I-5 Lid Feasibility Study

Overview and Orientation
March 26, 2019
Seattle City Hall, Bertha Landes Room
Meeting Purpose

- Provide study background, overview and orientation
- Establish expectations for collaboration and coordination
- Share study approach and timeline
Introductions
Background and History
Background and history
Background and history
Lid I-5 Campaign Introduction
The Movement to Reconnect Seattle
Who We Are

We are volunteer Seattle residents advancing the concept of lidding Interstate 5 citywide to reconnect neighborhoods and expand public land.

Steering Committee
Natalie Bicknell
Scott Bonjukian, Co-Chair
Jim Castanes
Cormac Diggins
Liz Dunn
John Feit, Co-Chair
Bruno Lambert
Thomas Pitchford
Sony Purba

Coalition Partners

SEATTLE PARKS FOUNDATION
Fiscal Sponsor

Capitol Hill Housing

Downtown Seattle Association

FIRST HILL IMPROVEMENT ASSOCIATION
Grassroots Civic Engagement

- Design Charrettes
- Media Coverage
- Walk/Bike Tours
- Community Presentations
Political Endorsements

Sally Bagshaw
Seattle City Council District 7

Rob Johnson
Seattle City Council District 4

Teresa Mosqueda
Seattle City Council Position 8

Mike O'Brien
Seattle City Council District 6

Rep. Nicole Macri
Washington District 43

Sen. Jamie Pedersen
Washington District 43
Challenge: Rapid Growth & Scarce Public Land

Downtown, Capitol Hill, and First Hill are 3.5% of Seattle’s land area and are absorbing 29% of population growth without similar increases in parks, affordable housing, and schools.

Calculated from OPCD Urban Village Indicators Monitoring Report, 2018
Challenge: Disconnections & Environmental Injustice

“The drivers of cars and trucks might live in homes far from the highway and may suffer no negative health impacts from the pollution they help create. But city dwellers who live near the highway, and who might walk and take transit more so than they drive, are prone to pollution’s effect.”

- Darin Givens, ATL Urbanist
Current Conditions
Win-Win Opportunity
## Community Benefits

### Parks & Open Space
- Critical breathing room in a dense city
- Play areas for kids, seniors, pets
- Spaces for sports and active recreation
- Public health and economic benefits

### Walk/Bike Connections
- Opportunities for restoring the street grid
- Encourage more walking and bicycling
- Integrate with multi-modal trails
- Better connections to transit

### Affordable Housing
- New public land where it is needed most
- Proximity to jobs and social services
- Transit-oriented development potential
- Homes for families and low wage workers

### Public Health
- Cutting off sights and sounds of traffic
- Opportunity for improved stormwater quality
- Potential to capture or filter air pollutants
- Reduced urban heat island effect

### Community Facilities
- Multi-purpose community centers
- Downtown elementary and middle schools
- Childcare
- Public safety and utility infrastructure

### The Arts
- Studios, galleries, performance venues
- Activate new park spaces with programming
- Housing affordable to artists
- Outdoor public art
Why Now?

» Favorable economics
» Planning ahead of private interests
» WSDOT’s long term I-5 corridor planning
» Convention Center Addition
Cost vs. Land Value

» Building lids is likely cost-competitive with buying private land (if private land was even available)

» This may facilitate value capture mechanisms and private-public partnerships for funding
Private Lid Developments

CAPITOL CROSSING (WASHINGTON, D.C.)

FENWAY CENTER (BOSTON)
I-5 Systems Partnership
Recent WSDOT Precedents

SAM SMITH PARK (1994)

STATE ROUTE 520 (2015)
Equity Considerations

Median Household Incomes

Data Source: "Demographic Baseline" GIS Shapfile by King County, updated August 9, 2016, based on 2010 - 2014 American Community Survey 5 Year Average
“...in the core of the Puget Sound region I-5 is permanently constrained geometrically as it passes into and through Seattle. That constraint is the architectural limit for freeway expansion in the region.”

Convention Center Addition: Catalyst for Discussion
## Community Package Coalition

<table>
<thead>
<tr>
<th>Project</th>
<th>Cost</th>
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<tbody>
<tr>
<td>Lid I-5 Study</td>
<td>$1.5M</td>
</tr>
<tr>
<td>Affordable Housing</td>
<td>$29M</td>
</tr>
<tr>
<td>Freeway Park Improvements</td>
<td>$10M</td>
</tr>
<tr>
<td>Terry Avenue Promenade</td>
<td>$4.0M</td>
</tr>
<tr>
<td>Pike-Pine Protected Bike Lanes</td>
<td>$10M</td>
</tr>
<tr>
<td>8&lt;sup&gt;th&lt;/sup&gt; Avenue Protected Bike Lane</td>
<td>$6.0M</td>
</tr>
<tr>
<td>Olive Way Pedestrian Safety</td>
<td>$0.5M</td>
</tr>
</tbody>
</table>
National Trends and Case Studies

42 COMPLETED

27 PROPOSED/PLANNED
Klyde Warren Park – Dallas (2012)

5.7 acre lid / $490 per SF / Funding: 48% private, 52% public / Ranked #8 most visitors

“I had enormous admiration for what they were wanting to do, but their idea about putting a lid on top of the freeway? My first thought was, ‘These people are nuts.’”

