

DBA 240 Final Project Business Requirements Document

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Client information: Rebound, Alternatives for Youth

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OVERVIEW

Rebound serves the needs of high school students in the Durham County public school system who have received out-of-school suspensions. While the initial offenses range from verbally showing disrespect to teachers to behaviors like smoking many of these students face obstacles to success in their daily life such as homelessness, drug addiction, mental health issues, poverty, lack of proficiency in English or have experienced traumatic events.

The program Rebound provides to these students:

- allows their record to show an in-school suspension in place of the more serious out-of-school suspension
- provides a safe and supportive atmosphere where students can complete their assigned school work during their suspension
- completes a comprehensive assessment of each student to determine the root causes of their negative behavior at school.
- provides a variety of services on site during the suspension and in addition refers students to other types of services to help them get and stay on track for graduation.

Privacy Implications of working with student data:

Individual student data is a highly protected class of information and thus data security concerns are a high priority for this project. Various classes of data will be included in the Rebound database with the following levels of sensitivity:

Non-sensitive: includes publicly released aggregate data from Durham County Public Schools.

FERPA: identifiable student data must meet FERPA privacy standards

Other data

DATABASE IMPLEMENTATION PHASES

Because cooperation with external government entities will be required for the analysis, design, and implementation of certain portions of the database this project is most efficiently implemented in phases:

Phase I

- eliminate manual entry of referral form into excel by Rebound staff
- add the Durham County Public school ID number to the referral form (if allowable)
- automate weekly attendance reports
- collect data on services provided to students by rebound
- collect data on referrals to additional outside services for later follow-up

Out-of-scope

anonymous survey data collection of students and parents

An existing outside tool such as SurveyMonkey would be the best approach to automating the survey data collection process. It is readily available and free or low cost and easy to use.

Phase II

- automate the JPCP reporting process through NC Allies
- address Elna B. Spaulding referral fields
- analyze probation officer referral data form
- address granular Risk Assessment data
- termination report (probation officers)

requires additional analysis

Phase III

- develop metrics and access to comparative data for analysing the effectiveness of Rebound
- collaborate with existing agencies and organizations (summer 2016)

requires additional analysis

The remainder of this document will focus on Phase I.

ENTITIES

STUDENT

REFERRAL

SUSPENSION

GUARDIAN

SERVICE

PROVIDER

REFERANT

ATTENDANCE
SCHEDULE

STUDENT

Students who have received out-of-school suspension are typically referred to the program by a school official but may refer themselves or be referred by a parent.

All information contained on the referral form must be captured in the database this includes:

student id, durham public school student ID, first name, last name, middle name, school, grade (9-12), address, city, state, ZIP, home phone, cell phone, email, DOB, concerns (from check list: gang involvement, substance use or abuse, recent history of fighting or aggression, recent history of suicidal thoughts or attempts, suspended more than once this school year, oppositional behavior, low intellectual functioning, homelessness or risk of homelessness, other), student strengths, foster care, juvenile probation, number of suspensions in previous 12 months, risk assessment score, trauma disclosed, expected graduation date, actual graduation date.

Rebound staff must add the following information:

Student Demographic information: race/ethnicity, free/reduced lunch Y/N, IEP, gender, language spoken at home

GUARDIAN

Each student record must be linked to a parent or guardian with the following data: guardian id, first name, last name, address, city, state, ZIP, email, and phone number(s) (home, work, cell), relationship to student. A student must have one guardian, but may have more than one guardian on file. Guardians may have one or more children in the program.

Guardian to Student is a many-to-many relationship and will be connected via an intersection table.

REFERRAL

For each individual referral for a student (some students are referred multiple times for repeated suspensions) the following data needs to be captured: student id, referral type (school, self, parent/guardian, court), referrant id, referral date, reason for suspension, checkbox for received parent permission for Rebound referral, reason for not attending Rebound (in cases where the student chooses not to attend Rebound during the suspension).

Referral types:

- SELF (self-referrals will link back to the student)
- GUARDIAN (parent/guardian referrals will link back to the guardian table)
- SCHOOL (Durham County Public School referrals will link back to the DCPS table)
- COURT (court referrals will link back to the justice table)

Referrals made by students and parents will link back to their contact information contained in the student and guardian tables.

REFERRAL (continued)

School Referrals

DCPS referrals will link back to a DCPS table containing the contact information of the referrant: referrant id (employee id), first name, last name, school, phone number, email, position/title (e.g. guidance counselor, principal).

Court Referrals

Data contained in Court Referral forms will be collected in the JUSTICE table. Fields include: referral id, NC-JOIN id, program, county, juvenile justice involvement, court ordered, diversion plan or contract, risk score.

Student information contained in NC DPS JJ/JCPC referrals is considerable, however, this aspect of this database requires further analysis and portions of this data is out of scope at this time.

REBOUND SUSPENSION

For each suspension spent at Rebound the following information must be kept:

suspension id, referral id, start date, end date, length of suspension (number of days), level of completion, student reason for attending rebound, assigned staff, level of engagement, tree completed, exit survey completed, wrap-up meeting completed, schoolwork assessment completed.

SERVICE

Students may receive a variety of individualized counseling and with counselors, tutors and social workers, and in addition may sometimes be referred to other care providers or organizations. Data to be captured includes: suspension id, service referral indicator, date of service or referral, service type, provider id, duration (# hours), referred service provided indicator, follow-up date, notes.

PROVIDER

Provider id, provider type, first name, last name, organization, home phone number, cell phone number, work phone number, email, address, city, state, zip, website, note.

ATTENDANCE SCHEDULE

Dates that each students are in attendance at Rebound must be captured and sent back to their high school on a weekly basis: suspension id, date, suspension status, attendance status, note.

LOOK-UP TABLES

COMPLETION CODE

| COMPLETION CODE | COMPLETION CODE DESCRIPTION |
|-----------------|------------------------------|
| 04 | SUCCESSFUL COMPLETION |
| 03 | SATISFACTORY COMPLETION |
| 02 | UNSUCCESSFUL COMPLETION |
| 01 | TERMINATED FOR NONCOMPLIANCE |

ENGAGEMENT LEVEL

| ENGAGEMENT LEVEL CODE | ENGAGEMENT LEVEL CODE DESCRIPTION |
|-----------------------|-----------------------------------|
| 04 | HIGHLY ENGAGED |
| 03 | ENGAGED |
| 02 | PARTIALLY ENGAGED |
| 01 | DISENGAGED |

SUSPENSION STATUS CODE

| SUSPENSION STATUS CODE | SUSPENSION STATUS DESCRIPTION |
|------------------------|-------------------------------|
| 01 | ASSIGNED TO REBOUND |
| 02 | REBOUND CLOSED |
| 03 | REBOUND FULL |
| 04 | WAIT-LISTED |
| 05 | NOT ASSIGNED TO REBOUND |

