



# **RMG/SOUTHSIDE RECYCLING HIA Public Engagement Session #3**

**February 15, 2022**



# AGENDA

- **Review of HIA Process**
- **Screening & Scoping**
- **Assessment**
  - Existing Conditions
  - Potential Impacts of Southside Recycling
- **Recommendations**
- **Monitoring & Evaluation**
- **Next Steps**

# ★ HEALTHY CHICAGO 2025



- CDPH's citywide community health improvement plan
- **Goal is to close the racial life expectancy gap**: 9 years between Black and white Chicagoans, life expectancy declining for Latinx
- Focus on the **root causes of health** – including institutional racism – and supporting community power in decision-making



# WHAT IS A HEALTH IMPACT ASSESSMENT?

A defined process that helps determine the **potential effects** of a **proposed policy, plan, or project** on **health**.

Source: Human Impact Partners. A Health Impact Assessment Toolkit: A Handbook to Conducting HIA, 3rd Edition

## 6 STEPS OF THE HIA PROCESS

### 1. Screening

Determines if an HIA is needed or valuable

### 2. Scoping

Identifies the community impacted, potential health effects and key stakeholders

### 3. Assessment

Uses qualitative and quantitative methods to assess current health conditions and potential impacts

### 4. Recommendations

Provides solutions to lessen or enhance health effects

### 5. Reporting

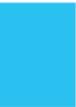
Disseminates findings to key stakeholders, community members and decision makers

