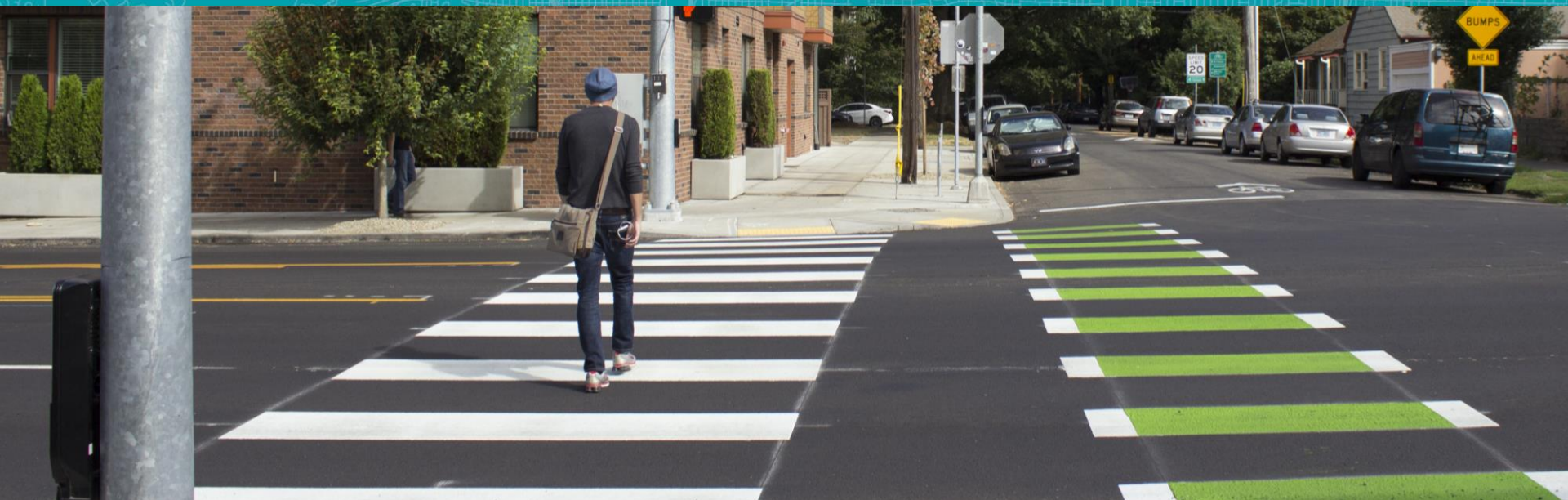# PedPDX

PORTLAND'S CITYWIDE PEDESTRIAN PLAN

CITIZEN ADVISORY COMMITTEE

May 30, 2018

PBOT
PORTLAND BUREAU OF TRANSPORTATION

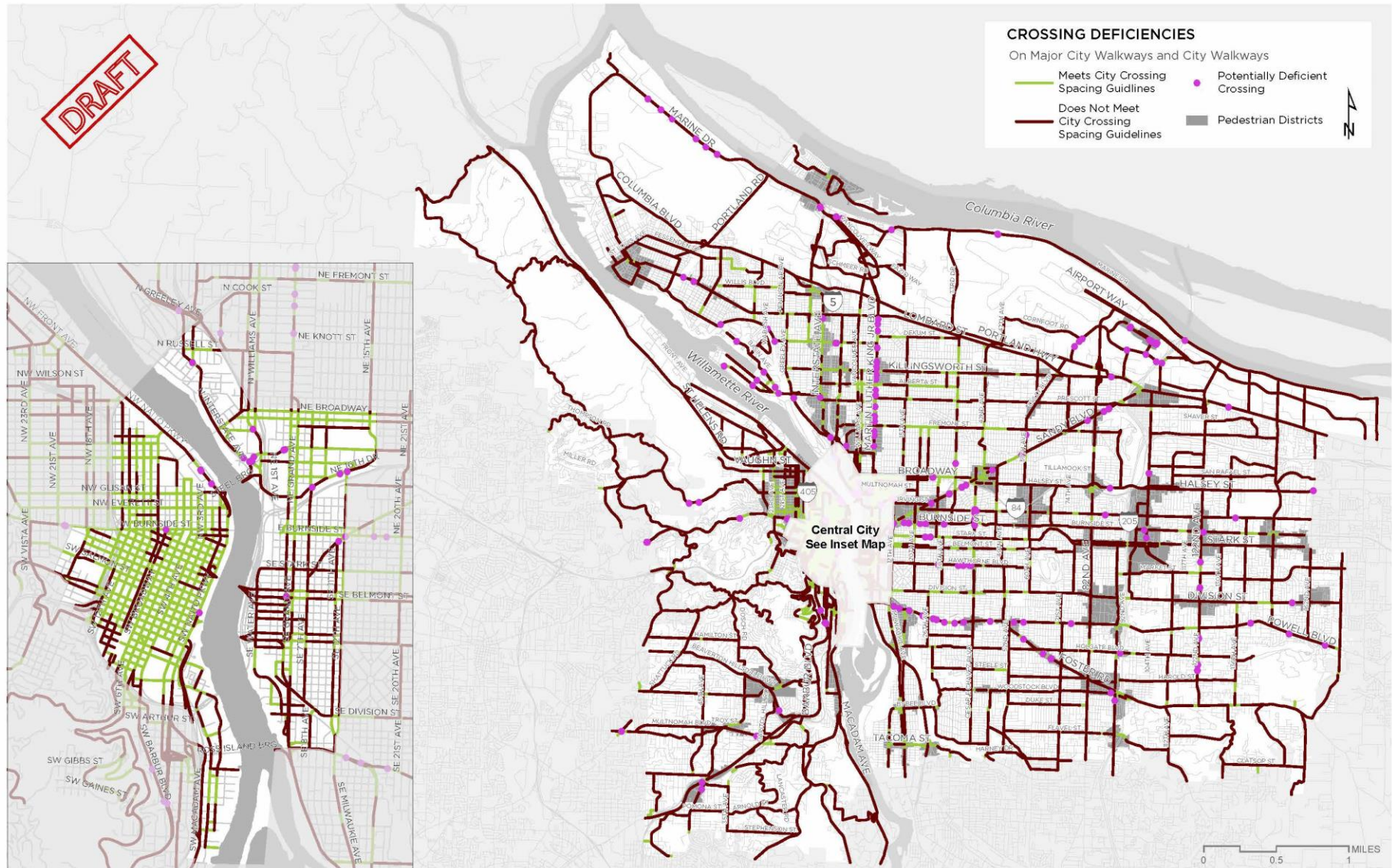# Prioritizing Needs
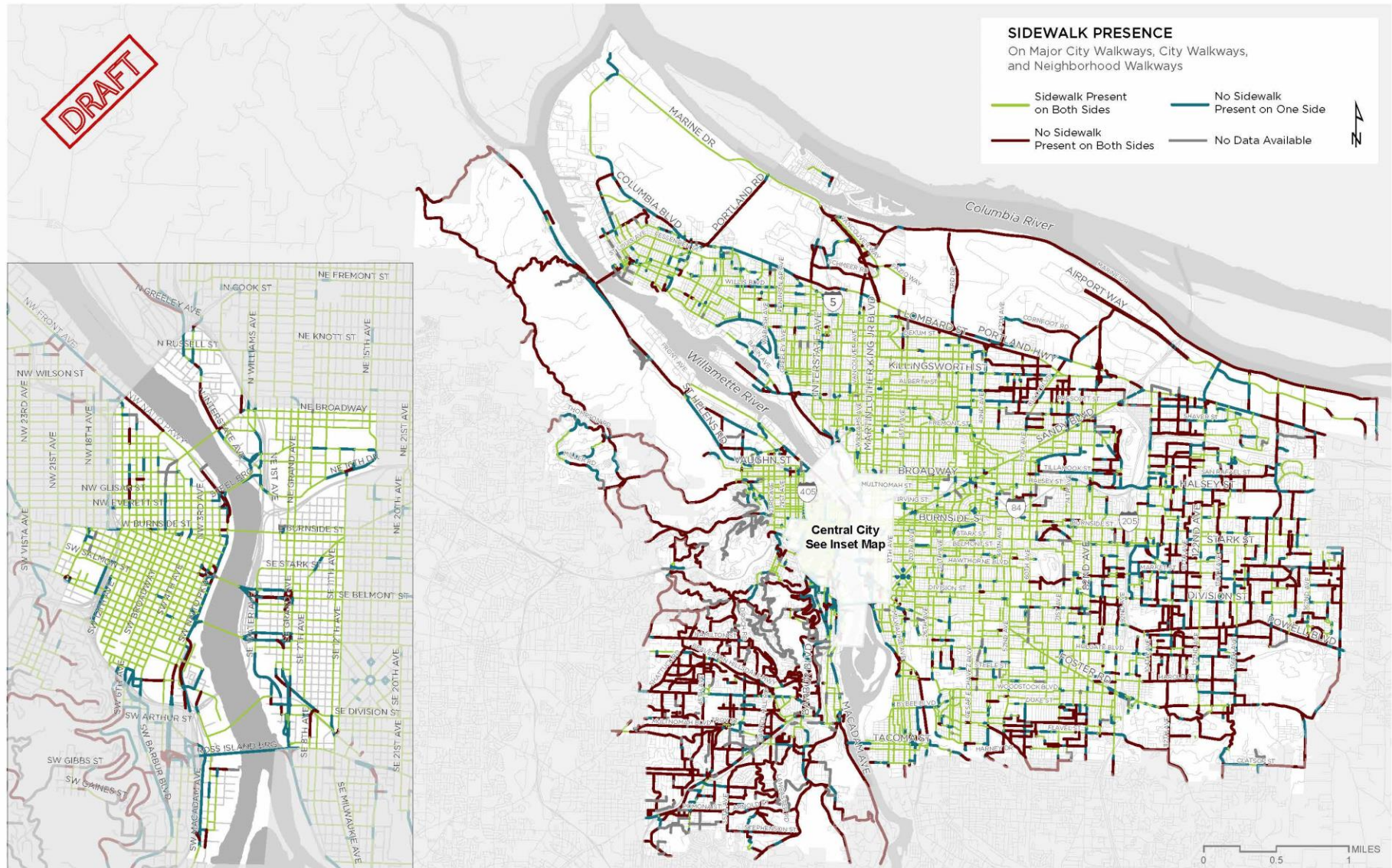
Prioritization Framework

Walking Priorities Survey → **Vision, Mission, Goals, Objectives**

Pedestrian Priority Network

The universe of streets that we will invest in

Pedestrian Network Needs

Identify the needs within the Pedestrian Priority Network

Pedestrian Needs Priorities

How we prioritize needs within the network

Implementation Toolkit: (What will we do?)