ATTENDANCE STATUS CODE

| ATTENDANCE STATUS CODE | ATTENDANCE STATUS DESCRIPTION |
|------------------------|-------------------------------|
| 01 | PRESENT |
| 02 | ABSENT |
| 03 | EXCUSED ABSENCE |
| 04 | OTHER |

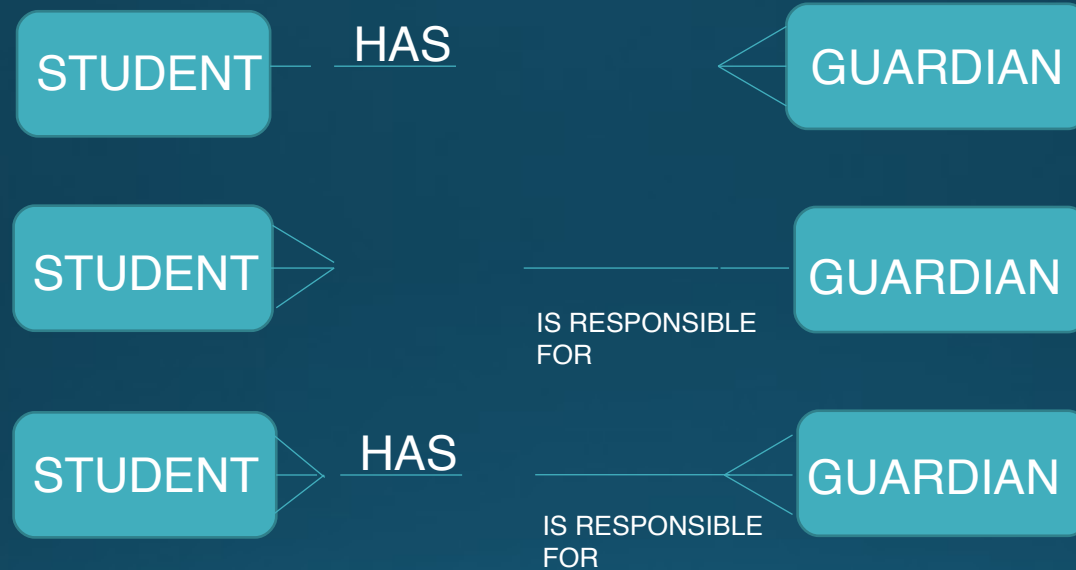
REFERRAL TYPE

| REFERRAL TYPE CODE | REFERRAL TYPE DESCRIPTION |
|--------------------|---------------------------|
| 01 | SELF |
| 02 | PARENT/GUARDIAN |
| 03 | SCHOOL |
| 04 | COURT |

ENTITY RELATIONSHIPS

MATRIX

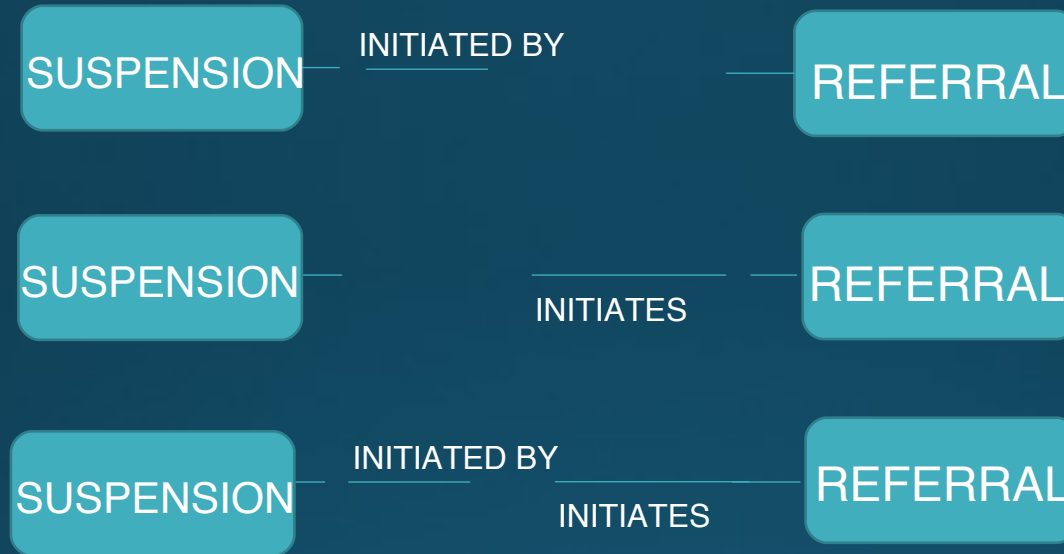
| | STUDENT | GUARDIAN | REFERRAL | SUSPENSION | ATTENDANCE SCHEDULE | SERVICE | PROVIDER | REFERRANT |
|---------------------|--------------------|----------|-----------------|---------------|---------------------|----------|----------------|---------------|
| STUDENT | | HAS | RECEIVES A | | | | | |
| GUARDIAN | IS RESPONSIBLE FOR | | | | | | | |
| REFERRAL | IS WRITTEN FOR | | | INITIATES | | | | IS WRITTEN BY |
| SUSPENSION | | | IS INITIATED BY | | HAS A | INCLUDES | | |
| ATTENDANCE SCHEDULE | | | | IS FOR | | | | |
| SERVICE | | | | OCCURS DURING | | | IS PROVIDED BY | |
| PROVIDER | | | | | | PROVIDES | | |
| REFERRANT | | | COMPLETES A | | | | | |



Each student must have one or more guardians.
Each guardian must be responsible for one or more students.

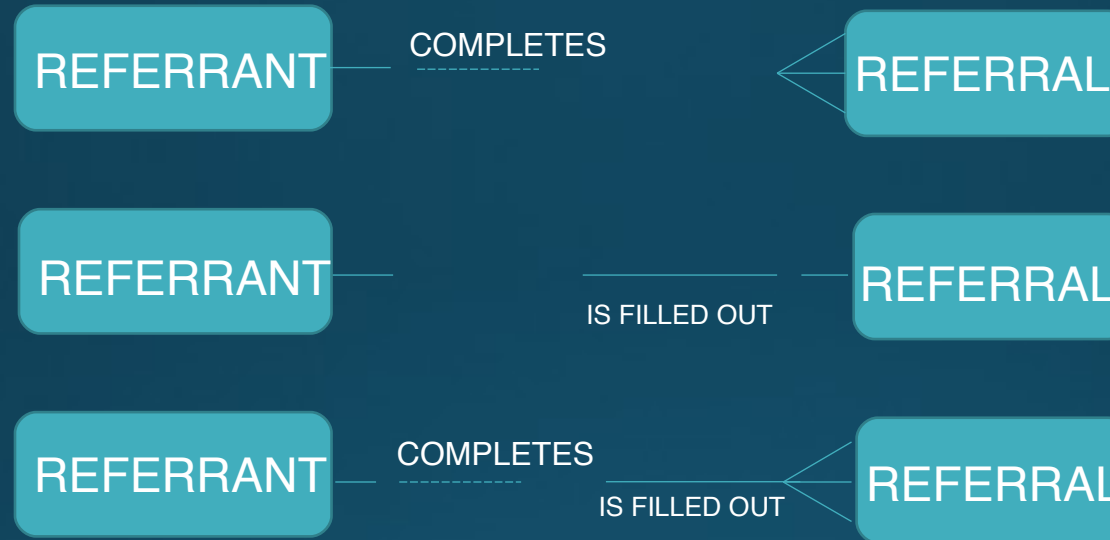


Each student must receive one or more referrals.
Each referral must be written for one and only one student.

