ADAP Financial Projection Model
Companion Document
April 2013

Through a Cooperative Agreement with HRSA, NASTAD has worked to create an ADAP financial forecasting model that can be used and adapted by ADAPs to project fiscal needs for the future of individual ADAPs. The following serves as a companion document to the *ADAP Financial Projection Model.* For questions, contact Britten Pund.

Financial Forecasting for ADAP

To project future financial outcomes for program sustainability, ADAPs must conduct financial forecasting/projections. Characteristics of the ideal ADAP financial forecasting/projection model include:

- *Predictive:* a model that is adequately able to offer an indication of what the future might hold for an individual ADAP
- *Explanatory:* a model that is able to articulate in numbers an accurate picture of the state of ADAP
- *Convenient:* a model that is easily accessible and easy to use
- *Adaptable/flexible:* a model that is able to be modified based on the individual needs of an ADAP and readily able to meet different conditions (i.e., traditional ADAP vs. insurance)
- *Simple/understandable:* a model that is easy to understand and not elaborate or complicated
- *Margin of error:* a model that allows for an acceptable allowance for slight error or miscalculation, depending on changing circumstances

When thinking about developing and implementing an ADAP financial forecasting/projection model, ADAPs should consider the following questions:

- What data elements should ADAPs include in a financial forecasting model?
- What trends should ADAPs be monitoring?
- What information do ADAPs need to have to understand the data being inputted?

In order to move to a place of accurate financial forecasting, ADAPs must first collect historic data and understand the basic data elements needed to manage ADAP.

Time Frame

Throughout the course of the administration of ADAP, programs should have been collecting data to be able to track program utilization and growth. The more data that is included in an ADAP financial projection model, the more accurate the overall projection is likely to be. It is recommended that ADAPs should use the most recent **three to five years** of data that is available. The model developed by ADAP uses **a minimum of two year (24 months)** to allow for programs that have made more substantive changes in the past two years to adequately project costs.

Data Elements

- Number of **clients enrolled** by ADAP. How many clients have been enrolled from ADAP on an annual basis?

- Number of **clients served** by ADAP. How many clients have been receiving medications from ADAP on an annual basis?

- Number of **new clients enrolled** in the program. Has this number of new clients eligible for the ADAP changed/decreased/increased? By how much?

- Complete listing of all **funding** available for ADAP in the current year, based on funding category. ADAPs should also document the historic funding, by category. Along with these dollar amounts, each ADAP should also understand each of the funding timelines (e.g., state fiscal year vs. grant year).

- Data on **rebates** collected. If possible, separate rebates by 340B vs. ADAP Crisis Task Force negotiated rebates and based on rebates on traditional medications vs. rebates on insurance payments (full rebates on partial payments).

- Data on **program income** collected from back-billing Medicaid for clients where ADAP paid for medications when the client was Medicaid eligible. As well, does ADAP have a mechanism to back-bill if a client has obtained private insurance?

- Data on **attrition rate**. On an annual basis, how many clients do not recertify for ADAP and/or are disenrolled due to lack of participation?

Once one has a basic understanding of data elements, ADAPs must examine and analyze trends related to ADAP. ADAPs should look to effectively examine and analyze historic and current trends in the following categories over the past three to five years.

- Enrollment
- Utilization
- New enrollment
- Funding
- 340B and ADAP Crisis Task Force rebates
- Attrition rates

Finally, ADAP must be able to think critically about projections. NASTAD has worked to develop a financial forecasting/projection model to address these questions.

Projecting Fiscal Needs for ADAP

The level and sophistication of data available determines how good the projection will be. To project, you must acknowledge:

The basis for historical data.

- In what context was the data collected?
- What program changes were taking place that could impact data trends?
- Was data collected in the same manner in which it is collected currently?

Structure of ADAP

- What is the enrollment process for clients?
- How does the ADAP dispense medications?

- How does ADAP wrap around other payers?
- Program history, detailing major changes nationally and within state program
    - ADAP timeline
- Systems changes

