

## A Message from the Technical Advisory Team: What we learned from the I-5 Lid Feasibility Study

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The Lid Feasibility Study was initiated in response to a citizen-led effort to secure study funding as part of the community benefits package from the Washington State Convention Center expansion project. Those funds were administered by Seattle's Office of Planning and Community Development (OPCD) which also convened a Technical Advisory Team to guide the study process and provide input and review during development of the study. That team included representatives from Seattle's Department of Transportation (SDOT), Seattle Parks and Recreation (SPR), the Office of Housing (OH) and Department of Neighborhoods (DON) as well as the Washington State Department of Transportation (WSDOT). Multiple colleagues in other departments and from within our respective agencies were also involved through the study process. We thank them for their engagement, time and expert review. We also thank the consultant team, organized and led by WSP, for their thorough work, technical expertise, professional judgement, partnership and high level of responsiveness to the Study Community's needs.

When we initiated the study in early 2019, we could never have imagined the world in which we would be releasing the final report: wracked by a global pandemic and related economic fallout as well as a local and national movement to reevaluate policing, injustice and inequity that have negatively impacted Black, Indigenous, and people of color for too long.

While the chapters that follow summarize the many more pages of technical and financial analyses completed for this study, we thought it would be helpful to our colleagues and community if we provided our own condensed summary of what we learned as a result of this work, and what it may mean going forward:

**This is a very preliminary study.** The study helps us understand what's technically possible, key barriers and considerations for any future lid project, and the impact of alternative development programs (and different levels of 'community benefit') on cost and financial performance over time. It provides a wealth of valuable data and analysis to inform potential next steps, but does not recommend a development program or take a position on whether this is an idea worth pursuing at this time.

**Lidding in this area is possible, but not easy.** The idea of lidding over I-5 in downtown Seattle, and highways in general, is not new. It's been done before, including in three previous projects within and adjacent to the study area. But this stretch of highway – including its topography, alignment, frequent on- and off-ramps and urban context – is particularly challenging even as it presents intriguing and meaningful potential benefits.

**The more you want to hold up on a lid, the more expensive it is to build.** Not surprisingly, the cost of the underlying lid structure is higher if you need it to support buildings and other structures. But even the simplest lid structure—to hold up green space—could be complicated and expensive. The (very preliminary) projected costs for developing a lid project from Madison St. to Denny Way range from about \$966 million for the lowest cost "park lid" to about \$2.5 billion for a lid that can support a development program that maximizes vertical development and private investment. Those costs do not include a number of factors that would need to be determined through future studies.

**On- and off-ramps are particularly challenging.** Working around existing on- and off-ramps adds to complexity and cost, and results in lid outcomes that are less than ideal (bordering on undesirable in

some locations). But relocating, removing or reconfiguring ramps is not a simple proposition and has other implications—both good and bad. Although the frequency of highway interchanges in the study area is greater than current highway design standards recommend, the elimination of even a single ramp presents significant challenges. Any future lid project will need to analyze and address the long-term needs and operations of I-5 and the adjacent downtown street network. That work was beyond the scope of this project, but the results of this analysis can help inform future work and problem solving.

**Vehicle parking and slope issues will require creative solutions.** Any lid project will need to consider strategies to significantly reduce or nearly eliminate the need for parking options on the lid. Providing parking for buildings on a lid in a manner consistent with current standards and practices would make the project infeasible. Also, the area's considerable slope is a challenge—but vertical development (buildings or pavilions) can help mitigate this challenge while also contributing to activating open space areas.

**This is a very large and expensive undertaking, requiring a variety of funding and financing sources.** Financial analysis of the test cases demonstrates that while private development on the lid could help defray costs, it won't cover them. It will likely require some combination of municipal, county, regional, state and federal funding as well as philanthropic or private sector contributions to make a lid project a reality. For the current analysis, we assumed that 100 percent of capital costs would be financed (i.e., no initial federal, state or local funding), resulting in annual debt servicing of anywhere from about \$50 million to \$130+ million.

**How you do it will depend on what you're doing.** There are different approaches to the design, financing, construction, maintenance and management of a lid project. The delivery, ownership and governance model that makes the most sense will be determined in part by what is being built and how it is being paid for. The report provides an evaluation of options based on the three test cases that were examined.