- Tom Shelton, lead project engineer
Capitol Crossing – Washington, D.C. (opens 2021)

6.5 acre lid / $706 per SF / Funding: 100% private / 2.2 million SF office, retail, residential

“It’s an urban planning victory to be able to reconnect the city street grid and make a highway disappear.”

- Robert Braunohler, Property Group Partners
2018 Central Hills Triangle Collaborative (CHTC)
Lid I-5 Resources for the Feasibility Study

- Finger on the pulse of community needs and vision
- Nationwide freeway lid inventory and case study data, graphics, histories, sources, and personal contacts
- Public records and I-5/Freeway Park/WSCC history
- References to recent freeway lid academic research
- Collection of community-led design concepts and illustrations
- Advisory Council of experts and community leaders
- Neighborhood coalition, political connections, media contacts
- Website, large mailing list, and social media presence
Thank You

Follow | Engage | Advocate

www.lidi5.org
Al Levine
UW Runstad Department of Real Estate’s Development Studio Report
REAL ESTATE DEVELOPMENT STUDIO
Master of Architecture
Master of Landscape Architecture
Master of Science in Real Estate
Master of Urban Planning

UNIVERSITY of WASHINGTON
- FEASIBILITY
- ACCESSIBILITY

- SUSTAINABILITY
- WATER/LIGHT/AIR

- TRAFFIC FLOW
- SURROUNDING USES
DENSITY
Total Land Area: 28.7 AC
Total LID Area: 22.3 AC
Percent LID: 77%

Open Space vs FAR

Density

Hyper Low | Low | Medium | High | Hyper High
---|---|---|---|---

Floor-Area-Ratio

- 2
- 4
- 6
- 8
- 10

Open Space

- 0
- 250,000
- 500,000
- 750,000
- 1,000,000
- 1,250,000

DENSITY | Overview
DENSITY | Low

1,842 UNITS

1,345 MARKET

497 AFFORDABLE

68% OPEN

20 ACRES
4,531 UNITS
3,308 MARKET
1,223 AFFORDABLE

38% OPEN
11 ACRES
PARTNERSHIPS
PARTNERSHIPS | Master Developer

- CITY OF SEATTLE
- WSDOT
- MASTER DEVELOPER

Lid I-5
PAYMENT: $100M
Forgo Future LID Cost: ($662M)
AIR RIGHTS & GROUND LEASE
MASTER DEVELOPER
FINANCIAL ANALYSIS
**Limitation of Model**

1. We are not engineers
2. The model is not granular
3. Simplified financial structuring
FINANCIAL ANALYSIS | Untrended Costs PSF

|$/SF$

LID: $699$
MULTIFAMILY: $279$
CONDOMINIUMS: $375$
RETAIL: $264$
OFFICE: $320$
HOTEL: $350$
COMMUNITY: $400$
PARKING: $175$
UTILITIES: $86$
PED BRIDGES: $225$
LANDSCAPING: $142$

76% hard costs
24% soft costs
FINANCIAL ANALYSIS | Untrended Yield on Cost

The chart illustrates the yield on cost across different categories: Hyper Low, Low, Medium, High, and Hyper High.

- Hyper Low: 0%
- Low: 2%
- Medium: 4%
- High: 6%
- Hyper High: 8%

The chart also indicates 'W/No Public Funding.'
FINANCIAL ANALYSIS | Residual Land Value

**Value Breakdown**
- 18% Public Money
- 82% Value (Year 8)

**Total Value**
- 100%

**Residual Land Value**
- 17% Profit
- 58% Net Development Cost
- 25% Residual Land Value

**Breakdown of Residual**
- 32%
- 68% Cost of LID
Air Rights/Ground Lease: $100M
Trended Cost of LID: $1.012B
Trended Cost PSF: $1,044
Untrended Cost PSF: $925
Capitol Hill Land Price PSF: $600
CBD Land Price PSF: $1,000
## Financial Analysis

### Trended Summary

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Public Funding</th>
<th>Private Equity</th>
<th>Residual Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hyper Low</strong></td>
<td>$1,449,421,893</td>
<td>$0</td>
<td>$1,012,104,261</td>
</tr>
<tr>
<td><strong>Low</strong></td>
<td>$1,400,000,000</td>
<td>$739,600,000</td>
<td>$1,090,478,474</td>
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<tr>
<td><strong>Medium</strong></td>
<td>$1,000,000,000</td>
<td>$1,106,084,631</td>
<td>$1,626,621,112</td>
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<tr>
<td><strong>High</strong></td>
<td>$900,000,000</td>
<td>$1,535,503,643</td>
<td>$1,546,930,506</td>
</tr>
<tr>
<td><strong>Hyper High</strong></td>
<td>$0</td>
<td>$2,945,123,010</td>
<td>$367,234,600</td>
</tr>
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### Bar Charts