Policy, Funding Programs, Palette of Alternative Walking Paths

Prioritization Framework

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Network Needs Analysis - Crossings

"ACROSS" - Includes Crossing Gaps and Deficiencies

Network Needs Analysis – Sidewalk Gaps

SIDEWALK PRESENCE
On Major City Walkways, City Walkways, and Neighborhood Walkways

- Sidewalk Present on Both Sides
- No Sidewalk Present on Both Sides
- No Sidewalk Present on One Side
- No Data Available

DRAFT

"ALONG" - Includes Sidewalk Gaps only

Prioritization Framework

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Prioritizing Needs

Role of Prioritization

- Converts wants and needs to something **practical, actionable, and thoughtful**

- Can be based on a **wide range of considerations**

- Works best when **targeted and judicious**

Prioritization Framework

- Scores every segment of the **Pedestrian Priority Network**

- Uses **three criteria**

Equity

Safety

Demand

Desired outcome
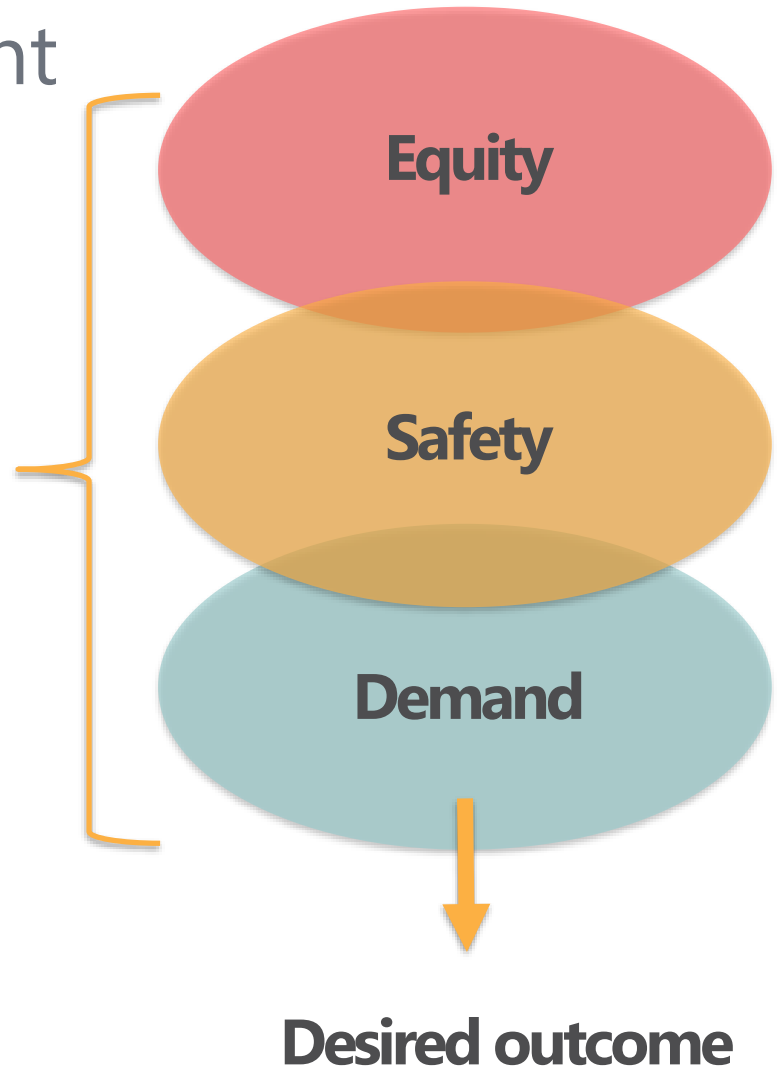
Equity in all things

- **Comprehensive equity approach:** equity lens in plan outreach, engagement, needs analysis, prioritization, and implementation strategies

- Focus on equity supports a **city-wide approach** that is not driven purely by density

Assigning a Value to Equity

- Score derived from PBOT's Equity Matrix Scores, based on **race and income.**

- **Consistent** with City's current approach

- Developed to leverage **sound methodology**

Why use PBOT's Equity Matrix?

- **Robust multi-departmental effort** over several years and several iterations, including the Office of Equity and Human Rights

- **Captures intersectionality** of race and income
  - People with disabilities are over-represented in low income communities locally and nationally.

Equity Score

- **Census Tracts** receive scores from 1 (less inequity) to 5 (highest inequity) for each category

Factor	Equity Score
Race	1 to 5
Income	1 to 5
Overall Equity Score	*Sum (2 to 10)*

- The Equity Matrix Score is applied to the **entire pedestrian priority network**.

Equity - Network Prioritization

PEDESTRIAN NETWORK: EQUITY

Scores

9 - 10
7 - 8
5 - 6
3 - 4
1 - 2
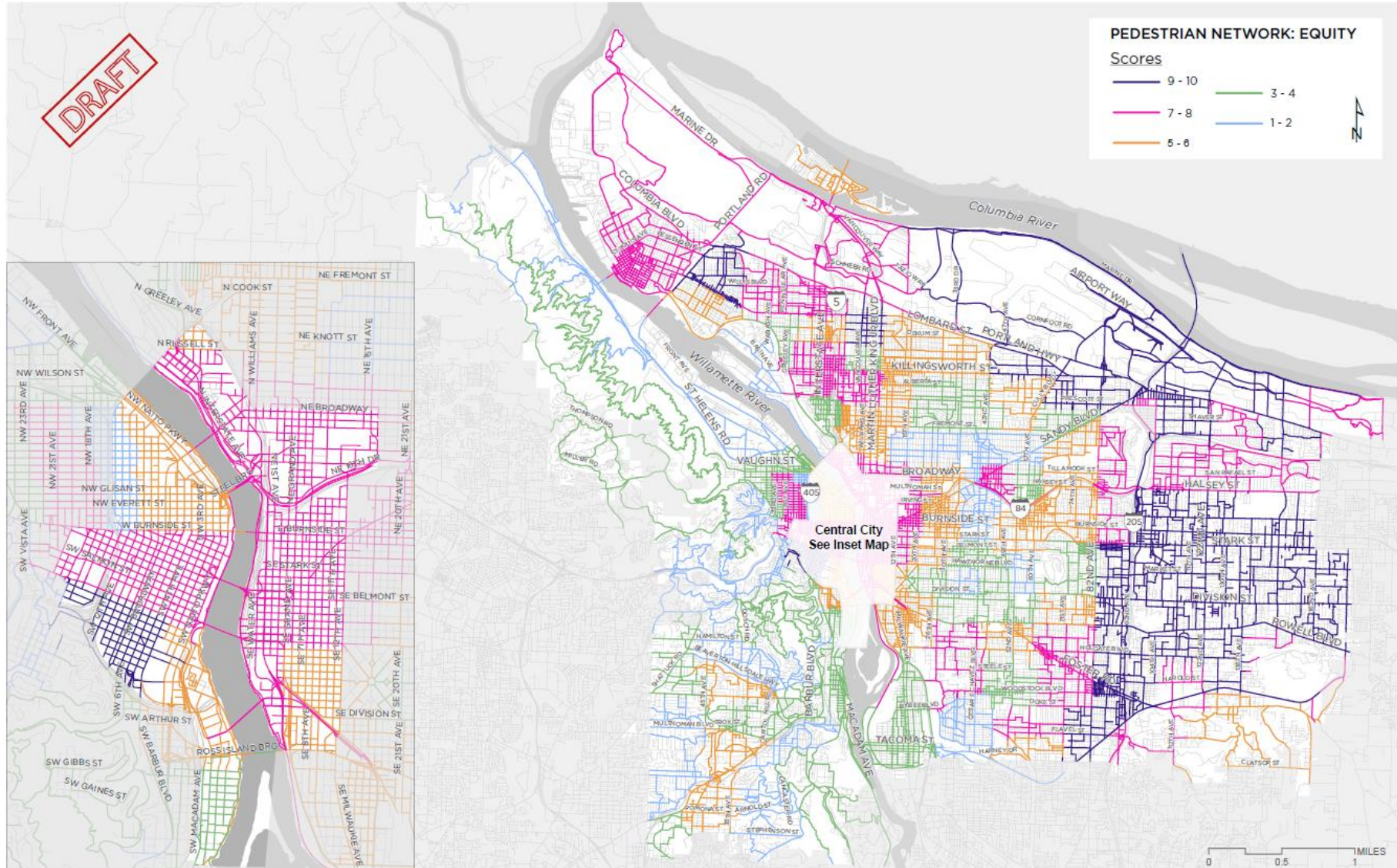
Equity Considerations

What are we missing?
- Race
- Income
- Limited English Proficiency
- Affordable Housing
- Youth
- Seniors
- Persons with Disability
- Destinations (data limited)

Equity Considerations

Suggested Factor: Race
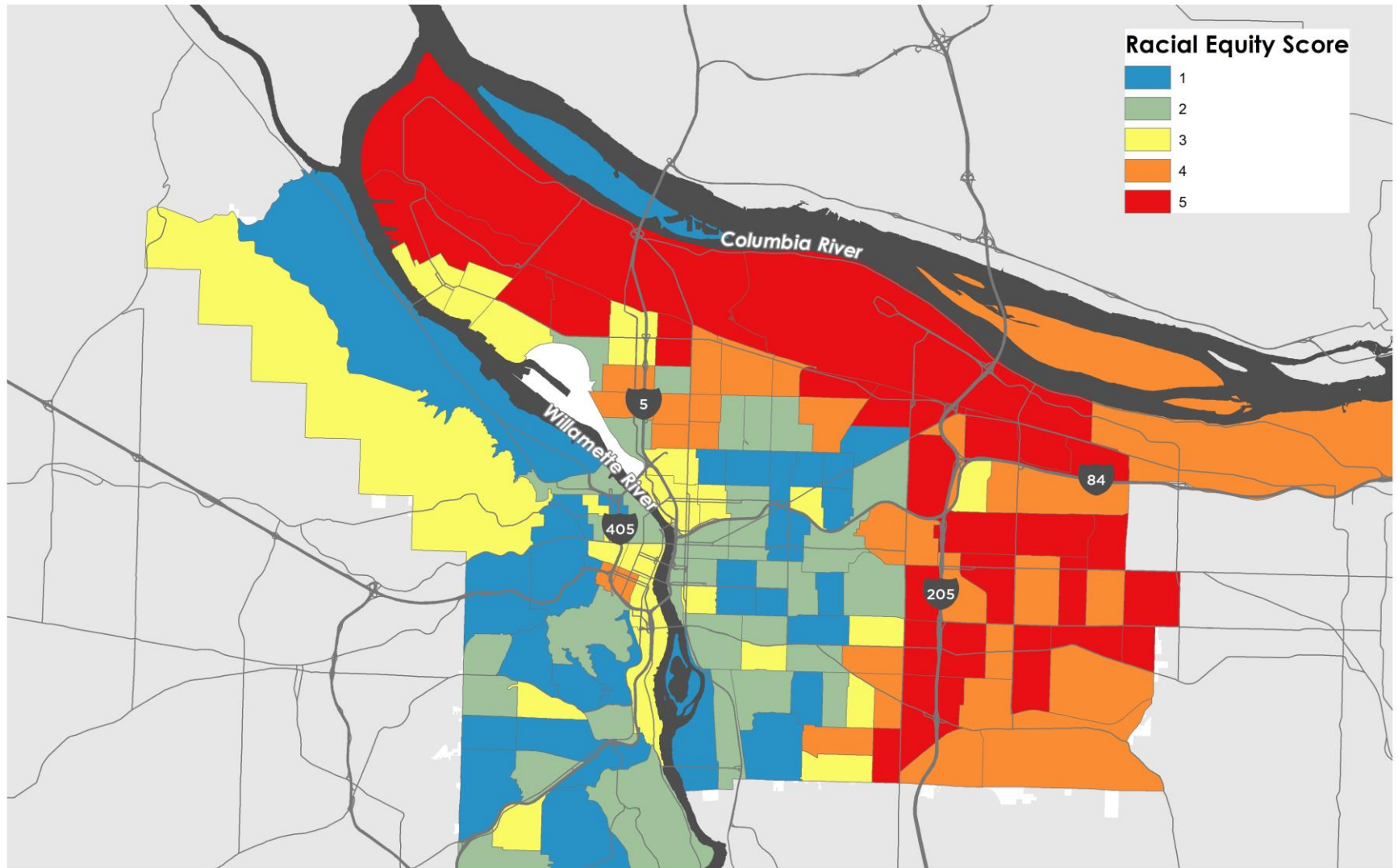
Equity Considerations