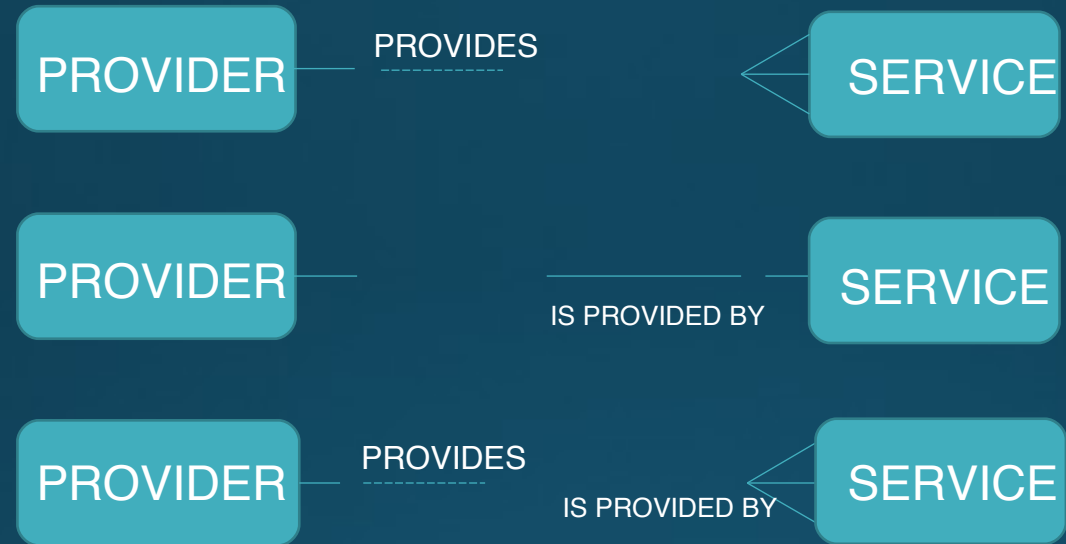


Each Rebound suspension must be initiated by one and only one referral.

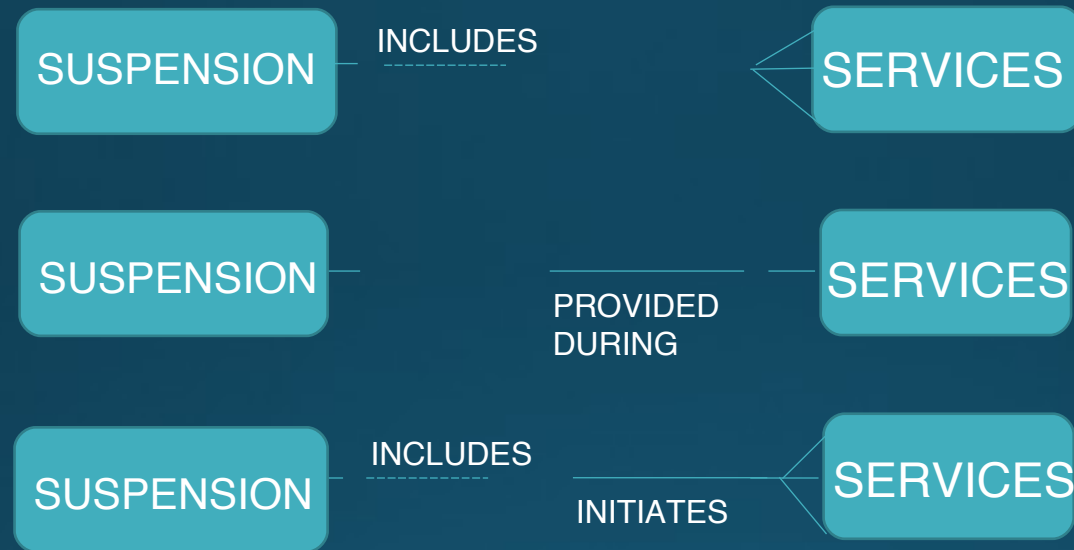
Each referral may initiate one and only one Rebound suspension spent at Rebound.



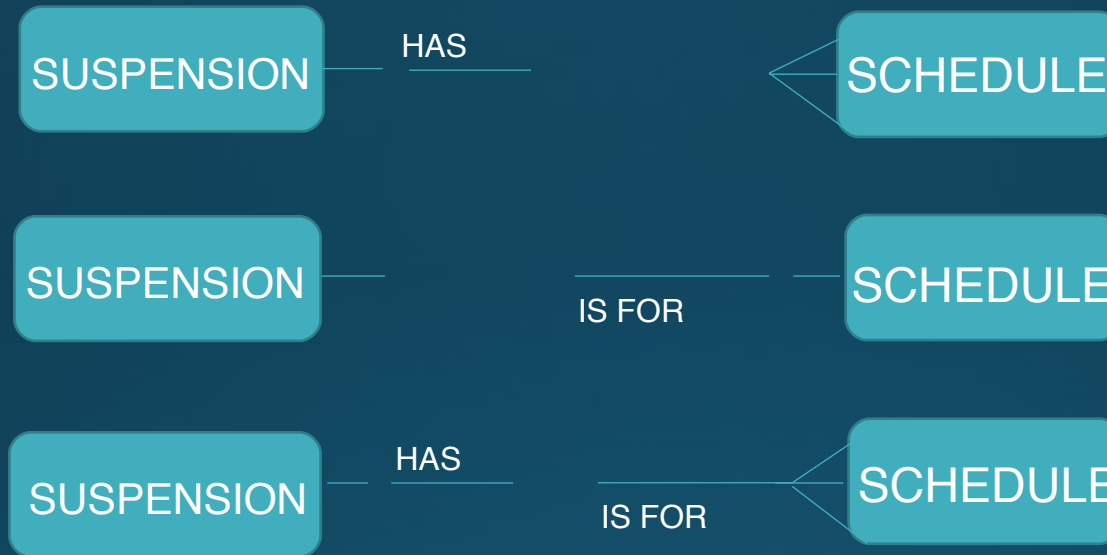
Each referrant may complete one or more referrals.
Each referral to Rebound must be filled out by one and only one referrant.



Each provider may provide one or more services.
Each service is provided by one and only one provider.

