# Tornado Database – Data Dictionary

## Table: Tornado

|  |  |  |
| --- | --- | --- |
| Field | Data Type | Description |
| TornadoID | INTEGER (PK) | Unique ID for each tornado |
| StateID | INTEGER (FK) | Links to the State where it occurred |
| RatingID | INTEGER (FK) | Links to the tornado's EF rating |
| EventTypeID | INTEGER (FK) | Links to the tornado’s event type |
| StartTime | TEXT | Date and time the tornado started |
| PathLengthMi | REAL | Path length in miles |

## Table: State

|  |  |  |
| --- | --- | --- |
| Field | Data Type | Description |
| StateID | INTEGER (PK) | Unique ID for each state |
| Name | TEXT | Full name of the state |
| Abbreviation | TEXT | 2-letter abbreviation |
| Region | TEXT | Region (e.g., Midwest, South) |
| Population | INTEGER | Population of the state |
| LandArea | REAL | Land area in square miles |

## Table: Rating

|  |  |  |
| --- | --- | --- |
| Field | Data Type | Description |
| RatingID | INTEGER (PK) | Unique ID for each EF rating |
| Code | TEXT | EF code (e.g., EF0–EF5) |
| Description | TEXT | Summary of expected damage |
| MinWindSpeed | INTEGER | Minimum wind speed (mph) for this rating |
| MaxWindSpeed | INTEGER | Maximum wind speed (mph) for this rating |
| DamageLevel | TEXT | Qualitative damage label (e.g., Moderate) |

## Table: EventType

|  |  |  |
| --- | --- | --- |
| Field | Data Type | Description |
| EventTypeID | INTEGER (PK) | Unique ID for the type of tornado event |
| Name | TEXT | Name of the event type |
| Description | TEXT | Description of the event type |
| LandOrWater | TEXT | Whether it occurred over land or water |
| FrequencyRank | INTEGER | Frequency rank (1 = most common) |
| ExampleRegion | TEXT | Where this type is commonly found |

## Table: CasualtyStats

|  |  |  |
| --- | --- | --- |
| Field | Data Type | Description |
| StatID | INTEGER (PK) | Unique ID for casualty record |
| TornadoID | INTEGER (FK) | Links to the tornado this record describes |
| Injuries | INTEGER | Number of injuries caused |
| Fatalities | INTEGER | Number of fatalities |
| PropertyDamage | REAL | Estimated property damage (in millions) |
| CropDamage | REAL | Estimated crop damage (in millions) |