TO: Board of Supervisors

FROM: David Russell

Assistant Director Information Technologies

RE: Virtual Desktop Infrastructure (VDI) implementation update

The purpose of this staff report is to provide background information and an update on the progress of the VDI implementation.

## Background

The Information Technologies Department began looking at the implementation of VDI back in June of 2015. On March 22, 2016, the Board received a presentation and approved a three-year project to implement VDI throughout the County. The goal of the project is to provide a secure, flexible, and cost effective solution that the County can support and maintain over the long term.

# **Project Update**

### Pilot Phase:

Phase I of the implementation plan included the acquisition of the initial hardware and software to support up to 200 users. During this phase the IT Department and our outside consultant attempted to build and transition the end-users of the Board of Supervisors, Parks, AQMD, and the Public Defenders offices to Windows 10. The end-user experience in Windows 10 was not stable and bugs with Windows 10 were being worked out by VmWare. As a result, the project was stopped and re-engineered to transition end-users to Windows 7. This caused a 30 to 45 day delay in the rollout, but overall produced a much better end-user experience. By the end of Phase I, 61 users were converted.

#### Phase II:

In conjunction with the Building A & B renovations and moves, Phase II of the VDI rollout included the Chief Administrative Office, Human Resources, Risk, Auditor-Controller, and Treasurer/Tax Collector departments. While converting a significant number of end-users to the VDI environment, a noticeable decline in logon speed occurred. It was discovered that the initial hardware solution did not meet our employees' environment needs. Through monitoring, troubleshooting, and working with our vendor as a business partner, our vendor stood by their product and provided additional hardware at no cost to the County to meet our employees' needs. At the end of Phase II February 17, 2017, 171 employees have been converted to VDI.

## Phase III:

After completion of Phase II moves for the Building A & B renovation project, the IT Department will begin working to convert the District Attorney and County Counsel departments as well as divisions of the Health & Human Services Agency (HHSA). The Surveyor and Assessor departments will follow or be converted prior to their building renovation moves, in conjunction with the HHSA divisions.

# **Project Cost**

As of February 13, 2017 the total project expenses to date are \$497,166 with an additional \$198,393 in process. Updated projections by fiscal year are shown below, consistent with the Information Technology Department's mid-year forecast:

| Approved Project Budget | Original<br>Budget | Updated<br>Forecast |
|-------------------------|--------------------|---------------------|
| Initial FY 15-16        | \$440,000          | \$426,785           |
| Year 1 FY 16-17         | \$677,500          | \$1,003,774         |
| Year 2 FY 17-18         | \$664,000          | \$664,000           |
| Year 3 FY 18-19         | \$598,000          | \$284,941           |
| Total Expenditures      | \$2,379,500        | \$2,379,500         |