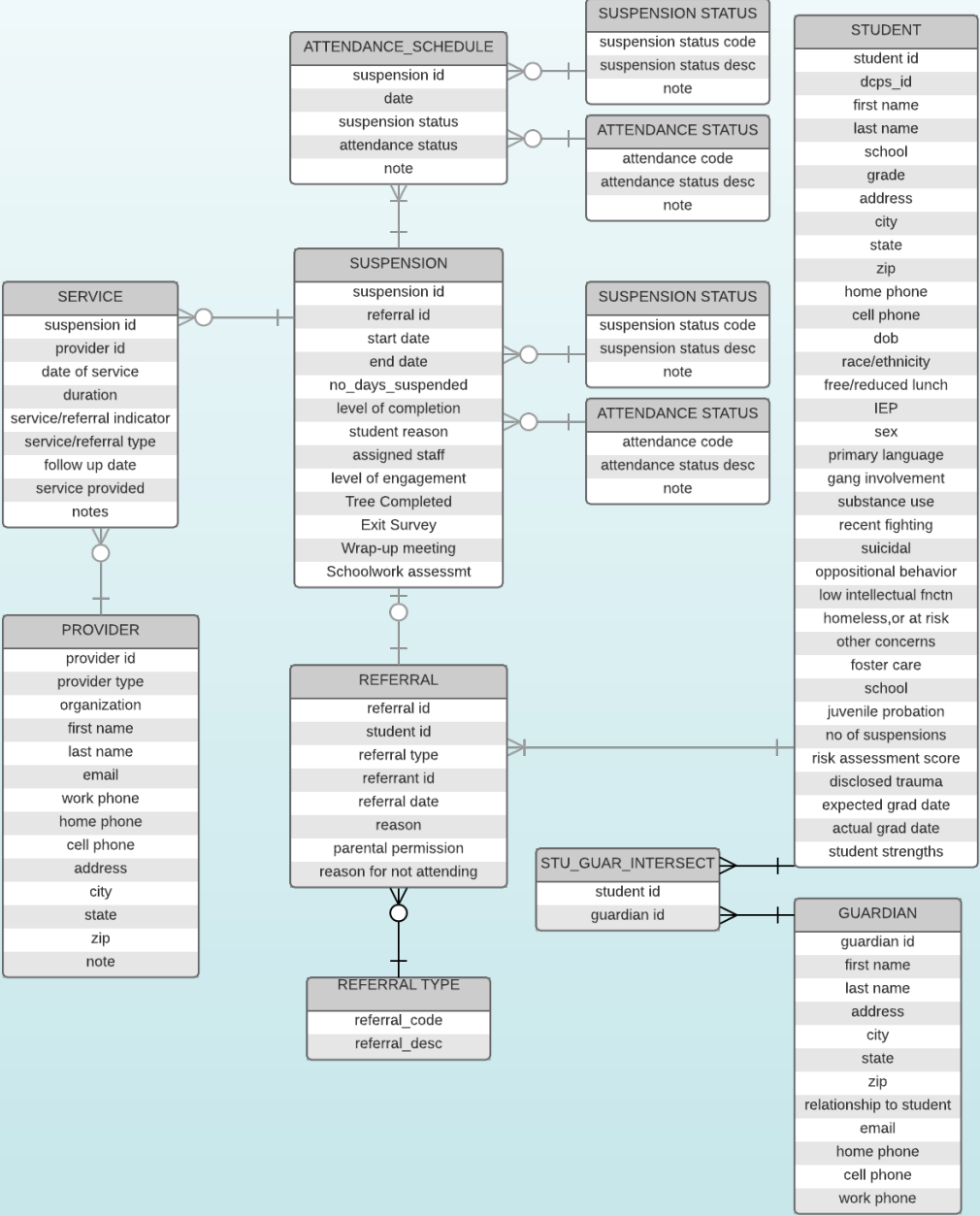


Each suspension may include one or more services.
Each service is provided in conjunction with one and only one suspension.

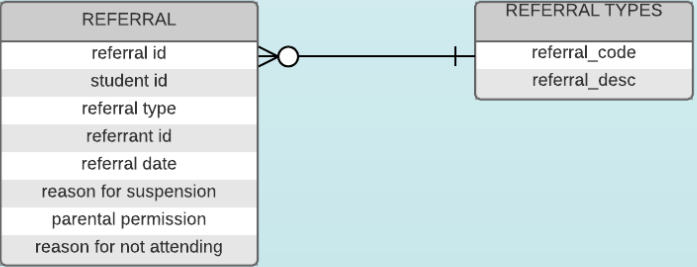
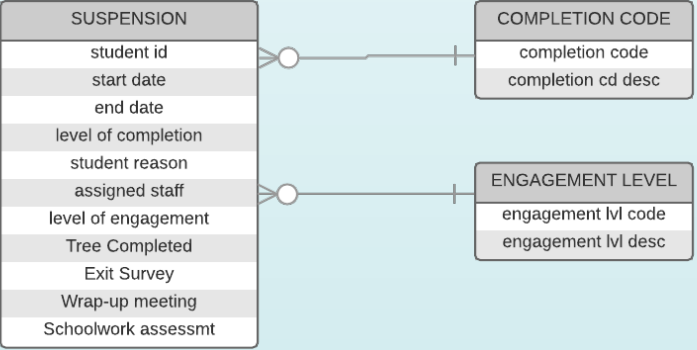
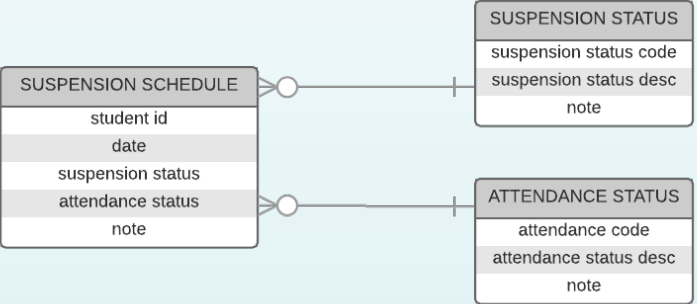


Each suspension must have one or more attendance schedule records (one for each day).
Each attendance schedule record must be for one and only one suspension.

