H1 FORECAST MODEL
NM 2010-2016 ED Data

The AUTOREG Procedure

Dependent Variable	TCC_PRE

H1 FORECAST MODEL
NM 2010-2016 ED Data

The AUTOREG Procedure

Ordinary Least Squares Estimates			
SSE	20046.5288	**DFE**	61
MSE	328.63162	**Root MSE**	18.12820
SBC	550.121148	**AIC**	545.834879
MAE	15.1054376	**AICC**	546.034879
MAPE	3.42211301	**HQC**	547.520689
Durbin-Watson	0.0643	**Total R-Square**	0.0782

Parameter Estimates

Variable	DF	Estimate	Standard Error	t Value	Approx Pr > |t|
Intercept	1	450.6662	5.2911	85.17	<.0001
TIME	1	-0.2857	0.1256	-2.27	0.0265

<table>
<tr><th colspan="4">Estimates of Autocorrelations</th></tr>
<tr><th>Lag</th><th>Covariance</th><th>Correlation</th><th>-1 9 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 9 1</th></tr>
<tr><td>0</td><td>318.2</td><td>1.000000</td><td>| |********************|</td></tr>
<tr><td>1</td><td>293.8</td><td>0.923398</td><td>| |****************** |</td></tr>
<tr><td>2</td><td>256.2</td><td>0.805130</td><td>| |**************** |</td></tr>
<tr><td>3</td><td>206.8</td><td>0.649879</td><td>| |************* |</td></tr>
</table>

Preliminary MSE	38.9606

Estimates of Autoregressive Parameters

Lag	Coefficient	Standard Error	t Value
1	-1.134490	0.126463	-8.97
2	-0.006033	0.195405	-0.03
3	0.269103	0.126463	2.13

Expected Autocorrelations

Lag	Autocorr
0	1.0000
1	0.9234
2	0.8051
3	0.6499

Coefficients for First NLAG Observations

	1	2	3
1	0.3499158626	0	0
2	-0.841779324	0.9116104112	0
3	0.3107246248	-1.176257656	0.9631112783

Algorithm converged.

H1 FORECAST MODEL
NM 2010-2016 ED Data

The AUTOREG Procedure

Maximum Likelihood Estimates			
SSE	214.473255	DFE	58
MSE	3.69781	Root MSE	1.92297
SBC	283.438837	AIC	272.723163
MAE	1.53105283	AICC	273.775794
MAPE	0.34925549	HQC	276.93769
Log Likelihood	-131.36158	Transformed Regression R-Square	0.0089
Durbin-Watson	2.4249	Total R-Square	0.9901
		Observations	63

Parameter Estimates

Variable	DF	Estimate	Standard Error	t Value	Approx Pr > |t|
Intercept	1	443.5302	9.9784	44.45	<.0001
TIME	1	-0.1691	0.2367	-0.71	0.4779
AR1	1	-1.7757	0.1321	-13.44	<.0001
AR2	1	0.7297	0.2541	2.87	0.0057
AR3	1	0.1026	0.1334	0.77	0.4450

