```sql
WITH all_fe AS ( --Join FE tables
    SELECT *
    FROM  `INTO_Live_Brief.Fall_Enrollments_2020`
    UNION ALL
    SELECT *
    FROM  `INTO_Live_Brief.Fall_Enrollments_2019`
    UNION ALL
    SELECT *
    FROM `INTO_Live_Brief.Fall_Enrollments_2018`
    UNION ALL
    SELECT *
    FROM `INTO_Live_Brief.Fall_Enrollments_2017`
),

all_fe_fixed AS ( --Change dashes to 0 then cast strings to ints
SELECT
    Unit_Id AS unit_id,
    Institution_name AS institution,
    year,
    CASE
        WHEN Total = '-' THEN 0
        ELSE CAST(REPLACE(Total, ',', '') AS INT)
        END AS total,
    CASE
        WHEN In_state___Number = '-' THEN 0
        ELSE CAST(REPLACE(In_state___Number, ',', '') AS INT)
        END AS in_state_no,
    CASE
        WHEN Out_of_state___Number = '-' THEN 0
        ELSE CAST(REPLACE(Out_of_state___Number, ',', '') AS INT)
        END AS out_state_no,
    CASE
        WHEN Foreign_countries___Number = '-' THEN 0
        ELSE CAST(REPLACE(Foreign_countries___Number, ',', '') AS INT)
        END AS foreign_no,
FROM all_fe),

all_dd AS ( --Join DD tables
    SELECT UNITID, INSTNM, STABBR, ICLEVEL, LOCALE, CYACTIVE, INSTSIZE, 2017 AS yea
r FROM `INTO_Live_Brief.Data_Dictionary_2017`
    UNION DISTINCT
    SELECT UNITID, INSTNM, STABBR, ICLEVEL, LOCALE, CYACTIVE, INSTSIZE, 2018 AS yea
r FROM `INTO_Live_Brief.Data_Dictionary_2018`
    UNION DISTINCT
    SELECT UNITID, INSTNM, STABBR, ICLEVEL, LOCALE, CYACTIVE, INSTSIZE, 2019 AS yea
r FROM `INTO_Live_Brief.Data_Dictionary_2019`
    UNION DISTINCT
    SELECT UNITID, INSTNM, STABBR, ICLEVEL, LOCALE, CYACTIVE, INSTSIZE, 2020 AS yea
r FROM `INTO_Live_Brief.Data_Dictionary_2020`
),

fe_dd AS ( --Join DD and FE tables
    SELECT
        unit_id,
        institution,
        all_fe_fixed.year,
        total,
        in_state_no,
```

```sql
        out_state_no,
        foreign_no,
        STABBR,
        ICLEVEL,
        LOCALE,
        CASE
        WHEN institution IN ('Colorado State University-
Fort Collins', 'Colorado State University Pueblo', 'Drew University', 'George Mason
 University', 'Hofstra University', 'Illinois State University', 'Oregon State Univ
ersity', 'Oregon State University-
Cascades Campus', 'Saint Louis University', 'Suffolk University', 'University of Al
abama at Birmingham', 'University of Arizona', 'University of Massachusetts-
Amherst')
        THEN 1
        ELSE 0
        END AS into_partner
    FROM all_fe_fixed
LEFT JOIN all_dd
    ON all_fe_fixed.institution = all_dd.INSTNM
    AND all_fe_fixed.Unit_Id = all_dd.UNITID
    AND all_fe_fixed.year = all_dd.year),

add_cost AS ( --Add cost data
    SELECT fe_dd.*, cost_estimates.avg_cost
    FROM `prism-2023-c1.INTO_Live_Brief_Sandbox.aa_estimated_costs_2017-
20v2` cost_estimates
    INNER JOIN fe_dd
        ON fe_dd.institution = cost_estimates.INSTNM
        AND fe_dd.Unit_Id = cost_estimates.UNITID
        AND fe_dd.year = cost_estimates.year
),

add_foreign_percent AS ( --Add foreign percents
    SELECT
        DISTINCT *,
        foreign_no/NULLIF((in_state_no + out_state_no),0) AS `foreign%`
    FROM add_cost
),

add_ranks AS ( --Add ranks
    SELECT *, 1 AS recommended, RANK() OVER (ORDER BY rank, weighted_score) AS fina
l_rank
    FROM `prism-2023-c1.INTO_Live_Brief_Sandbox.aa_sl`
    LIMIT 20
)

SELECT
    afp.unit_id,
    afp.institution,
    afp.year,
    afp.total,
    afp.in_state_no,
    afp.out_state_no,
    afp.foreign_no,
    afp.STABBR,
    afp.into_partner,
    afp.avg_cost,
    IFNULL(afp.`foreign%`,0) AS `foreign%`,
```

```sql
    IFNULL(ar.recommended,0) AS recommended,
    IFNULL(ar.final_rank,999) AS rank,
    IFNULL(((0.8 * (100000/afp.avg_cost)) + (0.2 * (100*afp.`foreign%`))),0) AS wei
ghted_score
FROM add_foreign_percent afp
LEFT JOIN add_ranks ar
    ON afp.institution = ar.institution
        AND afp.unit_id = ar.unit_id
        ORDER BY RANK ASC;
```