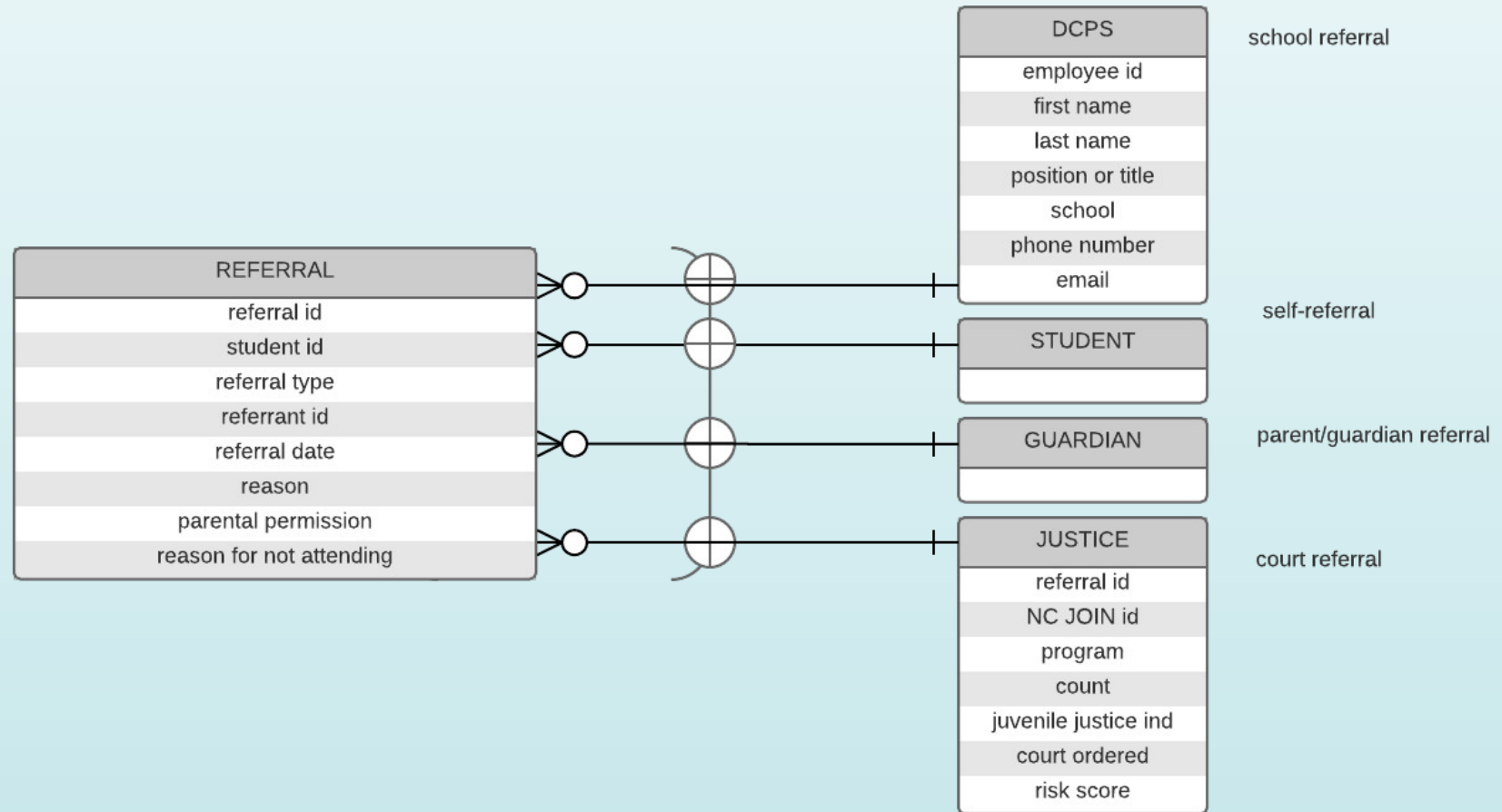
REBOUND
ENTITY RELATIONSHIP DIAGRAM
Part A



REBOUND
LOOK-UP TABLES
Part B



REBOUND
REFERRAL ARC
Part C



LOGICAL MODEL TABLE STRUCTURE, SAMPLE DATA AND SQL

REBOUND
LOGICAL DESIGN

| SERVICES | | |
|----------|------------------|----------|
| PK | suspension_id | INT |
| PK | service_date | DATE |
| PK | ser_type | VARCHAR2 |
| | ser_ref_ind | CHAR(1) |
| FK | provider_ID | INT |
| | duration_hrs | INT |
| | follow_up_date | DATE |
| | service_provided | CHAR(1) |
| | note | VARCHAR2 |

| SCHEDULES | | |
|-----------|---------------|----------|
| PK | suspension_id | INT |
| PK | date | DATE |
| FK | susp_status | INT |
| FK | attend_status | INT |
| | note | VARCHAR2 |

| STUDENTS | | |
|----------|------------------|----------|
| PK | student_id | INT |
| UI | dcps_student_id | INT |
| | fname | VARCHAR2 |
| | lname | VARCHAR2 |
| | school | VARCHAR2 |
| | grade | INT |
| | address | VARCHAR2 |
| | city | VARCHAR2 |
| | state | CHAR(2) |
| | zip | INT |
| | home_phone | CHAR(12) |
| | cell_phone | CHAR(12) |
| | dob | DATE |
| | race | VARCHAR2 |
| | lunch | INT |
| | sex | CHAR(1) |
| | language | VARCHAR2 |
| | gang | CHAR(1) |
| | substance | CHAR(1) |
| | fighting | CHAR(1) |
| | suicidal | CHAR(1) |
| | behavior | CHAR(1) |
| | low_intel_fn | CHAR(1) |
| | homelessness | CHAR(1) |
| | other | CHAR(1) |
| | foster | CHAR(1) |
| | juv_pro | CHAR(1) |
| | no_suspen | INT |
| | risk_assess | INT |
| | trauma | CHAR(1) |
| | exp_grad_date | DATE |
| | actual_grad_date | DATE |
| | iep | CHAR(1) |
| | risk_score | INT |
| | strengths | VARCHAR2 |

| PROVIDERS | | |
|-----------|---------------|----------|
| PK | provider_id | INT |
| | provider_type | VARCHAR2 |
| | organization | VARCHAR2 |
| | fname | VARCHAR2 |
| | lname | VARCHAR2 |
| | address | VARCHAR2 |
| | city | VARCHAR2 |
| | state | CHAR(2) |
| | zip | CHAR(10) |
| | email | VARCHAR2 |
| | home_phone | CHAR(12) |
| | cell_phone | CHAR(12) |
| | work_phone | CHAR(12) |
| | note | VARCHAR2 |

| GUARDIANS | | |
|-----------|------------|----------|
| PK | guar_id | INT |
| | fname | VARCHAR2 |
| | lname | VARCHAR2 |
| | address | VARCHAR2 |
| | city | VARCHAR2 |
| | state | CHAR(2) |
| | zip | CHAR(10) |
| | relation | VARCHAR2 |
| | email | VARCHAR2 |
| | home_phone | CHAR(12) |
| | cell_phone | CHAR(12) |
| | work_phone | CHAR(12) |

| SUSPENSIONS | | |
|-------------|-------------------|-------------|
| PK | suspension_id | INT |
| FK | referral_id | INT |
| | start_date | DATE |
| | end_date | DATE |
| | no_days_suspended | INT |
| FK | lvl_complete | INT |
| FK | assign_staff | INT |
| FK | lvl_engamt | INT |
| | student_reason | VARCHAR(40) |
| | tree | CHAR(1) |
| | survey | CHAR(1) |
| | wrap_up | CHAR(1) |
| | school_assess | CHAR(1) |

| REFERRALS | | |
|-----------|------------------|--------------|
| PK | referral_id | INT |
| FK | student_id | INT |
| FK | referral_type | VARCHAR2(20) |
| FK | referrant_id | INT |
| | referral_date | DATE |
| | reason_suspended | VARCHAR2(20) |
| | guard_peris | CHAR(1) |
| | reason_not_atten | VARCHAR(20) |

| STU_GUA_INTERSECTION | | |
|----------------------|------------|-----|
| PK | student_id | INT |
| PK | guar_id | INT |