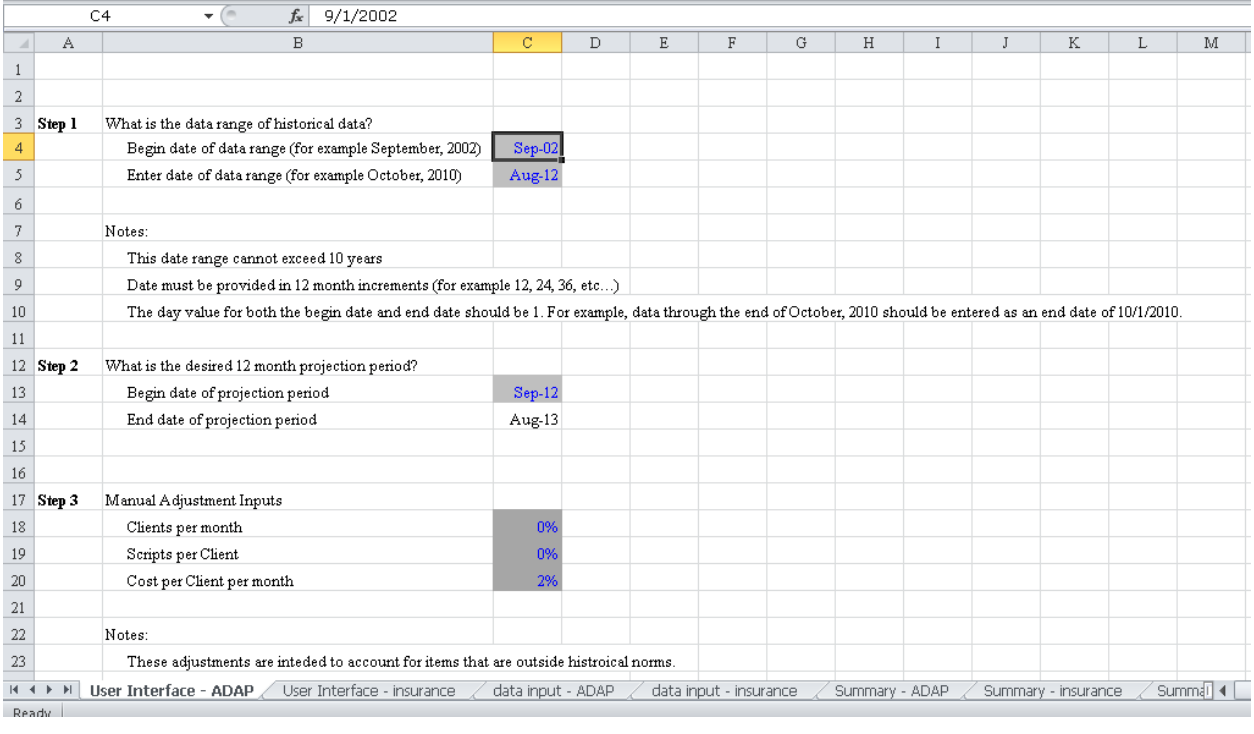
Resources

- Glossary of important terms
- Definitions of variables included in the model
- Variability of projections and seasonality of data
- Unmet need

Instructions for Using the ADAP Financial Forecasting Model

Traditional ADAP Projections (Full Pay)

User Interface



	A	B	C
3	**Step 1**	What is the data range of historical data?	
4		Begin date of data range (for example September, 2002)	Sep-02
5		Enter date of data range (for example October, 2010)	Aug-12
7		Notes:	
8		This date range cannot exceed 10 years	
9		Date must be provided in 12 month increments (for example 12, 24, 36, etc…)	
10		The day value for both the begin date and end date should be 1. For example, data through the end of October, 2010 should be entered as an end date of 10/1/2010.	
12	**Step 2**	What is the desired 12 month projection period?	
13		Begin date of projection period	Sep-12
14		End date of projection period	Aug-13
17	**Step 3**	Manual Adjustment Inputs	
18		Clients per month	0%
19		Scripts per Client	0%
20		Cost per Client per month	2%
22		Notes:	
23		These adjustments are inteded to account for items that are outside histroical norms.	

<u>Step One</u>

- Enter the date range of the historical data available for inclusion in the model. Dates should be entered as MM/1/YYYY. For example, 9/1/2009-8/1/2012 would be entered for data representing the period September 2009 through (and including) August 2012.
- At a minimum 24 months of data must be entered.
- Data must be entered in twelve month increments.
- Longer historical data periods improve the accuracy of the projection.

<u>Step Two</u>

- Enter the date range of the desired twelve month projection period. Begin date should be entered as MM/1/YYYY.
    - The begin date of the projection period is input by the user and the end date (twelve months later) is calculated.