### 6. Monitoring and Evaluation

Tracks changes in health risks, health outcomes and changes in decision making



# SCREENING



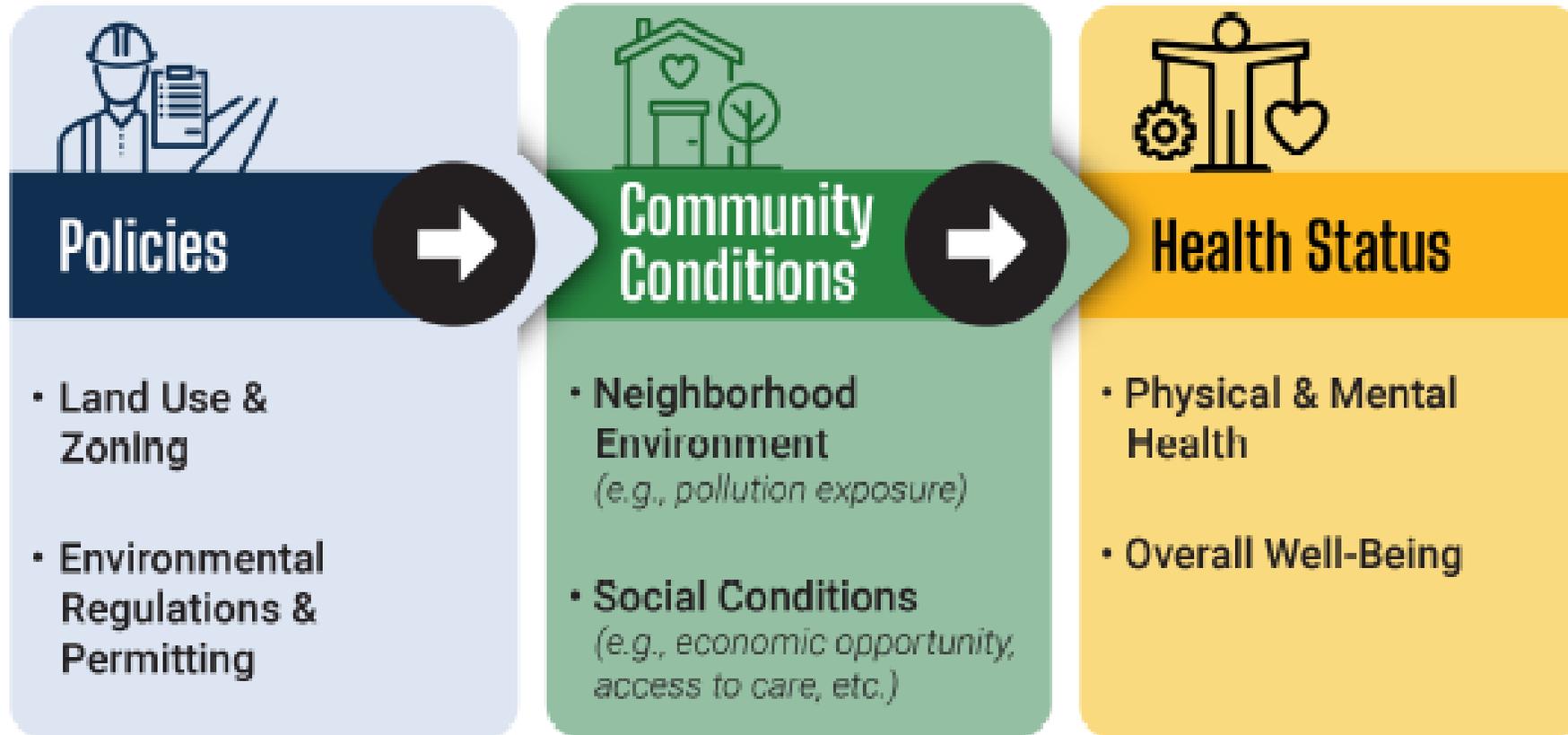
# SCREENING FACTORS

- 
- The potential to explicitly consider environmental justice and health equity in the review of this permitting decision;
  - The opportunity to comprehensively review pertinent data not limited to just environmental impacts of the permitted facility, but existing and potential environmental, social and health impacts;
  - The support of U.S. EPA;
  - CDPH authority to review applications to determine whether or not to grant permits, request additional information, and recommend special conditions or mitigation strategies in the event a permit is granted; and
  - The opportunity to highlight broader recommendations for broader policy and process change and discuss these potential strategies with community partners.



# SCOPING

# ★ CONCEPTUAL FRAMEWORK





# HIA RESEARCH QUESTIONS

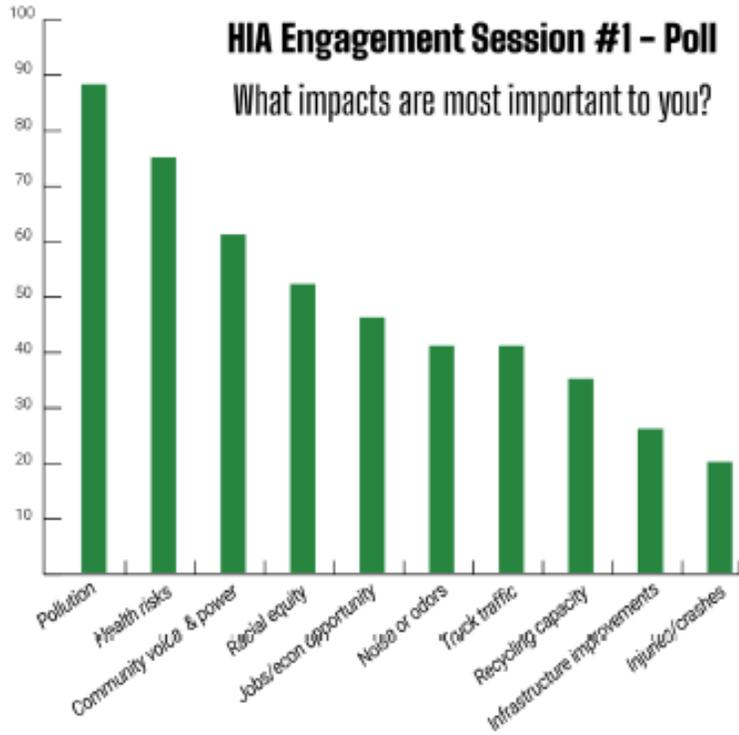
- What are the **current community conditions** on the Southeast Side?
- What are the **potential impacts** of the proposed Southside Recycling operations on the **environment, health, and quality of life** for Southeast Side residents?
- Who would **benefit** and who would be **burdened** by a decision to grant the permit? How could we minimize burdens and maximize benefits?
- What did we learn through this process about ways to **improve City and other policies and practices** to promote health and racial equity?



# BACKGROUND: LARGE RECYCLING FACILITIES

- Collect and process automobiles, appliances, and other large items containing recyclable material, which they sell to other end users (e.g., manufacturers and foundries).
- **Benefits:** Keep metal materials out of the waste stream and landfills, and reduce the need for environmentally harmful mining activities.
- **Risks:** Unique operational risks include:
  - Reliance on suppliers to de-pollute and separate materials before processing
  - Nature of shredding process creates potential for particulate matter emissions, as well as possibility of explosions/fires

# ★ POTENTIAL IMPACTS FOR ASSESSMENT



## HIA Engagement Session #2 - Small Group Discussion Notes

**Benefits?**

- “ Recycling keeps consumers scrap out of the landfill, supports other companies and vendors.”
- “ Employed hundreds of people over the years. Around 80% minority. Operation has been compliant. Good paying jobs with benefits.”
- “ Potential benefit by not having abandoned property, which attracts fly dumpers.”

