SCOPE OF WORK

August 2011

TASK 1: BEST PRACTICES

APPROACH

The initial task of the DKS team to analyze best practices is fundamental for setting the outcomes of the study. The preferred measures of effectiveness (MOEs) chosen here for use in Bellevue's complex planning environment will require careful consideration of what has been successfully applied elsewhere. To accomplish this task, the DKS team will draw upon experience from several states when developing and evaluating transportation systems and plans applicable to Downtown Bellevue. The DKS team will use planners and engineers who are recognized leaders in traffic operations, parking, transit operations, bicycle and pedestrian facilities to advise on this task. Each MOE will be included for its ease of measurement, predictability in forecasts, understandability to policy makers and the general public, and applicability to Downtown Bellevue.

SPECIFIC SUBTASKS

i. The DKS team will prepare a decision-making framework that includes qualitative and quantitative MOEs to help identify and compare the performance of specific transportation system recommendations relative to desired viability, livability, accessibility, and memorability outcomes – as described in the Downtown Subarea Plan. In addition to the current adopted level of service (LOS) standard that measures traffic capacity at intersections, MOEs may be comprised of such components as the benefit to mobility (vehicular level of service/travel time/mode split/pedestrian and bicycle circulation), the effect on the Downtown environment (urban character/aesthetics/pedestrian and bicycle environment), benefit to community sustainability (such as walkability, bikeability, vehicle miles traveled and greenhouse gas emissions), and other factors considered best practice or important for a multi-modal downtown environment.

   Deliverable: *Prepare for Transportation Commission consideration and discussion recommended measures of effectiveness -both qualitative and quantitative, and an explanation of why these are important for this project -that can be used to evaluate individual proposed projects as well as the overall package of transportation system recommendations for the Downtown Transportation Plan Update.*

ii. The DKS team will research and correlate transportation and growth trends in Downtown Bellevue, and compare to similar emerging mixed-use urban centers. The DKS team will

summarize the correlation between growth and certain transportation measures such as Average Weekday Trips, PM Peak hour trips, Vehicle Miles Traveled, Greenhouse Gas Emissions (GHG) travel time, and others. The team will analyze how this research correlates with the Bellevue-Kirkland-Redmond (BKR) travel demand forecasts and how it could be applied within Downtown Bellevue to affect transportation system decisions that are made based upon trip generation and travel demand.

Deliverable: *A brief technical paper that describes findings from Downtown Bellevue and other similar emerging urban centers related to land use and specific transportation system metrics, especially metrics related to non-motorized modes.*

TASK 2: EXISTING CONDITIONS

APPROACH

Using the MOEs defined in Task 1, the DKS team will prepare an Existing Conditions report that documents the physical infrastructure, and the operations and performance for all key travel modes. DKS will coordinate with City staff to obtain data from a variety of sources including the City of Bellevue, King County Metro, Sound Transit, Puget Sound Regional Council, Washington State Department of Transportation, Microsoft (Connector bus service), and potentially other private sources such as Inrix.

The DKS team will include future baseline conditions in addition to existing conditions information where available. The 2030 baseline condition will include a description of the anticipated transportation system performance, given growth assumptions and regional and local transportation assumptions (determined to be reasonably foreseeable by 2030). The report will present the 2030 baseline condition assuming that a newer plan has not been adopted, except where prior projects are deemed not reasonably foreseeable and have been excluded from consideration for this project. The DKS team will include a description of GHGs in the report for both the existing and 2030 baseline conditions.

SPECIFIC SUBTASKS

i. The DKS team will document the existing (2011 or most recent) conditions of the transportation system in Downtown Bellevue, including the physical infrastructure, operations and performance for all modes. The task will incorporate the existing conditions and 2030 baseline findings as provided by City of Bellevue staff.