<u>Step Three</u>

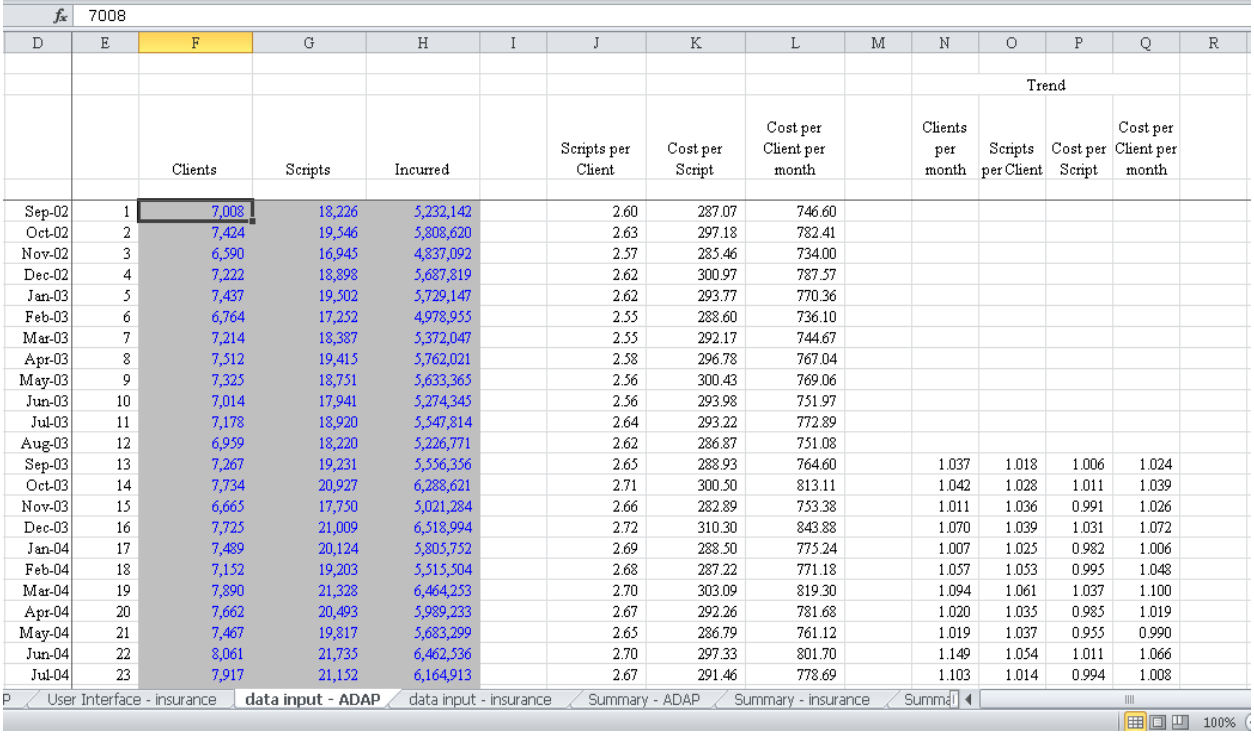
- Input any manual adjustments based on user's judgment. These adjustments are intended to account for items beyond the historical pattern as seen in the historical data.

- For example, a large one time influx of clients would be accounted for by adjusting the clients per month adjustment to reflect the expected increase that is in addition to historical growth.
- If the user does not want to utilize the manual adjustments it is recommended that the *clients per month* and *scripts per month* adjustments be entered as 0% and the *cost per client per month* as 2%. This set of inputs would provide a 2% "margin" in the projection.

Step Four

- Enter the historical data on the data input tab matching the date range entered in Step One.

Data Input



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D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
										Trend				
		Clients	Scripts	Incurred		Scripts per Client	Cost per Script	Cost per Client per month		Clients per month	Scripts per Client	Cost per Script	Cost per Client per month	
Sep-02	1	7,008	18,226	5,232,142		2.60	287.07	746.60						
Oct-02	2	7,424	19,546	5,808,620		2.63	297.18	782.41						
Nov-02	3	6,590	16,945	4,837,092		2.57	285.46	734.00						
Dec-02	4	7,222	18,898	5,687,819		2.62	300.97	787.57						
Jan-03	5	7,437	19,502	5,729,147		2.62	293.77	770.36						
Feb-03	6	6,764	17,252	4,978,955		2.55	288.60	736.10						
Mar-03	7	7,214	18,387	5,372,047		2.55	292.17	744.67						
Apr-03	8	7,512	19,415	5,762,021		2.58	296.78	767.04						
May-03	9	7,325	18,751	5,633,365		2.56	300.43	769.06						
Jun-03	10	7,014	17,941	5,274,345		2.56	293.98	751.97						
Jul-03	11	7,178	18,920	5,547,814		2.64	293.22	772.89						
Aug-03	12	6,959	18,220	5,226,771		2.62	286.87	751.08						
Sep-03	13	7,267	19,231	5,556,356		2.65	288.93	764.60		1.037	1.018	1.006	1.024	
Oct-03	14	7,734	20,927	6,288,621		2.71	300.50	813.11		1.042	1.028	1.011	1.039	
Nov-03	15	6,665	17,750	5,021,284		2.66	282.89	753.38		1.011	1.036	0.991	1.026	
Dec-03	16	7,725	21,009	6,518,994		2.72	310.30	843.88		1.070	1.039	1.031	1.072	
Jan-04	17	7,489	20,124	5,805,752		2.69	288.50	775.24		1.007	1.025	0.982	1.006	
Feb-04	18	7,152	19,203	5,515,504		2.68	287.22	771.18		1.057	1.053	0.995	1.048	
Mar-04	19	7,890	21,328	6,464,253		2.70	303.09	819.30		1.094	1.061	1.037	1.100	
Apr-04	20	7,662	20,493	5,989,233		2.67	292.26	781.68		1.020	1.035	0.985	1.019	
May-04	21	7,467	19,817	5,683,299		2.65	286.79	761.12		1.019	1.037	0.955	0.990	
Jun-04	22	8,061	21,735	6,462,536		2.70	297.33	801.70		1.149	1.054	1.011	1.066	
Jul-04	23	7,917	21,152	6,164,913		2.67	291.46	778.69		1.103	1.014	0.994	1.008	

User Interface - insurance | data input - ADAP | data input - insurance | Summary - ADAP | Summary - insurance | Summa