**This area of the city has significant needs beyond re-linking neighborhoods and mitigating the environmental impacts of I-5.** This is one of the densest parts of our city and region, and a critical part of our economy. It has seen significant growth in population, jobs and visitors in recent years but without a commensurate increase in open space and other amenities needed to support a healthy and vibrant urban neighborhood. There are many lower income households that face the risk of displacement whether or not a lid project is implemented. To ensure equitable development and prevent housing displacement adjacent to a new freeway lid, additional strategies above and beyond the Mandatory Housing Affordability requirements are needed. Future project evaluation will require a thorough racial equity analysis.

**There are significant benefits that could flow from this investment.** Projects of this scope and scale could create significant social and economic benefits. The test cases we examined would create anywhere from 621,000 to 4.7 million square feet of new housing; nearly 2 million to 5 million square feet of commercial and hotel space; and between 2.5 and 9.8 acres of new park space. A lid project could tentatively support 5,000 to 13,000 direct, indirect, and induced jobs over 10 years from construction alone and revitalize the economy with up to \$3.1 billion in annual economic activity.

Interstate 5 in this area requires attention and investment regardless; lidding could be part of a larger effort to address long-term resilience of this critical transportation spine. Interstate 5 was built in the

1960s, with a designed lifespan of 75 years. While WSDOT has been making investments to this stretch of I-5 and its many supports, bridges and retaining walls, getting it up to current seismic standards will demand significant commitment and investment. Collaborative analysis and planning between the City of Seattle and WSDOT will be needed to determine the best course of action for this critical infrastructure. This needs to happen regardless of any lid effort, but important next steps in exploring a lid could be incorporated in that work.

**While we analyzed the full stretch of this study area as a single lid project, it could be approached differently.** We looked at test cases, costs and other factors across the length of the study area, from Denny Way to Madison St. Where possible, though, we reported cost data on an area-level basis (i.e., Madison St. to Freeway Park; Freeway Park/Convention Center; Pike/Pine; and Olive Way/Denny Way) and know that the cost, complexity and benefits of a lid varies across the study area. That information can be used to inform next steps that might explore a more focused lid effort in one or two segments, or a “mix and match” analysis that focuses on park area in some segments and more building-focused programs in others.

**This will require significant and ongoing partnership.** A visionary undertaking of this scope and scale will only be achieved through strong and sustained partnership. The community-led Lid I-5 Committee has been effective in advancing this concept and securing the funds for this study. They will undoubtedly remain active in advocating for next steps. The City of Seattle, WSDOT, other agencies and elected leaders will need to decide the shape, focus and level of commitment to any next steps, incorporating a broader community engagement strategy. This study helps to inform, but does not determine, what those next steps could or should be.

The long-term economic and social impacts of the COVID-19 pandemic will be real, but how they might affect this or other long-term planning and investment remain unclear. The COVID-19 pandemic hit Seattle and the rest of the world just as the final phases of this analysis were being completed. While it doesn't change the purpose or results of the analysis, it creates uncertainty about how to interpret or apply them. The community is facing severe impacts from the crisis that require attention and investment. Spending \$1+ billion to build a lid over Interstate 5 seems misaligned with other imminent priorities. However, as we start to phase into recovery, we also embrace the opportunity to re-engage our civic imagination about the future city we seek to create: one that is healthy, equitable, vibrant and resilient. Seattle's past, present and future has been shaped by bold ideas and big investments that have often emerged from the hardest times.

**This is a first step.** We approached this study with the idea that its results would need to have a relatively long shelf-life, understanding that these types of infrastructure projects take multiple decades to conceptualize, analyze, design and complete. The recent closure of the West Seattle Bridge highlights the long-term nature of the lid effort. Improving the resiliency of the bridge, as critical transportation infrastructure, is a priority for the City and will require significant investment that exacerbates near-term funding challenges for a lid. We are in the conceptual phase. We hope the analysis and its results will serve the City and its partners well, now and in the coming years, as we move from crisis into recovery, reconnection and resilience.

Core Technical Advisory Team