Expected Autocorrelations

Lag	Autocorr
0	1.0000
1	0.9733
2	0.8987
3	0.7830

Coefficients for First NLAG Observations

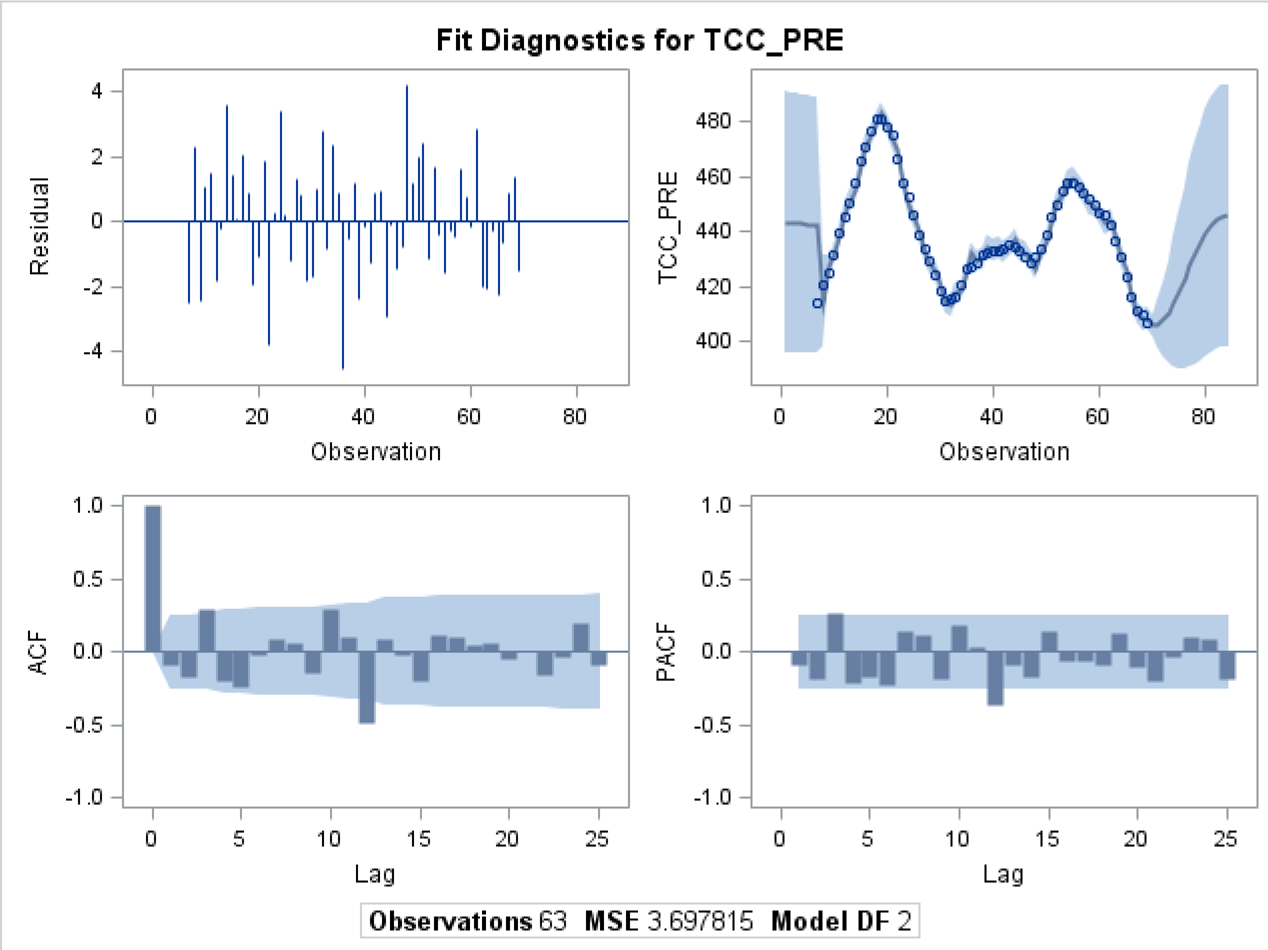
	1	2	3
1	0.08867574	0	0
2	-0.375916291	0.3862336655	0
3	0.916681465	-1.86034921	0.9947267729

Autoregressive parameters assumed given

Variable	DF	Estimate	Standard Error	t Value	Approx Pr > |t|
Intercept	1	443.5302	9.8465	45.04	<.0001
TIME	1	-0.1691	0.2335	-0.72	0.4719

H1 FORECAST MODEL
NM 2010-2016 ED Data

The AUTOREG Procedure



H2 FORECAST MODEL
NM 2010-2016 ED Data

The AUTOREG Procedure

Dependent Variable	TCC_PRE

H2 FORECAST MODEL
NM 2010-2016 ED Data

The AUTOREG Procedure

Ordinary Least Squares Estimates			
SSE	433.120072	**DFE**	61
MSE	7.10033	**Root MSE**	2.66464
SBC	308.528981	**AIC**	304.242712
MAE	2.03790952	**AICC**	304.442712
MAPE	4.52584987	**HQC**	305.928523
Durbin-Watson	0.0906	**Total R-Square**	0.0070

Parameter Estimates					
Variable	**DF**	**Estimate**	**Standard Error**	**t Value**	**Approx Pr > |t|**
Intercept	1	43.7998	0.7777	56.32	<.0001
TIME	1	0.0121	0.0185	0.66	0.5132

<table>
<tr><th colspan="4">Estimates of Autocorrelations</th></tr>
<tr><th>Lag</th><th>Covariance</th><th>Correlation</th><th>-1 9 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 9 1</th></tr>
<tr><td>0</td><td>6.8749</td><td>1.000000</td><td>| |********************|</td></tr>
<tr><td>1</td><td>5.9119</td><td>0.859920</td><td>| |***************** |</td></tr>
</table>

Preliminary MSE	1.7912

Estimates of Autoregressive Parameters			
Lag	**Coefficient**	**Standard Error**	**t Value**
1	-0.859920	0.065896	-13.05

Expected Autocorrelations	
Lag	**Autocorr**
0	1.0000
1	0.8599

Coefficients for First NLAG Observations	
	1
1	0.51042905

Algorithm converged.