LOOK-UP TABLES

| COMPL_CODE | | |
|------------|-----------------|----------|
| PK | completion_code | INT |
| | comp_code_desc | VARCHAR2 |

| ENGAGEMENT_LVL | | |
|----------------|--------------------|----------|
| PK | engagement_lm_cd | INT |
| | engagement_lm_desc | VARCHAR2 |

| SUSP_STATUS | | |
|-------------|------------------|----------|
| PK | susp_status_cd | INT |
| | susp_status_desc | VARCHAR2 |
| | susp_status_note | VARCHAR2 |

| ATTENDANCE_STATUS | | |
|-------------------|------------------|----------|
| PK | attn_cd | INT |
| | attn_status_desc | VARCHAR2 |
| | attn_status_note | VARCHAR2 |

| REFERRAL_TYPES | | |
|----------------|----------|--------------|
| PK | ref_code | INT |
| | ref_desc | VARCHAR2(20) |

ADDITIONAL TABLES

| DCPS | | |
|------|-------------|----------|
| PK | employee_id | INT |
| | fname | VARCHAR2 |
| | lname | VARCHAR2 |
| | title | VARCHAR2 |
| | school | VARCHAR2 |
| | phone | CHAR(12) |
| | email | VARCHAR2 |

| JUSTICE | | |
|---------|----------------------|--------------|
| PK | referral_id | INT |
| | NC_JOIN_id | INT |
| | program | VARCHAR2(20) |
| | county | VARCHAR2(20) |
| | juvenile_justice_ind | CHAR(1) |
| | court_ordered_ind | CHAR(1) |
| | risk_score | INT |

COMPLETION CODE

| COMPLETION_CODE | compl_code | compl_code_desc |
|-----------------|------------|------------------------------|
| KEY | PK | |
| TYPE | INT | VARCHAR2(30) |
| INSTANCES: | 04 | Successful completion |
| | 03 | Satisfactory completion |
| | 02 | Unsuccessful completion |
| | 01 | Terminated for noncompliance |

```
CREATE TABLE completion_code (  
    compl_code INTEGER  
    CONSTRAINT compl_code_pk PRIMARY  
KEY,    compl_code_desc VARCHAR2(30));
```

ENGAGEMENT LEVEL

| ENGAGEMENT_LVL | engagement_lvl_code | engagement_lvl_desc |
|----------------|---------------------|---------------------|
| KEY | PK | |
| TYPE | INT | VARCHAR2(30) |
| INSTANCES: | 04 | Highly engaged |
| | 03 | Engaged |
| | 02 | Partially engaged |
| | 01 | Disengaged |

```
CREATE TABLE engagement_lvl (  
    engagement_lvl_code INTEGER  
        CONSTRAINT engagement_lvl_code_pk PRIMARY  
KEY,    engagement_lvl_desc VARCHAR2(30)  
);
```


ATTENDANCE STATUS

| ATTENDANCE_STATUS | attend_status_code | attend_status_desc |
|-------------------|--------------------|--------------------|
| KEY | PK | |
| TYPE | INT | VARCHAR2(20) |
| INSTANCES: | 01 | Present |
| | 02 | Absent |
| | 03 | Excused absence |
| | 04 | Other |

```
CREATE TABLE attendance_status (  
    attend_status_code INTEGER  
        CONSTRAINT attend_status_code_pk PRIMARY KEY,  
    attend_status_desc VARCHAR2(20)  
);
```

REFERRAL TYPES

| REFERRAL_TYPE | referral_type_code | referral_type_desc |
|---------------|--------------------|--------------------|
| KEY | PK | |
| TYPE | INT | VARCHAR2(20) |
| INSTANCES: | 01 | Self-referral |
| | 02 | Guardian referral |
| | 03 | DCPS referral |
| | 04 | Court referral |

```
CREATE TABLE referral_type (  
    referral_type_code INTEGER  
        CONSTRAINT referral_type_code_pk PRIMARY  
KEY,    referral_type_desc VARCHAR2(20)  
);
```

SUSPENSION STATUS

| SUSPENSION_STATUS | susp_status_code | susp_status_desc |
|-------------------|------------------|--|
| KEY | PK | |
| TYPE | INT | VARCHAR2(45) |
| INSTANCES: | 01 | Assigned to Rebound |
| | 02 | Not assigned to Rebound – Rebound closed |
| | 03 | Not assigned to Rebound – Rebound full |
| | 04 | Wait-listed |
| | 05 | Elected not to attend Rebound |

```
CREATE TABLE suspension_status (  
    susp_status_code INTEGER  
    CONSTRAINT susp_status_code_pk PRIMARY  
KEY,    susp_status_desc VARCHAR2(45)  
);
```

DURHAM COUNTY PUBLIC SCHOOLS

| DCPS | employee_id | fname | lname | title | school | phone | email |
|------------|-------------|-------------|-------------|-------------|--------------|--------------|------------------|
| KEY | PK | | | | | | |
| TYPE | INT | VARCHAR(50) | VARCHAR(50) | VARCHAR(30) | VARCHAR(30) | VARCHAR(12) | VARCHAR(60) |
| INSTANCES: | 101 | Brian | Bailey | Counselor | Riverside HS | 919-344-6789 | bbailey@dcps.edu |
| | 102 | Gentry | Cook | Principal | Western HS | 919-123-4567 | gcook@dcps.edu |

```
CREATE TABLE dcps (  
    employee_id INTEGER  
        CONSTRAINT employee_id_pk PRIMARY KEY,  
    fname VARCHAR2(50), lname VARCHAR2(50),  
    title VARCHAR2(30), school VARCHAR2(30),  
    phone VARCHAR2(12), email VARCHAR2(60)  
);
```

JUSTICE

| JUSTICE | referral_id | NC_JOIN_id | program | county | juvenile_justice_ind | court_ordered_ind | risk_score | comments |
|------------|-------------|------------|--------------|--------------|----------------------|-------------------|------------|--------------|
| KEY | PK | | | | | | | |
| TYPE | INT | INT | VARCHAR2(40) | VARCHAR2(40) | VARCHAR(1) | VARCHAR(1) | INT | VARCHAR(200) |
| INSTANCES: | 100001 | 837282 | DPS JJ | DURHAM | Y | Y | 15 | |
| | 100516 | 847298 | JCPC | DURHAM | Y | N | 25 | |

```

CREATE TABLE justice (
  referral_id INTEGER
    CONSTRAINT referral_id_pk PRIMARY KEY,
  NC_JOIN_id INT,
  program VARCHAR2(40),
  county VARCHAR2(40),
  juvenile_justice_ind VARCHAR2(1),
  court_ordered_ind VARCHAR2(1),
  risk_score INT,
  comments VARCHAR2(200),
  outcome VARCHAR2(50),
  event VARCHAR(200)
);

