Geospatial Analysis for San Francisco Better Streets Prioritization

FEHR PEERS

presentation outline

- Introduction
- Workflow & Analysis
- Results & Communication
- Lessons Learned

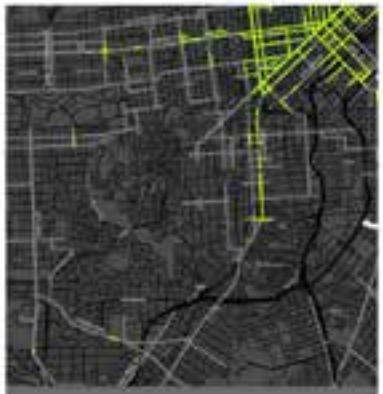
INTRODUCTION

Project Goal

Identify where the City of San Francisco should make future streetscape improvements that have the greatest benefit using a technical, data-driven approach

background

SCENARIO DEVELOPMENT METHODOLOGY



DEVELOP INVESTMENT STRATEGIES

Identify three potential investment strategies for how future projects could be selected

Identify data inputs

Identify metrics to compare across strategies

SELECT INVESTMENT STRATEGY

Prioritize blocks by Supervisor District

Aggregate blocks into corridors

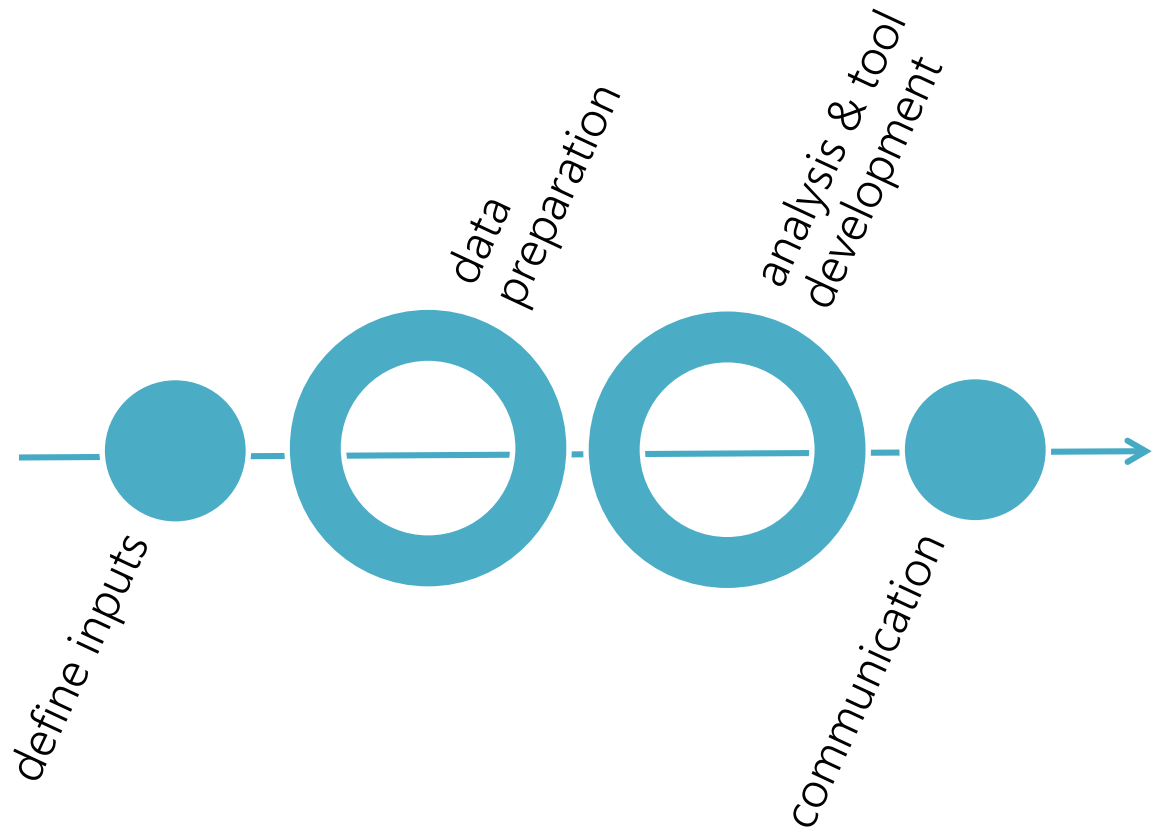
DEVELOP PROJECT LIST

Design details to be determined once funding is secured

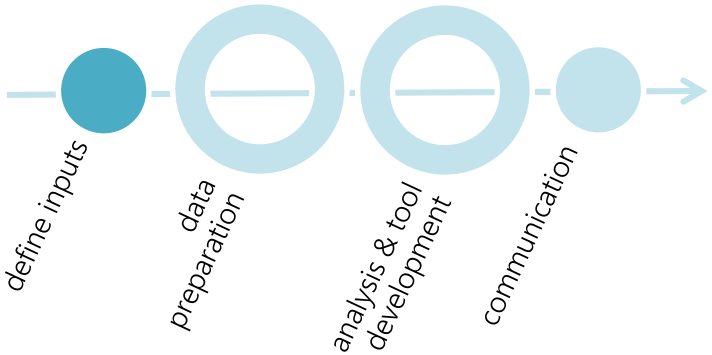
Identify funding sources and availability

investment strategies

overview

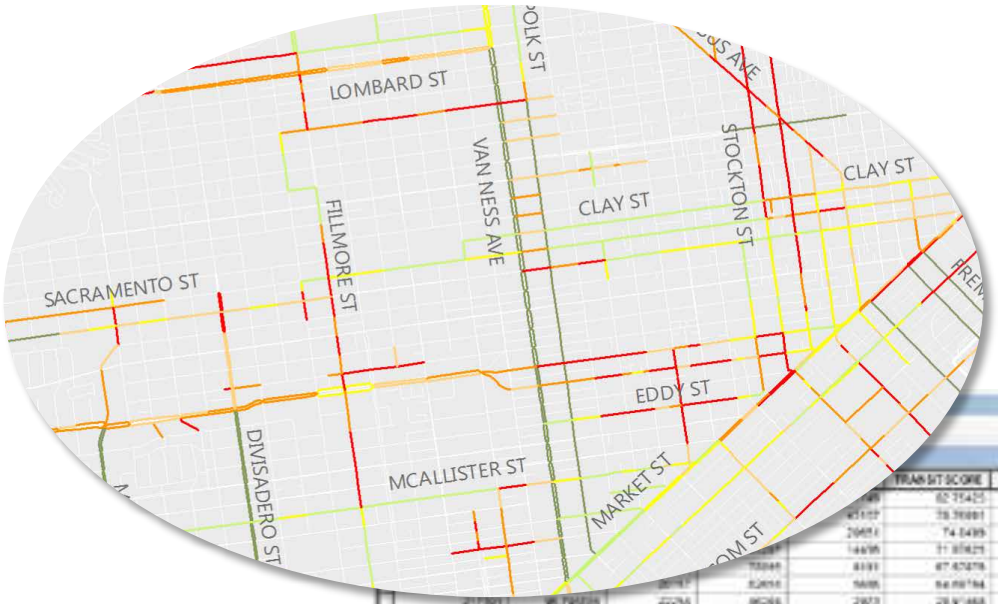

define inputs
data preparation
analysis & tool development
communication

WORKFLOW & ANALYSIS



Scenario 4: Selected Scenario			
SF-CHAMP model forecasted pedestrian volume	calculated	2030	Forecasted 2030 total pedestrian volume, calculated by applying SF-CHAMP model percentage growth to SFMTA model 24-hour pedestrian volume
PEQI Light score	SFDPH	2014	SFDPH PEQI Light score, inverted to reflect higher need for lower-scored street segments
Pedestrian tourist corridor	SF Planning	2014	Flag pedestrian tourist corridors
Neighborhood Commercial corridor	SF Planning	2014	Flag Neighborhood Commercial corridors
Sidewalk crowding	calculated	2014	Pedestrians per square foot, calculated using forecasted pedestrian volume and sidewalk square footage
Scenario score	calculated	2014	Calculated based on weighted sum of normalized Scenario 4 input variables
Class by Supervisor District	calculated	2014	Street segment class based on Scenario 4 score, by Supervisor District (5 categories with equal number of street segments)
Completed/fully funded project overlap	SF Planning	2014	Flag overlap with completed/fully funded projects
Supervisor District	SF Planning	2014	Designated Supervisor District, provided for street segments with no completed/fully funded project overlap