Suggested Factor: Income
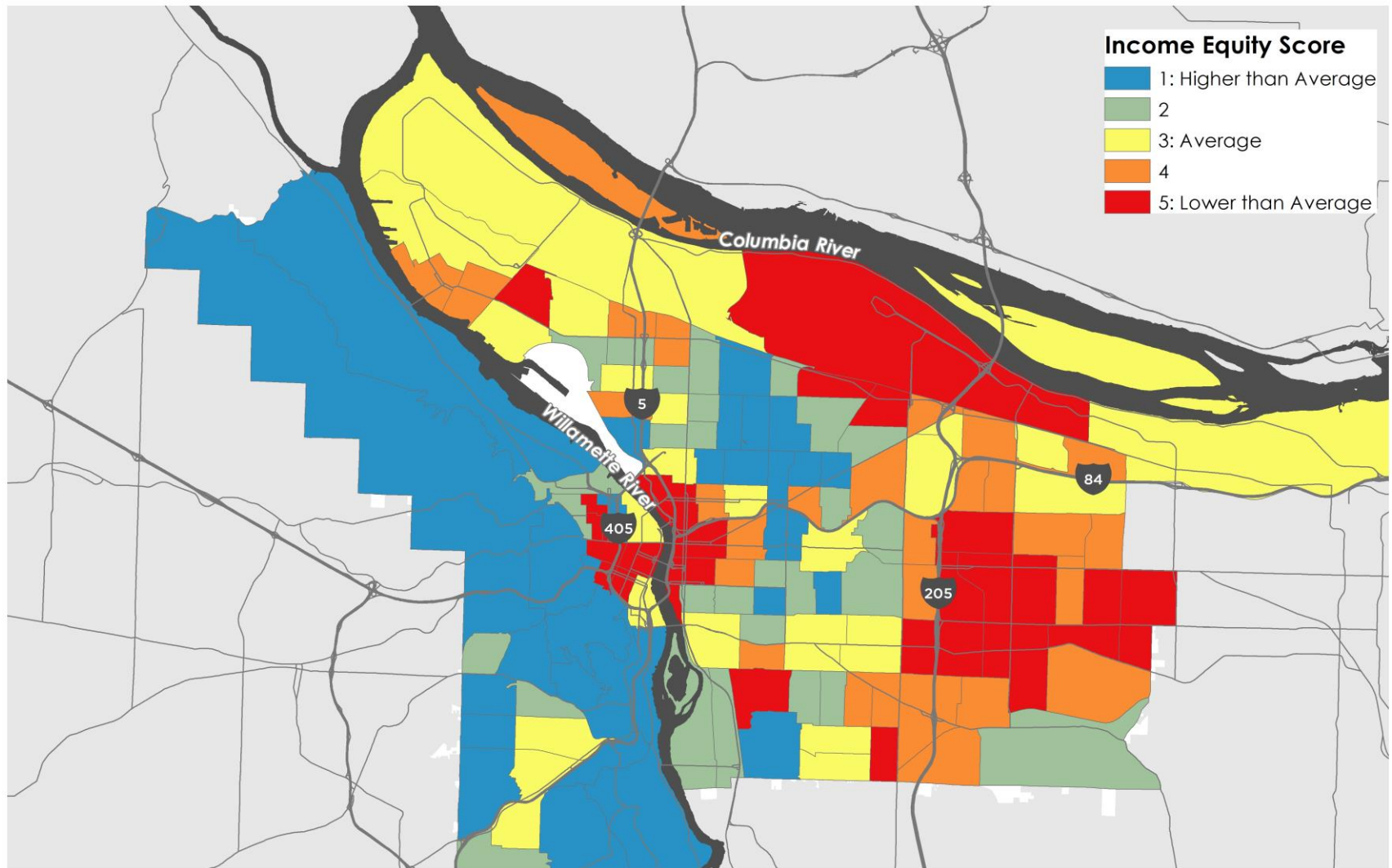
Equity Considerations

Suggested Factor: Limited English Proficiency
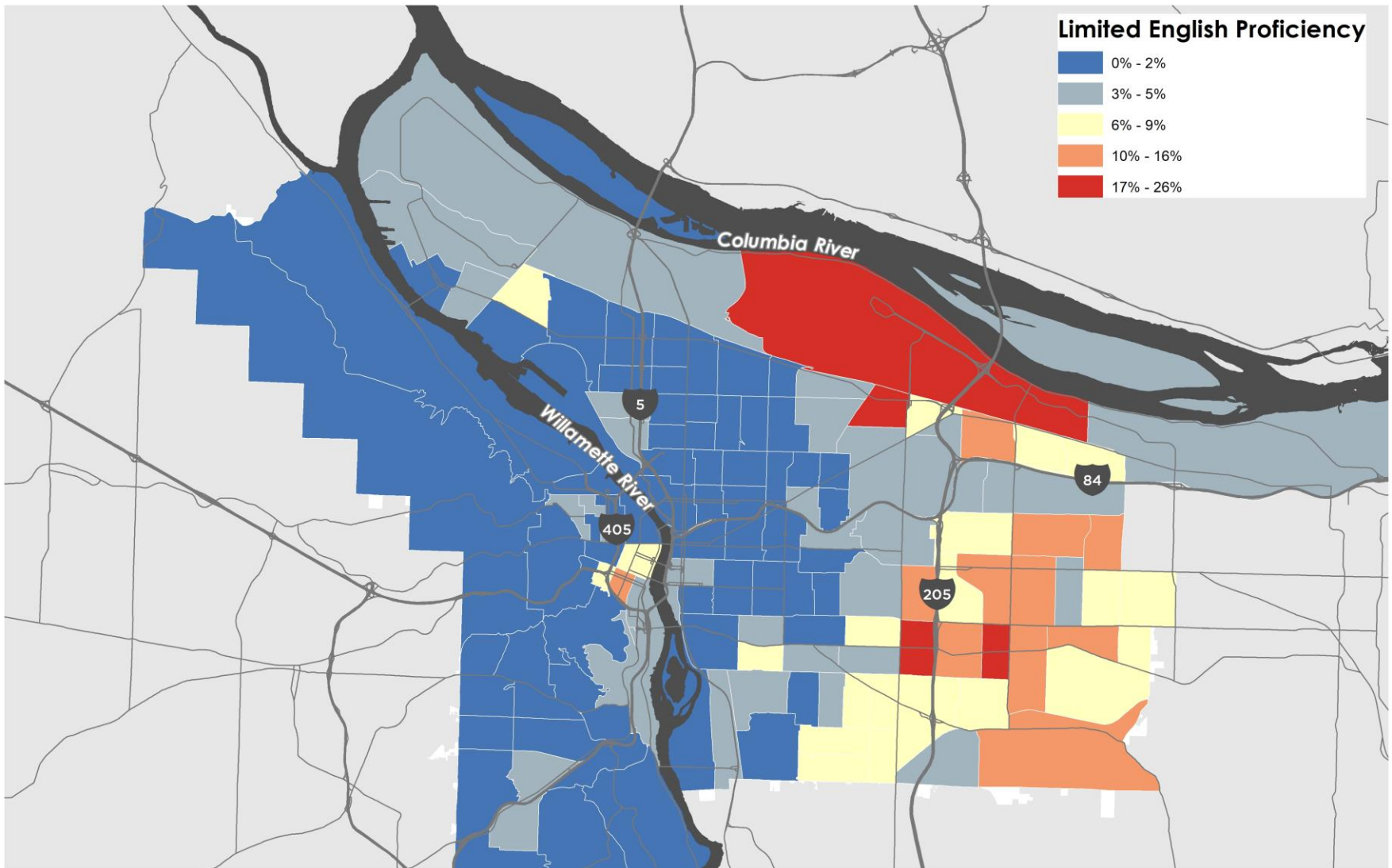
Equity Considerations