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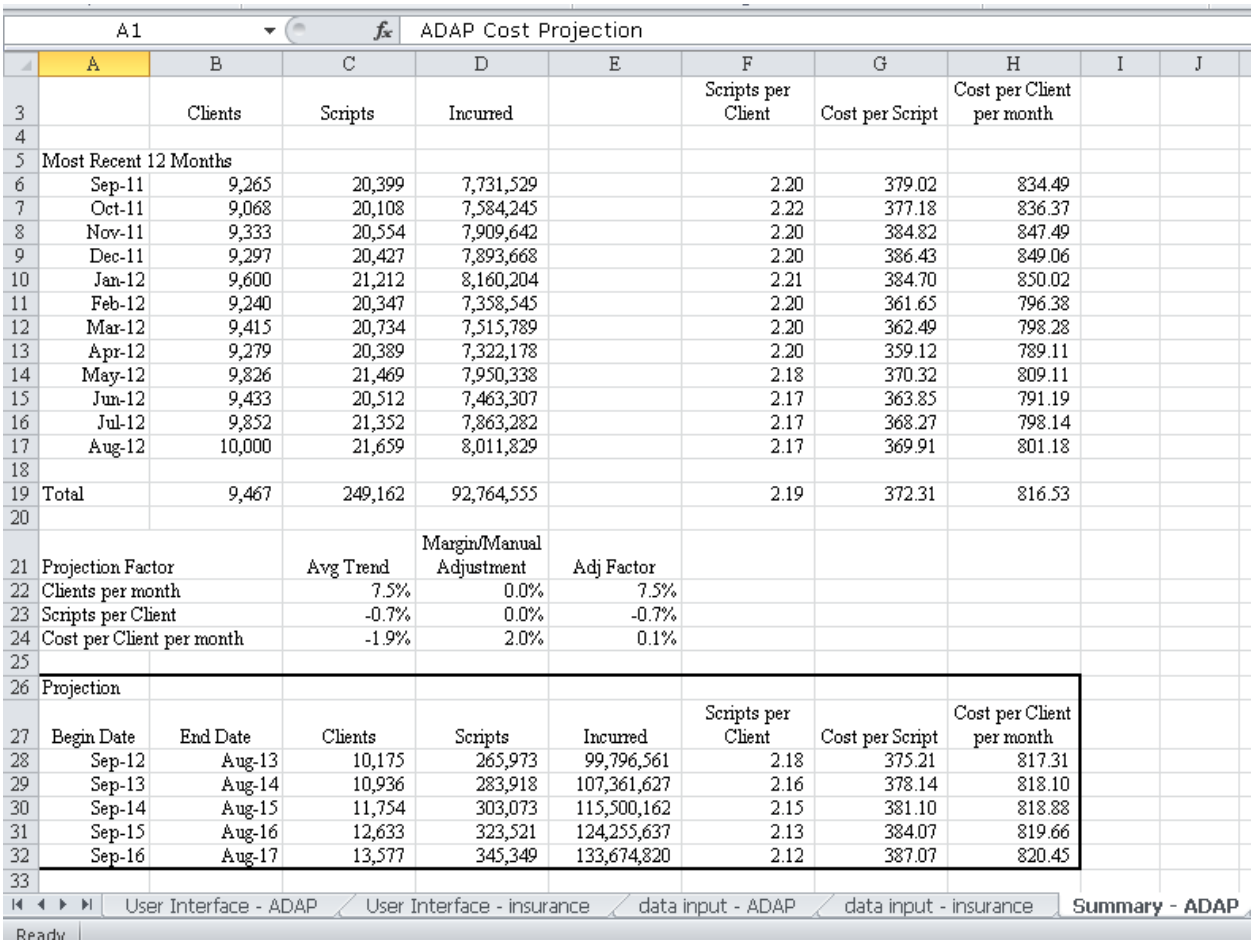
The *Data Input: ADAP* requires the input of the number of ADAP clients, number of prescriptions and total incurred (i.e. total cost) by month for the historical data period.

The *Data Input* worksheet calculates various average monthly statistics and calculates historical trends within various categories.