H2 FORECAST MODEL
NM 2010-2016 ED Data

The AUTOREG Procedure

Maximum Likelihood Estimates			
SSE	37.3756313	DFE	60
MSE	0.62293	Root MSE	0.78926
SBC	161.373745	AIC	154.94434
MAE	0.61748302	AICC	155.35112
MAPE	1.37833744	HQC	157.473057
Log Likelihood	-74.47217	Transformed Regression R-Square	0.0791
Durbin-Watson	0.4889	Total R-Square	0.9143
		Observations	63

Parameter Estimates

Variable	DF	Estimate	Standard Error	t Value	Approx Pr > |t|
Intercept	1	40.0187	4.2161	9.49	<.0001
TIME	1	0.1653	0.0964	1.72	0.0915
AR1	1	-0.9761	0.0309	-31.60	<.0001

Expected Autocorrelations

Lag	Autocorr
0	1.0000
1	0.9761

Coefficients for First NLAG Observations

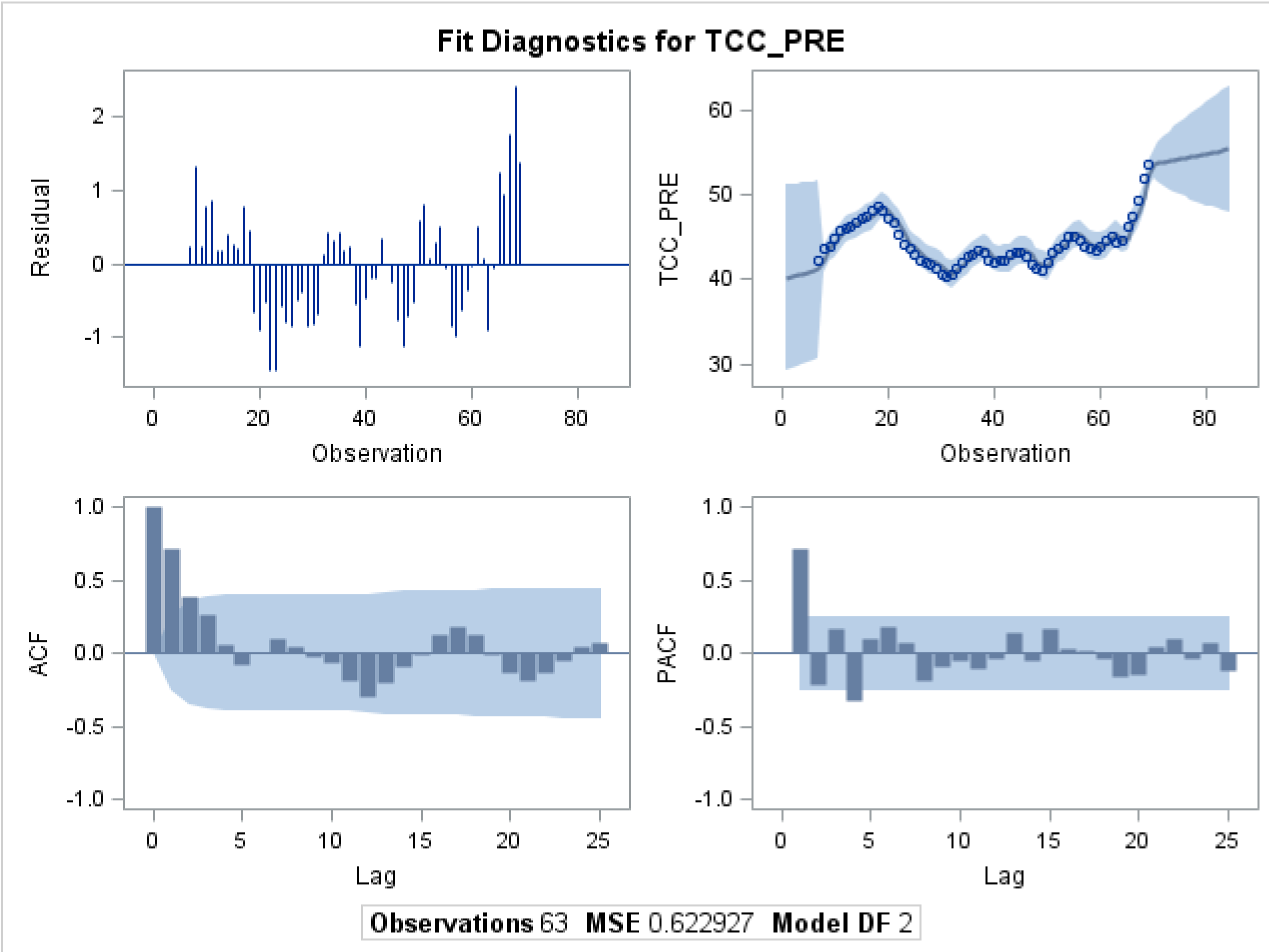
	1
1	0.2174708434

Autoregressive parameters assumed given

Variable	DF	Estimate	Standard Error	t Value	Approx Pr > |t|
Intercept	1	40.0187	3.8972	10.27	<.0001
TIME	1	0.1653	0.0729	2.27	0.0268

H2 FORECAST MODEL
NM 2010-2016 ED Data

The AUTOREG Procedure



H3 FORECAST MODEL
NM 2010-2016 ED Data

The AUTOREG Procedure

Dependent Variable	TCC_PRE

H3 FORECAST MODEL
NM 2010-2016 ED Data

The AUTOREG Procedure

Ordinary Least Squares Estimates			
SSE	180.231122	DFE	61
MSE	2.95461	Root MSE	1.71890
SBC	253.292159	AIC	249.00589
MAE	1.41670076	AICC	249.20589
MAPE	3.63165739	HQC	250.691701
Durbin-Watson	0.1411	Total R-Square	0.8851