Suggested Factor: Affordable Housing

Affordable Housing Units
- 0 - 25
- 26 - 55
- 56 - 99
- 100 - 158
- 159 - 263

Columbia River

Willamette River
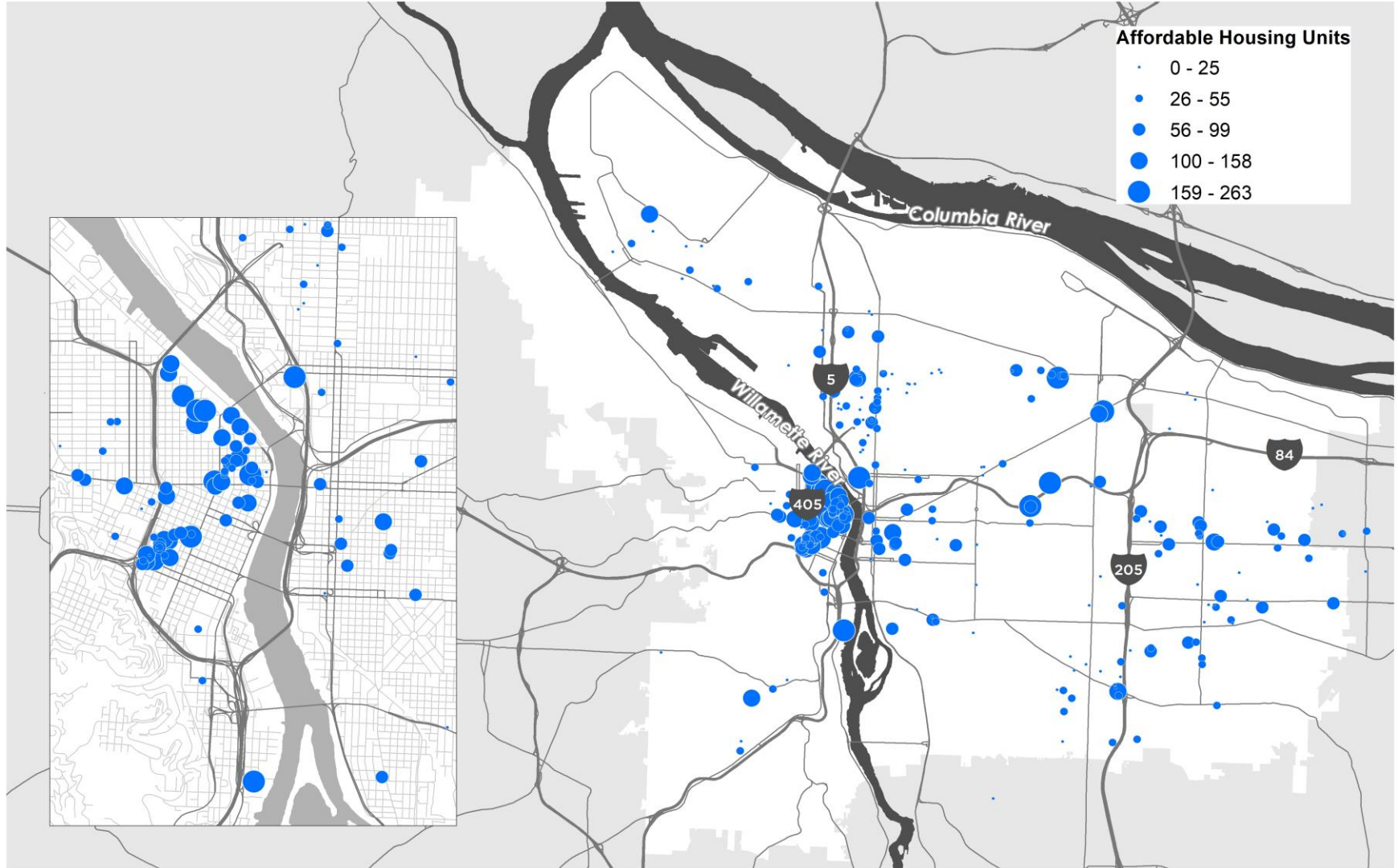
Equity Considerations

Suggested Factor: Youth
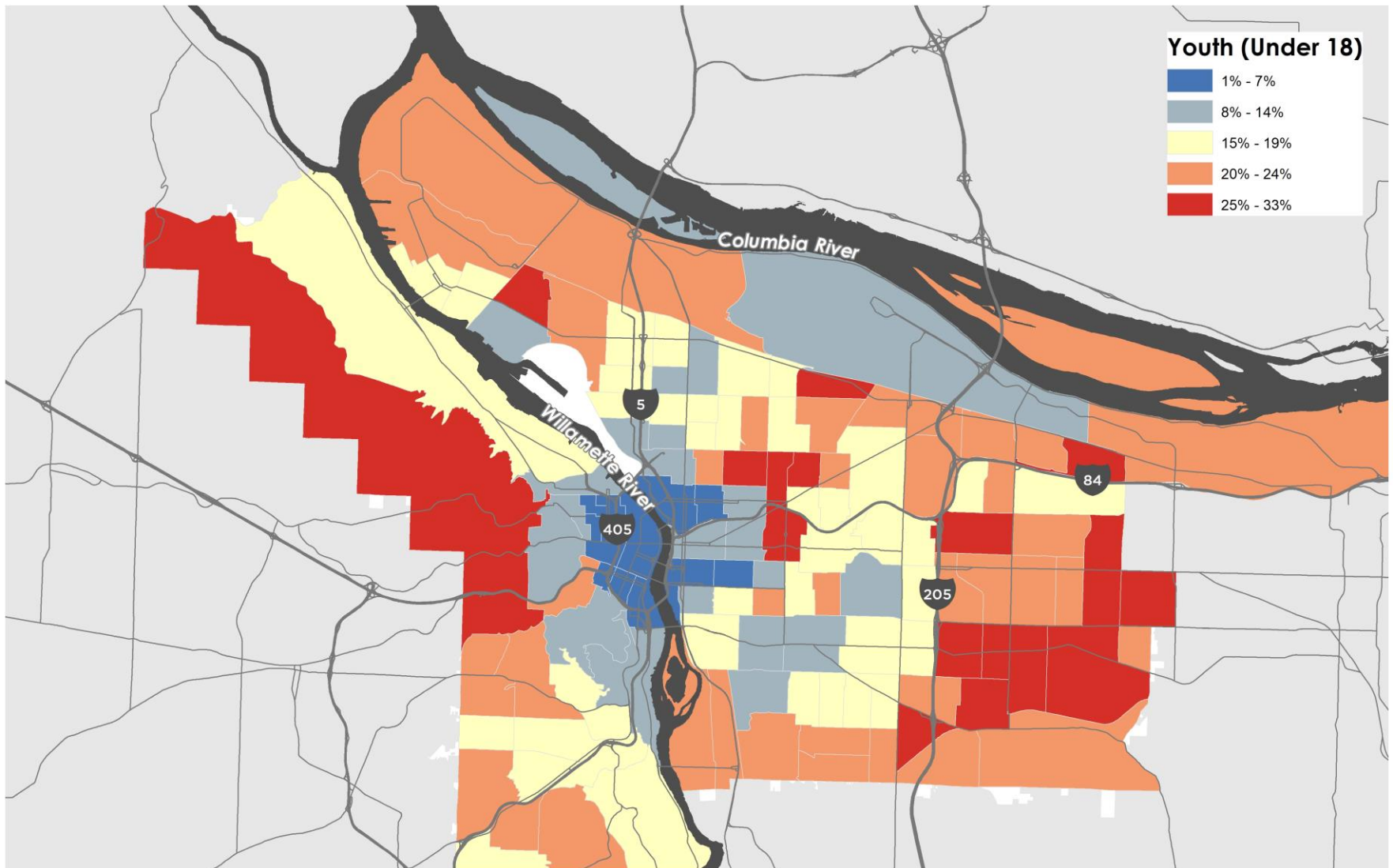
Equity Considerations

Suggested Factor: Seniors
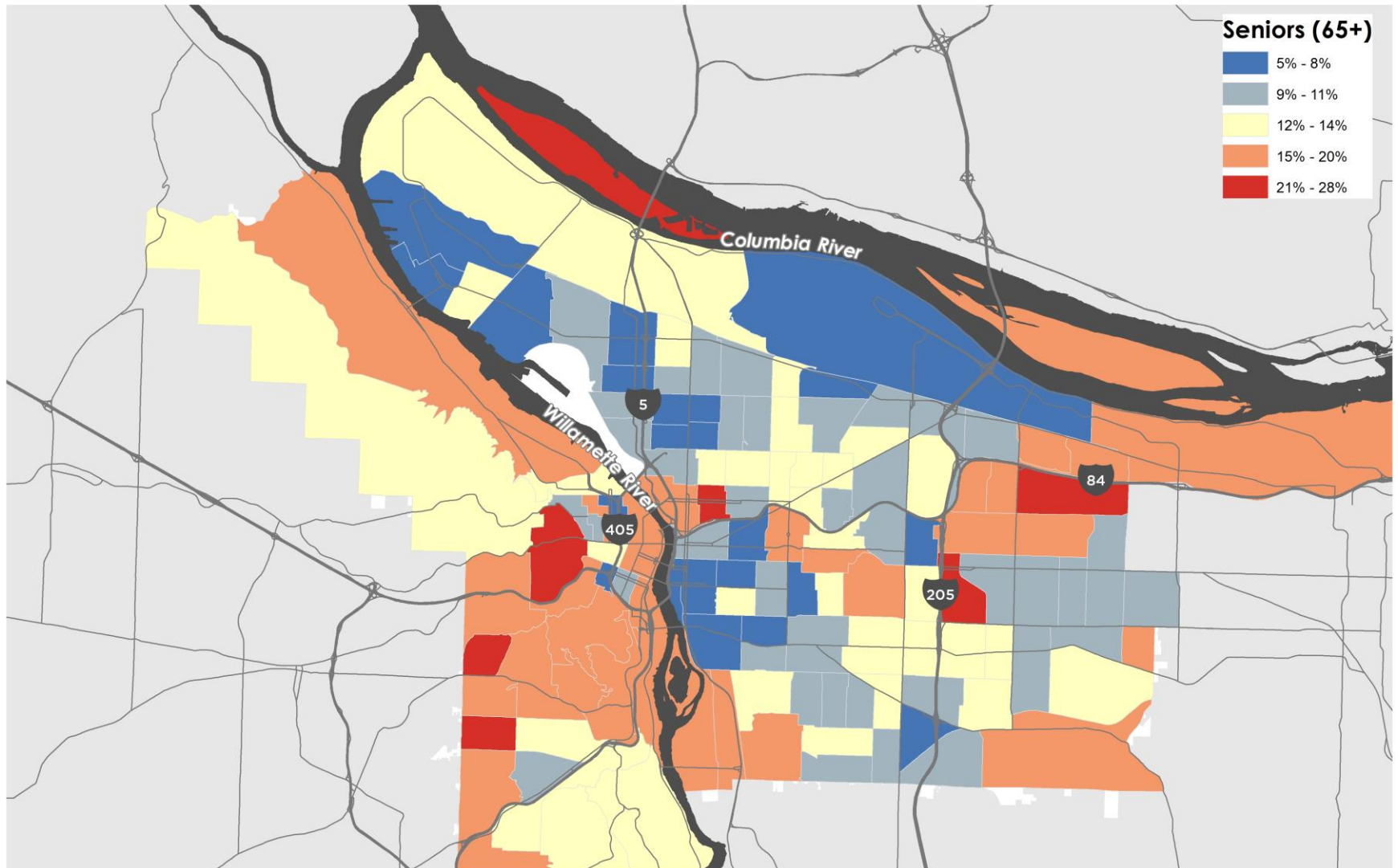
Equity Considerations

Suggested Factor: Persons with Disability

Equity - Network Prioritization

PEDESTRIAN NETWORK: EQUITY

Scores

- 9 - 10
- 7 - 8
- 5 - 6
- 3 - 4
- 1 - 2
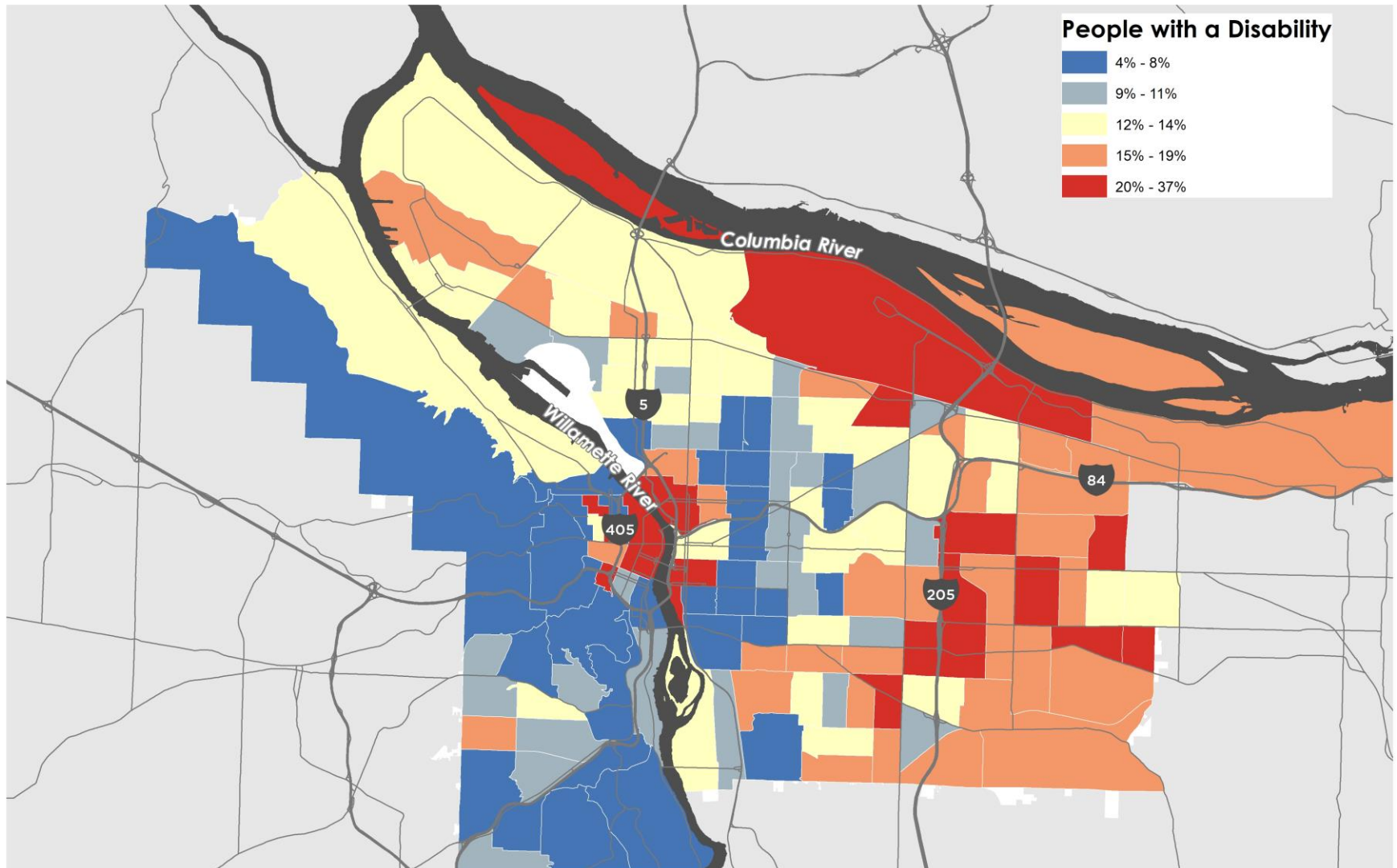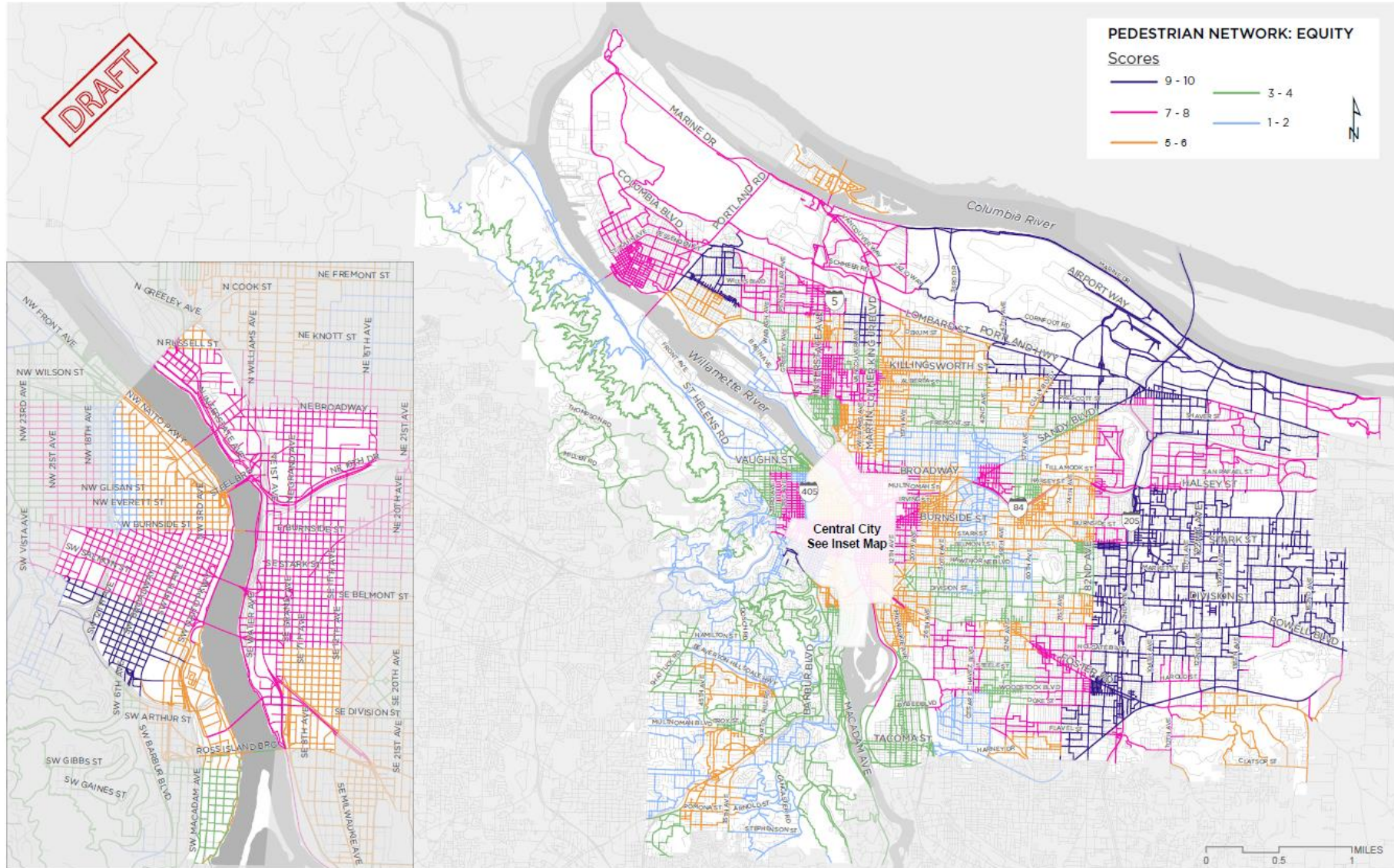
Pedestrian Demand