Deliverable: *An "Existing Conditions Report" that includes an inventory of the physical components of the motorized and non-motorized transportation system in Downtown Bellevue (streets, alleys, mid-block pedestrian connections and crossings, on-street parking, traffic control, etc.) and the operational metrics such as traffic counts, pedestrian and bicycle counts, transit ridership, level of service, accident type and location, and other components that are available. No original data collection is expected in this task. The Existing Conditions Report will include a status report, provided by City staff, on the projects in the current Downtown Subarea Plan. The report*

will also contain 2030 baseline condition land use and transportation information where provided by City staff.

TASK 3: ROADWAY CAPACITY AND OPERATIONS

APPROACH

The DKS team will summarize roadway operations and discuss variability for AM and PM peak periods, weekday mid-day, AM and PM off-peak, and weekends. The DKS team will analyze transit priority, pedestrian crossing times and changes in activity, and signal system improvements. DKS will work with staff to include recognition of the Sydney Coordinated Adaptive Traffic Systems (SCATS) investment in traffic operations analyses and travel model forecasts. DKS will identify and evaluate potential traffic movement strategies that may vary by time of day and day of week and in real-time. DKS will present travel delay to the movement of people to supplement the more typical vehicle delay analysis. DKS will identify locations where off-peak street use for parking and loading/unloading during non-peak hours would support adjacent land use and could occur without significantly degrading traffic operations at those times. Finally, DKS will discuss with staff ways to modify travel demand model forecasts that may have oversaturated the traffic volumes, because this cannot be effectively simulated in models; to remedy the technical problem, DKS will recommend several appropriate technical adjustments that the City staff may implement.

SPECIFIC SUBTASKS

i. DKS will work with City staff to assess the performance of several roadway and intersection projects identified in the Downtown Subarea Plan that have not been built or programmed. This effort may include assessing these projects using the MOEs developed earlier. DKS will identify possible project modifications or alternate approaches to general capacity expansion that may provide a better solution for the City's viability, livability, accessibility, and memorability outcomes in the Subarea Plan.

Deliverable: *Memorandum that summarizes findings of Downtown roadway/intersection projects that are described in the Downtown Subarea Plan (and assumed as part of the roadway network in the 2030 BKR travel demand model) but not built or programmed, to determine their performance relative to the MOEs developed in Task 1. The memorandum will make initial recommendations for each planned project as to whether it should be retained, modified, removed or replaced with an alternative mobility improvement.*

ii. DKS will identify potential new capacity and operational improvements that would address 2030 travel demand needs on the local roadway system (within Downtown and along arterials that serve Downtown from adjacent neighborhoods and the regional freeway system). DKS will evaluate each project as stand-alone or through packaging with a set of related projects.

Deliverable: *A memorandum that presents potential new local roadway capacity projects or operational enhancements for the 2030 transportation system in Downtown and the vicinity and uses MOEs developed in Task 1 to evaluate these projects.*

Deliverable: *A technical memorandum summarizing the City's efforts in Traffic Signal Adaptive System technologies and the implementation/operation of the Sydney Coordinated Adaptive Traffic Systems SCATS to more efficiently move traffic in and through Downtown. Coordinate with staff to compile information that describes the City's progress and outcomes of the system as well as any new technology advancements and operational strategies for the signal system network in Downtown.*

iii. DKS will identify potential improvements to the regional transportation network, beyond those assumed in the 2030 "baseline" travel demand model that would improve the capacity to move people and goods to the benefit of Downtown Bellevue residents and businesses.

Deliverable*: A technical memorandum that includes a list of potential new regional transportation system projects and include quantitative and/or qualitative rationale to describe the benefit of each project or group of projects to mobility for Downtown Bellevue residents and businesses.*

iv. DKS will explore ideas and options to implement a more extensive system of short-term on-street parking and loading zones to support the needs for Downtown residents and businesses. This includes a generalized assessment of the concept of implementing off-peak on-street parking and permanent on-street parking on targeted arterials and the potential impacts on roadway capacity, transit operations and bicycle facilities, as well as an assessment of the use of existing and new alleys for parking and loading.