- **Trended Unleveraged IRR**
- **Trended Leveraged IRR**
- **Trended Equity Multiple**
PREFERRED APPROACH
PHASE ONE

PHASE TWO

PHASE THREE

1 2 3 4 5 6 7 8

ENTITLEMENT
LID CONSTRUCTION
BUILDING CONSTRUCTION
CONCLUSION
CONCLUSION | Benefits

- Tax Revenue
- Affordable Housing
- Park Space
- Pollution, Noise & Stormwater Mitigation
- Citywide Connectivity
- Local Retail
THANK YOU

Final Report
realestate.washington.edu/research/student-research/
Appendix
APPROACH | MEDIUM DENSITY
Study Community and Coordination

I-5 Lid Feasibility Study

- Technical Advisory Team + Core TAT
- I-5 Lid Feasibility Study Committee
- Lid I-5 Steering Committee + Advisory Council
- Community Stakeholders
Study Community Collaboration Goals

- Keep stakeholders informed of the LFS process
- Access community knowledge, expertise and information
- Understand community goals and priorities related to the LFS
- Identify long-term opportunities and constraints related to the study area
- Test ideas together
Study Collaboration and Coordination

Study Community

OPCD

WSP
Study Approach

• Evidence-based approach
• Support City’s goal to lead with equity
Study Purpose

• Two overarching goals:
  1. Explore the **range of feasibility**—technically and financially
  2. Create a framework to maximize benefits for all.
Structural Assessment Boundary
Conceptual Study Area
I-5 Lid Feasibility Study Approach

KEY STEP 1: Define the Focus

KEY STEP 2: Scenario Planning

KEY STEP 3: Scenario Analysis
I-5 Lid Feasibility Study Approach

KEY STEP 1: Define the Focus

- What is our approach to the study?

KEY STEP 2: Scenario Planning

- What are the important assumptions?

KEY STEP 3: Scenario Analysis

- Where can a lid be built?
I-5 Lid Feasibility Study Approach

KEY STEP 1: Define the Focus

• What is our approach to the study?
• What are the important assumptions?
• Where can a lid be built?

KEY STEP 2: Scenario Planning

• What can a lid support?

KEY STEP 3: Scenario Analysis
I-5 Lid Feasibility Study Approach

KEY STEP 1: Define the Focus
- What is our approach to the study?
- What are the important assumptions?
- Where can a lid be built?

KEY STEP 2: Scenario Planning
- What can a lid support?

KEY STEP 3: Scenario Analysis
- How might different scenarios perform?
- What are the next steps?
**KEY STEP 1: Define the Focus**

- WSDOT

**Build Zone Assessment**
- Asset-owner constraints
- Requirements
- Capital O&M cost assessment

**Constructability Block by Block**

**KEY STEP 2: Scenario Planning**

- Community and Stakeholders Needs & Wants

**Partner Agencies**
- City of Seattle
- Sound Transit
- WSDOT
- King County Other state and local authorities

**Layered Urban Analysis**

**Real Estate and Development Market Analysis**

**GIS Scenario Tool**

**CBA Model**

**Policy Matrix**

**KEY STEP 3: Scenario Analysis**

**Build Zone and Structural Assessment**

**Cost Range**

**Sample Feasibility Matrix**

<table>
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<tr>
<th>Lid</th>
<th>Type</th>
<th>Cost</th>
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<tr>
<td>1</td>
<td>A-D</td>
<td>SS</td>
<td>1-4</td>
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<tr>
<td>2</td>
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<td>SS</td>
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<tr>
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<td>B</td>
<td>SS</td>
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</tr>
<tr>
<td>7</td>
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**Inclusive Communication and Engagement Process**

**Iterative Technical, Urban, Social and Economic Analysis**

**Implementation Strategy**

**Scenarios**
Preliminary Structural Assessment

Representative example
KEY STEP 1: Define the Focus

- WSDOT
- Build Zone Assessment
- Asset-owner constraints
- Requirements
- Capital O&M cost assessment

KEY STEP 2: Scenario Planning

- Community and Stakeholders
- Needs & Wants
- Partner Agencies
- Layered Urban Analysis
- Constructability Block by Block
- Real Estate and Development Market Analysis

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KEY STEP 3: Scenario Analysis

- GIS Scenario Tool
- CBA Model
- Policy Matrix

I-5 Lid Feasibility Study Approach

Inclusive Communication and Engagement Process
Iterative Technical, Urban, Social and Economic Analysis
Representative example
Representative example
I-5 Lid Feasibility Study Approach

**KEY STEP 1:** Define the Focus

- Build Zone Assessment
  - Asset-owner constraints
  - Requirements
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- Community and Stakeholders
  - Needs & Wants
- Partner Agencies
  - City of Seattle
  - WSDOT
  - Sound Transit
  - King County
  - Other state and local authorities

- Layered Urban Analysis
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Inclusive Communication and Engagement Process
Iterative Technical, Urban, Social and Economic Analysis

Implementation Strategy

Scenarios
Representative example

Source: https://issuu.com/parnianghaemi/docs/parnian_ghaemi
Discussion
THANK YOU

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