Demand

↓
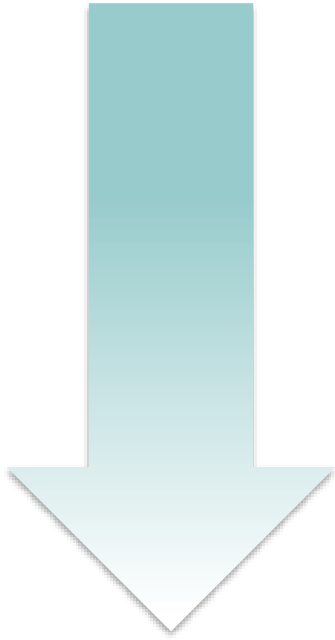
Pedestrian Districts

Major City Walkways

City Walkways

Neighborhood Walkways

~~Trails*~~

Off-street regional trails are included on the Pedestrian Priority Network and are now categorized as a Major City Walkway, City Walkway, or Neighborhood Walkway based on surrounding land uses and transit.

Pedestrian Demand

- Demand score is based on the **network classifications**.

- How do we know there is demand?
  - **Land use and transit** drive pedestrian demand

- Why does demand matter?
  - Accounts for **access to destinations** – goods, services, and jobs
  - PedPDX is a **modal plan** for transportation

Assigning a Value to Demand

Range of Demand Scores

| Network Classification	In Pedestrian Districts	In Light Rail Station Areas	Outside of Districts
Major City Walkway	10	8	6
City Walkway	8	6	4
Neighborhood Walkway	4	2	1
Local Streets	2	1	N/A

Assigning a Value to Demand

- **Highest demand** streets receive most points

- Added points for streets **within Pedestrian Districts and Light Rail Station Areas** receive additional points.

- For community members, **busy streets are a higher priority** than residential streets *(survey feedback)*

Which kinds of places are the most important to improve for walking in Portland?

	Citywide
Areas that serve people who need to rely on walking the most	5.11
Streets where people walking have been killed or injured	5.08
Streets connecting people to transit/ bus stops	5.06
Along and across busy streets	4.99
Streets connecting families and children to schools	4.99
Streets connecting people to neighborhood commercial districts	4.73
Streets connecting people to community facilities like libraries	4.66
Areas where the most people live and/ or work	4.55
Residential streets lacking sidewalks or walking paths	4.54
Streets connecting people to parks	4.52

Pedestrian Demand – Network Prioritization
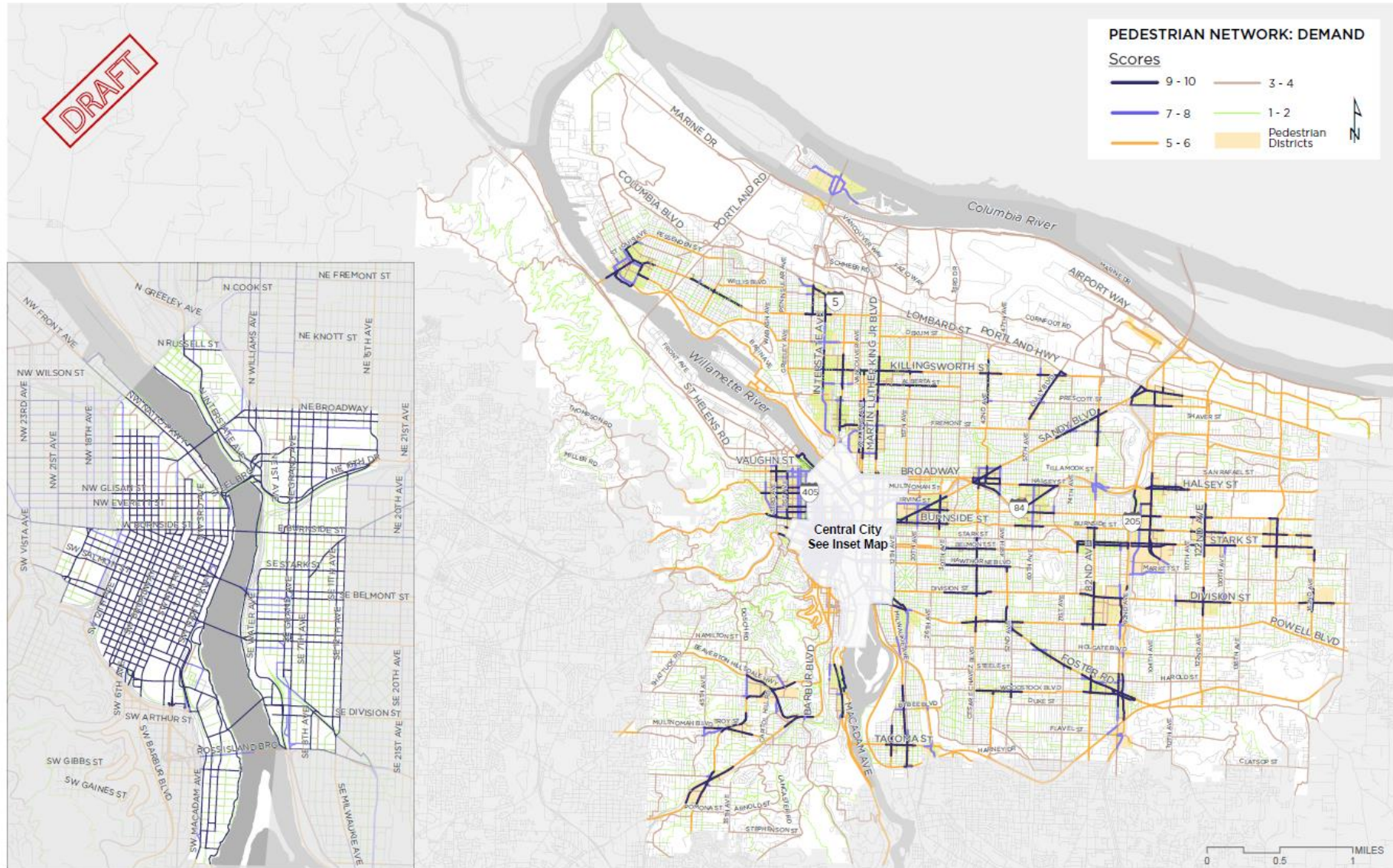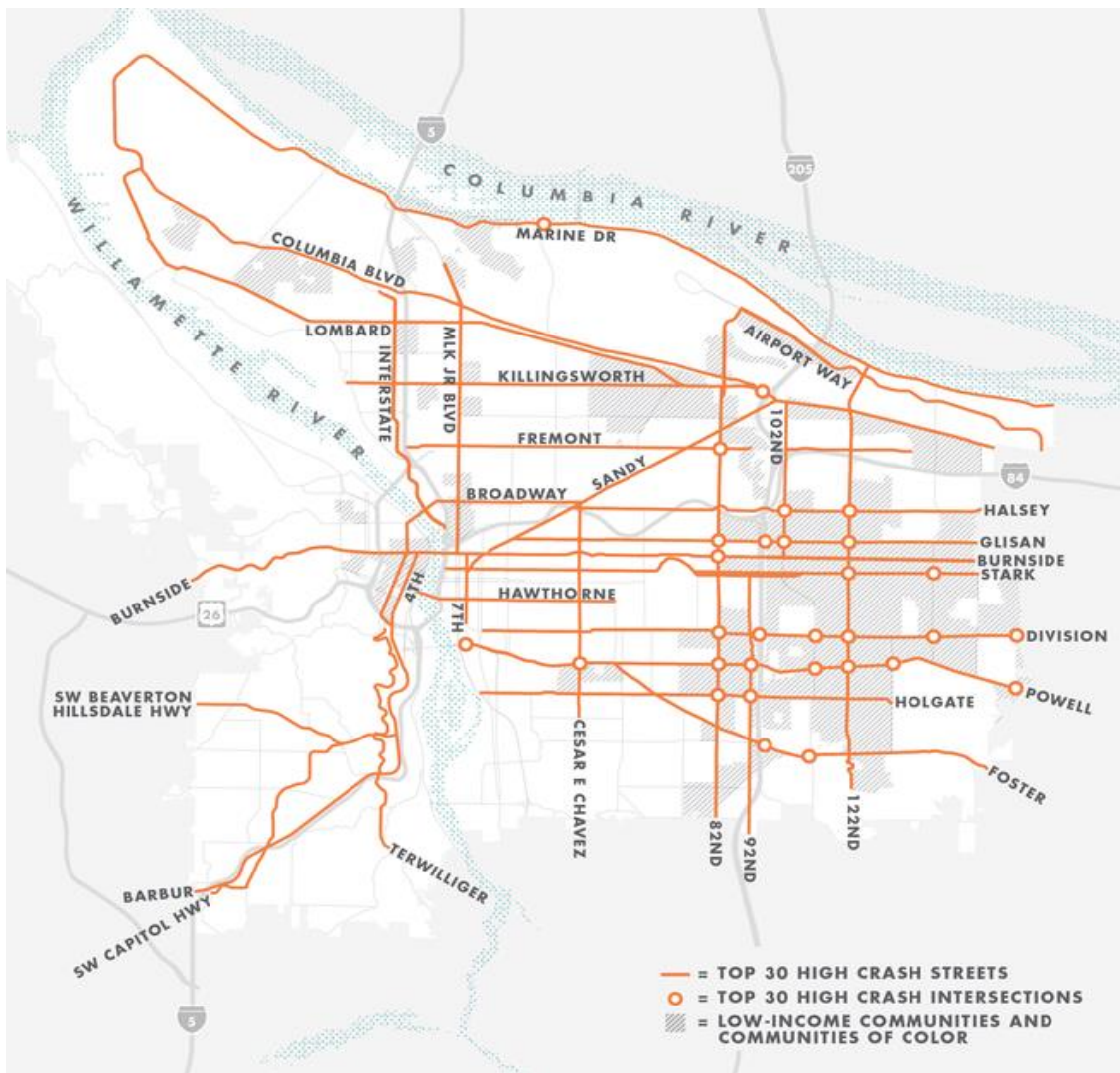
Safety

