How I come up with an estimated cost of $18,261.64

Newly added services :
1. **AWS WAF**: Securing our APIs from common vulnerabilities.
2, **AWS Elastic Cache:** To improve system performance.
3. **AWS SQS**: SQS is introduced to queue up a sudden spike in requests and long running operations.
4. **API Gateway**: Securing our endpoints

Multi-Region Setup (DR Site)
We also introduced a totally new AZ in the us-west region to add disaster recovery (DR site) in the event of region failure in us-east-1. This adds redundancy to the system as well it improves system performance for us-west traffic.

Changes to exiting Services.
1. Web server: No of the reserved instances increased from 12 to 14
2. Application server: No of the reserved instances increased from 14 to 18
3. Database: Storage is increased to handle higher loads.
4. Amazon Route 53: DNS health checks increased to 1 check after every half hour.