

## Implementation Phase Report

### Step-by-Step Chart Creation in Tableau

#### *Scenario 1: Overall Data Overview (KPI Cards)*

1. Open Tableau and connect your dataset (`Transformed\_Housing\_Data2.csv`).
2. Drag `Sale\_Price` to Rows and choose AVG – rename it to 'Average Sale Price' and format as currency (₹).
3. Drag `Basement Area (in Sqft)` to Rows and choose SUM – rename it to 'Total Basement Area'.
4. Use any non-null field to calculate COUNT – rename it to 'Total Houses'.
5. Use these three as KPI Cards in your Dashboard.

#### *Scenario 2: Total Sales by Years Since Renovation (Histogram)*

1. Create a bin: Right-click `Years Since Renovation` → Create → Bins → Bin Size: 5 or 10.
2. Drag `Years Since Renovation (bin)` to Columns.
3. Drag `Sale\_Price` to Rows and use COUNT or SUM.
4. Change chart type to Bar or Histogram.
5. Add color using `Ever\_Renovated\_Yes` or similar field.

#### *Scenario 3: Distribution of House Age by Renovation Status (Pie Chart)*

1. Create Calculated Field: `Renovation\_Status` = IF [Ever\_Renovated\_Yes] = 1 THEN "Renovated" ELSE "Not Renovated" END
2. Drag `Renovation\_Status` to Color and Label.
3. Drag a non-null field like `Sale\_Price` to Rows and choose COUNT.
4. Change Marks type to Pie and use COUNT field as Angle.

#### *Scenario 4: House Age Distribution by Bathrooms, Bedrooms, and Floors (Grouped Bar Chart)*

1. Create bins: Right-click `Age of House (in Years)` → Create → Bins → Bin Size: 10.
2. Drag `Age\_Group` (binned field) to Columns.
3. Drag one of `No of Bathrooms`, `No of Bedrooms`, or `No of Floors` to Color and Rows.
4. Use COUNT on any numeric field to show house counts.

5. Repeat for each feature in separate sheets.

## Dashboard Creation

1. Open a new Dashboard in Tableau.
2. Drag and drop all chart sheets (KPI Cards, Histogram, Pie, Grouped Bars).
3. Use containers for neat layout.
4. Add filters: `Renovation\_Status`, `Age\_Group`, `No of Bedrooms`, `Bathrooms`, `Floors`.
5. Apply filters to all relevant worksheets.
6. Format titles, legends, and tooltips for clarity.

## Tableau Story: Housing Market Trends

To guide viewers through the insights, a Tableau Story was created with the following story points:

### *1. Executive Overview (KPI Summary)*

Presents average sale price, house count, and total basement area. Offers a high-level snapshot of the market.

### *2. Impact of Renovation on House Sales*

Shows a histogram where recently renovated homes (0–10 years) are sold at higher prices.

### *3. Renovation Status Across House Ages*

Pie chart displays the proportion of renovated vs. non-renovated homes across age groups.

### *4. House Features by Age*

Grouped bar chart shows how newer homes have more bathrooms, bedrooms, and floors.

### *5. Interactive Exploration*

Dashboard with filters allows stakeholders to explore data based on specific features or renovation status.

The Tableau Story helps ABC Company present key housing insights step-by-step, making the dashboard easier to understand, share, and act upon.