## Impact Statement on draft Ordinance 2019-118 pertaining to requiring Value Engineering (VE)

- The proposed definition of "Value engineering" in Sec. 2-239.a.2 does not fully or necessarily correctly describe the full breadth of value engineering. Particularly absent is the mention of VE focus on optimizing total life-cycle costs, not just initial construction cost. This section states that VE is performed "by a team of persons not originally involved in the project". This should be modified to read "by a team of subject matter experts not originally involved in the project working in collaboration with the project team". Constructability review, field changes, weather and force majeure also require applying "value engineering" methodology that is different than the proposed definition.
- Despite the O&R request's statement that there is no fiscal impact resulting from this ordinance, there are direct additional cost elements to projects subject to this requirement that, may or may not, be recouped with accepted VE changes. There is the direct cost of services to engage an independent VE team. There will be additional cost to the A&E of record to explain the project to the VE team, respond to questions, review the proposed VE recommendations and make recommendations for acceptance or rejection, and finally to make changes to existing project design documents to incorporate accepted VE recommendations.
- In addition to direct monetary costs for conducting formal VE review(s), there will also be a time and schedule impact for the Agency and CAO review of the VE study recommendations. The increase to the project timeline can subject the project to changes in commodity or labor costs. Section 1.(c) of the draft Ordinance does not make provision for a scenario where the CAO does not agree with the value engineering report in part or in total, only that the CAO submit a copy of the "approved" VE report to City Council.
- The draft Ordinance mandates the use of VE for any project costing more than \$5,000,000. This project cost would typically equate to an actual construction cost of somewhere in the \$3.5 to \$4.25 million range. A more appropriate mandatory threshold is \$10,000,000.
- Formal VE as described by this ordinance may not be appropriate for all projects exceeding \$5,000,000, such as pipelines, water storage tank renewal or paving with narrow, but expensive scopes.
- The draft Ordinance also requires that VE is employed after the completion of the preliminary design phase but before the final design phase. Several problems with this requirement: 1) this terminology (preliminary design & final design) is used in some realms of construction, but is not the typical phase sequence terminology in other types of construction projects, 2) it is too prescriptive and limits flexibility, and 3) while this is normally a good stage for VE, it can happen at other points in a project. In fact, even one of the key reference sources cited in the O&R Request (the National Institute if Building Sciences Whole Building Design Guide) states that "VE can be applied at any point in a project, even in construction."
- Sec. 2-239.d requires that "a written summary .... be provided" to both the CAO and City Council
  prior to moving forward to the construction phase of the contract when using design-build or
  CM at Risk delivery. This statement does not recognize the inherent fluidity between design and
  construction that is the key advantage of these alternative project delivery methods (PPEA, D-B
  and CMaR for example) of decreasing the required schedule timelines or capital funding
  methods.

- Currently CIP project data is provided to the council through:
  - o Monthly financial reports:
    - http://www.richmondgov.com/Finance/MonthlyFinancialReports.aspx
  - Quarterly reports:
    - http://www.richmondgov.com/Budget/index.aspx
  - Development and Capital Improvement Projects
    - http://www2.richmondgov.com/cip/
- In addition, the Planning Commission receives and reviews large CIP project information and forwards their analysis to council for review.
- The results of value engineering, constructability review and field changes are found within this
  data. It appears the intent of the paper is to provide another level of detail on the project
  management of major projects. The administration is willing to work with all of council to find a
  better method for communication on CIP projects but recommends that this draft Ordinance is
  not the appropriate plan for that purpose.