SSRS REPORT

Given suburb and city, display local schools within 1km radius

Stored Procedure Used-

```
USE [PropertyAnalysis_EDW]
GO
/****** Object:  StoredProcedure [dbo].[sp_get_schools_within_range]    Script Date:
22/8/2020 10:53:21 AM ******/
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
ALTER procedure [dbo].[sp_get_schools_within_range]
@long float,
@lat float,
@within_km float

as
declare @g1 geography
begin
set @g1 = geography::Point(@lat, @long, 4326)

select s.SchoolName, s.Suburb, s.City, s.Latitude, s.Longitude,
@g1.STDistance(geography::Point(isnull(s.Latitude,0),isnull(s.Longitude,0),4326))/1000
as distance
from [dbo].[DimAUSchool] s
```

```
where
@g1.STDistance(geography::Point(isnull(s.Latitude,0),isnull(s.Longitude,0),4326))/1000
<= @within_km
end
```

Given suburb and city, display local public transport within 1km radius - update data sets

Stored Procedure Used-

```sql
USE [PropertyAnalysis_EDW]
GO
/****** Object:  StoredProcedure [dbo].[sp_get_Transport_within_range]    Script Date:
22/8/2020 10:58:53 AM ******/
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO

ALTER procedure [dbo].[sp_get_Transport_within_range]
@long float,
@lat float,
@within_km float

as
declare @g1 geography
begin

set @g1 = geography::Point(@lat, @long, 4326)

select t.StopName,t.Mode,t.City,t.Suburb,
```

```sql
@g1.STDistance(geography::Point(isnull(t.StopLatitude,0),isnull(t.StopLongitude,0),432
6))/1000 as Distance
 from [dbo].[TransportStagingTable] t
where
@g1.STDistance(geography::Point(isnull(t.StopLatitude,0),isnull(t.StopLongitude,0),432
6))/1000<= 1
and t.StopLatitude <= 90
end
```

Given suburb and city, display median rental value, median yearly income, and value changes of the property within 1 km radius

Property Rental Median Within x km

Suburb	City	ID1BRFlat	ID2BRFlat	ID3BRFlat	ID4BRflat	ID1BRHouse	ID2BRhouse	ID3BRHouse	ID4BRHouse	distance
Abbotsford	Melbourne	390	510	750			560	720		0
Abbotsford	Sydney	550	620	780			698	800	960	0
Abbotsford	Bundaberg									0
Chiswick	Sydney	550	620	780			698	800	960	0.612426281538837
Wareemba	Sydney	550	620	780			698	800	960	0.497688018608534

Stored Procedure used-

```sql
USE [PropertyAnalysis_EDW]
GO
/****** Object:  StoredProcedure [dbo].[sp_get_propertyrentalmedian_data_within_range]
Script Date: 22/8/2020 11:06:20 AM ******/
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
ALTER PROCEDURE [dbo].[sp_get_propertyrentalmedian_data_within_range]

@long float,
@lat float,
@within_km float

as
declare @g1 geography
begin
set @g1 = geography::Point(@lat, @long, 4326)

        select tbl.*

        from
```

```
              (
          SELECT
                dg.Suburb,
                c.City,
                fsr.[1BRFlat], fsr.[2BRFlat],fsr.[3BRFlat],fsr.[4BRflat],fsr.
[1BRHouse],fsr.[2BRhouse],fsr.[3BRHouse],fsr.[4BRHouse],
                dg.Longitude,
                dg.Latitude,

        @g1.STDistance(geography::Point(isnull(dg.Latitude,0),isnull(dg.Longitude,0),43
26))/1000 as distance

          FROM  DimGeography dg
          INNER JOIN
      FactSuburbRentalMedian fsr ON dg.DimGeographyKey = fsr.DimGeographyKey
          INNER JOIN
      DimCity c ON fsr.DimCityKey = c.DimCityKey) as tbl
          where tbl.distance <= @within_km
END
```