**Burdens?**

- “ The facility is one mile from high school and elementary school, exposing students and teachers, who deserve to breathe clean air and not fumes.”
- “ Having the facility here takes away the opportunity to use this land for natural space.”
- “ We do not want to experience the clouds of metal dust.”
- “ Cumulative impact of all industries should be considered. On top of fumes from vehicles and other industry, City should look at cumulative impact on air.”

**Lived Experience?**

- “ This is a community that has suffered too much from burdens of pollution, lack of investment, lack of representation. This is going to further harm people.”
- “ We need to move in a new direction. The SE side does not have to continue to be home to dirty industry.”
- “ RMG purchased the old Republic Steel property 20+ years ago and employed over 200 people. Everything is starting to get developed and we are poised for a great comeback.”

# ★ POTENTIAL IMPACTS FOR ASSESSMENT

## Quality of Life Impacts

-  Traffic & street conditions
-  Economic development & job opportunity
-  Noise
-  Concentration of industry

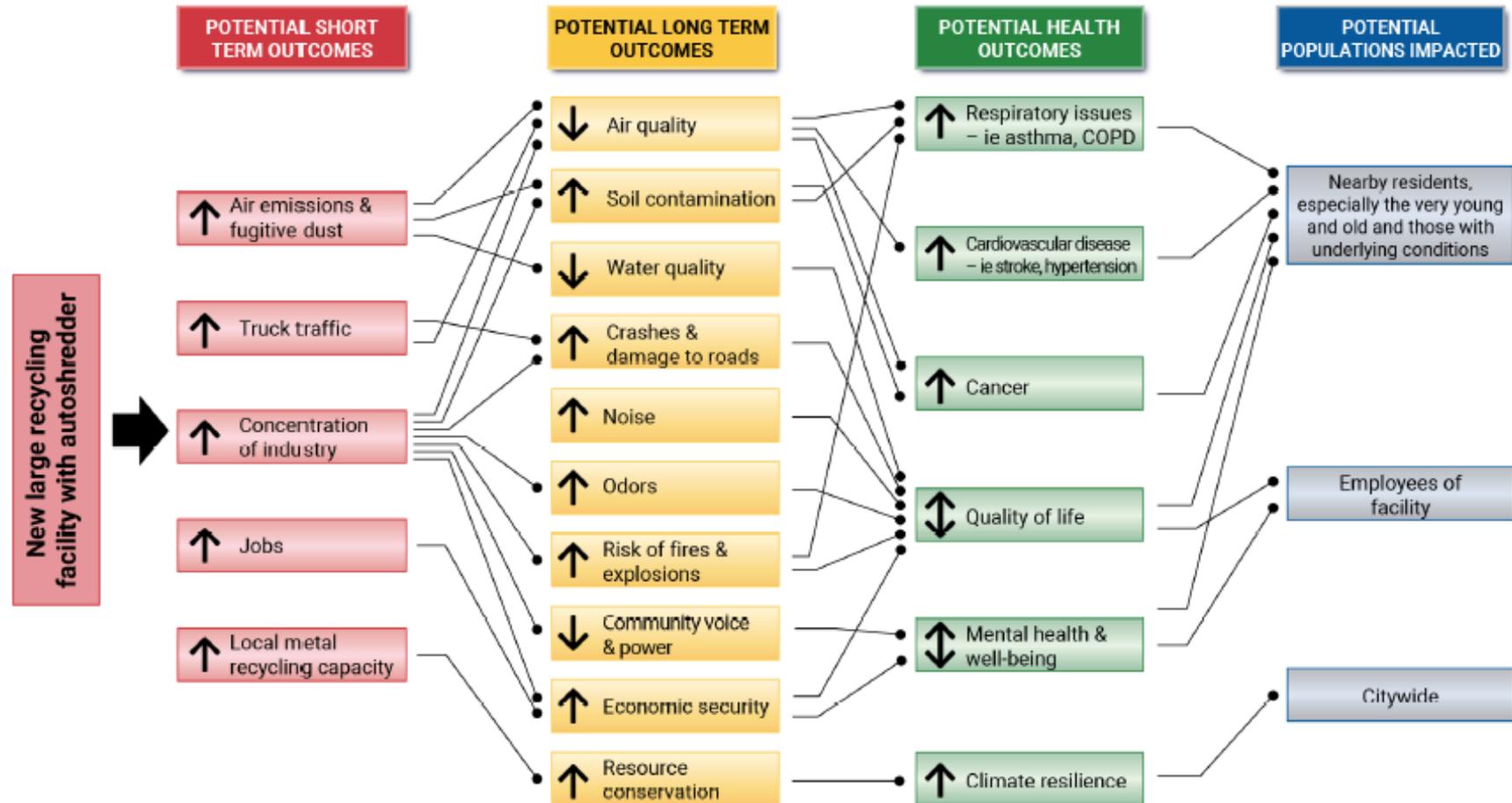
## Environmental Impacts

-  Air Pollution
-  Water Pollution
-  Soil Pollution
-  Explosions/Fires
-  Recycling Capacity

## Health Impacts

-  Acute & Chronic Risks
-  Carcinogenic Risks
-  Mental Health & Wellbeing

# ★ PATHWAY DIAGRAM



# GEOGRAPHIC SCOPE

1.

Communities that with the greatest potential to be directly affected by pollution exposure.