Deliverable: *A report that includes a mapped inventory of existing short-term on-street parking, loading zones and alleys in Downtown Bellevue, and an analysis of the benefits and opportunities to increase the on-street parking supply and/or loading zones. The report will include a qualitative and/or quantitative review of the value and trade-offs to the Downtown community – businesses and residents – of on-street parking and loading zones, and the potential of increasing the supply of each. It will also include a brief evaluation of the potential benefits/impacts of implementing a paid on-street parking program in Downtown Bellevue.*

v. DKS will work together with City staff to apply traffic operational modeling software (VISSIM or similar) to simulate 2030 travel modes (car, bus, light rail, bicycle, and pedestrian) in select corridors Downtown and link the traffic simulation with 3D visual representations of future Downtown buildings and streetscapes. DKS will work with staff to obtain BKR travel demand data and document/code the roadway details within the desired study areas and corridors.

Deliverable: *A set of VISSIM and AVI files that document the 2030 "baseline" condition, and the recommended 2030 multi-modal transportation condition for the select areas and corridors of Downtown Bellevue and for select arterial corridors that serve the Downtown in adjacent areas..*

TASK 4: TRANSIT SERVICE AND OPERATIONS

APPROACH

The DKS team will present an assessment of the Downtown Bellevue Transit Center capacity, and how different types of transit service (short-distance local, long-distance commute, overall Downtown circulation, planned light rail service and associated light rail feeder service) are each able to serve both the Transit Center as well as the remainder of Downtown. The DKS team will identify strategies that recognize the relationship between transit speed and reliability, and ridership, and will identify operational projects that would maximize access within and through Downtown, potentially increasing transit mode shares of all types of trips.

The DKS team will include an analysis of underserved transit markets by location and time of day; generalized approaches on each category of transit service differently; which facilities are needed to provide access, safety and comfort in different conditions; and ways to maximize productivity for transit operators, while improving speed and reliability for transit riders.

SPECIFIC SUBTASKS

i. The DKS team will review the projected Downtown 2030 baseline transit ridership (bus and light rail) in the BKR travel demand model which assumes East Link light rail and the current transit integration plan, and identify ways to potentially improve transit mode share.

   Deliverable: *A technical memorandum that documents the projected 2030 transit mode share relative to other motorized trips. This memorandum will also provide recommendations for programmatic, project, operational and service changes that may improve transit ridership and mode share over the model projections.*

ii. The DKS team will review the existing conditions information as well as analyze transit trips projected to/from Downtown Bellevue in 2030 to identify the underserved transit markets in the region. This will provide a basis to recommend specific improvements to planned transit service (considering primarily routing and headways) could help meet market demand and improve transit mode share to Downtown Bellevue. Recommendations should provide support for advocacy to transit service providers for improved service to these underserved markets.

   Deliverable: *A technical memorandum that documents a quantitative analysis and mapping of transit markets for Downtown Bellevue commuters and identify those markets that are currently underserved. The memorandum will include specific recommendations for modifications to transit service to better serve these markets.*

iii. While Bellevue does not directly provide transit service, Bellevue does control the rights-of-way on which transit operates. The City, in partnership with transit service providers, may be able to enhance transit speed and reliability in Downtown Bellevue by implementing measures such as transit signal prioritization, bus-only lanes in peak hours, improving sidewalks and bus stops, and other tools and strategies.

Deliverable: *A technical memorandum that identifies specific recommendations for the application of available tools, technology and the public right-of-way to improve transit speed and reliability, and to improve passenger comfort and transit access in Downtown Bellevue. The memorandum will describe potential benefits to productivity, ridership and transit mode share that may be realized through each concept.*

TASK 5: NON-MOTORIZED TRANSPORTATION

APPROACH

The City of Bellevue developed a comprehensive Pedestrian and Bicycle Transportation Plan in 2009. Work on the Downtown Transportation Plan Update will complement that effort. To do this, the DKS team will examine non-motorized transportation solutions that provide both access and comfort. This will include methods to provide a quantitative justification for ways to increase pedestrian and bicyclist safety, security and access, and connect to larger non-motorized systems that link neighborhood, citywide and regional trip origins and destinations.