Parameter Estimates

Variable	DF	Estimate	Standard Error	t Value	Approx Pr > |t|
Intercept	1	30.2054	0.5017	60.21	<.0001
TIME	1	0.2581	0.0119	21.67	<.0001

Estimates of Autocorrelations

Lag	Covariance	Correlation	-1 9 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 9 1
0	2.8608	1.000000	| |********************|
1	2.5077	0.876585	| |****************** |
2	2.0081	0.701938	| |************** |

Preliminary MSE	0.6080

Estimates of Autoregressive Parameters

Lag	Coefficient	Standard Error	t Value
1	-1.128141	0.124713	-9.05
2	0.286973	0.124713	2.30

Expected Autocorrelations

Lag	Autocorr
0	1.0000
1	0.8766
2	0.7019

Coefficients for First NLAG Observations

	1	2
1	0.4610054	0
2	-0.839714636	0.9579387498

Algorithm converged.

H3 FORECAST MODEL
NM 2010-2016 ED Data

The AUTOREG Procedure

Maximum Likelihood Estimates			
SSE	16.0336113	DFE	59
MSE	0.27176	Root MSE	0.52130
SBC	112.2447	AIC	103.672161
MAE	0.42590949	AICC	104.361816
MAPE	1.07414648	HQC	107.043783
Log Likelihood	-47.836081	Transformed Regression R-Square	0.5555
Durbin-Watson	1.4802	Total R-Square	0.9898
		Observations	63

Parameter Estimates

Variable	DF	Estimate	Standard Error	t Value	Approx Pr > |t|
Intercept	1	29.1456	1.4916	19.54	<.0001
TIME	1	0.2914	0.0359	8.13	<.0001
AR1	1	-1.5102	0.1084	-13.94	<.0001
AR2	1	0.6016	0.1101	5.47	<.0001