Summary



A1 ADAP Cost Projection

	A	B	C	D	E	F	G	H	I	J
3		Clients	Scripts	Incurred		Scripts per Client	Cost per Script	Cost per Client per month		
4										
5	Most Recent 12 Months									
6	Sep-11	9,265	20,399	7,731,529		2.20	379.02	834.49		
7	Oct-11	9,068	20,108	7,584,245		2.22	377.18	836.37		
8	Nov-11	9,333	20,554	7,909,642		2.20	384.82	847.49		
9	Dec-11	9,297	20,427	7,893,668		2.20	386.43	849.06		
10	Jan-12	9,600	21,212	8,160,204		2.21	384.70	850.02		
11	Feb-12	9,240	20,347	7,358,545		2.20	361.65	796.38		
12	Mar-12	9,415	20,734	7,515,789		2.20	362.49	798.28		
13	Apr-12	9,279	20,389	7,322,178		2.20	359.12	789.11		
14	May-12	9,826	21,469	7,950,338		2.18	370.32	809.11		
15	Jun-12	9,433	20,512	7,463,307		2.17	363.85	791.19		
16	Jul-12	9,852	21,352	7,863,282		2.17	368.27	798.14		
17	Aug-12	10,000	21,659	8,011,829		2.17	369.91	801.18		
18										
19	Total	9,467	249,162	92,764,555		2.19	372.31	816.53		
20										
21	Projection Factor		Avg Trend	Margin/Manual Adjustment	Adj Factor					
22	Clients per month		7.5%	0.0%	7.5%					
23	Scripts per Client		-0.7%	0.0%	-0.7%					
24	Cost per Client per month		-1.9%	2.0%	0.1%					
25										
26	Projection									
27	Begin Date	End Date	Clients	Scripts	Incurred	Scripts per Client	Cost per Script	Cost per Client per month		
28	Sep-12	Aug-13	10,175	265,973	99,796,561	2.18	375.21	817.31		
29	Sep-13	Aug-14	10,936	283,918	107,361,627	2.16	378.14	818.10		
30	Sep-14	Aug-15	11,754	303,073	115,500,162	2.15	381.10	818.88		
31	Sep-15	Aug-16	12,633	323,521	124,255,637	2.13	384.07	819.66		
32	Sep-16	Aug-17	13,577	345,349	133,674,820	2.12	387.07	820.45		
33										

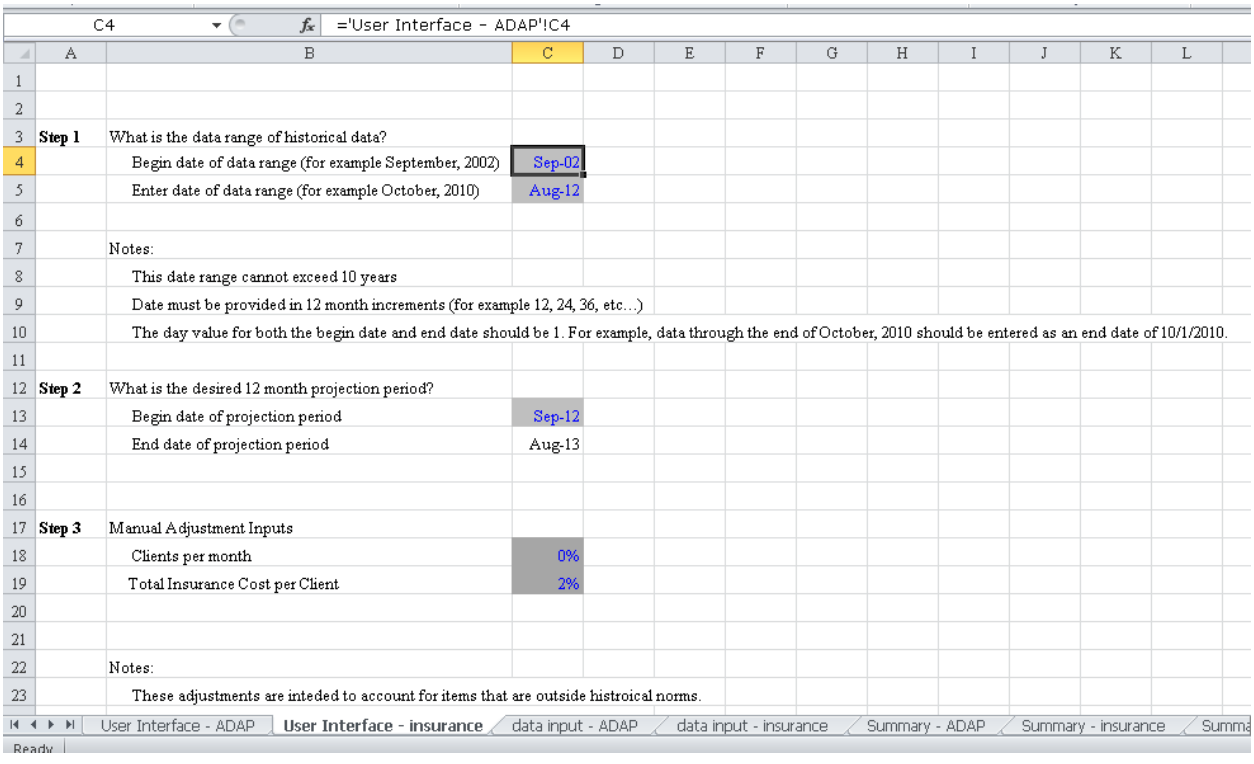
User Interface - ADAP | User Interface - insurance | data input - ADAP | data input - insurance | Summary - ADAP

Ready

Based on the information entered by the user, the Summary worksheet provides a high level projection of the number of clients, prescriptions, and total cost. These projections are based on the historical trend factors calculated and the manual adjustments (if any) entered by the user.

Insurance Projections

User Interface



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5		Enter date of data range (for example October, 2010)	Aug-12
7		Notes:	
8		This date range cannot exceed 10 years	
9		Date must be provided in 12 month increments (for example 12, 24, 36, etc…)	
10		The day value for both the begin date and end date should be 1. For example, data through the end of October, 2010 should be entered as an end date of 10/1/2010.	
12	**Step 2**	What is the desired 12 month projection period?	
13		Begin date of projection period	Sep-12
14		End date of projection period	Aug-13
17	**Step 3**	Manual Adjustment Inputs	
18		Clients per month	0%
19		Total Insurance Cost per Client	2%
22		Notes:	
23		These adjustments are inteded to account for items that are outside histroical norms.	