- Based on Pedestrian Safety **Analysis**

- Includes **Crash** History
    - Pedestrian High Crash Network
    - High KSI segments

- Includes **Risk** Factors
    - Three or more travel lanes
    - Posted speeds of => 30 mph

- Includes **Trails**

Safety

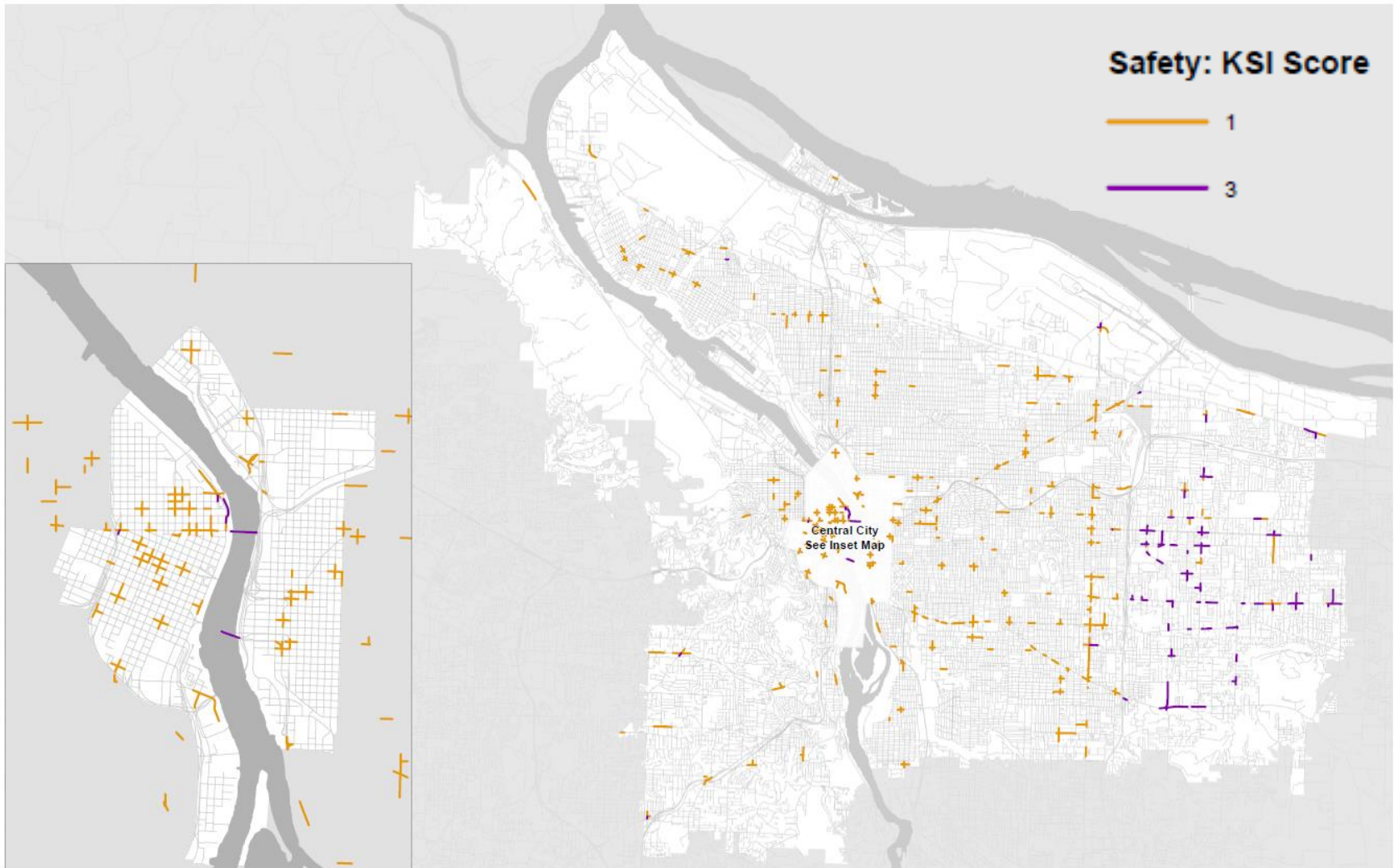**Safety Factor**: *High Crash Network (HCN) streets*

The Pedestrian HCN includes the 20 most dangerous streets for pedestrians throughout Portland.
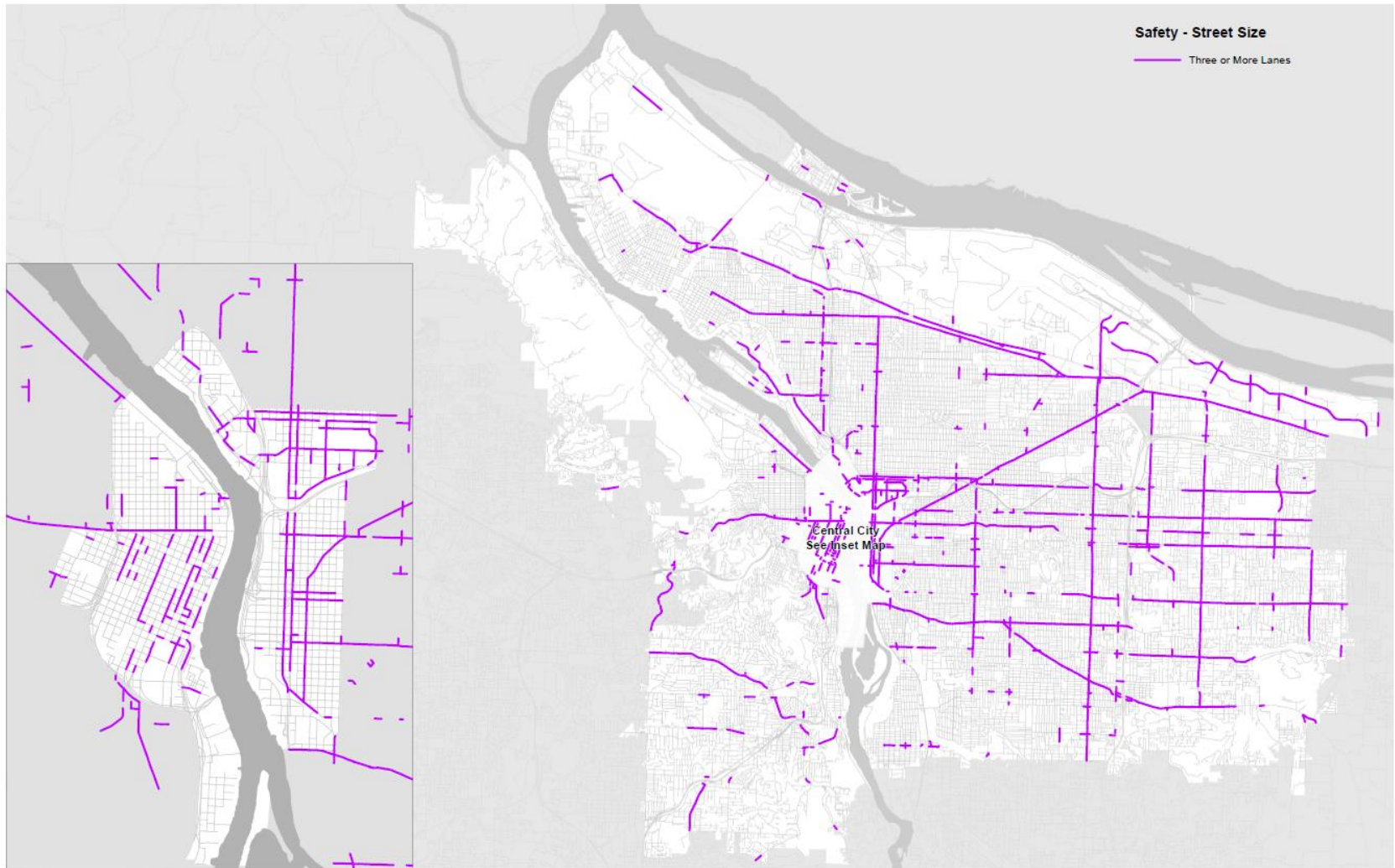
(Source: Portland's Vision Zero Action Plan).