Expected Autocorrelations

Lag	Autocorr
0	1.0000
1	0.9429
2	0.8224

Coefficients for First NLAG Observations

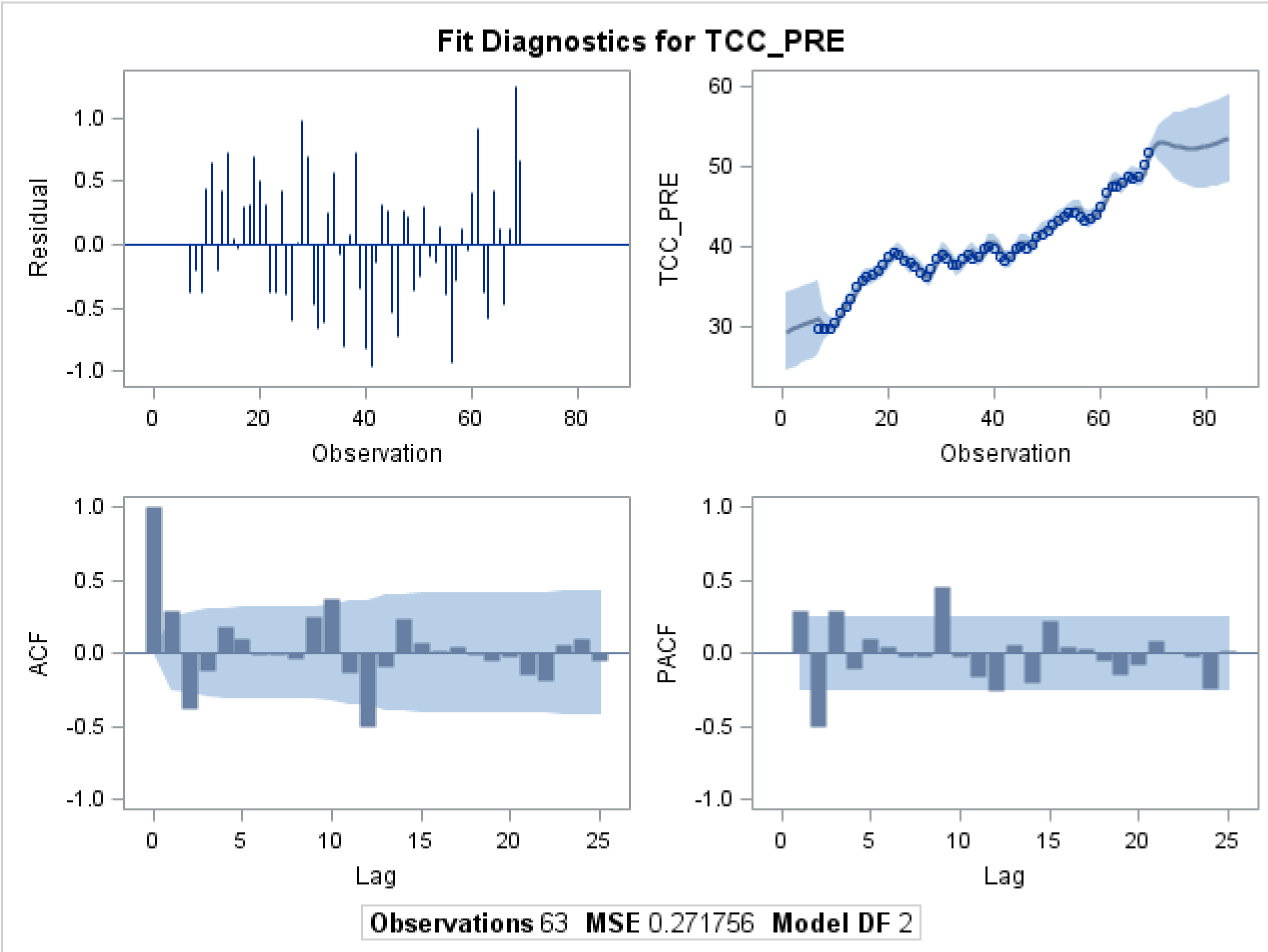
	1	2
1	0.2659662737	0
2	-0.753206079	0.7987849879

