Background

The Riverside County Regional Medical Center (RCRMC) is a 365-bed general acute care hospital in Moreno Valley that occupies over five-hundred thousand (500,000) square feet of space within a five (5) story circular designed building. RCRMC also has fifty-seven thousand (57,000) square feet of space in a newly constructed Annex Building adjacent to the Moreno Valley campus, which provides offices for administrative and support departments. The outside of the medical center consists of a large parking lot, decontamination station, a helicopter landing pad, and a tank farm north of the Medical Center that contains a large propane gas storage tank, a water-cooling plant and medical gases that are used at the Medical Center on a daily basis.

The City of Moreno Valley contracts with Riverside County Sheriff’s Department to provide law enforcement protection (24 hours/7 days) for patients and staff (approximately 1,700 employees) at RCRMC. In May 2005, a private security company was hired to assist with hospital security.

RCRMC includes a Level II Trauma Center with one (1) primary, self-contained Trauma Bay that measures 12’ x 14’ 9” and is immediately accessible to the Operating Rooms and Intensive Care Units. In fiscal year 2003-2004, the RCRMC Trauma Center provided over forty-seven percent (47%) of all trauma care in Riverside County.

As listed below, vast amounts of supplies, mobile equipment and professional staff, sometimes up to fifteen (15), might be required to treat a critically injured patient.
**MOBILE EQUIPMENT AND SUPPLIES:**

1. A ventilator
2. Fast Scan Ultrasound (used for blunt or penetrating chest and/or abdominal trauma)
3. Portable x-ray
4. Bear Hugger (inflated warming blanket)
5. Level “1” Rapid Infusor (used to provide warm rapid fluid or blood transfusion)
6. Hotline (used to warm IV fluids)
7. IV pumps
8. Pediatric or adult code cart
9. Portable mayo stand (used for placement of sterile trays)
10. Trauma nurse’s documentation podium
11. Ambulance gurney that transported the patient to Trauma Center

**PROFESSIONAL STAFF:**

1. Attending Emergency Department Physician
2. Attending Emergency Department Resident
3. Two (2) Trauma Residents
4. Two (2) Emergency Department Nurses
5. Specialty Nurses as needed (Pediatric ICU)
6. Various Technicians (Radiology, Phlebotomist, Respiratory Therapy)
7. Anesthesiologist
8. Admitting Clerk

9. House Supervisor (A Senior Nurse Supervisor who represents the Hospital Administrator and/or Chief Nurse Officer when off duty)

Abbreviations: IV – Intravenous
ICU – Intensive Care Unit

Findings

1. On July 21, 2004, the Riverside County Community Health Agency, which serves as the local Emergency Medical Services Agency for Riverside County, conducted a focused survey of the RCRMC Trauma Center, and noted that the “Trauma Bay was extremely small.” The Office of Statewide Health Planning and Development* confirmed that there are no California State standards for Trauma Bay size or design and that each healthcare institution determines its own size and design. Therefore, the Grand Jury obtained comparative data from other hospitals in Riverside and San Bernardino counties (see Table I)

*A state agency that approves all new hospital construction and remodeling in California

<table>
<thead>
<tr>
<th>FACILITY</th>
<th>TRAUMA BAY</th>
<th>ROOM SIZE</th>
<th>ANNUAL VOLUME</th>
</tr>
</thead>
<tbody>
<tr>
<td>RIVERSIDE COUNTY REGIONAL MEDICAL CENTER</td>
<td>1</td>
<td>12’ X 14’ 9”</td>
<td>2,160</td>
</tr>
<tr>
<td>RIVERSIDE COMMUNITY HOSPITAL</td>
<td>2</td>
<td>14’ 5” X 18’ 5”</td>
<td>1,842</td>
</tr>
<tr>
<td>ARROWHEAD REGIONAL MEDICAL CENTER SAN BERNARDINO COUNTY</td>
<td>8</td>
<td>14’ 6” X 11’ 2”</td>
<td>2.068</td>
</tr>
<tr>
<td>LOMA LINDA UNIVERSITY MEDICAL CENTER SAN BERNARDINO COUNTY</td>
<td>10</td>
<td>9’ X 18’</td>
<td>2,700</td>
</tr>
</tbody>
</table>

