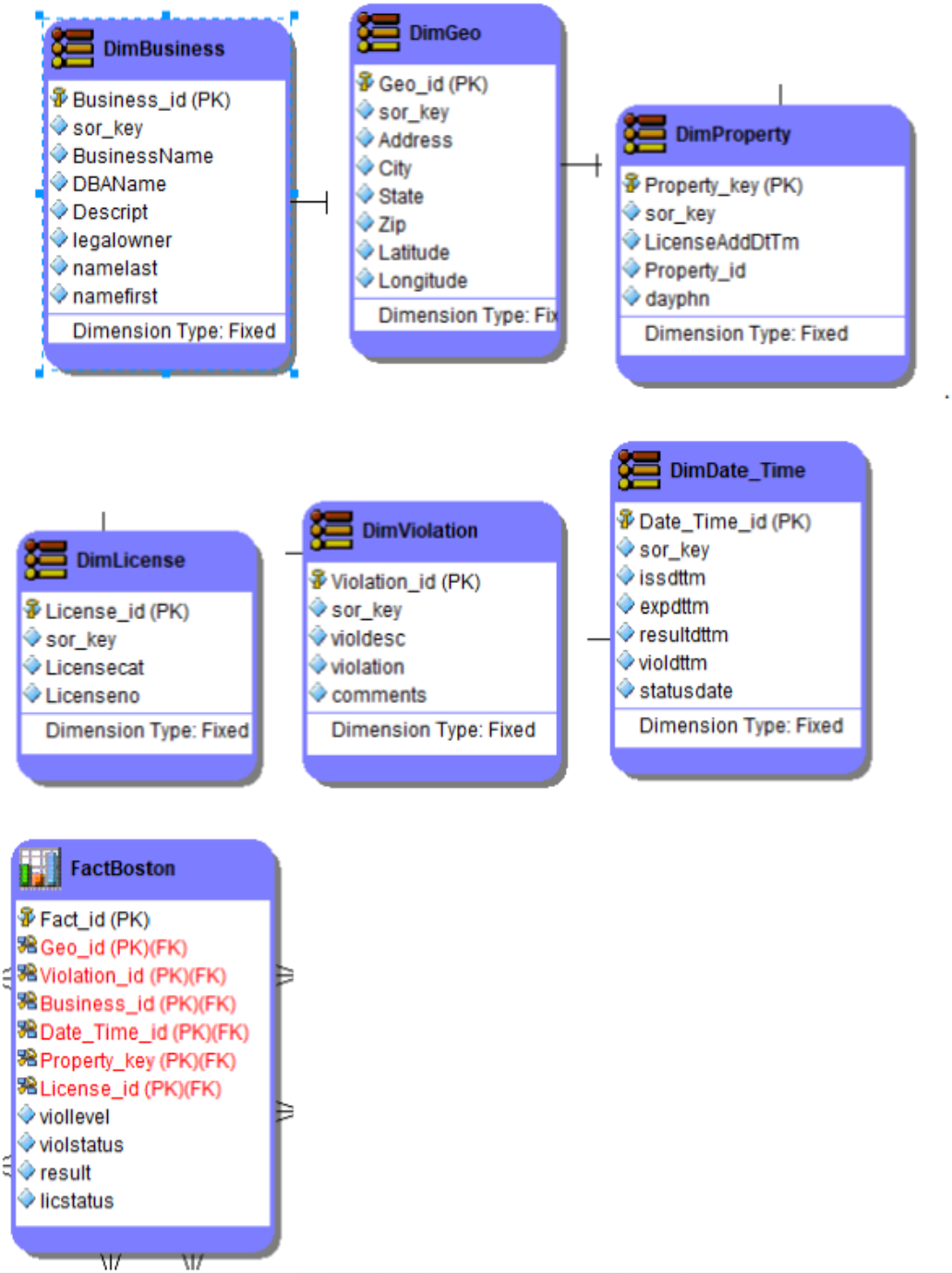