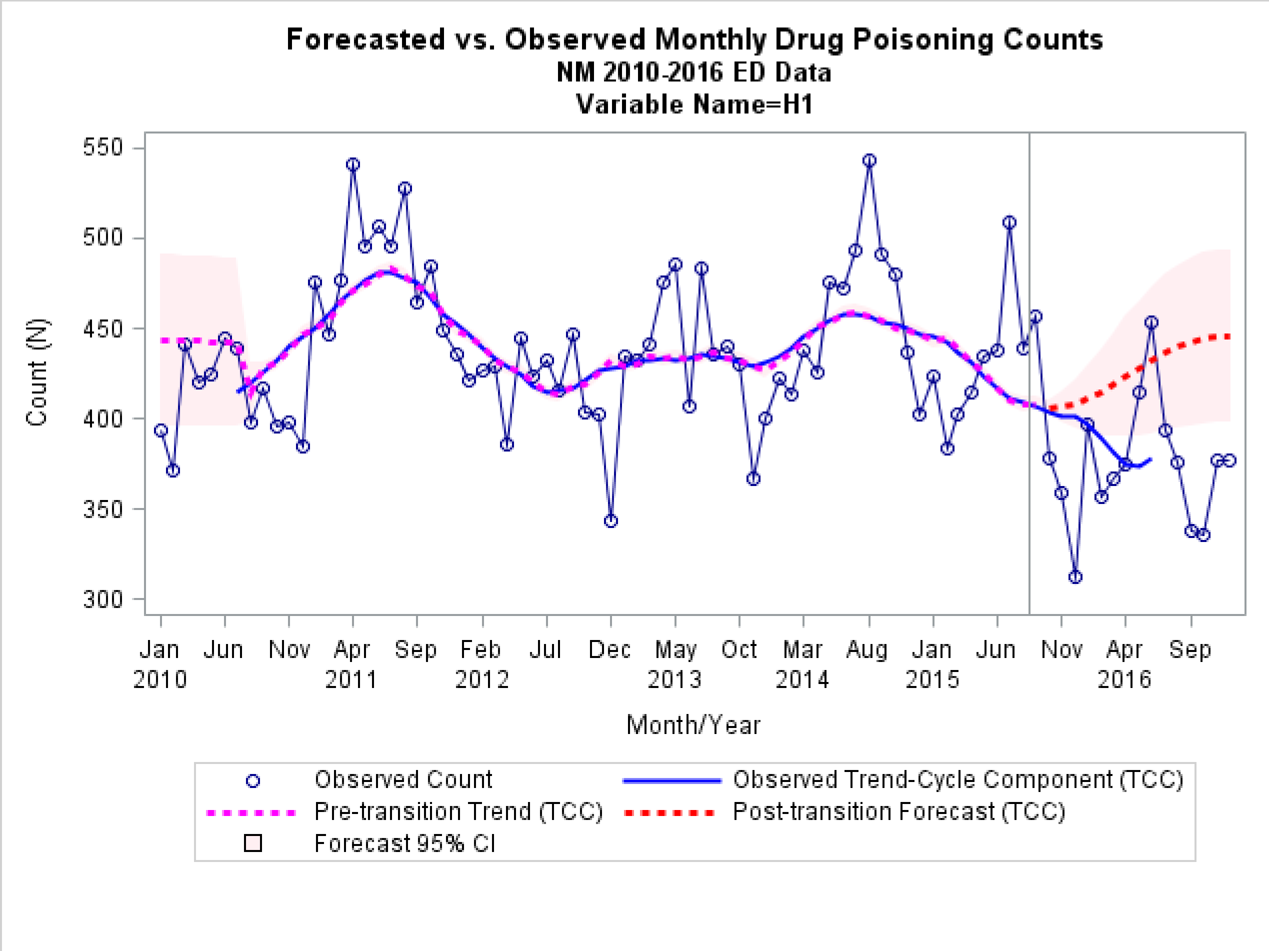
Autoregressive parameters assumed given

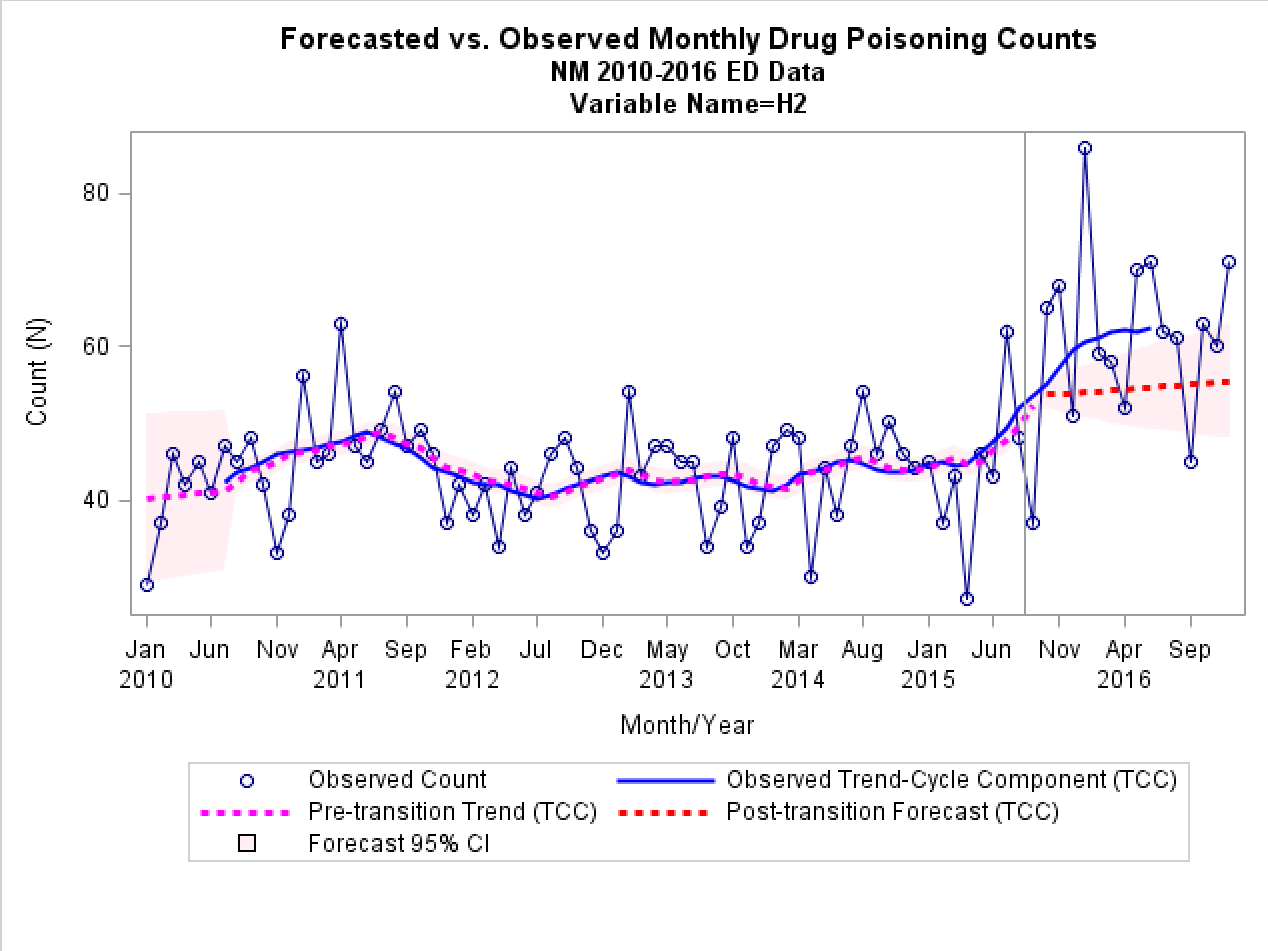
Variable	DF	Estimate	Standard Error	t Value	Approx Pr > |t|
Intercept	1	29.1456	1.4593	19.97	<.0001
TIME	1	0.2914	0.0339	8.59	<.0001