Safety

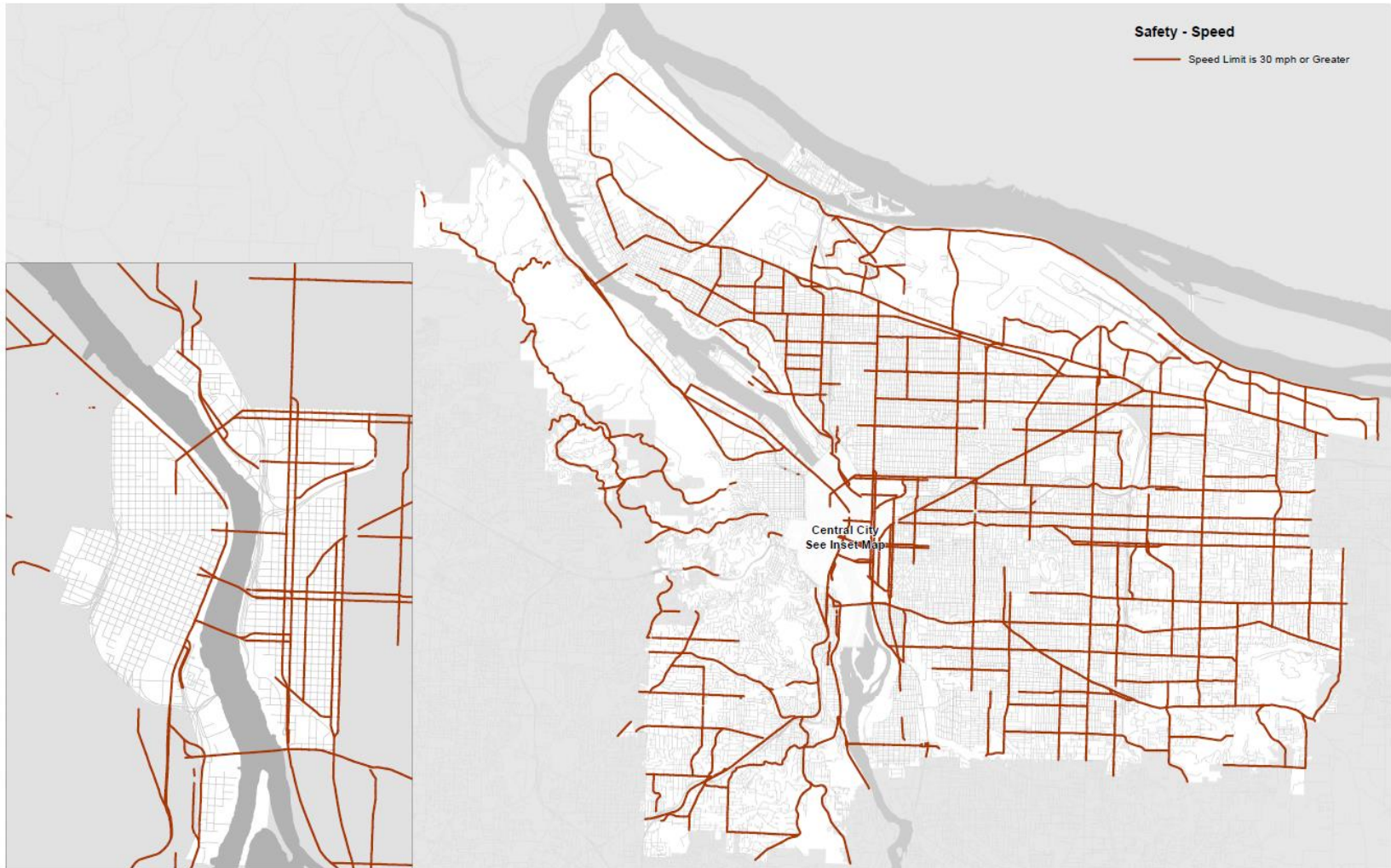**Safety Factor**: *Street segments with a high density of KSI pedestrian collisions*

Safety

Safety Factor: *Streets with three or more travel lanes*

Safety

Safety Factor: *Locations with posted speeds of 30 mph or greater*

Safety

Based on factors in the Pedestrian Safety Existing Conditions Memo.

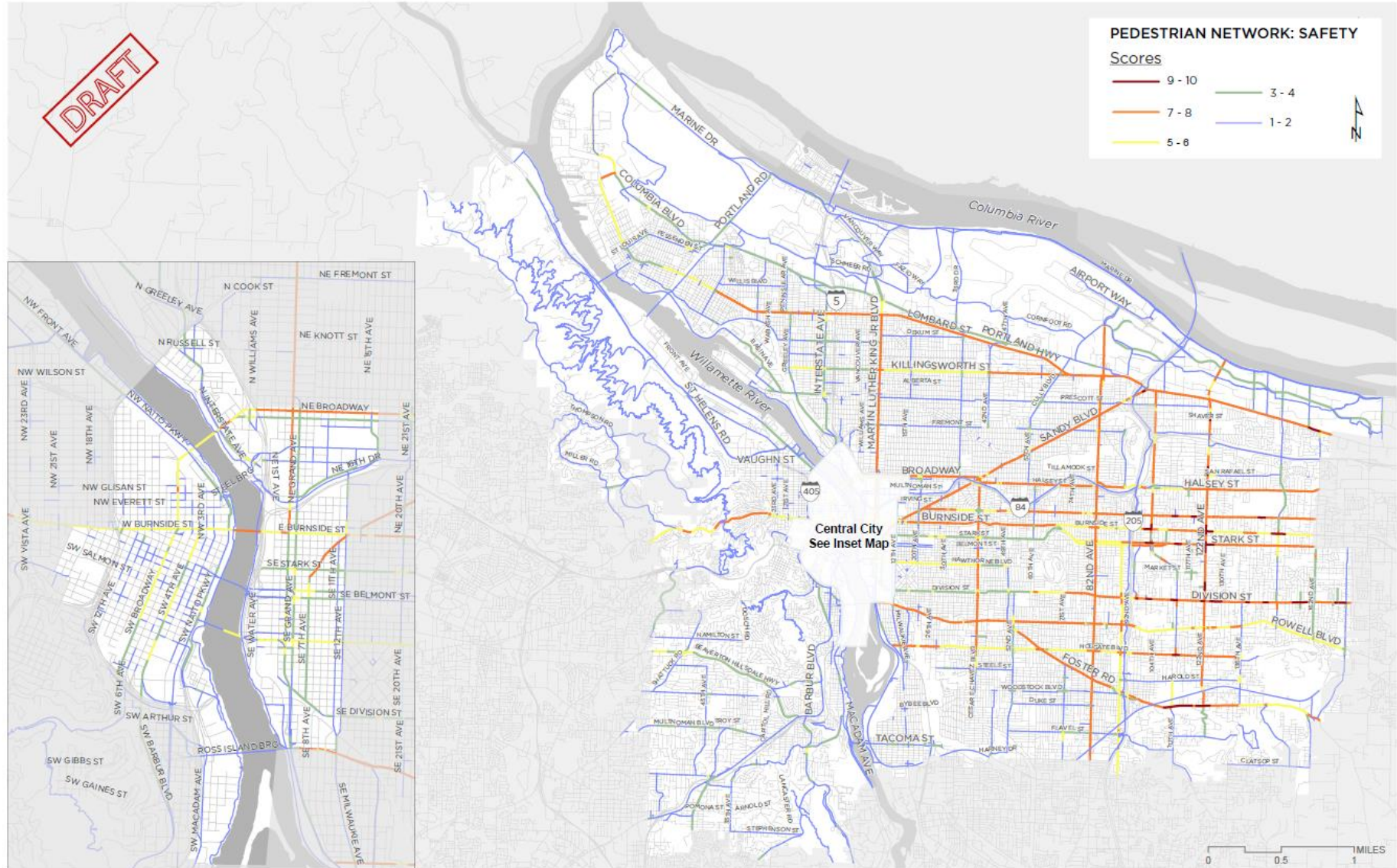| Condition	Safety Score
	Collision-based Factors
Pedestrian High Crash Network	3
Street segments with **one** KSI pedestrian collision	1
Street segments with **multiple** KSI pedestrian collision	3
	Risk Factors
Streets with three or more travel lanes	2
Locations with posted speeds of 30 mph or higher	2
	Off-Street Factor
Trail segments separated from motor vehicles	2
Overall Safety Score	**Sum Total**

Safety

Based on factors in the Pedestrian Safety Existing Conditions Memo.

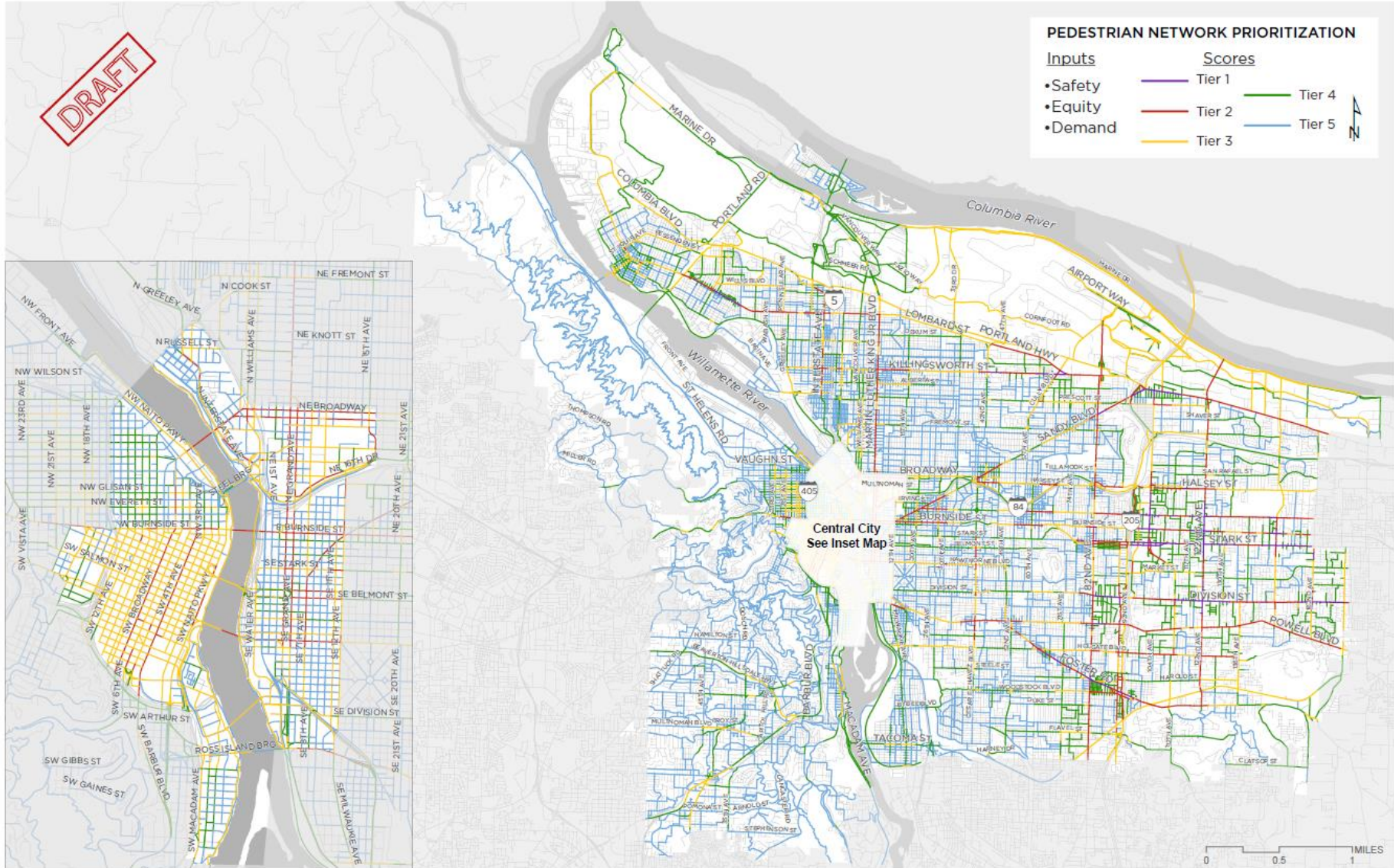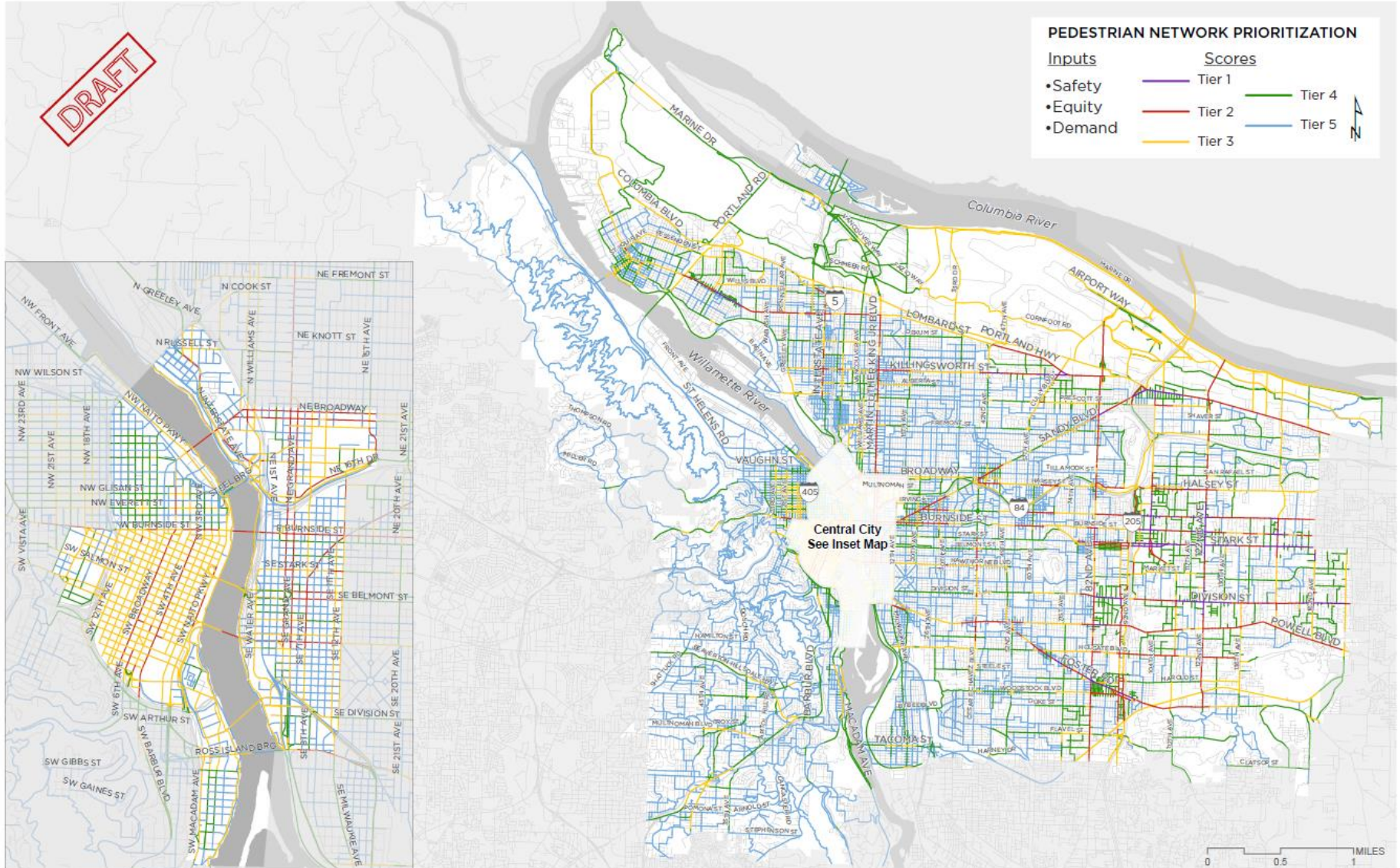| Condition	Safety Score
	Collision-based Factors
Pedestrian High Crash Network	3
Street segments with **one** KSI pedestrian collision	1 ← **Either/Or**
Street segments with **multiple** KSI pedestrian collision	3
	Risk Factors
Streets with three or more travel lanes	2
Locations with posted speeds of 30 mph or higher	2
	Off-Street Factor
Trail segments separated from motor vehicles	2 ← **Exclusive**
Overall Safety Score	**Sum Total**