2.

Communities with the greatest potential to be directly affected by operational impacts such as truck traffic, noise, and odors.



3.

Communities that expressed the greatest concern about the Southside Recycling permit application during town halls and the public comment period.





# DATA SOURCES

## PERMIT APPLICATION MATERIALS

- Modeling
- Mitigation Plans
- Traffic Study
- Zoning Materials

## COMMUNITY INPUT ANALYSIS

- 2 town halls
- 4,000+ public comments
- Media monitoring
- Facilitated small group discussions and surveys

## EXISTING CONDITIONS ANALYSIS

- Public health data sets
- U.S. EPA Ambient Air Quality Report
- ATSDR Health Consultation (pending)

## ENVIRONMENTAL AND HEALTH RISK ASSESSMENT

- Emissions inventory and calculations
- On-site soil sampling
- Risk modeling

## LITERATURE REVIEW

- Environmental justice and cumulative impact frameworks



**ASSESSMENT FINDINGS:**  
**EXISTING CONDITIONS ON THE SOUTHEAST SIDE**



# EXISTING CONDITIONS ANALYSIS: SOCIAL FACTORS

INDICATOR	SOUTH DEERING	EAST SIDE	HEGEWISCH
People of Color	50-75%	50-75%	25-50%
Linguistic Isolation	50-75%	75-100%	25-50%
Economic Hardship	75-100%	75-100%	25-50%
Children	75-100%	75-100%	25-50%
Seniors	50-75%	25-50%	75-100%
Uninsured	50-75%	50-75%	50-75%
No Primary Care Provider	50-75%	75-100%	25-50%

Relative to All Chicago Communities







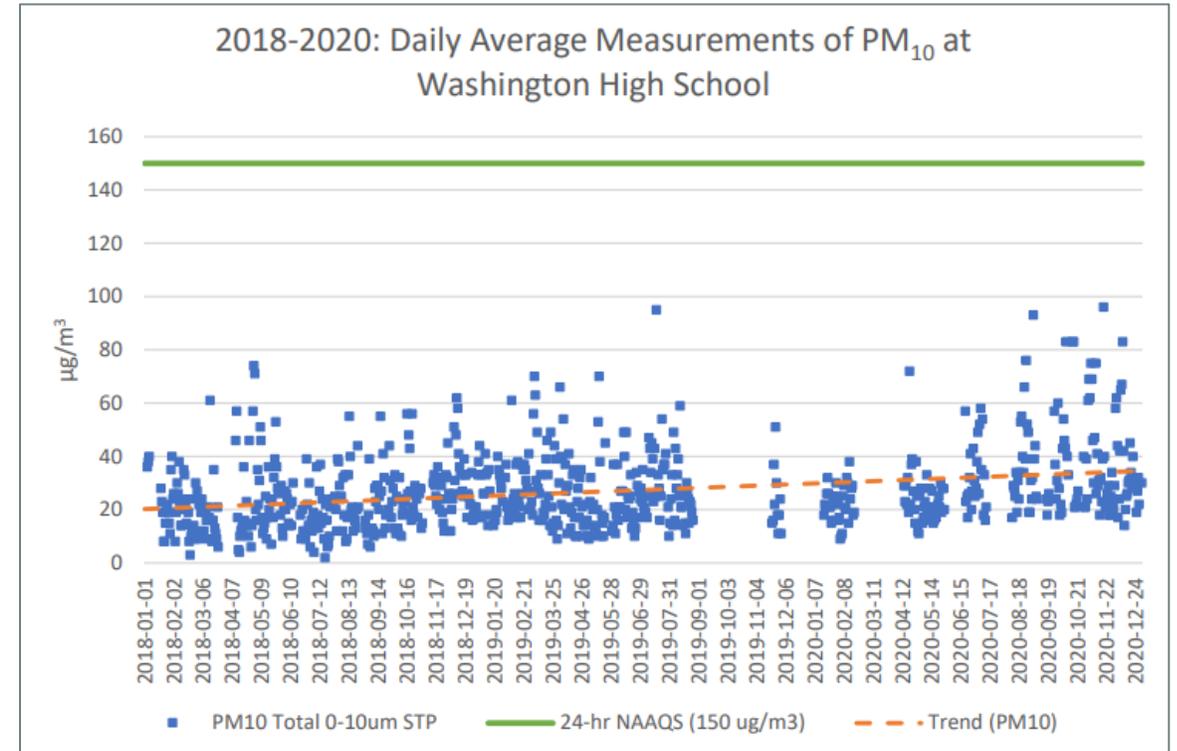
# EXISTING CONDITIONS: U.S. EPA FINDINGS



