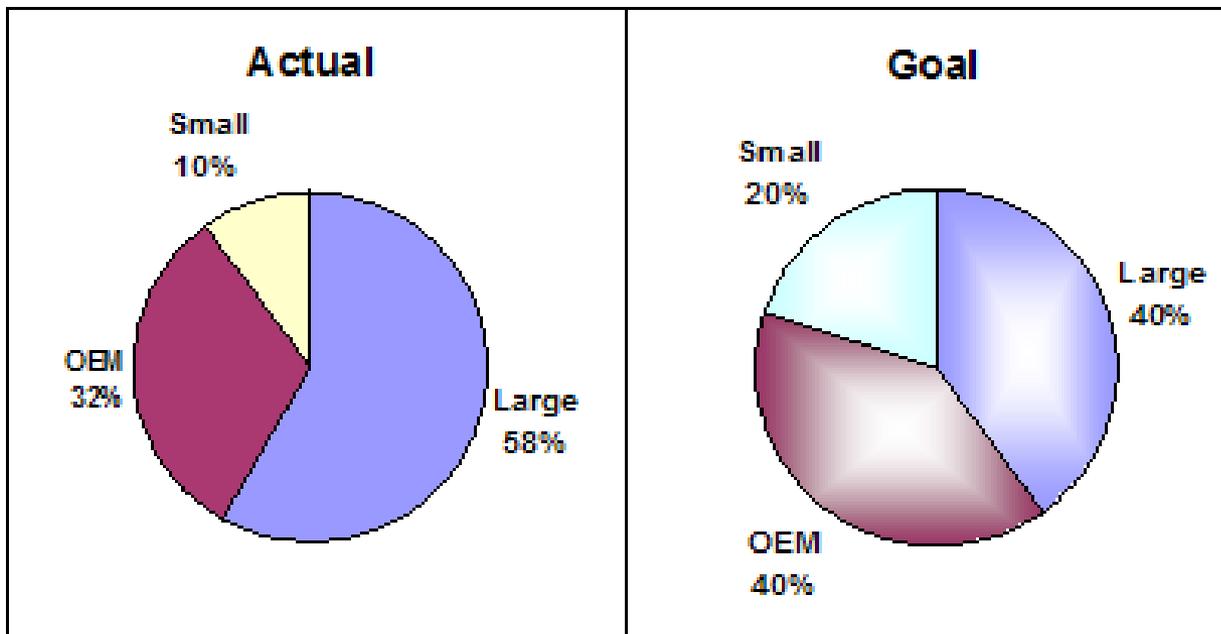
Project Activity by Work Type

Report Period

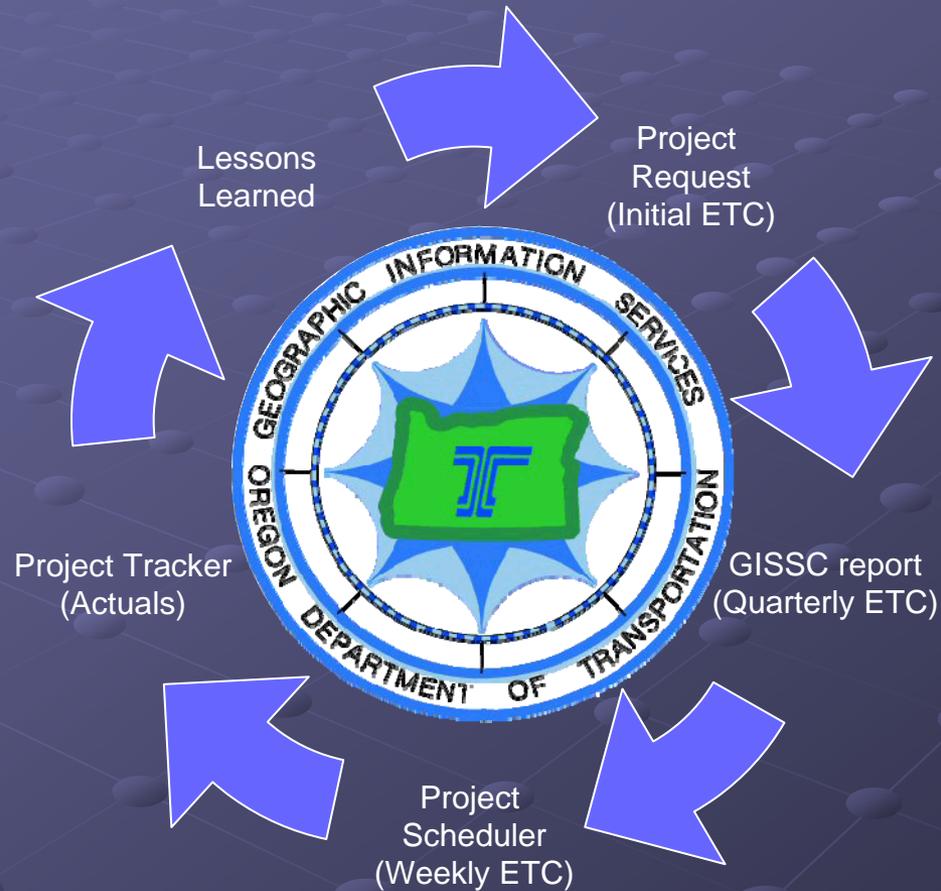
Beginning: 01-Jul-10

Ending: 30-Jul-10

Percent of Hours for each Work Type



Informing the process



Future Steps

- Integrate any disconnects between our requests, scheduling, and tracking tools
- Review trends of 40/20/40 distribution
- Recommendation for revised distribution and large project thresholds at next GIS Steering Committee meeting with new GIS Manager