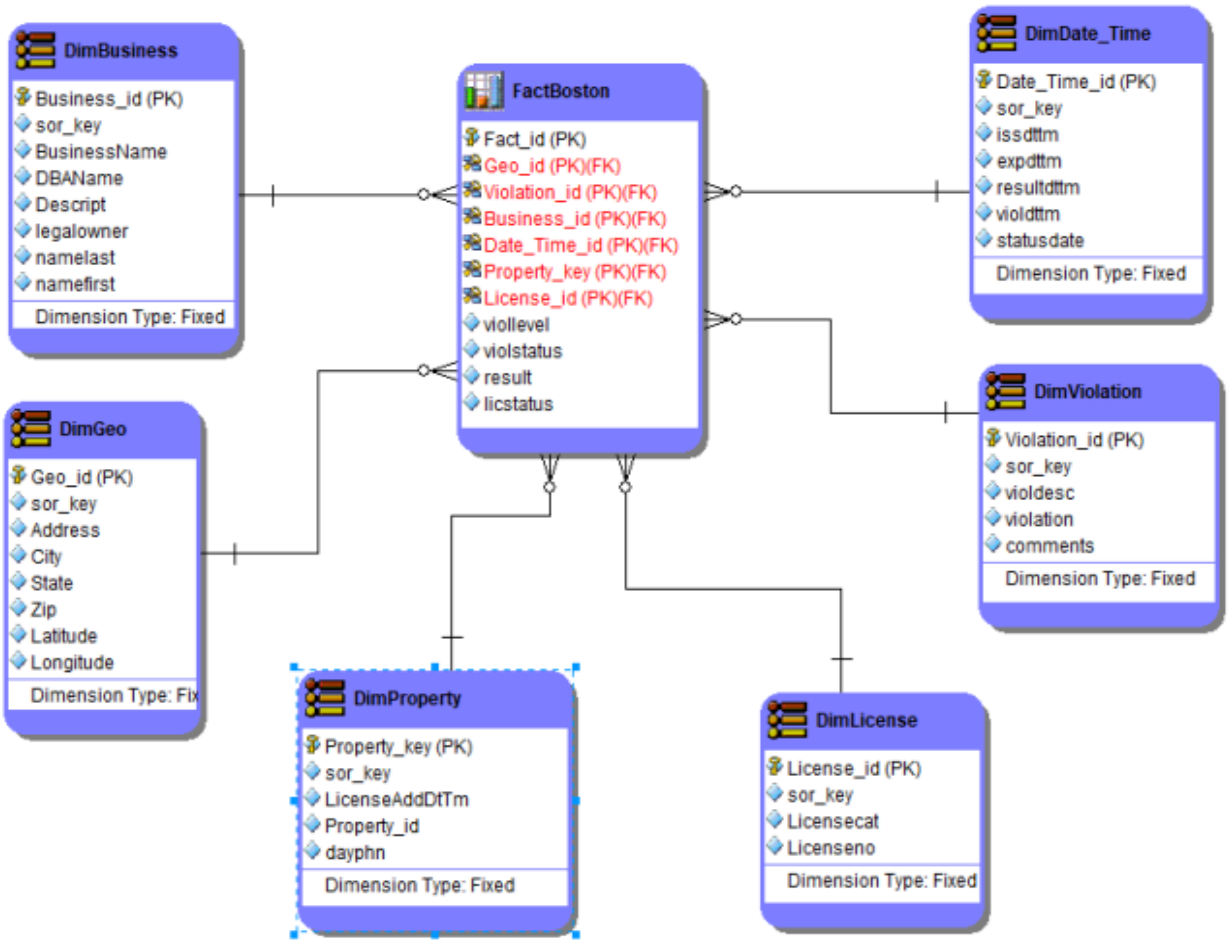
Report - Boston Food Inspections