User Interface - ADAP | **User Interface - insurance** | data input - ADAP | data input - insurance | Summary - ADAP | Summary - insurance | Summa

Ready

<u>Step One</u>

- Enter the date range of the historical data available for inclusion in the model. Dates should be entered as MM/1/YYYY. For example, 9/1/2009-8/1/2012 would be entered for data representing the period September 2009 through (and including) August 2012.
- At a minimum 24 months of data must be entered.
  - In the absence of 24 months of data, ADAP should trend their first year expenses using national trend data.
- Data must be entered in twelve month increments.
- Longer historical data periods improve the accuracy of the projection.

<u>Step Two</u>

- Enter the date range of the desired twelve month projection period. Begin date should be entered as MM/1/YYYY.
  - The begin date of the projection period is input by the user and the end date (twelve months later) is calculated.

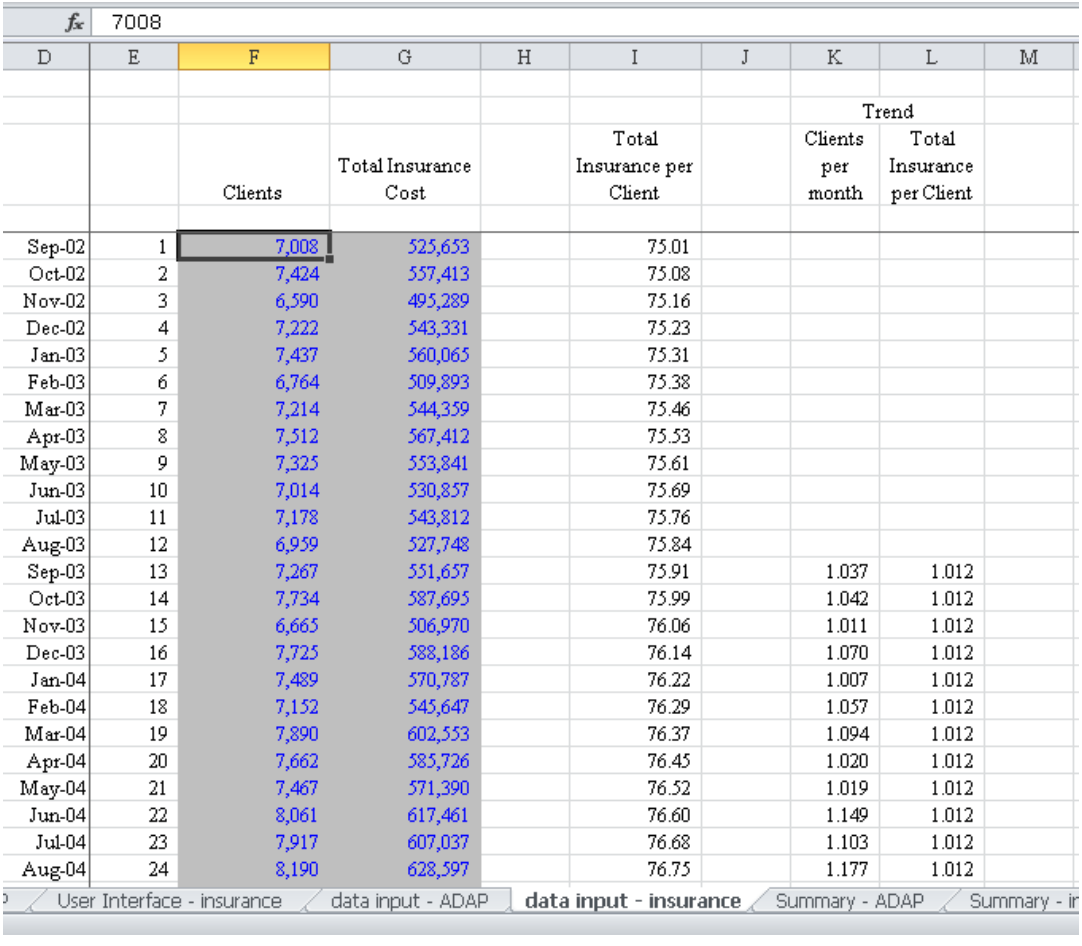
<u>Step Three</u>

- Input any manual adjustments based on user's judgment. These adjustments are intended to account for items beyond the historical pattern as seen in the historical data.
- For example, a large one time influx of clients would be accounted for by adjusting the clients per month adjustment to reflect the expected increase that is in addition to historical growth.

<u>Step Four</u>

Enter the historical data on the data input tab matching the date range entered in Step One.