WORKFLOW & ANALYSIS

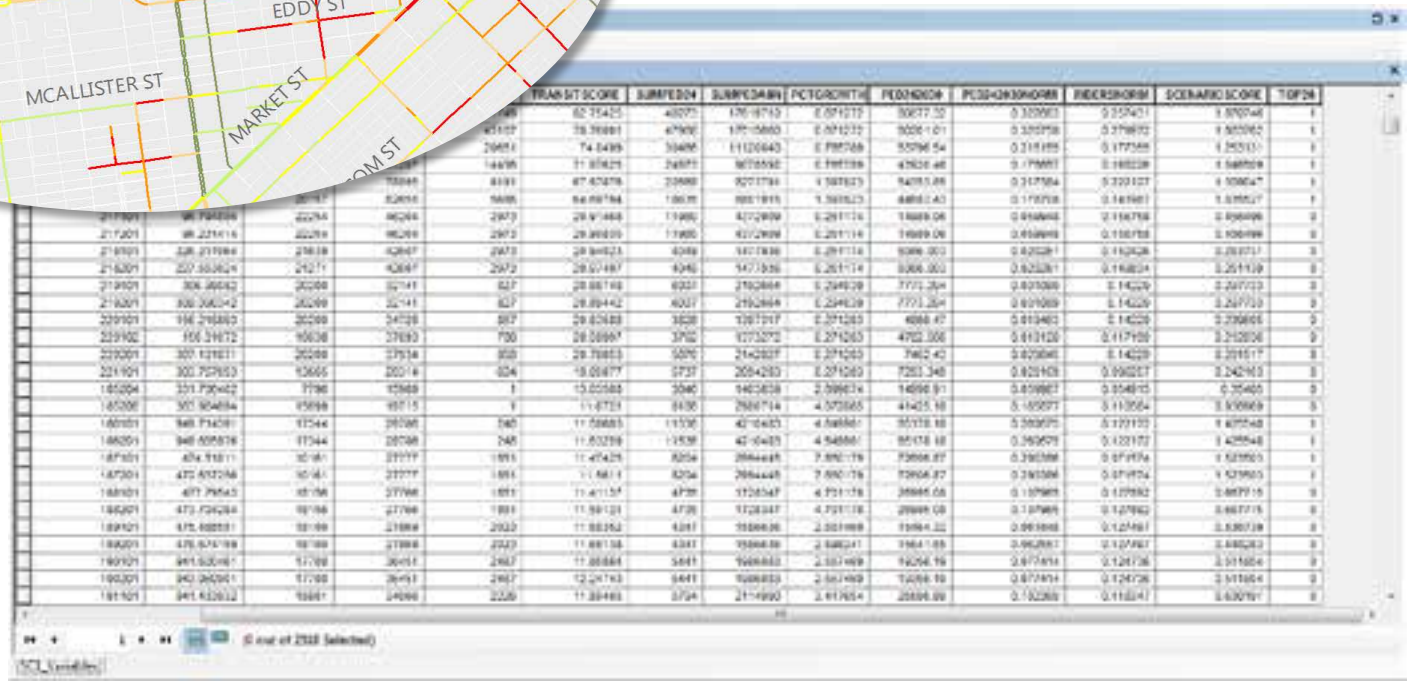


define inputs

data preparation

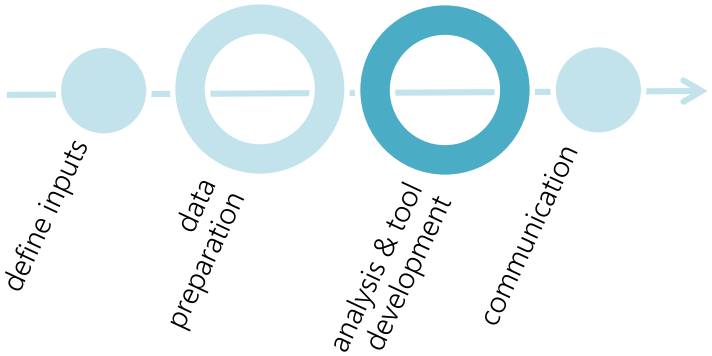
analysis & tool development

communication



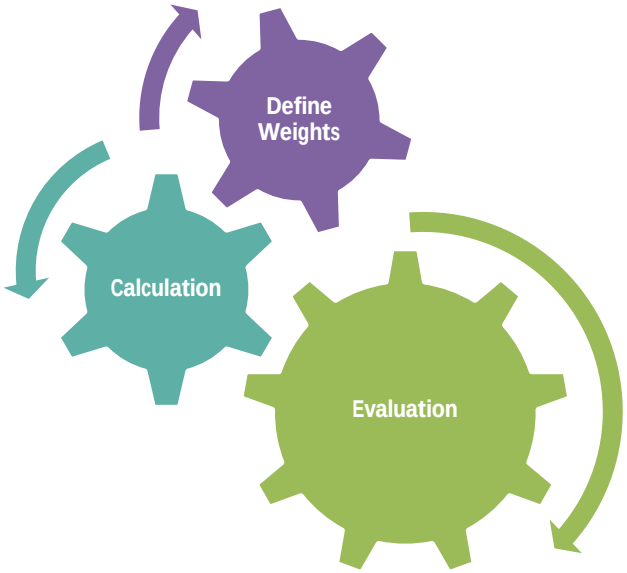
FEHR PEERS

WORKFLOW & ANALYSIS



step 1:

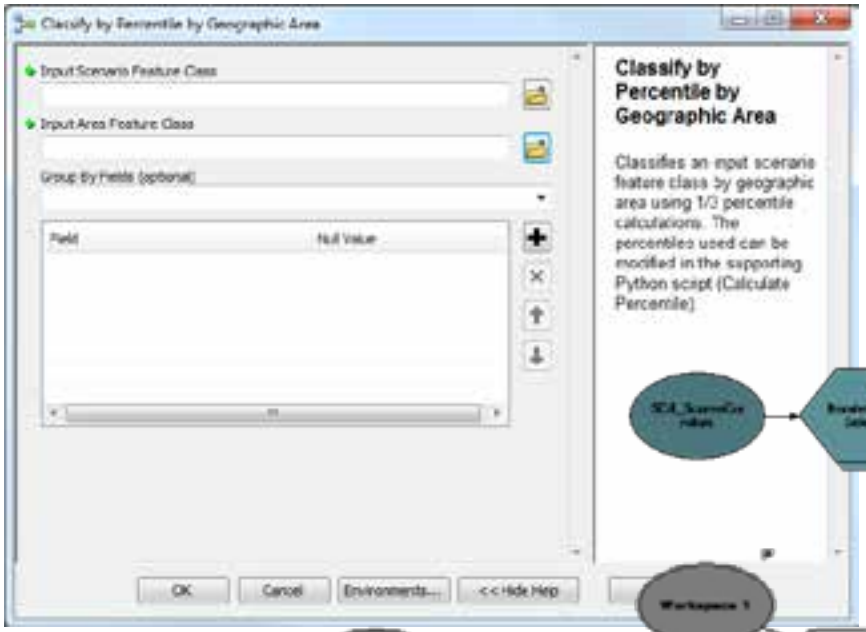
Set weights, normalize values, & calculate scenario score



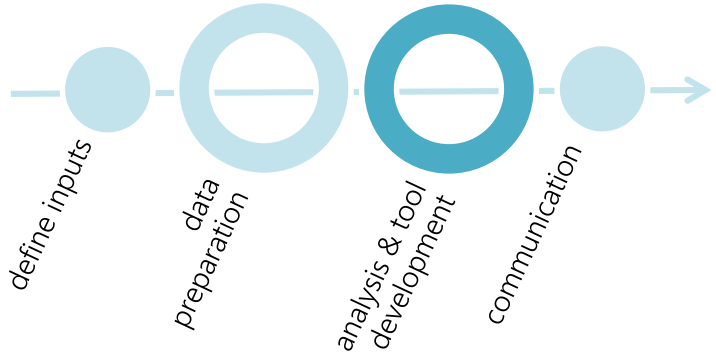
step 2:

Evaluate segments in the top 20th percentile

WORKFLOW & ANALYSIS



WORKFLOW & ANALYSIS

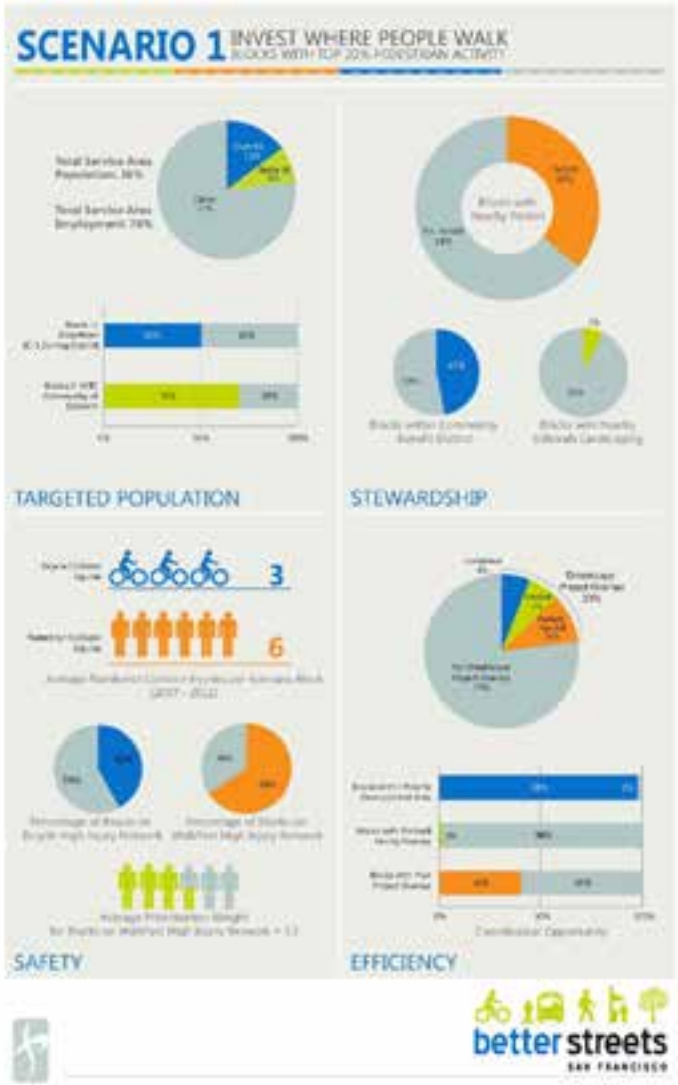


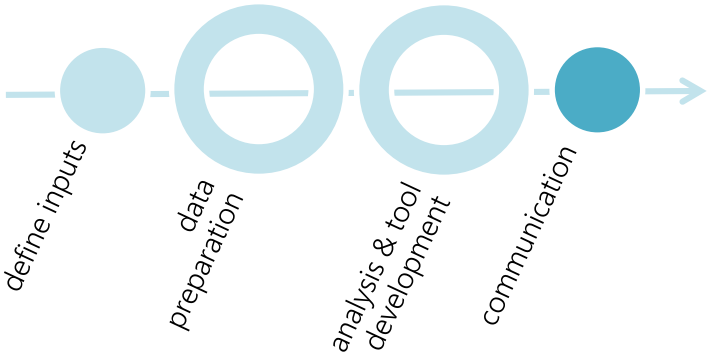
High pedestrian activity
+
Poor pedestrian environment
+
Neighborhood commercial corridor
+
Tourist corridor