Concentrations of pollutants measured at George Washington High School (closest federal air monitor):

- All measured pollutants have either decreased or remained the same when averaged over the past 10 years
- All measured pollutants have either decreased or remained the same when averaged over the past 3 years—with the exception of coarse particulate matter, which has risen over the past 3 years—though it remains within the NAAQ standard

For the last 10 years, annual averages of all metals—like lead and manganese—have been within the long-term health benchmarks.

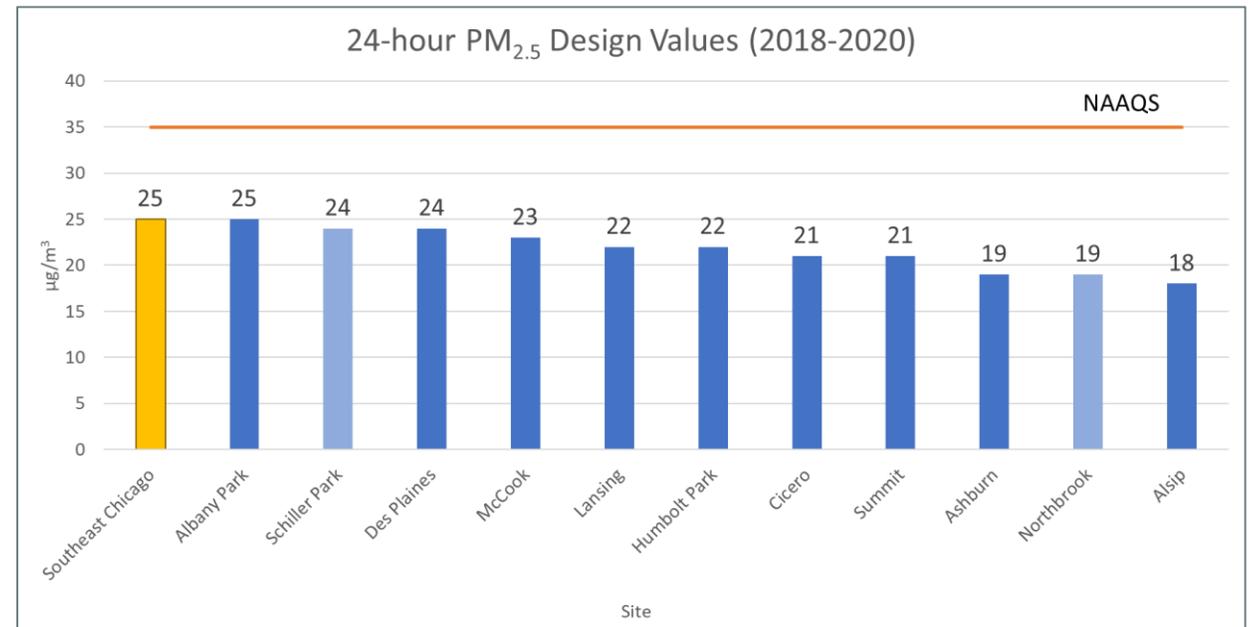


# EXISTING CONDITIONS: U.S. EPA FINDINGS

Comparing Southeast Chicago's data to data collected at the other Chicago-area federal air monitors, Southeast Chicago is:

