

Seek, Rotate, **Transfer**

Data is either read from or written to the surface.

- ➔ Depends on RPM and sector density
With typical 100+ MB/s it takes $5\mu\text{s}$ / sector (512 bytes)

✓ Pretty Fast

Workload

So ...

- seeks are slow
- rotations are slow
- transfers are fast

What kind of workload is fastest for disks?

- Sequential : access sectors in order (transfer dominated)
- Random : access sectors arbitrarily (seek+rotation dominated)

➡ Disk Scheduler decides which I/O request to schedule next

- First Come First Served (FCFS)
- Shortest Seek Time First (SSTF)
- Elevator Scheduling (SCAN) commonly used on Unix