1. Identify Dimensions & Facts –



2. Dimensional Data Model



3. DDL Schema

```
-- ER/Studio Data Architect SQL Code Generation
-- Project :      Boston_Final.DM1
-- Date Created : Friday, April 08, 2022 14:55:57

-- Target DBMS : MySQL 8.x
-- TABLE: DimBusiness

CREATE TABLE DimBusiness(
    Business_id     int   NOT NULL,
    sor_key         int   NOT NULL,
```

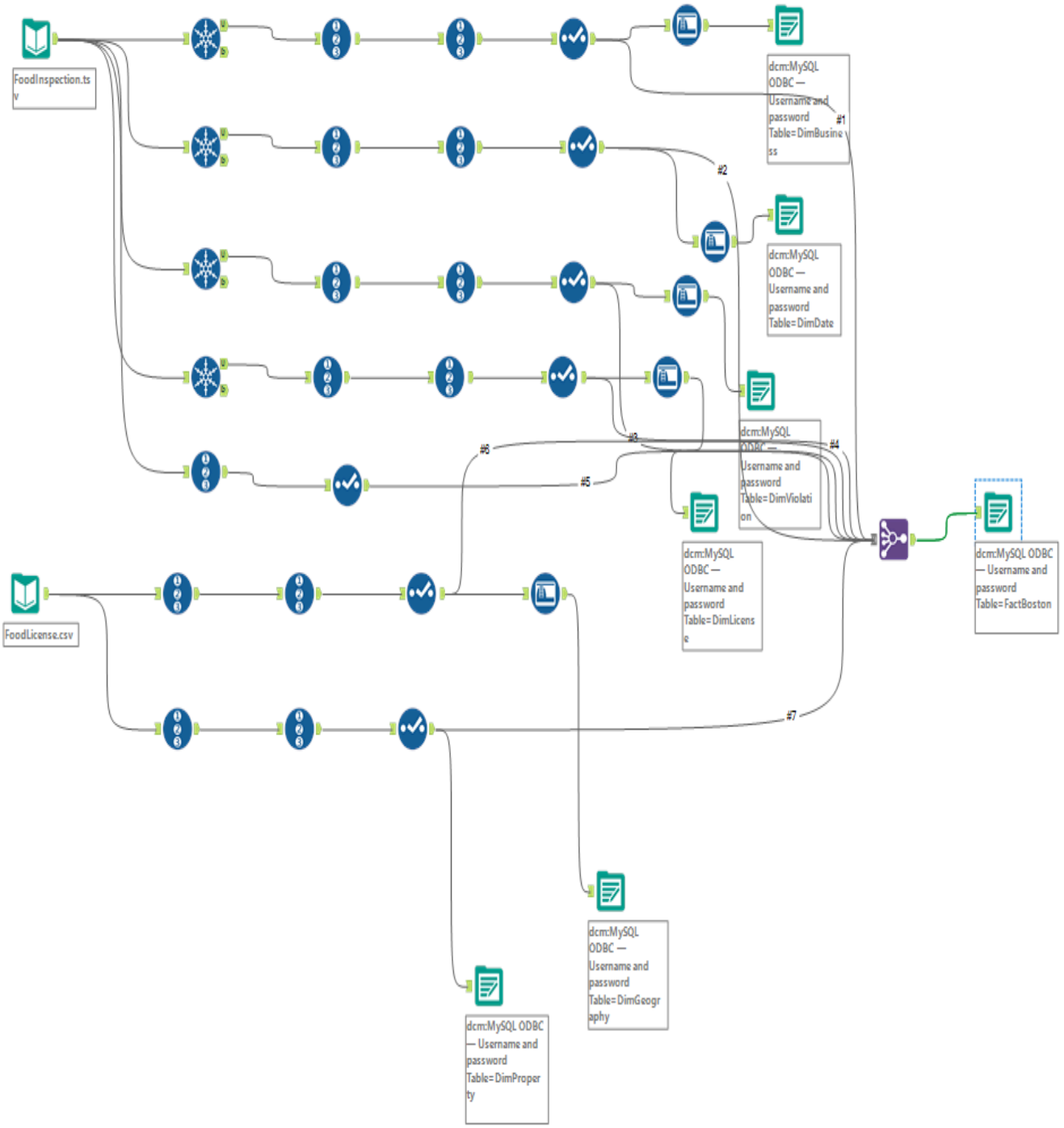
```
    BusinessName    CHAR(10),
    DBAName         CHAR(10),
    Descript        CHAR(10),
    legalowner      CHAR(10),
    namelast        CHAR(10),
    namefirst       CHAR(10),
    PRIMARY KEY (Business_id)
)ENGINE=MYISAM
;

-- TABLE: DimDate_Time
--

CREATE TABLE DimDate_Time(
    Date_Time_id    int   NOT NULL,
    sor_key         int   NOT NULL,
    issdttm         CHAR(10),
    expdttm         CHAR(10),
    resultdttm      CHAR(10),
    violdttm        CHAR(10),
    statusdate      CHAR(10),
    PRIMARY KEY (Date_Time_id)
)ENGINE=MYISAM
;

-- TABLE: DimGeo
--

CREATE TABLE DimGeo(
    Geo_id       int   NOT NULL,
    sor_key      int   NOT NULL,
    Address      CHAR(10),
    City         CHAR(10),
    State        CHAR(10),
    Zip          CHAR(10),
```

```
   Latitude     CHAR(10),
   Longitude    CHAR(10),
   PRIMARY KEY (Geo_id)
)ENGINE=MYISAM
;

--
-- TABLE: DimLicense
--

CREATE TABLE DimLicense(
   License_id    int   NOT NULL,
   sor_key       int   NOT NULL,
   Licensecat    CHAR(10),
   Licenseno     CHAR(10),
   PRIMARY KEY (License_id)
)ENGINE=MYISAM
;
--
-- TABLE: DimProperty
--

CREATE TABLE DimProperty(
   Property_idvvewf    int   NOT NULL,
   sor_key          int   NOT NULL,
   LicenseAddDtTm      CHAR(10),
   Property_id         CHAR(10),