- tied for highest daily fine particulate matter (though within the NAAQ standard)
- in the middle for annual fine particulate matter (6<sup>th</sup> highest out of 12)
- in the middle for annual coarse particulate matter (2<sup>nd</sup> highest out of 3)

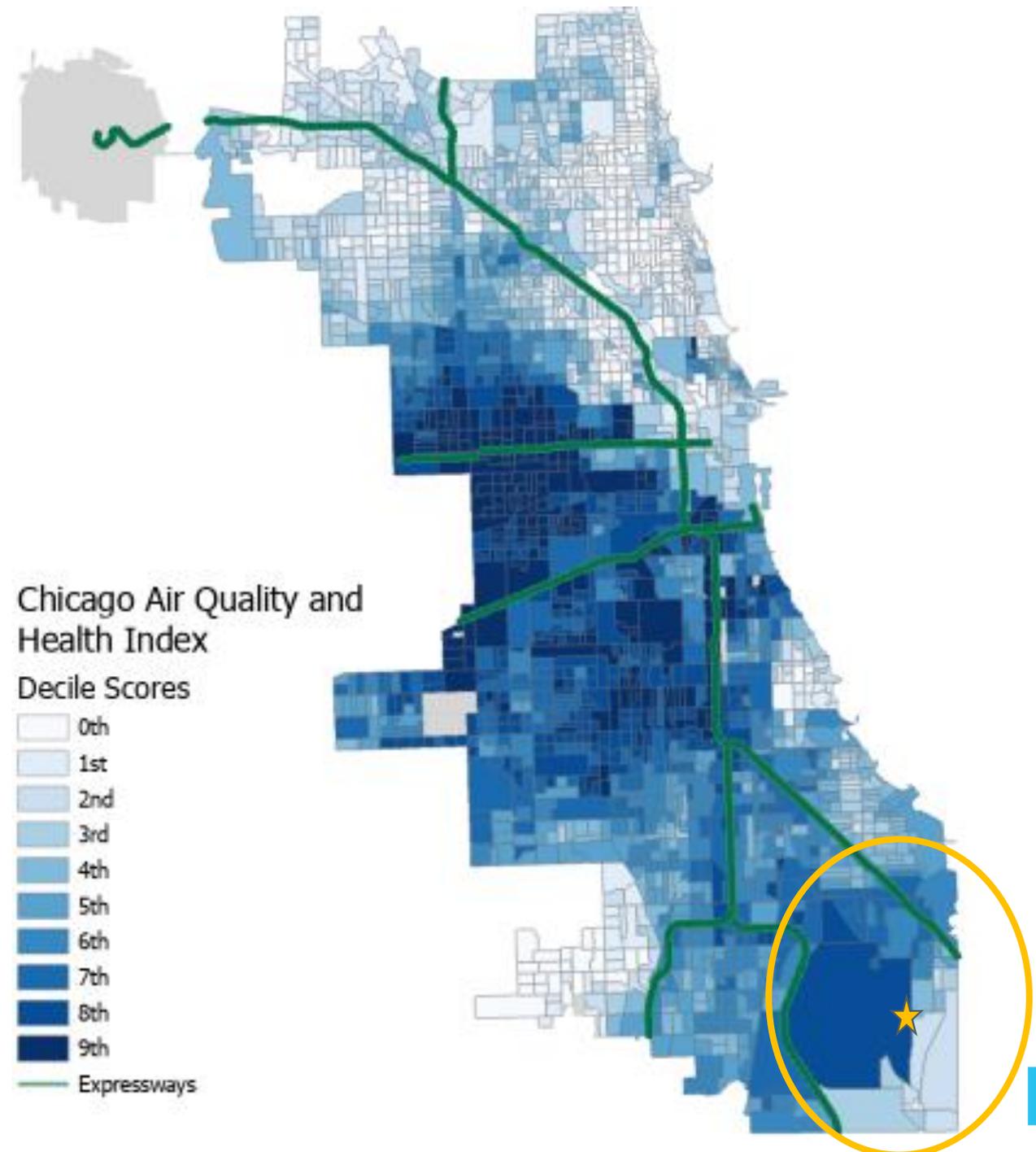
The most recent 12-month rolling averages of manganese near facilities where EPA required special monitoring are all within the long-term health benchmark.



# Air Quality & Health Index

Combines community-level data on **air pollution, health, and social factors** to identify the areas in our city that are **more vulnerable** to the effects of air pollution.

More vulnerable areas are shown in **darker blue**.