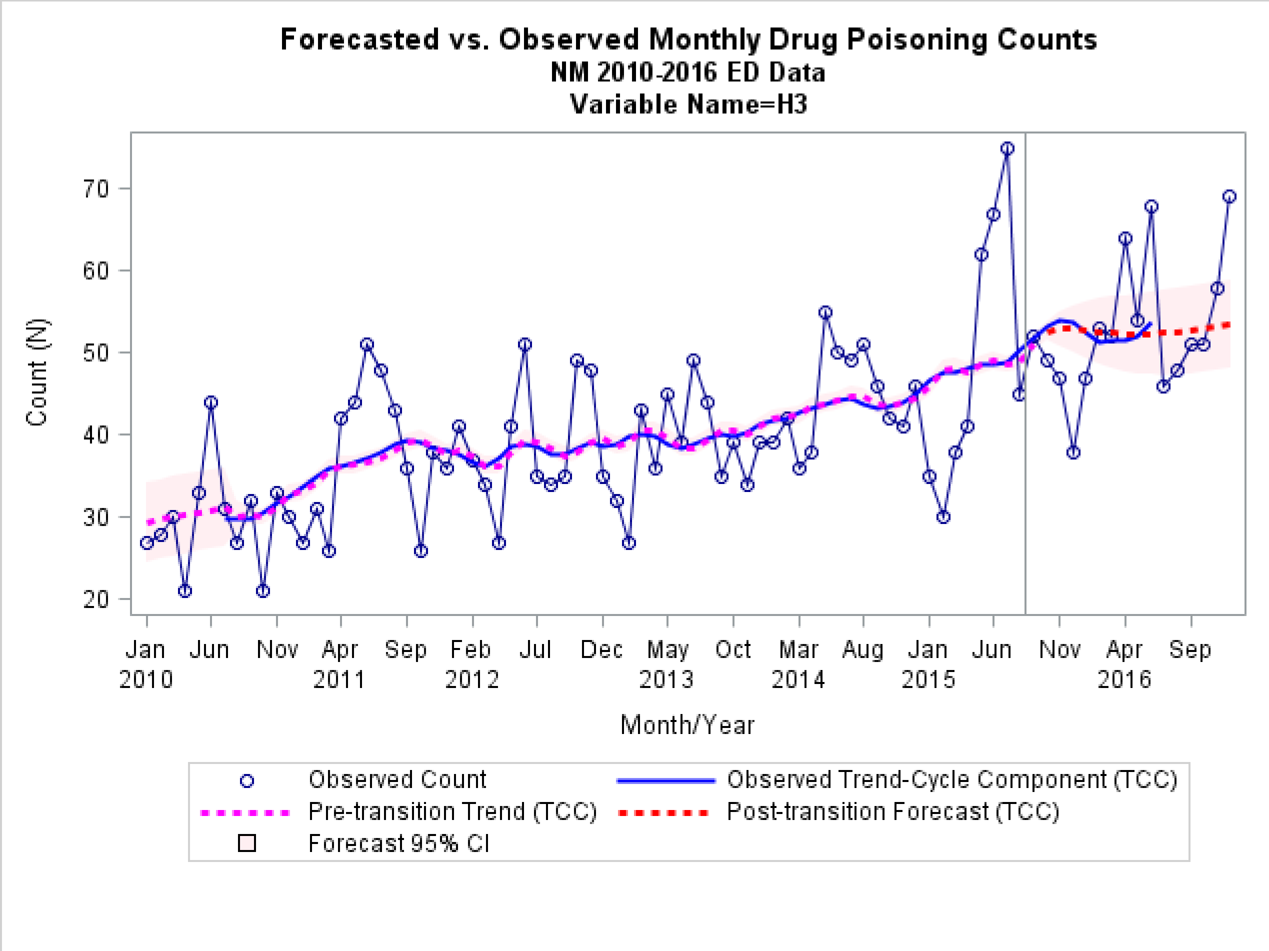
H3 FORECAST MODEL
NM 2010-2016 ED Data

The AUTOREG Procedure




Forecasted vs. Observed Monthly Drug Poisoning Counts
NM 2010-2016 ED Data
Variable Name=H1
Count (N)
550
500
450
400
350
300
Jan 2010
Jun
Nov
Apr 2011
Sep
Feb 2012
Jul
Dec
May 2013
Oct
Mar 2014
Aug
Jan 2015
Jun
Nov
Apr 2016
Sep
Month/Year
Observed Count
Observed Trend-Cycle Component (TCC)
Pre-transition Trend (TCC)
Post-transition Forecast (TCC)
Forecast 95% CI


Forecasted vs. Observed Monthly Drug Poisoning Counts
NM 2010-2016 ED Data
Variable Name=H2
Count (N)
80
60
40
Jan 2010
Jun
Nov
Apr 2011
Sep
Feb 2012
Jul
Dec
May 2013
Oct
Mar 2014
Aug
Jan 2015
Jun
Nov
Apr 2016
Sep
Month/Year
Observed Count
Observed Trend-Cycle Component (TCC)
Pre-transition Trend (TCC)
Post-transition Forecast (TCC)
Forecast 95% CI


Forecasted vs. Observed Monthly Drug Poisoning Counts
NM 2010-2016 ED Data
Variable Name=H3
Count (N)
70
60
50
40
30
20
Jan 2010
Jun
Nov
Apr 2011
Sep
Feb 2012
Jul
Dec
May 2013
Oct
Mar 2014
Aug
Jan 2015
Jun
Nov
Apr 2016
Sep
Month/Year
Observed Count
Observed Trend-Cycle Component (TCC)
Pre-transition Trend (TCC)
Post-transition Forecast (TCC)
Forecast 95% CI