à

FEHR PEERS

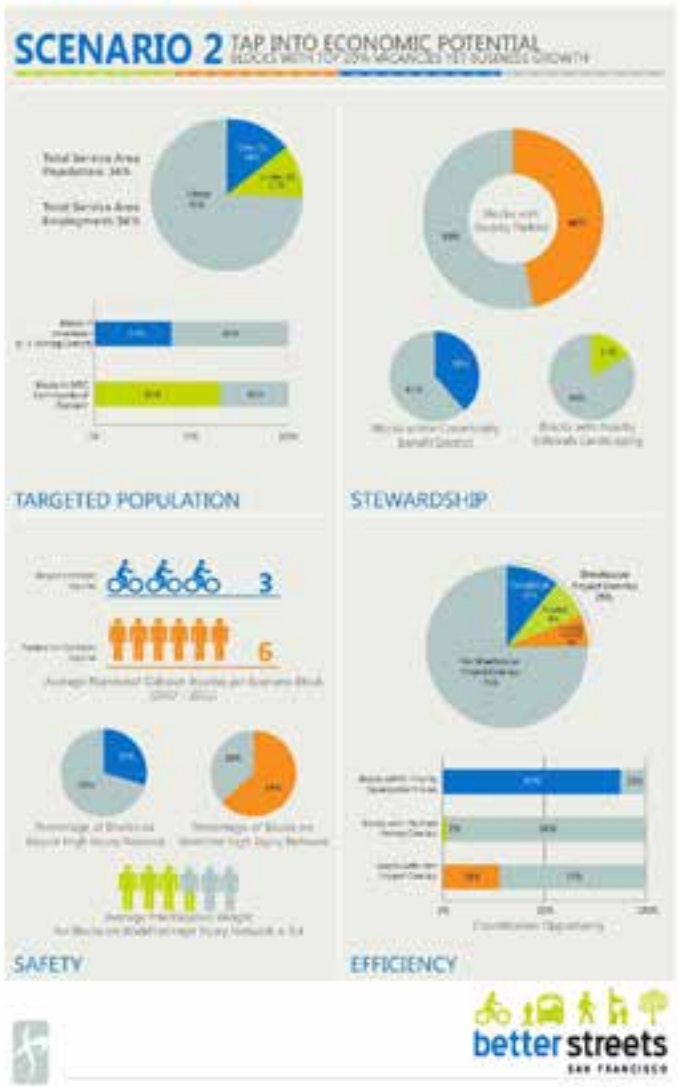
RESULTS & COMMUNICATION

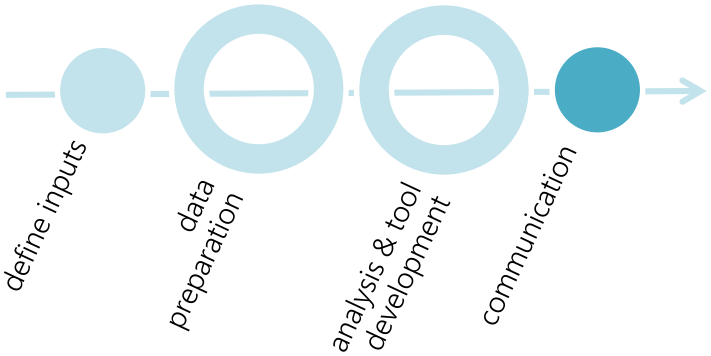




FEHR PEERS

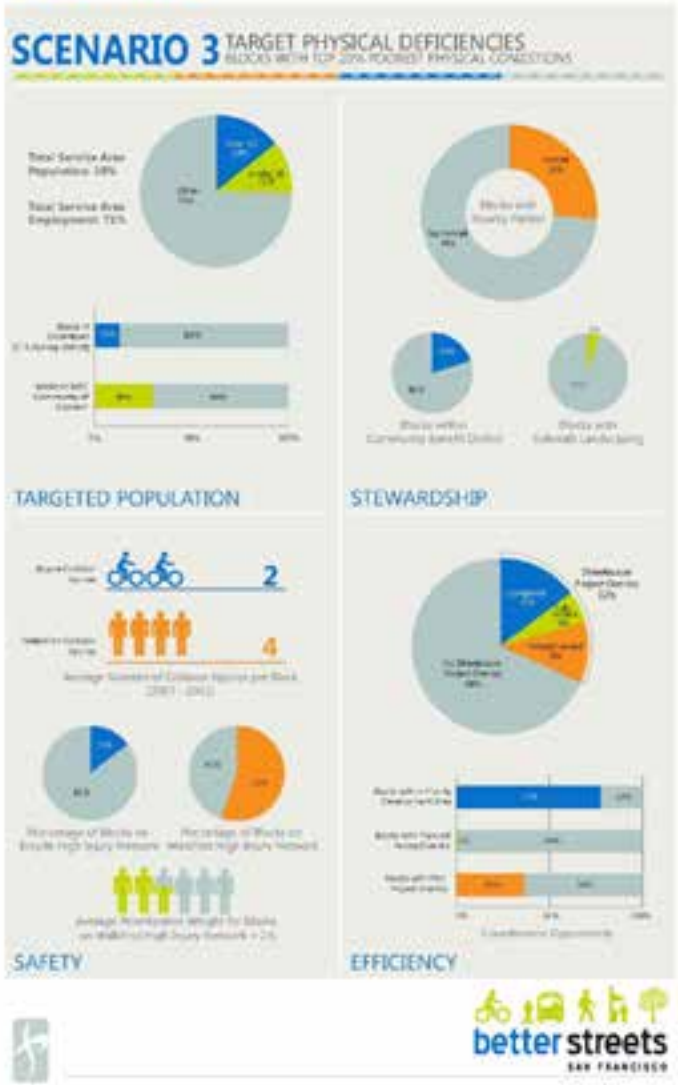
RESULTS & COMMUNICATION

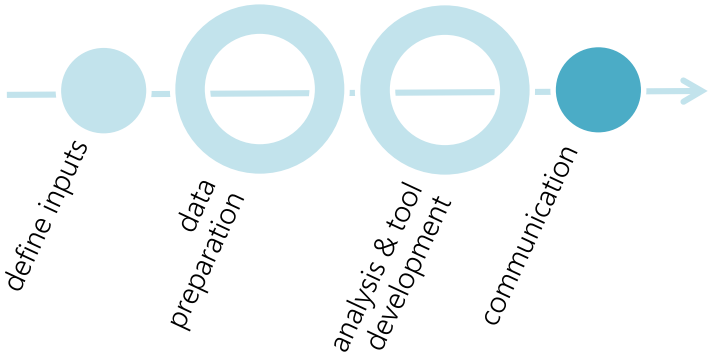




FEHR PEERS

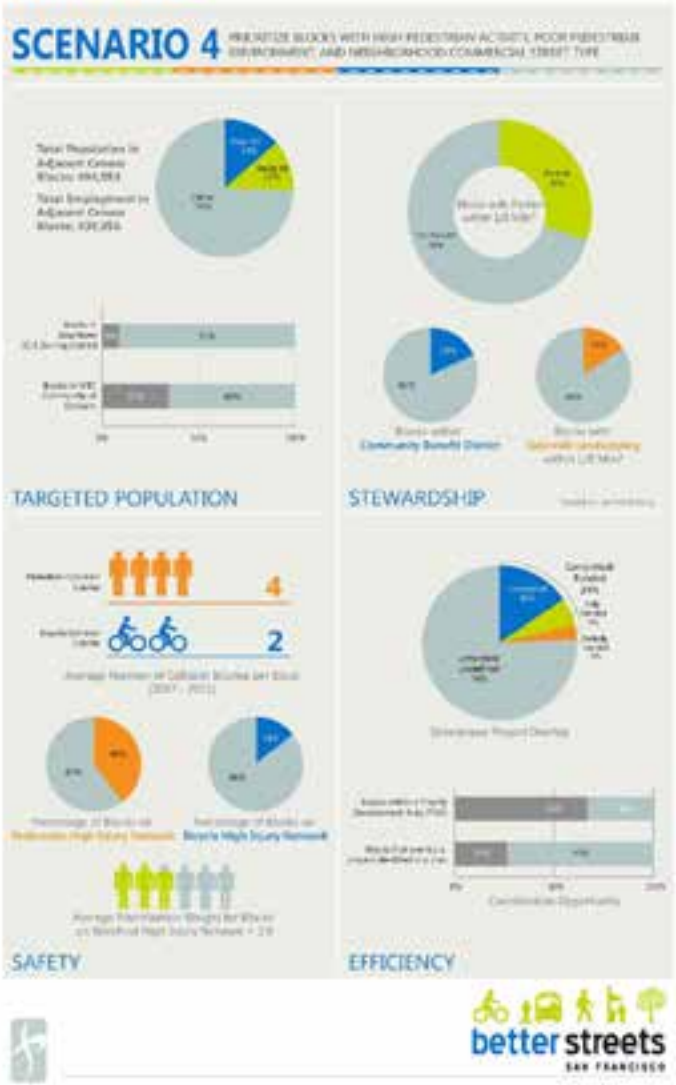
RESULTS & COMMUNICATION

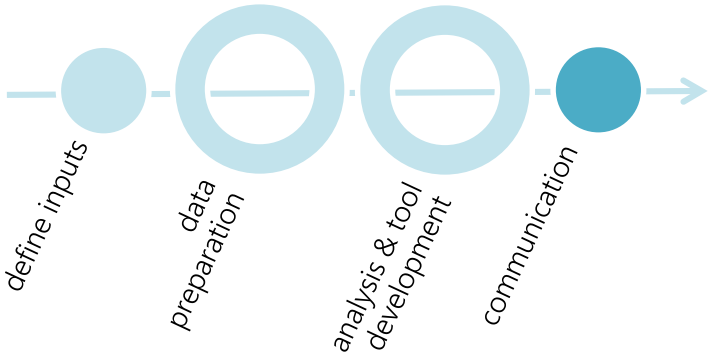




FEHR PEERS

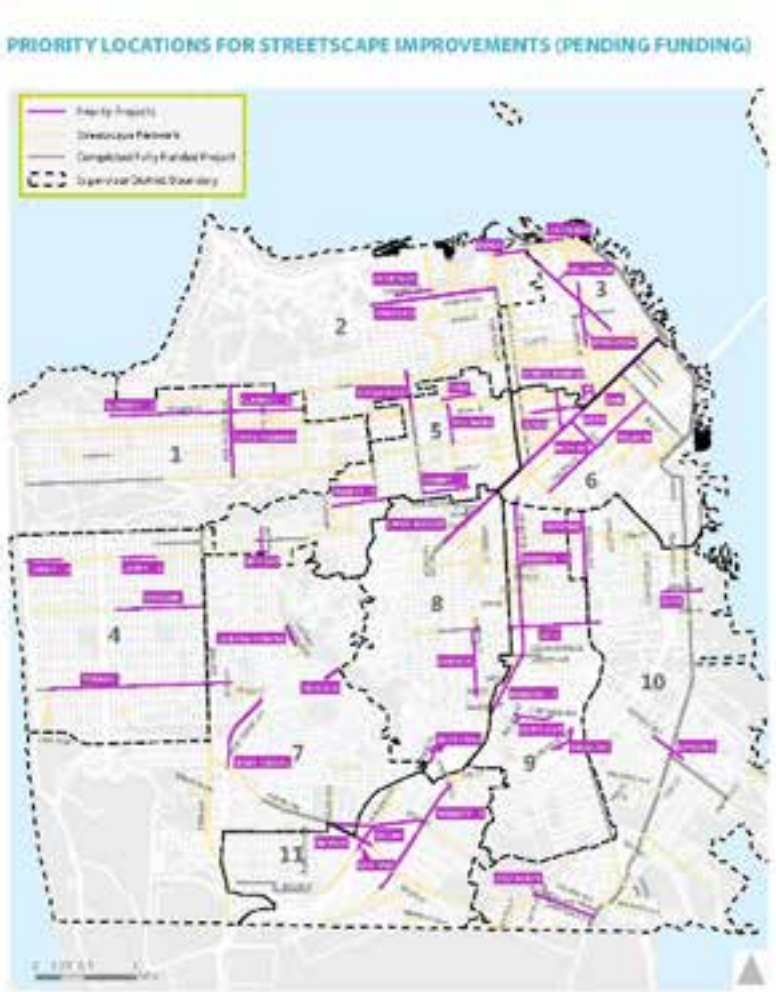
RESULTS & COMMUNICATION

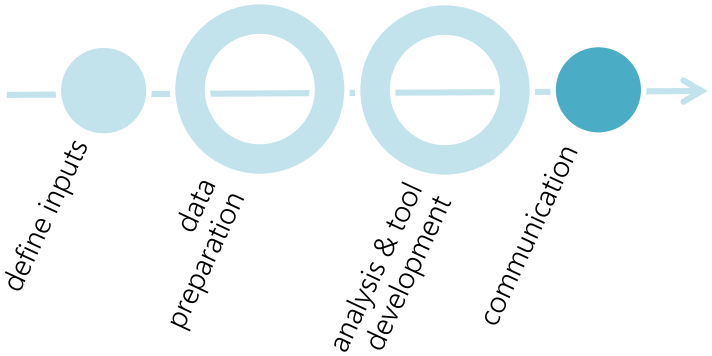




FEHR PEERS

RESULTS & COMMUNICATION





POTENTIAL LOCATIONS FOR FUTURE STREETSCAPE IMPROVEMENTS

PROJECT	DISTANCE	NOTES
16TH ST	0	High volumes of pedestrian activity. Need for pedestrian safety improvements.
22ND	11	Community visited design. Leverage Impact Fees. Neighborhood commercial street.
24TH	0	Neighborhood commercial street. Invest in Neighborhoods corridor.