   dayphn              CHAR(10),
   PRIMARY KEY (Property_idvvewf)
)ENGINE=MYISAM
;
```

```
--
-- TABLE: DimViolation
--

CREATE TABLE DimViolation(
   Violation_id   int   NOT NULL,
   sor_key        int   NOT NULL,
   violdesc       CHAR(10),
   violation      CHAR(10),
   comments       CHAR(10),
   PRIMARY KEY (Violation_id)
)ENGINE=MYISAM
;

-- TABLE: FactBoston
--

CREATE TABLE FactBoston(
   Fact_id           int   NOT NULL,
   Geo_id            int   NOT NULL,
   Violation_id      int   NOT NULL,
   Business_id       int   NOT NULL,
   Date_Time_id      int   NOT NULL,
   Property_key      int   NOT NULL,
   License_id        int   NOT NULL,
   viollevel         CHAR(10),
   violstatus        CHAR(10),
   result            CHAR(10),
   licstatus         CHAR(10),
   PRIMARY KEY (Fact_id, Geo_id, Violation_id, Business_id, Date_Time_id,
Property_idvvewf, License_id)
)ENGINE=MYISAM
;
```

```
--
-- TABLE: FactBoston
--

ALTER TABLE FactBoston ADD CONSTRAINT RefDimDate_Time1
   FOREIGN KEY (Date_Time_id)
   REFERENCES DimDate_Time(Date_Time_id)
;

ALTER TABLE FactBoston ADD CONSTRAINT RefDimGeo2
   FOREIGN KEY (Geo_id)
   REFERENCES DimGeo(Geo_id)
;

ALTER TABLE FactBoston ADD CONSTRAINT RefDimBusiness3
   FOREIGN KEY (Business_id)
   REFERENCES DimBusiness(Business_id)
;

ALTER TABLE FactBoston ADD CONSTRAINT RefDimViolation4
   FOREIGN KEY (Violation_id)
   REFERENCES DimViolation(Violation_id)
;

ALTER TABLE FactBoston ADD CONSTRAINT RefDimProperty5
   FOREIGN KEY (Property_idvvewf)
   REFERENCES DimProperty(Property_idvvewf)
;

ALTER TABLE FactBoston ADD CONSTRAINT RefDimLicense6
   FOREIGN KEY (License_id)
   REFERENCES DimLicense(License_id)
;
```