Data Input



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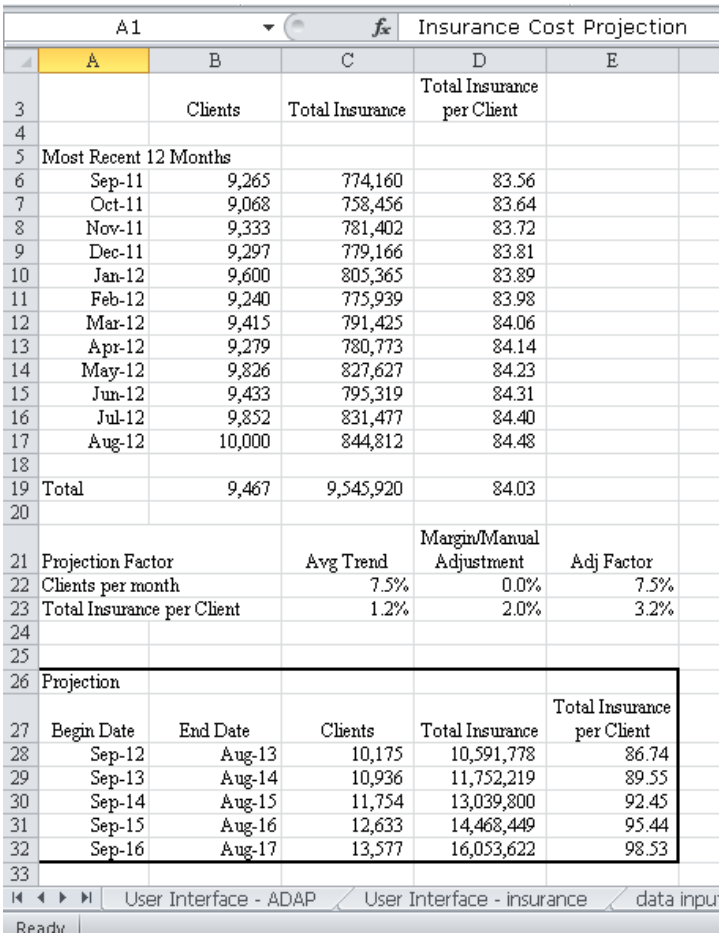
D	E	F	G	H	I	J	K	L	M
							Trend		
		Clients	Total Insurance Cost		Total Insurance per Client		Clients per month	Total Insurance per Client	
Sep-02	1	7,008	525,653		75.01				
Oct-02	2	7,424	557,413		75.08				
Nov-02	3	6,590	495,289		75.16				
Dec-02	4	7,222	543,331		75.23				
Jan-03	5	7,437	560,065		75.31				
Feb-03	6	6,764	509,893		75.38				
Mar-03	7	7,214	544,359		75.46				
Apr-03	8	7,512	567,412		75.53				
May-03	9	7,325	553,841		75.61				
Jun-03	10	7,014	530,857		75.69				
Jul-03	11	7,178	543,812		75.76				
Aug-03	12	6,959	527,748		75.84				
Sep-03	13	7,267	551,657		75.91		1.037	1.012	
Oct-03	14	7,734	587,695		75.99		1.042	1.012	
Nov-03	15	6,665	506,970		76.06		1.011	1.012	
Dec-03	16	7,725	588,186		76.14		1.070	1.012	
Jan-04	17	7,489	570,787		76.22		1.007	1.012	
Feb-04	18	7,152	545,647		76.29		1.057	1.012	
Mar-04	19	7,890	602,553		76.37		1.094	1.012	
Apr-04	20	7,662	585,726		76.45		1.020	1.012	
May-04	21	7,467	571,390		76.52		1.019	1.012	
Jun-04	22	8,061	617,461		76.60		1.149	1.012	
Jul-04	23	7,917	607,037		76.68		1.103	1.012	
Aug-04	24	8,190	628,597		76.75		1.177	1.012	

User Interface - insurance | data input - ADAP | **data input - insurance** | Summary - ADAP | Summary - i

The *Data Input: Insurance* requires the input of the number of Insurance clients and total insurance cost by month for the historical data period.

The *Data Input* worksheet calculates various average monthly statistics and calculates historical trends within various categories.