Given suburb and city, display crime rate within 1 km radius

Stored Procedure Used for Crime Rate-

```sql
USE [PropertyAnalysis_EDW]
GO
/****** Object:  StoredProcedure [dbo].[sp_get_crime_data_within_range]    Script
Date: 22/8/2020 11:18:08 AM ******/
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO

ALTER PROCEDURE [dbo].[sp_get_crime_data_within_range]

@long float,
@lat float,
@within_km float

as
declare @g1 geography
begin
set @g1 = geography::Point(@lat, @long, 4326)

            select tbl.*

            from
            (
            SELECT
                    dg.Suburb,
                    c.City,
                    fc.RecordedIncidents,
                    fc.Offences,
                    dg.Longitude,
                    dg.Latitude,

        @g1.STDistance(geography::Point(isnull(dg.Latitude,0),isnull(dg.Longitude,0),43
26))/1000 as distance

            FROM  DimGeography dg
            INNER JOIN
        FactCrimeSuburbCityTable fc ON dg.DimGeographyKey = fc.DimGeographyKey
            INNER JOIN
        DimCity c ON fc.DimCityKey = c.DimCityKey) as tbl
            where tbl.distance <= @within_km
END
```
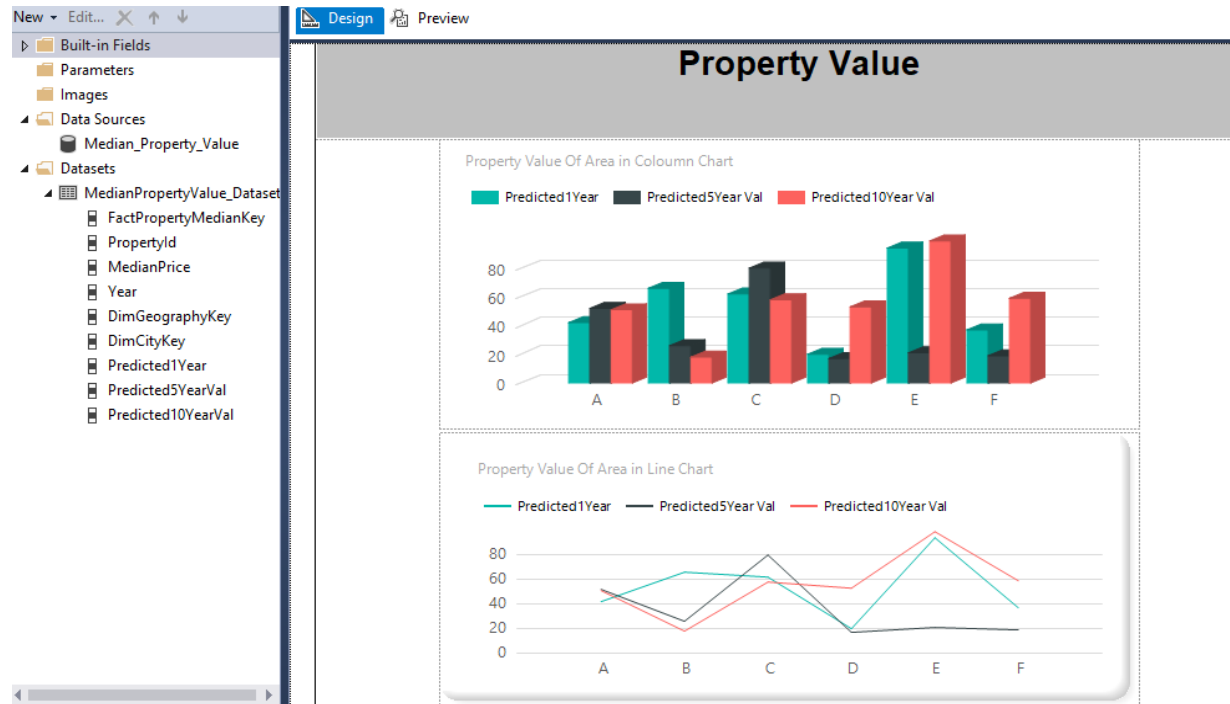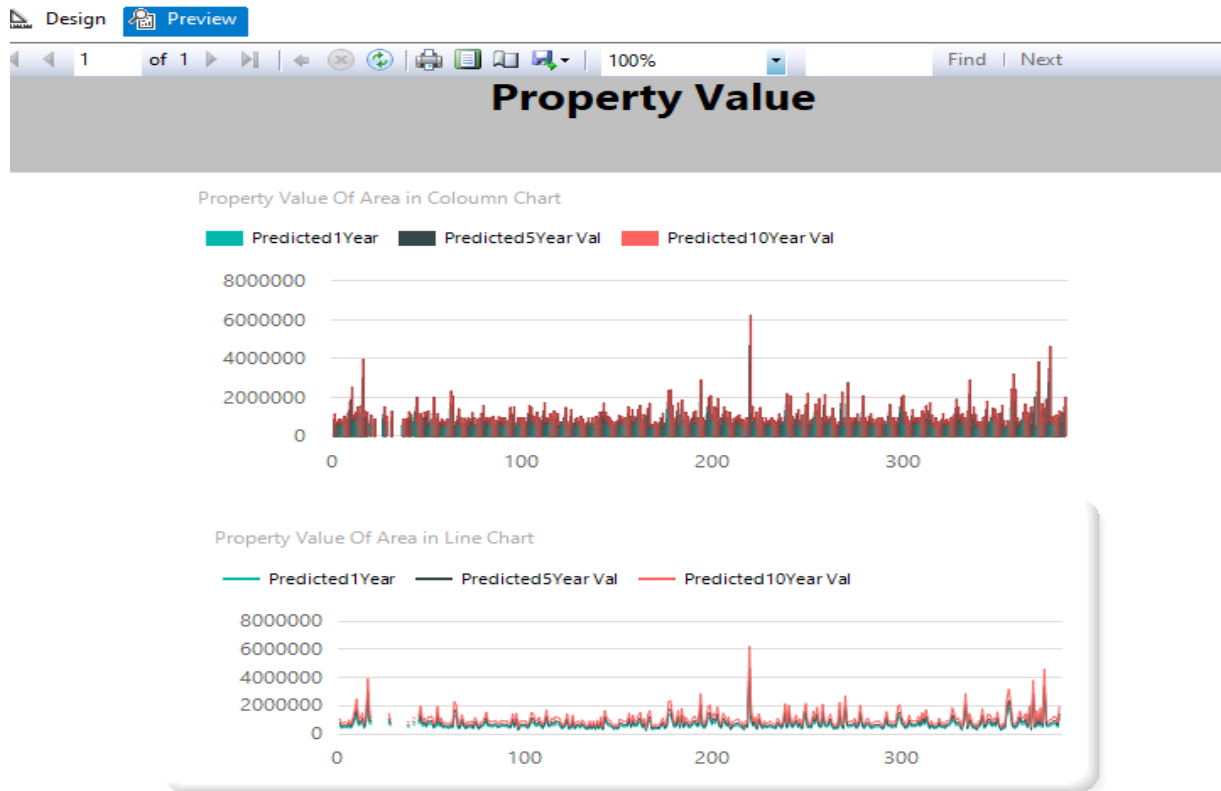
Given suburb and city, display property value of the area in Column chart and line chart of 1 year, 5 years and 10 years value

Design-

Preview-

Property Value

Property Value Of Area in Coloumn Chart

■ Predicted1Year   ■ Predicted5Year Val   ■ Predicted10Year Val

Property Value Of Area in Line Chart

— Predicted1Year   — Predicted5Year Val   — Predicted10Year Val

Query Used-

```sql
select fc.*, fc.MedianPrice*1.06 as Predicted1Year, fc.MedianPrice*power(1.06,5) as
Predicted5YearVal,
fc.MedianPrice*power(1.06,10) as Predicted10YearVal

from [dbo].[FactMedianPropertyValue] fc

where year = 2018
```