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TO: BOARD OF DIRECTORS

THROUGH: PHILLIP A. WASHINGTON *PAW*
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SUBJECT: ROC/BOC FUNCTIONAL OBSOLESCENCE STUDY

ISSUE

METRO consultant, HDR, Inc., has analyzed the current conditions of the Rail Operations Control and Bus Operations Control Centers (ROC/BOC) for functional and human factors obsolescence and recommends co-location of the ROC and BOC into the new Emergency Services and Operations Center (ESOC).

BACKGROUND

The Enterprise Transit Asset Management (ETAM) Department, in addition to evaluating Metro State of Good Repair (SGR) needs through asset condition assessments, also evaluates planned and/or functional obsolescence of existing facilities, equipment, and systems. In this context, ETAM contracted with HDR to assess the planned obsolescence of the ROC, because of expanded rail services. HDR also evaluated the current ROC infrastructure relative to other co-located rail and bus control facilities with benchmarking at four other transit agencies and through a qualitative assessment using a human factors expert.

DISCUSSION

According to HDR, space constraints at the existing ROC will require an expansion buildout of the existing facility after revenue operation begins on the Regional Connector. Therefore, the Purple Line Extension projects and Gold Line Extension projects are unable to fit in the existing facility without a major capital initiative. A major remodeling/expansion of the existing ROC would require a costly seismic and ADA upgrades to conform with current codes. Also, the relocation to a temporary ROC facility while construction is underway on the existing ROC would necessitate the need for a duplicative ROC to be set up to guarantee continuity of operations and to ensure

that the ROC is never off-line. This temporary relocation would have costs and phasing burdens associated with it to ensure there are operations are not interrupted. Further, a new ROC would make possible a redesign of the 25 year old human/systems interfaces which could improve controller attention and reduce fatigue.

The ESOC project (currently in design) at 410 Center Street in downtown Los Angeles, is currently funded with a \$112 million California state grant for the design and construction of the new ESOC facility which includes dedicated space for a ROC/BOC buildout on the 3rd floor. The fit test of the designed ESOC space on the third floor allows controller and observer consoles to be able to add future lines/projects through year 2070.

Moving the BOC to the ESOC is expected to improve rail/bus coordination and free up space for other purposes at Gateway. Moving the ROC to the ESOC location will improve emergency coordination and will improve the likelihood of continued ROC operation in the event of a disruption. Moving the ROC to the ESOC will also allow Metro to use the existing ROC facility either as a backup ROC.

NEXT STEPS

Staff recommends beginning the immediate design (approximately \$10M LOP) of the ROC/BOC move to the ESOC for award in late FY18. With the design will come a more accurate cost estimate for the construction of the BOC/ROC, including any state of the art systems that are identified during design. Staff will come back to the Board with a recommendation complete with an LOP (Life of Project) budget and funding plan sufficient to complete the construction of the project for the timely opening of the Purple Line Extension. This necessary buildout of the ROC/BOC is not currently funded in the current Metro capital plan, nor is it included in the current Measure M expenditure plan.