ARIMA Modeling SAS Code

/\* Using ARIMA to forecast vechicle numbers \*/

**data** usecon;

set sashelp.usecon;

**run**;

/\*Creating difference and doube difference to verify stationarity \*/

**data** usecon2;

set usecon;

dvehicles = dif(VEHICLES);

sno = \_n\_;

**run**;

/\* ARIMA identification step - checking stationarity \*/;

**proc** **arima** data=usecon2;

identify var=VEHICLES stationarity=(adf);

**run**;

**proc** **arima** data=usecon2;

identify var=dvehicles stationarity=(adf);

**run**;

**proc** **sgplot** data= usecon2;

title 'Using SGPlot';

scatter y = VEHICLES x = sno ;

**run**;

**proc** **sgplot** data= usecon2;

title 'Using SGPlot';

scatter y = dvehicles x = sno ;

**run**;

/\*Identification step \*/

**proc** **arima** data = usecon2;

identify var = dvehicles minic;

**run**;

/\*Estimation and forecasting step \*/

/\* ARIMA (4,1,5) process \*/

**proc** **arima** data = usecon2;

identify var = dvehicles;

estimate p=**4** q=**1**;

forecast lead = **12**;

**run**;