Summary



A1 — Insurance Cost Projection

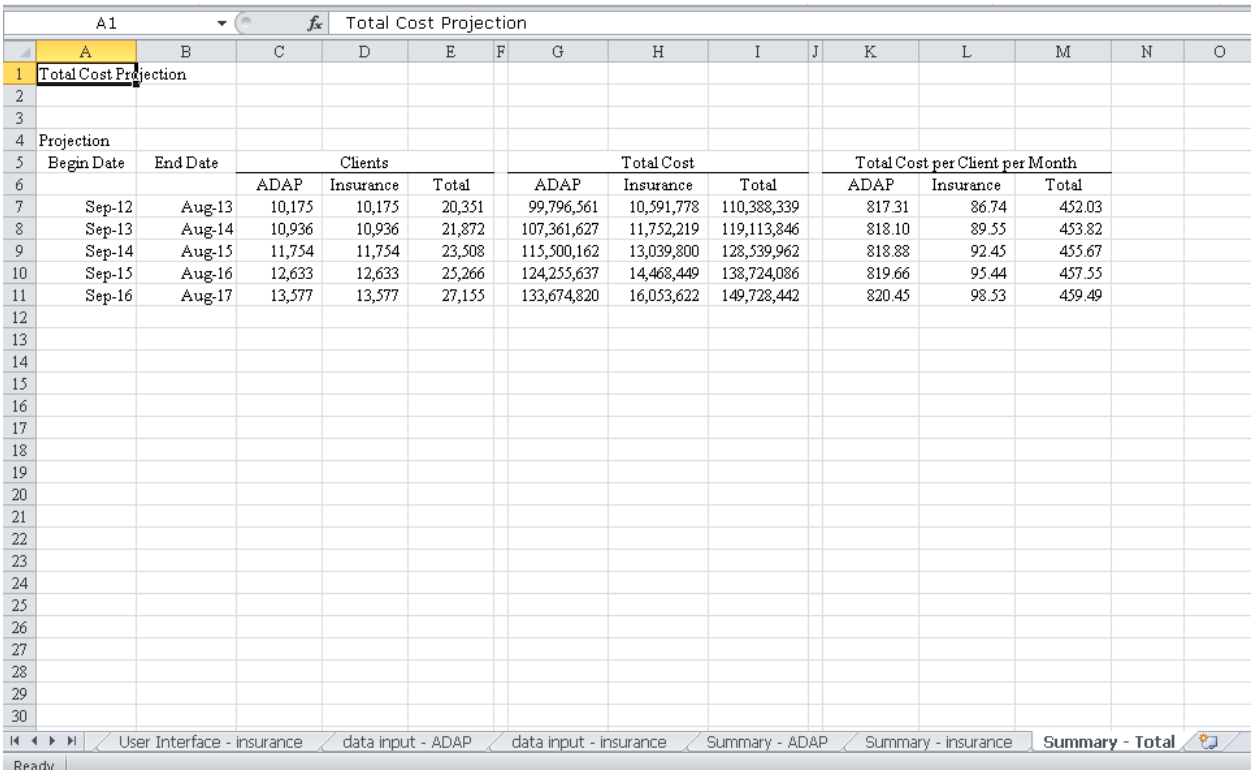
	A	B	C	D	E
3		Clients	Total Insurance	Total Insurance per Client	
4					
5	Most Recent 12 Months				
6	Sep-11	9,265	774,160	83.56	
7	Oct-11	9,068	758,456	83.64	
8	Nov-11	9,333	781,402	83.72	
9	Dec-11	9,297	779,166	83.81	
10	Jan-12	9,600	805,365	83.89	
11	Feb-12	9,240	775,939	83.98	
12	Mar-12	9,415	791,425	84.06	
13	Apr-12	9,279	780,773	84.14	
14	May-12	9,826	827,627	84.23	
15	Jun-12	9,433	795,319	84.31	
16	Jul-12	9,852	831,477	84.40	
17	Aug-12	10,000	844,812	84.48	
18					
19	Total	9,467	9,545,920	84.03	
20					
21	Projection Factor		Avg Trend	Margin/Manual Adjustment	Adj Factor
22	Clients per month		7.5%	0.0%	7.5%
23	Total Insurance per Client		1.2%	2.0%	3.2%
24					
25					
26	Projection				
27	Begin Date	End Date	Clients	Total Insurance	Total Insurance per Client
28	Sep-12	Aug-13	10,175	10,591,778	86.74
29	Sep-13	Aug-14	10,936	11,752,219	89.55
30	Sep-14	Aug-15	11,754	13,039,800	92.45
31	Sep-15	Aug-16	12,633	14,468,449	95.44
32	Sep-16	Aug-17	13,577	16,053,622	98.53
33					

User Interface - ADAP | User Interface - insurance | data inpu

Ready

Based on the information entered by the user the Summary worksheet provides a high level projection of the number of clients and total insurance cost. These projections are based on the historical trend factors calculated and the manual adjustments (if any) entered by the user.

Summary Total



A1 fx Total Cost Projection

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	Total Cost Projection														
2															
3															
4	Projection														
5	Begin Date	End Date	Clients				Total Cost				Total Cost per Client per Month				
6			ADAP	Insurance	Total		ADAP	Insurance	Total		ADAP	Insurance	Total		
7	Sep-12	Aug-13	10,175	10,175	20,351		99,796,561	10,591,778	110,388,339		817.31	86.74	452.03		
8	Sep-13	Aug-14	10,936	10,936	21,872		107,361,627	11,752,219	119,113,846		818.10	89.55	453.82		
9	Sep-14	Aug-15	11,754	11,754	23,508		115,500,162	13,039,800	128,539,962		818.88	92.45	455.67		
10	Sep-15	Aug-16	12,633	12,633	25,266		124,255,637	14,468,449	138,724,086		819.66	95.44	457.55		
11	Sep-16	Aug-17	13,577	13,577	27,155		133,674,820	16,053,622	149,728,442		820.45	98.53	459.49		
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User Interface - insurance | data input - ADAP | data input - insurance | Summary - ADAP | Summary - insurance | **Summary - Total**

Ready

The *Summary Total* combines the results of the ADAP and Insurance projection including the number of clients and total cost for each.