Safety – Network Prioritization

Overall Prioritization

- The overall prioritization score is equal to the **sum of the demand, equity, and safety scores.**

- Prioritization scores are calculated for each segment on the Pedestrian Priority Network at **the block level**.

- The output table is consistent with outputs from the **Active Trans Priority Tool.**
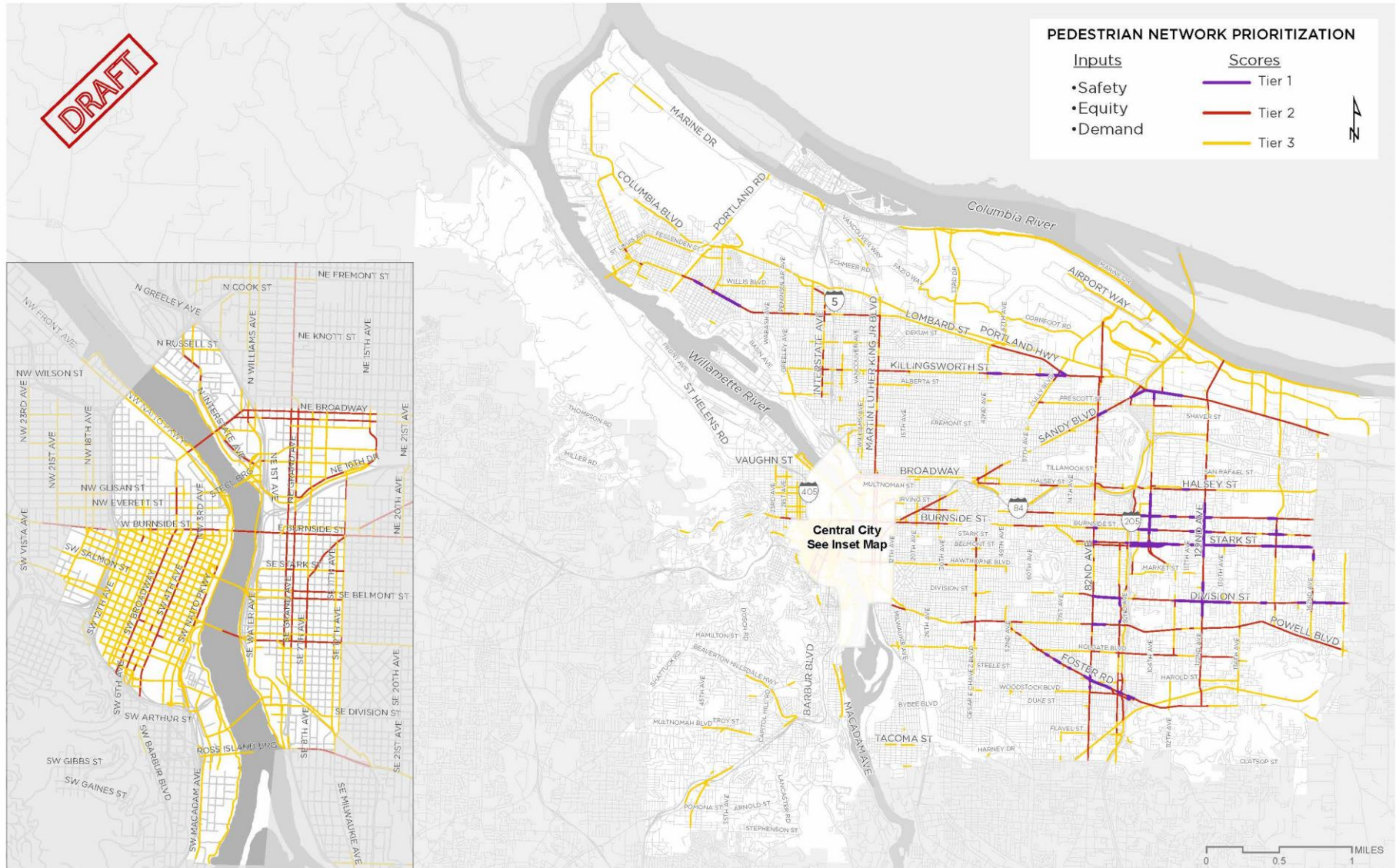
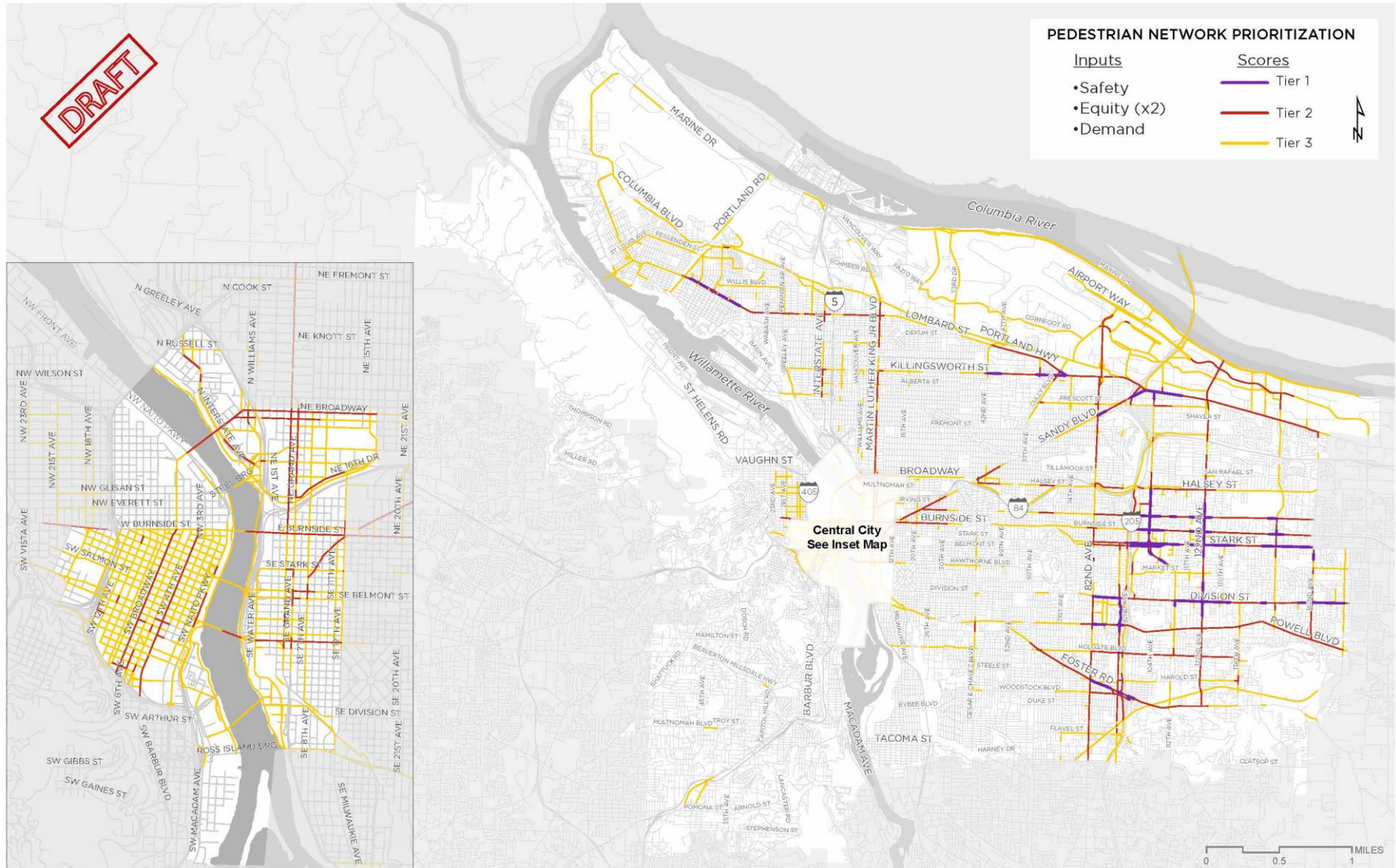# Overall Prioritization – Equal Weighting

PEDESTRIAN NETWORK PRIORITIZATION

Inputs
- Safety
- Equity
- Demand

Scores
- Tier 1
- Tier 2
- Tier 3
- Tier 4
- Tier 5

Overall Prioritization – Higher Equity Weighting

PEDESTRIAN NETWORK PRIORITIZATION

Inputs
- Safety
- Equity
- Demand

Scores
- Tier 1
- Tier 2
- Tier 3
- Tier 4
- Tier 5

Top Tier Prioritization – Equal Weighting

Top Tier Prioritization – Higher Equity Weighting

Needs within Prioritized Segments

Equal Weighting Prioritization Results

	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5	Total
Sidewalk Gaps (miles)	4	31	112	198	356	701
Crossing Gaps (miles)	13	47	123	146	125	453
Crossing Gaps (estimated number of crosswalks needed to close gap)	124	380	969	1100	879	3452
Deficient Crossings	5	89	68	46	8	216

Next Steps

- Identify **needs that fall within the highest priority segments**.

- **Quantify prioritized needs** by number and cost.