SPECIFIC SUBTASKS

i. The DKS team will prepare an evaluation of the current and planned bicycle system. Recommendations for improvements will be based on, but not limited to, the Bellevue Pedestrian and Bicycle Transportation Plan (2009). The team will identify improvements to existing or planned bicycle routes and facilities that will provide superior bicycle access within Downtown and connectivity to neighborhoods and regional facilities and destinations.

Deliverable: *A technical memorandum that includes a bicycle route map, descriptions and/or illustrations of bicycle facilities recommended to serve Downtown and provide connections to neighborhoods and regional facilities and destinations, and ways to prioritize bicycle system recommendations in the context of the MOEs identified in Task 1. Recommendations will include innovative and industry-accepted treatments that provide for bicycle travel through congested and constrained urban corridors like those in Downtown Bellevue.*

ii. The DKS team will prepare an evaluation of the current and planned pedestrian system. Recommendations for improvements will be based on, but not limited to, the Bellevue Pedestrian and Bicycle Transportation Plan (2009) and the current Downtown Land Use Code. The team will identify improvements to existing or planned sidewalks, mid-block connections, intersection and mid-block crosswalks/signals, and other facilities that will provide a more safe, comfortable and accessible (including accessibility in the ADA context) pedestrian environment within Downtown Bellevue and to adjacent neighborhoods.

Deliverable: *A technical memorandum that describes new or enhanced pedestrian facilities that enable Downtown to be a more accessible and more attractive place to walk. The memorandum will include ways to prioritize pedestrian system recommendations in the context of the MOEs.*

TASK 6: IMPLEMENTATION PLAN

APPROACH

The DKS team will organize elements in a manner agreed with City staff. Specifically, this will include packaging projects that work together; developing project diagrams and sketches that convey both the strategies and their benefits to the public; and creating a phased and prioritized implementation plan that will provide a useful guide to pursue funding through regional programs and developer incentives.

SPECIFIC SUBTASKS

i. The DKS team will recommend specific transportation system improvements – after review of BKR travel demand modeling results and evaluating potential projects developed in Tasks 3, 4 and 5 -that will meet the intended mobility standard in 2030 (which is assumed to be a Level of Service E+ for Mobility Management Area 3 that encompasses all of Downtown Bellevue). This will include infrastructure for all modes as well as operations improvements.

Deliverable: *A comprehensive list of recommended transportation system projects and technology applications for all modes. Includes a MOE evaluation for each project or group of projects with respect to their role in providing long-term multi-modal mobility in Downtown Bellevue. The list will include a vicinity map of all projects and a larger-scale site map to highlight individual projects or group of projects.*

Deliverable: *A set of planning-level sketches for select projects or group of projects (up to 10) to be jointly determined by the Consultant and the City.*

Deliverable: *A set of planning–level cost estimates for operational improvements and for the above recommended capital projects.*

ii. DKS will prepare an implementation plan for recommended improvements to Downtown roadways and operations, transit service and facilities, and non-motorized transportation facilities.

Deliverable: *A report that includes a phased implementation plan, a prioritization strategy and potential funding resources for recommended improvements to the transportation system. The report will include logical pairings/groupings of infrastructure and/or operational and programmatic improvements. As part of the phasing and prioritization considerations, the report will include threshold metrics or conditions that would need to occur to trigger the implementation of a project – such as degraded level of service, increased traffic volume, transit capacity, or increased transit or auto travel time. A section of the report will discuss applicable funding resources and strategies that the City could use to fund implementation of recommended projects. The report will include a documentation of additional projects that arise as "good ideas" through the planning effort, but may have to be implemented beyond the defined 2030 horizon – or as policy or code amendments.*

TASK 7: PUBLIC INVOLVEMENT

APPROACH

The City of Bellevue and the DKS team will work together to effectively engage the community using well-thought through public involvement processes and concise presentation materials.