## EXISTING CONDITIONS: ATSDR HEALTH CONSULTATION

- CDPH is awaiting the final results of a Health Consultation conducted by the Agency for Toxic Substances and Disease Registry (ATSDR).
- This will characterize how current exposure to particulate matter and metals in the air are affecting the health of Southeast side residents – particularly those who live downwind of the proposed Southside Recycling facility.



**ASSESSMENT:**

**POTENTIAL IMPACTS OF SOUTHSIDE RECYCLING**

# HIA FINDINGS: QUALITY OF LIFE



## Quality of Life Impacts

	Assessment Findings	Impact Rating
<b>Traffic &amp; street conditions</b>	<p>During weekday morning peak hours, there would be 70 new trips (personal vehicles and trucks); at weekday evening peak hours, there would be 30 new trips. The traffic study shows that this would maintain an adequate level of service at nearby intersections.</p>	
<b>Economic development &amp; job opportunity</b>	<p>Southside Recycling would employ in excess of 100 people (35 jobs currently unfilled). The company will prioritize hiring from the community and continue to support small recyclers, many of which are led by people of color.</p>	
<b>Noise</b>	<p>Modeling indicates that the operations will not cause noise above standards outside of the manufacturing district boundary but did not account for noise from any potential explosions.</p>	
<b>Concentration of industry</b>	<p>Southside Recycling would bring a new metal recycling facility to the area. This would continue a trend of industrial development rather than shift to a different type of land use as proposed by some community members.</p>	

# HIA FINDINGS: ENVIRONMENT



	Assessment Findings	Impact Rating
Environmental Impacts	 <b>Recycling Capacity</b> Under its current proposal, Southside Recycling has the capacity to process up to 500 tons per hour of obsolete metal products.	Positive impact
	 <b>Explosions/Fires</b> Explosions/fires are an inherent risk for any metal shredding operation. The permit application includes a Feedstock Management Plan and the RTO system is equipped with controls to prevent explosions. But the risk cannot be reduced to zero.	Potential negative impact
	 <b>Water Pollution</b> Industrial facilities on the riverfront pose a risk for pollution. Application includes a Stormwater Pollution Prevention Plan to reduce potential stormwater contamination. Facility treats water before it drains to the City sewers.	Potential negative impact
	 <b>Soil Pollution</b> On-site soil sampling identified lead concentrations on the RMG property that exceed the industrial Removal Management Level. This presents a risk to workers as well as the potential for particles to be blown or tracked off the site.	Potential negative impact
	 <b>Air Pollution</b> Emission sources at the site include the stockpiling, loading, and unloading of materials; onsite operations such as the crushing, shredding, screening, cutting scrap metal; and mobile equipment and vehicles. Emissions consist primarily of particulates, volatile organic compounds (VOCs), and other gases such as nitrogen oxides (i.e., NOx). Emissions from the shredder will be treated using various pollution control devices, including an RTO, roll-media filter, and scrubber. Dust controls include watering materials and cleaning pavements with a street-sweeper, dust cannons to suppress airborne dust as well as covered conveyors and dust collection and treatment systems. Even with controls in place, emissions are not entirely prevented.	Negative impact

# ★ HIA FINDINGS: HEALTH



## Health Impacts

	Assessment Findings	Impact Rating
 <b>Acute &amp; Chronic Risks</b> (Non-cancer)	<p>Human health risk assessment modeling does not indicate an increased risk of non-cancer adverse health effects due to Southside Recycling and other RMG businesses on the property. The Southeast side community areas are in the top half of all Chicago neighborhoods for current rates of chronic disease (COPD, asthma, heart disease).</p>	
 <b>Carcinogenic Risks</b> (Cancer)	<p>Human health risk assessment modeling does not indicate an increased risk of cancer due to Southside Recycling and other RMG businesses on the property. South Deering and Hegewisch are in the top half of all Chicago neighborhoods for cancer rates.</p>	
 <b>Mental Health &amp; Wellbeing</b>	<p>Living near industrial activity negatively impacts mental health. This impact is both direct and mediated by individuals' perceptions of neighborhood disorder and personal powerlessness, and the impact is greater for minorities and the poor than it is for whites and wealthier individuals.</p>	

# ★ POTENTIAL MITIGATIONS

- Current **RMG commitments**
- Additional **permit conditions** (would require company compliance)
- Do not address community concerns related to **concentration of industry**