4. Data Preparation Alteryx Workflow



5. Table row counts

```
1 •    select count(*) from dimproperty
2
```

Result Grid | Filter Rows: | Export:

	count(*)
▶	3147

\

```
1 •    select count(*) from dimviolation
2
```

Result Grid | Filter Rows: | Export:

	count(*)
▶	797667

```
1 •    select count(*) from dimlicense
2
```

Result Grid | Filter Rows: | Export

	count(*)
▶	10353

```
1      select count(*) from dimdate
```

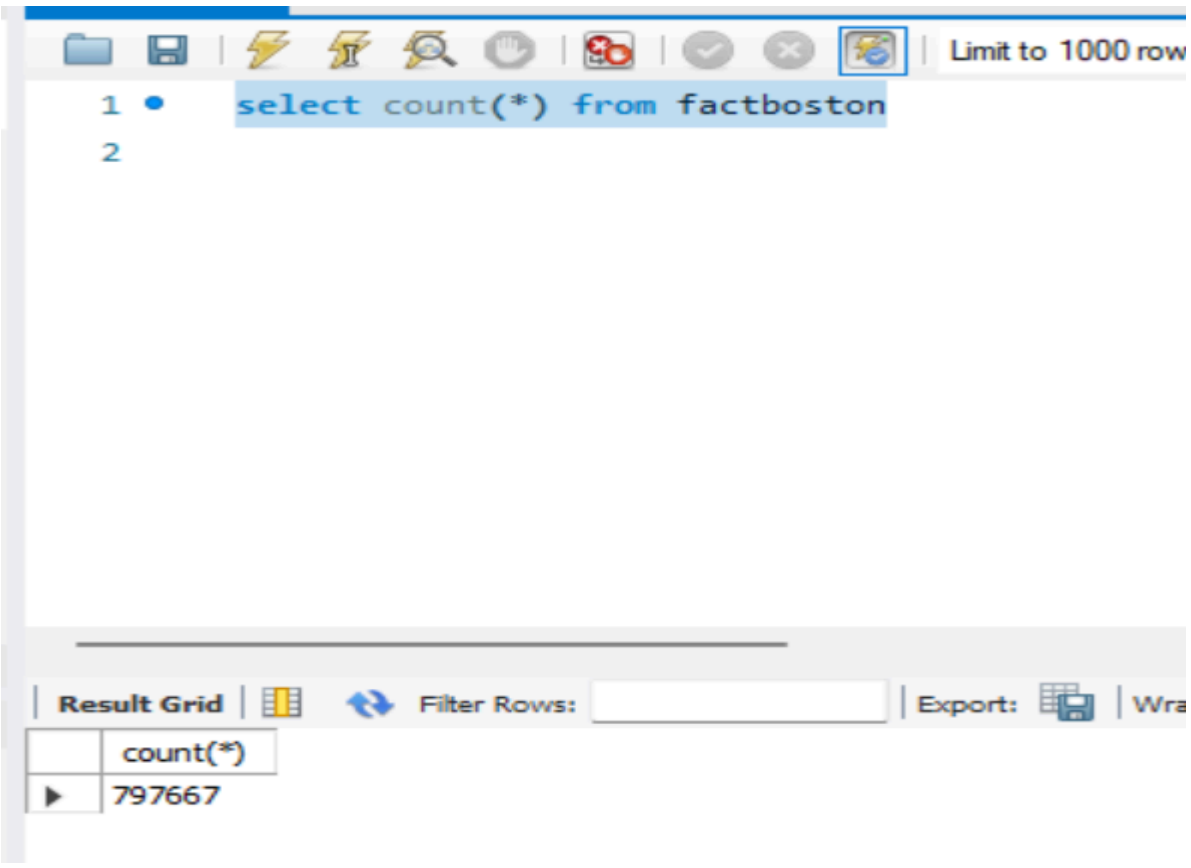
Result Grid | Filter Rows: | Export:

	count(*)
▶	797667

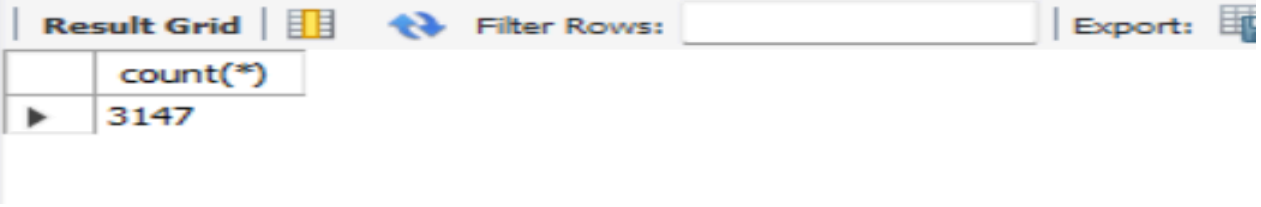
```
1    select count(*) from dimbusiness
```

Result Grid | Filter Rows: | Export:

	count(*)
▶	8631



```
1 •    select count(*) from dimgeography
```



	count(*)
▶	3147