2. In November 2004, the RCRMC received a $250,000 Federal Planning Grant to design the expansion of the Trauma Center. As of June 28, 2005, there has been no public release of a plan design or timeline for a Trauma Center Expansion project.
3. The 2004 Annual Security Assessment for RCRMC prepared by a Security Officer with the Riverside County Sheriff’s Department and a RCRMC Safety Officer stated the following:

- Although terrorist attacks can occur anywhere in the country, the threat of a possible terrorist attack occurring at RCRMC is rated medium. This is based on the Rapid Response Profile** of the Riverside County Sheriff’s Department. However, the Medical Center would be expected to deal with other Mass Casualty Incidents (MCIs) occurring within the county. In order for RCRMC to effectively respond to MCIs, perimeter security of the facility is vital. Currently, RCRMC has over thirty (30) perimeter doors that are accessible from the street.

- The electronic monitoring system that attaches to newborn, Neonatal Intensive Care Unit and pediatric patients to prevent infant abduction is "...becoming antiquated and parts are becoming harder to find. Additionally, with the current system it takes an extended amount of time to validate if an actual abduction has occurred. This allows an abductor to exit the Medical Center before a perimeter is established, and this was proved during a recently staged abduction drill."

4. Although RCRMC is committed to providing a safe and secure environment for patients, staff and visitors, the RCRMC 2004 Annual Security Assessment identifies additional strategies to enhance security at the Medical Center. The estimated cost of implementation of these safety and security strategies is summarized in Table II.

**The Rapid Response Profile is designed to respond to previously identified critical infrastructure within the county. This is a pre-plan for law enforcement operations in the event of a terrorist attack or natural emergency.
### TABLE II
**RCRMC PROPOSED SECURITY AND SAFETY STRATEGIES**

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Install perimeter fence around the Medical Center and Tank Farm.</td>
<td>$130,000</td>
</tr>
<tr>
<td>b</td>
<td>Upgrade the Infant Abduction Monitoring System.</td>
<td>200,000</td>
</tr>
<tr>
<td>c</td>
<td>Install barrier doors that require the use of key card to control access to the Operating Room.</td>
<td>15,000</td>
</tr>
<tr>
<td>d</td>
<td>Install doors in the hallway that require the use of key card to control access to the Diagnostic Imaging Department.</td>
<td>30,000</td>
</tr>
<tr>
<td>e</td>
<td>Install an alarm system around the perimeter of the Tank Farm.</td>
<td>4,000</td>
</tr>
<tr>
<td>f</td>
<td>Install a gate at the top of driveway leading to the Loading Dock.</td>
<td>30,000</td>
</tr>
<tr>
<td>g</td>
<td>Implement a screening system for patients and visitors with the use of color-coded passes.</td>
<td>15,000</td>
</tr>
<tr>
<td>h</td>
<td>Install a stationary metal detector at the four main entrances (Nason Street, Cactus Avenue, and Security and Emergency Departments) to the Medical Center.</td>
<td>35,000</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL</strong></td>
<td><strong>$459,000</strong></td>
</tr>
</tbody>
</table>

### Recommendations

**Riverside County Board of Supervisors**

**Riverside County Regional Medical Center**

1. RCRMC Chief Executive Officer develop and submit Trauma Center Expansion Plans by November 1, 2005, to the Board of Supervisors for approval.

2. RCRMC Chief Executive Officer request approval from the Board of Supervisors for Trauma Center Expansion Project.

3. RCRMC Chief Executive Officer formally request approval and funding from the Board of Supervisors to implement by March 31, 2006, all safety and security strategies identified on the RCRMC 2004 Annual Security Assessment as shown on Table II, specifically upgrade the Infant Abduction Monitoring System.

*Report Delivered: 06/29/05*
*Report Public: 07/01/05*
*Report Response Due: 09/27/05*