			
Pollution	Traffic/Street Conditions	Noise	Explosion/Fires
Potential Mitigations / Permit Conditions			
<ul style="list-style-type: none"> <li>• Conduct daily patrols for litter and auto shredder residue; clean in surrounding community areas</li> <li>• Prohibit torch cutting of metals and accepting any waste, including hazardous waste</li> <li>• Conduct continuous sampling for pollutants</li> <li>• Install, operate, and maintain weather station and particulate matter monitors; notify CDPH of any exceedances within 15 minutes</li> <li>• Treat all discharges to City's sewer system</li> <li>• Prohibit use of detention pond water for dust control</li> </ul>	<ul style="list-style-type: none"> <li>• CDOT evaluating ongoing dedications (i.e. improving and making public) of sections of 117th Street and 118th Street west of Avenue O, segments of Burley Avenue and Buffalo Avenue between the 117th Street and 118th Street, and the anticipated dedication of Burley Avenue north of 117th Street to redirect truck traffic from residential roads</li> </ul>	<ul style="list-style-type: none"> <li>• Install, operate, and maintain a noise monitor</li> <li>• Notify CDPH of any and all shredder explosions, including raw sound pressure levels and one-band octaves of the explosion</li> </ul>	<ul style="list-style-type: none"> <li>• Require thermal cameras to monitor material stockpiles for hotspots</li> <li>• Conduct air monitoring and sampling for fires lasting more than one hour</li> <li>• Fire Department to flag address and ensure prompt response hazmat team with appropriate air monitoring equipment</li> </ul>

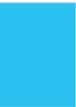


## RMG COMPLIANCE HISTORY

- As part of its permitting process for large recycling facilities, CDPH must evaluate the applicant's prior experience in recycling facility operations.
- We consider the history of compliance and any material threats to continued compliance.
- Through the HIA process, CDPH has identified apparent permit violations for other facilities on the RMG property. More information will be provided when our investigation is complete.



# HIA RECOMMENDATIONS



## POLICY & PROCESS CHANGES

The HIA includes recommendations prioritized by stakeholders to promote health and racial equity, including:

- Increase **monitoring, enforcement, and environmental protections** for the Southeast Side.
- Embed **cumulative impact** principles in zoning, permitting, and enforcement and engage the community in decision-making.
- Expand and enhance use of **health and racial equity impact assessments** to inform decision-making.

The HIA report will include a monitoring plan with indicators, actions and responsible parties to implement these recommendations.



# MONITORING & EVALUATION

# HIA PROCESS EVALUATION

## MINIMUM ELEMENTS OF HIA

Was the HIA conducted to assess the potential health consequences of a proposed program, policy, project, or plan under consideration by decision-makers, and was it conducted in advance of the decision in question?



Did the HIA involve and engage stakeholders affected by the proposal, particularly vulnerable populations?



Did the HIA systematically consider the full range of potential impacts of the proposal on health determinants, health status, and health equity?



Did the HIA provide a profile of existing conditions for the populations affected by the proposal, including their health outcomes, health determinants, and vulnerable sub-groups within the population, relevant to the health issues examined in the HIA?



Did the HIA characterize the proposal's impacts on health, health determinants, and health equity, while documenting data sources and analytic methods, quality of evidence used, methodological assumptions, and limitations?



# HIA PROCESS EVALUATION

## MINIMUM ELEMENTS OF HIA

Did the HIA provide recommendations, as needed, on feasible and effective actions to promote the positive health impacts and mitigate the negative health impacts of the decision, identifying, where appropriate, alternatives or modifications to the proposal?



Did the HIA produce a publicly accessible report that includes, at minimum, documentation of the HIA's purpose, findings, and recommendations, and either documentation of the processes and methods involved, or reference to an external source of documentation for these processes and methods? Was the report shared with decision-makers and other stakeholders?



Did the HIA propose indicators, actions, and responsible parties, where indicated, for a plan to monitor the implementation of recommendations, as well as health effects and outcomes of the proposal?





## NEXT STEPS & TIMELINE

- **HIA summary report** will be published by end of week at [www.chicago.gov/city/en/sites/rmg-expansion/home/health-impact-assessment.html](http://www.chicago.gov/city/en/sites/rmg-expansion/home/health-impact-assessment.html).
  - Additional assessment components (including Community Input Analysis, Existing Conditions Assessment, Environmental & Health Risk Assessment, and final ATSDR Health Consultation) posted by February 28.
- Permit decision to be announced at same time. Factors include:
  - Extent of current **community burden and vulnerability**
  - Extent of **potential benefits** to Southeast Side residents
  - Extent of **potential negative impacts** on environment, health, and quality of life that cannot be adequately addressed through **mitigations**
  - Actions of the company, including **compliance history**



# Q&A