ADDENDUM
VIRTUALIZATION, STORAGE, BACKUP RFP #07-2012
LAMAR CONSOLIDATED ISD

TO: All Vendors

FROM: Lamar Consolidated ISD, Purchasing Dept.

DATE: January 27, 2012

RE: Addendum #3, RFP #06-2012

RFP #07-2012 - Virtualization, Storage, Backup

The following question and answer response addendum is a compilation of clarification items and questions submitted via email since the release of Addendum #2.

Questions:

1. How much additional head room should be (ideally) factored into the new data center architecture?

    The requested minimum of 30TB of usable storage includes the existing requirements plus growth. The solution should provide the ability to increase storage with minimum disruption to the production system.

2. How much data does LCISD need to protect?

    a. **Backup all content.**

3. How big are your Exchange message stores? How many mailboxes? Is individual mailbox recover needed?

    a. **Email is outsourced and hosted offsite, so this is not a requirement of this RFP.**

4. Do you use SharePoint today? How big is your SharePoint repository today?

    a. **No.**

5. How many databases do you have? (SQL or Oracle) How big are they?

    a. **125+ databases residing on 12 servers using 2-3 Tb of storage total.**

6. What other structured content data repositories do you have & how large are they?

    a. **One surveillance data repository using 3 Tb of storage plus miscellaneous structured of 1 Tb.**

7. How many Gbs of unstructured data (user home directories, etc…) do you have?

    a. **6.5 Tb of storage is currently allocated for unstructured data.**

8. What are you data retention requirements for backups? (Daily, Weekly, Monthly)

a. **Daily incremental change only backups retained for 45 days and full weekly backups retained for 90 days.**

9. What is your estimated annual growth rate of data?
   a. **Current growth rate projection is 10% per year.**

10. Is being able to back-up to tape a requirement? (i.e. disk-to-disk-to-tape)
    a. **Backup to tape is not a requirement of this RFP. The district is investigating a highly resilient system for 30+ year archive to meet government data retention requirements.**

11. If yes, how often will this need to happen? How long will you retain these tapes? What data sources need to be backed up tape?
    a. **N/A.**

12. What are the envisioned Recovery Point Objectives (RPO) and Recovery Time Objectives (RTO) for the disaster recovery (DR) plan?
    a. **Through the technical components being put in place including the Layer 2 Storage Network, the Data Center and NOC sites, the installation of a primary server and SAN solution at the DC and a secondary at the NOC, and the usage of vSphere 5.0 and associated modules or comparable software, to reduce the RPO and RTO to near 0 for data residing on the storage solution.**

13. Will core networking services be available at the DR site, such as DNS names resolution and directory services (Novel eDirectory or Microsoft Active Directory)?
    a. **Yes.**

14. Are there any database servers in scope for DR fail-over?
    a. **The existing Dell Server infrastructure will remain at the DR (Network Operating Center).**

15. Please clarify whether any Physical-to-Virtual (P2V) migrations are in scope for professional services requested in the RFP.
    a. **Yes, vendor should outline their proposed P2V solution as manual, semi-automated or fully automated and the professional services cost for the proposed solution.**

16. The RFP appears to call for the migration of all data on the existing VMware Datastores to a new SAN at the new data center. Is there other data (i.e. not VMware virtual machine data) that needs to be migrated to the new SAN?
    a. **The base proposal should include migration of all existing datastores to the new SAN.**
    b. **The proposal should provide the additional cost of services to migrate the remaining physical servers to virtual.**

17. With Layer 2 connectivity between the new data center and existing site, is it a correct assumption that IP addresses will not need to be changed on existing virtual machines in scope to migrate to the new data center? Likewise, we would also assume that IP addresses would not be changed for the DR fail-over plan.
    a. **Correct.**

18. Will the storage switches at each site be directly connected by Fiber or will the storage switches be connecting to the aggregation switches at each campus which will control the fiber links?
    a. **Directly connected to fiber.**

19. In either case, please specify the distance of the connections. Distance from storage switch to aggregation switch –or- Distance from storage switch to storage switch.
    a. **Approximate distance - NOC and Data center is 100,000 feet.**
    b. **Approximate distance - Foster HS and Data center is 54,000 feet.**
    c. **Approximate distance - George Ranch HS and Data center is 136,000 feet.**

20. Is the required Disaster Recovery (DR) plan for the entire data center as site-wide DR plan or only the VM infrastructure?
    a. **VM infrastructure.**

21. What are your overall RTO and RPO requirements? Are they same for VM and physical servers?
    a. **Through the VM project, the target of RPO and RTO is near 0.   The project provides the infrastructure to support the migration of the remaining physical servers to VM.   Therefore, the RTO and RPO are relevant only to the VM infrastructure.**

22. Can we assume that you also want to migrate/relocate those 30+ physical severs to the new data center? If so, do we need to provide DR plans for those physical servers?
    a. **The 30+ servers should be migrated to VMs as an option of the project. It is not the intent of the project to move the physical servers.**
    b. **The response may include a proposal to migrate/relocate the physical servers as an option,**

23. Can you provide a list of applications hosted in those 30+ physical servers, similar to what you have for the VMs?
    a. **Cisco VOIP Servers**
    b. **D9s Web Filter**
    c. **Ewatch Security**
    d. **Horizon Library Circulation**
    e. **Johnson HVAC Controls**
    f. **Siemens HVAC Control**
    g. **Kronos**
    h. **Cisco Wireless Control**

   i. Waterford
   j. Cisco Access Control
   k. AD Domain Controller
   l. Student Mgt System DB
   m. Munis
   n. Tyler App Server
   o. EPO Database
   p. Eschools Solutions
   q. District SQL

24. What are the key applications in your environment? Are their hosting servers virtualized or physical?
    a. **See item 23. Both.**

25. In addition to your integrated data protection requirement with snapshot, what are your other data protection requirements? Such as backup to disk, backup to disk, backup retention policy, off-site backup retention vs. remote replication, etc?
    a. **Daily incremental change only backups retained for 45 days and full weekly backups retained for 90 days.   Remote replication to NOC. Backup to tape is not a requirement of this RFP. The district is investigating a highly resilient system for 30+ year archive to meet government data retention requirements.**

26. Do you need to replace or upgrade your existing ML6020 and DL310 backup systems?
    a. **If tape is included in the proposed solution, then yes.**

27. Do you need to implement any backup solution in your new data center?
    a. **Yes.**

28. Where is Brazos Crossing admin building located? Are its systems part of the migration?
    a. **3911 Avenue I, Rosenberg, Texas 77471. Yes.**

29. Are there any systems in GRHS and FHS required in the migration?
    a. **No.**

NOTE:
Please acknowledge receipt of this addendum by signing and dating this page and include a copy with your proposals.

Signature_____Date: _____