```

GUARDIANS

| GUARDIAN S | guardian_id | fname | lname | address | city | state | zip | relation | email | home_phone | cell_phone | work_phone |
|----------------|-------------|------------------|------------------|------------------------|------------------|-----------------|------------------|-----------------|-----------------|------------------|------------------|------------------|
| KEY | PK | | | | | | | | | | | |
| TYPE | INT | VARCHAR2 (50) | VARCHAR2 (50) | VARCHAR2 (50) | VARCHAR2 (25) | VARCHAR2 (2) | VARCHAR2 (10) | VARCHAR (50) | VARCHAR (50) | CHAR (12) | CHAR (12) | CHAR (12) |
| INSTANCES : | 502 | Mary | Smith | 101 Markhaim St. | Durham | NC | 12121- 1212 | Mother | msmith@ya | 919-222- 2222 | 919-222- 2222 | 919-222- 2222 |

```
CREATE TABLE guardians (  
    guardian_id INTEGER  
    CONSTRAINT guardian_id_pk PRIMARY KEY,  
  
    fname VARCHAR2(50),  
    lname VARCHAR2(50),  
    address VARCHAR2(50),  
    city VARCHAR2(25),  
    state VARCHAR2(2),  
    zip VARCHAR2(10),  
    relation VARCHAR2(50),  
    email VARCHAR2(50),  
    home_phone CHAR(12),  
    cell_phone CHAR(12),  
    work_phone CHAR(12)  
);
```

STU_GUAR_INTERSECTION

| STU_GUAR_INTER | student_id | guardian_id |
|----------------|------------|-------------|
| KEY | PK, FK | PK, FK |

```
CREATE TABLE stu_guar_inter (  
    student_id INTEGER,  
    guardian_id INTEGER,  
    CONSTRAINT stu_guar_pk  
        PRIMARY KEY (student_id, guardian_id)  
);
```

REFERRALS

| REFERRALS | referral_id | student_id | referral_type | referral_date | referrant_id | guard_permis | reason_not_attending | reason_suspended |
|------------|-------------|--------------|---------------|---------------|--------------|--------------|----------------------|------------------|
| KEY | PK | FK, NOT NULL | FK, NOT NULL | NOT NULL | | | | |
| TYPE | INT | INT | INT | DATE | INT | VARCHAR2(1) | VARCHAR(50) | VARCHAR(40) |
| INSTANCES: | 1 | 1001 | 3 | 05/01/16 | 101 | Y | | |

```

CREATE TABLE referrals (
    referral_id INTEGER
        CONSTRAINT rf_referral_id_pk PRIMARY KEY,
    student_id INTEGER,
    referral_type INTEGER,
    referral_date DATE,
    referrant_id INTEGER,
    guar_permis VARCHAR2(1),
    reason_not_attending VARCHAR2(50),
    reason_suspended VARCHAR2(50),
    CONSTRAINT rf_student_id_fk
        FOREIGN KEY (student_id) REFERENCES STUDENTS(student_id),
    CONSTRAINT rf_referral_type_fk
        FOREIGN KEY (referral_type) REFERENCES REFERRAL_TYPE(referral_type_code)
);

```


SUSPENSIONS

| | | | | | | | | | | | | | |
|-------------|-----------|-------------|------------|----------|---------|--------------|----------------|----------------|-------------|-------------|-------------|---------------|------------|
| SUSPENSIONS | suspen_id | referral_id | start_date | end_date | no_days | lvl_complete | student_reason | assigned_staff | tree | survey | wrap_up | school_assess | lvl_engmnt |
| KEY | PK | FK | | | | FK | | FK | | | | | FK |
| TYPE | INT | INT | DATE | DATE | INT | INT | VARCHAR2(40) | INT | VARCHAR2(1) | VARCHAR2(1) | VARCHAR2(1) | VARCHAR2(1) | INT |
| INSTANCES : | 1 | 1 | 04/30/16 | 05/02/16 | 2 | 4 | | Mary Smith | Y | Y | Y | Y | 4 |

```
CREATE TABLE suspensions (  
  suspen_id INTEGER  
    CONSTRAINT suspen_id_pk PRIMARY KEY,  
  referral_id INTEGER,  
  start_date DATE,  
  end_date DATE,  
  no_days INTEGER,  
  lvl_complete INTEGER,  
  student_reason VARCHAR2(40),  
  assigned_staff INTEGER,  
  tree VARCHAR2(1),  
  survey VARCHAR2(1),  
  wrap_up VARCHAR2(1),  
  school_assess VARCHAR2(1),  
  lvl_engagement INTEGER,  
    CONSTRAINT su_referral_id_fk  
      FOREIGN KEY (referral_id) references REFERRALS(referral_id),  
  CONSTRAINT su_lvl_complete_fk  
    FOREIGN KEY (lvl_complete) references completion_code(compl_code),  
  CONSTRAINT su_assigned_staff_fk  
    FOREIGN KEY (assigned_staff) references PROVIDERS(provider_id),  
  CONSTRAINT su_lvl_engagement_fk  
    FOREIGN KEY (lvl_engagement) references engagement_lvl(engagement_lvl_code)  
);
```

ATTENDANCE SCHEDULES

| ATT_SCHED | suspension_id | susp_date | susp_status | attend_status | note |
|------------|---------------|-----------|-------------|---------------|-------------------|
| KEY | PK | PK | FK | FK | NULL |
| TYPE | INT | DATE | INT | INT | VARCHAR2 (200) |
| INSTANCES: | 1 | 05/01/16 | 1 | 1 | |
| | 1 | 05/02/16 | 1 | 1 | |
| | 2 | 05/02/16 | 1 | 2 | |

```

CREATE TABLE att_schedules (
    suspension_id INTEGER
        CONSTRAINT suspension_id_pk PRIMARY KEY,
    susp_date DATE,
    susp_status INT,
    attend_status INT,
    note VARCHAR2(200),
    CONSTRAINT susp_status_fk
        FOREIGN KEY (susp_status) references SUSPENSIONS(suspen_id),
    CONSTRAINT attend_status_fk
        FOREIGN KEY (attend_status) references
ATTENDANCE_STATUS(attend_status_code)
);
    
```

SERVICES

| SERVICES | suspension_id | service_date | service_type | ser_ref_ind | provider_id | duration_hours | follow_up_date | service_provided | note |
|----------|---------------|--------------|--------------|-------------|-------------|----------------|----------------|------------------|---------------|
| KEY | PK, FK | PK | PK | | FK | | | | |
| TYPE | INT | DATE | CHAR(1) | CHAR(1) | INT | INT | DATE | CHAR(1) | VARCHAR2(200) |
| INSTANCE | 1 | 05/01/16 | C | S | 323 | 2 | | Y | |

```

CREATE TABLE services (
    suspension_id INTEGER,
    service_date DATE,
    service_type INT,
    ser_ref_ind CHAR(1),
    provider_id INT,
    duration_hours INT,
    follow_up_date DATE,
    ser_provided_ind CHAR(1),
    note VARCHAR2(200),
    CONSTRAINT service_pk PRIMARY KEY (suspension_id, service_date, service_type),
    CONSTRAINT ser_provider_id_fk
        FOREIGN KEY (provider_id) references PROVIDERS(provider_id),
    CONSTRAINT ser_suspension_id_fk
        FOREIGN KEY (suspension_id) references SUSPENSIONS(suspen_id)
);