BAY AVE	1	Neighborhood commercial street. Transit corridor. Community ideas for plaza on BAY Ave. Adjacent to Golden Gate Park.
BEACH	2	Identified in Fisherman's Wharf Public Realm Plan. Major tourist activity.
MARKET STREET	0.5	Citywide Priority.
CHESTNUT	1	Neighborhood commercial street. Transit corridor.
CHURCH	0	Neighborhood commercial street. Transit corridor.
CLEMENT - 1	1	Neighborhood commercial street.
CLEMENT - 2	1	Neighborhood commercial street.
COLUMBUS	0	Neighborhood commercial street. Transit corridor.
CORTLAND	0	Neighborhood commercial street. Transit corridor.
CRISSY MT	0	Public Realm opportunity adjacent to Farmers Market.
DOLORES PARK	0.5	Citywide Complete Street Improvements.
EDDY	0	Transit corridor.
FILLMORE	1	Neighborhood commercial street. Transit corridor.
FOLSOM	0	Important east-west bicycle connection. Leverage Impact Fees.
GENEVA	11	Deficient pedestrian conditions. Community visited design. Opportunity to coordinate with future BRT project.
GLEN PARK	0	Transit hub identified in Glen Park Area Plan.
HAIGHT - 1	1	Opportunity to add streetscape enhancements in coordination with transit project.
HAIGHT - 2	1	Opportunity to add streetscape enhancements in coordination with transit project.
JEFFERSON	1	Streetscape/Beautification improvements identified in Fisherman's Wharf Public Realm Plan. Bicycle boulevard activity.
JONES	0	Conceptual design developed as part of Green Connections.
JUDAH - 1	0	Neighborhood commercial street. Transit corridor. Opportunity to add streetscape enhancements in coordination with transit project.

FEHR PEERS

LESSONS LEARNED

- **Data preparation & accuracy is crucial for ensuring defensible results**
- **Always do a “gut” check on analysis results**
- **Recognize the power of strong visuals**