# Financial proposal for project

1. VPC and Networking

  - VPC Peering: $0.01 per GB transferred.

  - Internet Gateway: No additional cost; however, data transfer out to the internet will incur charges.

  - Data Transfer Costs:

    - Data transfer within the same AWS Region is free.

    - Data transfer out to the internet (first GB free, then around $0.09 per GB).

2. Compute (EC2 Instances)

  - Public EC2 Instance (Web Traffic Collector):

    - Type: t3.medium (2 vCPU, 4 GB RAM) - ~$0.0416 per hour.

    - Usage: Assuming 24/7 usage, monthly cost: ~$30.02.

  - Private EC2 Instance (Data Processing):

    - Type: m5.large (2 vCPU, 8 GB RAM) - ~$0.096 per hour.

    - Monthly cost: ~$69.12.

  - Auto Scaling: Additional EC2 instances when traffic increases.

    - Costs depend on the number of instances launched, using the same pricing as above.

3. Storage (S3 and RDS

  - S3 Bucket:

    - Standard Storage: $0.023 per GB for the first 50 TB.

    - Data Retrieval: $0.0004 per 1,000 GET requests.

  - RDS (MySQL Multi-AZ deployment):

    - Instance: db.t3.medium - ~$0.082 per hour.

    - Monthly cost: ~$59.04.

    - Storage: $0.115 per GB-month provisioned (general purpose SSD).

    - Backup Storage: Free up to the provisioned database size.

4. APP Load Balancing and Scaling

  - Application Load Balancer (ALB):

    - ~$0.025 per hour.

    - Data processed: $0.008 per GB.

  - Auto Scaling Group: No additional cost, but will add EC2 instance costs.


5. Serverless Functions (Lambda)

  - Lambda Function:

    - 1 million requests per month free, then $0.20 per million requests.

    - Duration: $0.00001667 per GB-second, based on function memory size and runtime.


6. Messaging and Queuing (SQS)

  - SQS (Standard Queue):

    - $0.40 per 1 million requests.


7. CloudFront

  - $0.085 per GB data transfer for the first 10 TB.


8. Route 53 (DNS Service)

  - Hosted zone: $0.50 per month.

  - Domain registration (optional): Around $12 annually.


9. Security and Monitoring

  - AWS CloudTrail: Free for the first copy of management events within each region.

  - AWS Config: $0.003 per configuration item recorded.

  - KMS: $1.00 per month per key, $0.03 per 10,000 requests for key usage.


## Total Estimated Monthly Cost

Assuming moderate usage, the monthly costs are estimated between $200 - $400. Additional costs may arise from data transfer, higher traffic, or increased storage needs. Specific usage patterns and regional differences can affect the final cost.