

Standard Operating Procedure (SOP): Transportation Scheduling and Route Planning

This SOP details the processes for **transportation scheduling and route planning**, covering the coordination of transport resources, optimization of delivery routes, scheduling of shipments, and management of transit times. The objective is to enhance efficiency, reduce transportation costs, improve timely deliveries, and ensure effective communication between dispatchers and drivers.

1. Purpose

To outline standardized steps for efficient scheduling and route planning, ensuring optimal use of resources and timely delivery of shipments.

2. Scope

This SOP applies to all dispatchers, transportation planners, drivers, and logistics staff involved in shipment scheduling and route planning activities.

3. Responsibilities

- **Dispatchers:** Assign vehicles and drivers, monitor progress, and communicate updates.
- **Planners:** Optimize routes using planning tools/software and update schedules.
- **Drivers:** Follow assigned routes and schedules, report delays/incidents promptly.
- **Logistics Manager:** Oversee execution, resolve escalated issues, and review performance metrics.

4. Procedures

4.1 Collect Transportation Requirements

1. Receive transportation orders with shipment details (origin, destination, cargo type, volume, delivery timeframes).
2. Verify information for completeness and accuracy.

4.2 Resource Coordination

1. Check availability of vehicles and drivers.
2. Match resources based on shipment requirements and vehicle capacities.

4.3 Route Planning & Optimization

1. Use route planning software to:
 - Determine shortest/fastest routes.
 - Factor in traffic patterns, road closures, regulations, and delivery time windows.
 - Minimize empty miles and fuel consumption.
2. Adjust routes as necessary for multiple stops or priority shipments.

4.4 Schedule Shipments

1. Create detailed schedules with estimated departure, transit, and arrival times.
2. Communicate schedules and routes to drivers and customers (if applicable).
3. Update schedules in the Transportation Management System (TMS).

4.5 Communication and Monitoring

1. Maintain open channels between dispatchers and drivers (e.g., mobile app, radio, or phone).
2. Monitor shipment progress in real time and be alert for route deviations or delays.

4.6 Exception and Delay Management

1. Promptly address issues (traffic, vehicle breakdown, delays).
2. Reroute shipments or reschedule as necessary.

- 3. Inform relevant parties of significant changes in delivery times.

4.7 Documentation and Reporting

- 1. Record all route plans, schedules, changes, and incidents.
- 2. Generate daily/weekly reports on on-time deliveries, resource utilization, and route efficiency.

5. Performance Metrics

| Metric | Target | Frequency |
|-------------------------|--------------------------|-----------|
| On-time Delivery Rate | > 98% | Monthly |
| Average Route Duration | Within planned times | Monthly |
| Resource Utilization | > 90% | Weekly |
| Cost per Mile/Kilometer | Minimized (set annually) | Quarterly |

6. References

- Transportation Management System (TMS) User Manual
- Company Fleet Policy
- Regulatory Compliance Guidelines

7. Review & Revision History

| Date | Version | Description | Approved by |
|------------|---------|------------------|-------------------|
| 2024-06-15 | 1.0 | Initial creation | Logistics Manager |