# Parcel/Small Package/Merchandise Deliveries

One of the fastest growing components of truck freight has been the time sensitive delivery of small packages and general merchandise. Retail stores and other businesses have realized that speedy delivery is important to marketing and sales. Demand for home deliveries has become one of the main growth drivers in the express and parcels market over recent years and continues to transform markets and competitive dynamics in many countries around the world. Trends within ecommerce, internet penetration, new supply chain models, social demographics, innovations and new service providers are creating a dynamic environment in which parcel and express companies are trying to adapt their strategies in order to gain a competitive advantage. During the past decade or so, package delivery companies such as United Parcel Service (UPS), have substantially changed their mode of operation to meet their customers’ requirements. Rather than merely providing package delivery service, in which goods are picked up at local warehouses and delivered to customers at their homes, such companies have become integrated logistics operations handling a wide range of merchandise nationwide and worldwide. Increasingly, they are providing overall logistics services for large companies, involving the use of all modes of transportation – trucks, intermodal, rail, and air.

Figure 1 illustrates the typical supply-chain flow diagram for parcel shipments (sans logistics services).

**Figure 1. Supply Chain for Parcels/Small Packages**

Drop-Off at Customer Site

Pick-Up at Customer Site

*Truck/Van*

*Truck/Van*

Sort Facility

Destination Airports

Airport Hubs with Sort Facilities

Originating Airports

Sort Facility

*Air*

*TL*

*TL*

*Air*

*TL*

*Truck/Van*

The supply-chain process for parcel shipments traces the following path:

1. Package delivery companies have a network of small trucks and vans that pick up packages at designated customer locations during the day.
2. These packages are then brought to Consolidation Centers or Sort Facilities.
3. Short-haul deliveries are sorted for truck/van delivery.
4. Packages traveling longer distances are loaded onto dedicated aircraft by a specified cut-off time.
   * The planes leave for major system-wide sorting hubs, such as Memphis (for FedEx) and Louisville (for UPS).
   * Large carriers use multiple hubs, but each has a central hub located in the middle of the United States.
   * When the planes arrive a few hours later, the packages are sorted according to their final destination and placed into new containers and loaded onto planes.
   * Plane departures for destination cities typically begin between 3 AM and 4 AM and land at destination airports around 6 AM.
   * Packages are then unloaded and sorted in sorting facilities and then distributed to trucks and delivered to their final destinations.

Note: Lower priority packages, particularly those scheduled for second-day delivery are more likely than overnight deliveries to travel by truck rather than air, and are sorted in hubs during the daytime.