SPECIFIC SUBTASKS

i. Bellevue staff will lead the public involvement component of the Downtown Transportation Plan Update. Consultant will support staff in the undertaking of public and stakeholder involvement. The DKS team will provide support, generally consisting of preparing electronic and print materials and attending and participating in public meetings as directed by City staff. DKS staff will be available to attend meetings with stakeholder groups (such as the Bellevue Downtown Association), interested business owners and property owners, Downtown residents, transportation advocacy organizations such as Feet First and the Cascade Bicycle Club, and community open houses. DKS will also assist City staff with outreach through electronic and social media strategies.

   Deliverable: *Assistance to staff in public information and outreach activities such as preparing newsletters, creating materials and presentations for community meetings and stakeholder group discussions, developing visual simulations and displays, creating and managing a project web site, crafting a web-survey, producing a video, and other related tasks. Consultant attendance at public and stakeholder meetings will be kept to a minimum, with the appropriate level of support for each meeting to be determined jointly by the City and Consultant.*

ii. The DKS team will provide support for staff presentations to the Bellevue City Council, and City boards and commissions.

   Deliverable: *Prepare presentation graphics or other materials; and attend and participate in meetings with City Council, the Transportation Commission (who is the advisory group for this project), and other City boards and commissions as scheduled by staff. Consultant attendance at meetings will be kept to a minimum, with the appropriate level of support for each meeting to be determined jointly in advance by the City and Consultant.*

TASK 8: FINAL REPORT

APPROACH

The content and format of the final report will require both the consultant team and City staff to work together to ensure that its content is appropriate. DKS anticipates at least two rounds of internal review before releasing it for wider distribution. This review will help ensure that the final deliverables are well written without typographical errors, contain understandable tables and figures, and convey concise messages for readers.

SPECIFIC SUBTASKS

i. The DKS team will coordinate with City staff to product a final report that documents the

process and recommendations of the Downtown Transportation Plan Update. This report will include an executive summary (that may be used as a stand-alone product) and will be organized in chapters and appendices roughly corresponding to the Tasks identified in this Scope of Work. The final report will be the repository for the all of the text, graphics, plans and figures developed as recommendations. It will also document all of the public involvement activities in summary form, with appendices as needed.

***Deliverable**: Staff and the DKS team will work together to develop the content and format of the final report. DKS will prepare an electronic copy of the final report in PDF format as well as deliver to the City the electronic source document.*

TASK 9: PROJECT MANAGEMENT

APPROACH

The management of the DKS consultant team and deliverables on this project is best attained when project procedures are established at the beginning. DKS will work with City staff on a style guide and review protocol at the outset of the project to assure that products have a consistent feel and appearance. DKS will also work with the staff to provide appropriate documentation on project progress so that project invoices can be easily understood and approved by the City. Perhaps, most importantly, DKS will carefully guide the progress of its staff, as well as closely monitor work assignments by the sub consultants. DKS has a history and a close working relationship with its sub consultants, which will foster close coordination with their key staff.

SPECIFIC SUBTASKS

i. The Consultant will manage the contract tasks and budget in general accordance with the contract. Proposed reallocation of budget resources among budgeted tasks, or changes to the preliminary timeline may be initiated by the City or consultant and may be approved with concurrence of the each party.

***Deliverable:** Consultant project manager and appropriate consultant team members will develop an agenda for and participate in a project kick-off meeting at a mutually agreed-upon time subsequent to receiving a notice to proceed.*

***Deliverable**: Consultant project manager will prepare invoices and progress reports on a monthly basis, and submit these to the city of Bellevue project manager. Progress reports will document the specific work accomplished and the completion status for each task identified in this scope or work, plus the budget status for each task. Identify and document any emerging issues related to task, budget or timeline.*

***Deliverable:** Consultant project manager and city of Bellevue project manager will meet on a mutually agreeable monthly recurrence schedule to review progress and issues related to the scope, timeline and budget. Additional project management meetings will be held as needed in response to emerging issue and in preparation for major events.*