```

STUDENTS

| STUDENT S | student_id | dcps_id | school | grade | Fname | Lname | Address | City | State | Zip | Email | dob |
|-----------|------------|---------|---------------|-------|---------------|---------------|---------------|---------------|---------|------------|---------------|----------|
| KEY | PK | | | | | | | | | | | |
| TYPE | INT | INT | VARCHAR 2(20) | INT | VARCHAR 2(20) | VARCHAR 2(20) | VARCHAR 2(20) | VARCHAR 2(20) | CHAR(2) | CHAR (10) | VARCHAR 2(40) | DATE |
| INSTANC E | 232 | 8443544 | HILLSIDE | 9 | Debbie | Jones | 111 Main St. | Durham | NC | 11111-2222 | | 03/07/00 |

| | race | lunch | sex | home_language | gang | substance | fighting | suicidal | low_intel_fn | homeless | other_risk_factors | foster |
|-----------|---------------|---------|---------|---------------|---------|-----------|----------|----------|--------------|----------|--------------------|---------|
| KEY | | | | | | | | | | | | |
| TYPE | VARCHAR 2(20) | CHAR(1) | CHAR(1) | | CHAR(1) | CHAR(1) | CHAR(1) | CHAR(1) | CHAR(1) | CHAR(1) | VARCHAR 2(200) | CHAR(1) |
| INSTANC E | | Y | F | English | N | N | Y | N | N | N | | N |

| | juv_pro | no_suspen | risk_asses s | trauma | exp_grad_dt | act_grad_dt | iep | strength s | home_phone | cell_phone | work_phone |
|----------|---------|-----------|--------------|---------|-------------|-------------|----------|------------|--------------|------------|------------|
| KEY | | | | | | | | | | | |
| TYPE | CHAR(1) | INT | INT | CHAR(1) | DATE | DATE | CHAR (1) | | CHAR(12) | CHAR (12) | CHAR(12) |
| INSTANCE | N | 2 | 5 | N | 05/01/19 | | Y | | 919-222-1111 | | |

```
create table students(  
    student_id INTEGER  
        constraint student_id_pk PRIMARY KEY,  
    dcps_id INTEGER,  
    school VARCHAR2(20),  
    grade INTEGER,  
    fname VARCHAR2(20),  
    lname VARCHAR2(20),  
    address VARCHAR2(20),  
    city VARCHAR2(20),  
    state_of_residence CHAR(2),  
    zip CHAR(10),  
    email VARCHAR2(40),  
    dob DATE,  
    race VARCHAR2(20),  
    lunch CHAR(1),  
    sex CHAR(1), home_language  
    VARCHAR2(20),  
    gang CHAR(1),  
    substance CHAR(1),  
    fighting CHAR(1),  
    suicidal CHAR(1),  
    low_intel_fn CHAR(1),  
    homeless CHAR(1),  
    other_risk_factors VARCHAR2(200),  
    foster CHAR(1),  
    juv_pro CHAR(1),  
    no_suspen INTEGER,  
    risk_assess INTEGER, trauma CHAR(1),  
    exp_drad_dt DATE,  
    act_grad_dt DATE,  
    iep CHAR(1),  
    strengths VARCHAR2(200),  
    home_phone CHAR(12),  
    work_phone CHAR(12),  
    cell_phone CHAR(12)  
);
```

PROVIDERS

| PROVIDERS | provider_id | provider_type | Org | Fname | Lname | Address | City | State | Zip | Email | home_phone | cell_phone | work_phone | note | website |
|-----------|-------------|---------------|--------------|--------------|--------------|--------------|--------------|---------|------------|--------------------------|--------------|------------|------------|---------------|--------------|
| KEY | PK | | | | | | | | | | | | | | |
| TYPE | INT | VARCHAR2(20) | VARCHAR2(20) | VARCHAR2(20) | VARCHAR2(20) | VARCHAR2(20) | VARCHAR2(20) | CHAR(2) | CHAR(10) | VARCHAR2(40) | CHAR(12) | CHAR(12) | CHAR(12) | VARCHAR2(200) | VARCHAR2(50) |
| INSTANCE | 232 | COUSELING | MyCounseling | Linda | Mavery | 111 Main St. | Durham | NC | 11111-2222 | lmavery@mycounseling.com | 919-222-1111 | | | | |

```
CREATE TABLE providers (  
    provider_id INTEGER  
        CONSTRAINT provider_id_pk PRIMARY KEY,  
    provider_type VARCHAR2(20),  
    org VARCHAR2(20),  
    fname VARCHAR2(20),  
    lname VARCHAR2(20),  
    address VARCHAR2(20),  
    city VARCHAR2(20),  
    state CHAR(2),  
    zip CHAR(10),  
    email VARCHAR2(40),  
    home_phone CHAR(12),  
    cell_phone CHAR(12),  
    work_phone CHAR(12),  
    note VARCHAR2(200),  
    website VARCHAR2(50)  
);
```

REPORTING REQUIREMENTS

Weekly attendance reports

Central office report: first name, last name, school, grade, dates attended Rebound

School reports: (same as above minus school, but broken down by school and sent to each principal)

Quarterly/Annual reports

Quarterly and annual reports contain basic information on the students who have attended Rebound: total number of students served broken down by school, grade level, sex, race, primary language spoken in the home, court involvement, free/reduced lunch, level of engagement and level of completion statistics.

Additional information includes: average number of days at Rebound, total number of student-days at rebound, a break-down of time allocated to various Rebound activities, number of referrals from Rebound to other organizations.

The data is supplemented with qualitative information and summaries of data from the student and parent surveys.

Phase III: Metrics and comparative data

Requires further analysis.

Additional data that would allow Rebound to draw powerful conclusions about the efficacy of its program include:

Individual student data:

Quarterly grades for grades 9-12 (or GPA), tardies, absences, infractions, suspensions, and graduation date for all students referred to rebound (whether they are program participants or not)

This would allow Rebound to evaluate whether a students grades and behaviour changed after rebound, and how students that were referred to rebound but did not attend faired compared to students who did attend rebound.

School-wide Durham County data:

Suspension data

number of suspensions quarterly broken down by: offense, school, grade, expected graduation date

Graduation rate:

percent of each cohort of students graduating broken down by:
expected graduation date, school, graduation rate broken down by school, demographics and whether student has been suspended or not.

Long-term follow-up voluntary surveys of Rebound participants:

Similar to existing surveys but over a longer time frame.