

# HARVARD-WESTLAKE CARPOOL & TANDEM FINDER

## One-Page Summary

---

### THE CONCEPT

Harvard-Westlake Carpool Tandem Finder is a school-exclusive platform that helps students maximize the value of their \$800+ annual parking passes. The app connects students for carpooling, matches compatible tandem spot partners, provides data-driven parking spot rankings, and enables a peer-to-peer rental marketplace for unused parking days. All users are verified through Harvard-Westlake email addresses, ensuring a safe, trusted community environment where students can reduce costs, earn passive income, and make informed parking decisions.

---

### THE PROBLEMS WE'RE SOLVING

**Wasted Money on Underutilized Parking:** Students pay \$800+ annually for parking passes, yet tandem spots sit empty half the time and single spots go unused during absences, sick days, and vacations. There's no system to maximize permit value or recoup costs when spots aren't being used.

**Inefficient Coordination:** Finding compatible carpool partners or tandem spot matches currently happens through word-of-mouth, random GroupMe posts, or awkward hallway conversations. There's no centralized, reliable way to match students based on schedules, locations, and needs.

**Information Asymmetry:** Students commit hundreds of dollars to parking spots without knowing critical information about spot quality, distance to campus, shade coverage, traffic flow, or tandem blocking likelihood. This lack of transparency means students often end up with suboptimal spots and no way to make informed decisions before purchasing.

---

### OUR SOLUTION

**Centralized Matching Platform:** Students create profiles with their schedules, locations, and parking needs, then get intelligently matched with compatible carpool partners or tandem spot mates. Our algorithm considers class schedules, commute routes, and availability patterns to ensure seamless coordination.

**Data-Driven Spot Intelligence:** We collect and analyze comprehensive data on every parking spot—distance measurements, shade coverage throughout the day, traffic patterns, tandem blocking frequency, and user ratings—then present this information through clear rankings and comparisons so students can make informed decisions before committing financially.

**Peer-to-Peer Rental Marketplace:** Students can list their unused parking days, set competitive prices, and automatically connect with students seeking temporary spots. The platform handles scheduling, payment processing, and verification, transforming wasted parking days into actual income while maximizing lot utilization.

---

## KEY FEATURES

- ✓ **Smart Carpool Matching** - Connect with compatible students based on schedules, routes, and preferences to split parking costs and reduce traffic
  - ✓ **Tandem Partner Finder** - Match with students who have complementary schedules for efficient tandem spot sharing without coordination headaches
  - ✓ **Spot Intelligence & Rankings** - Access comprehensive data and ratings for every parking spot, including distance, shade, traffic flow, and user reviews
  - ✓ **Parking Spot Rental Marketplace** - List and rent unused parking days to generate passive income with secure, automated transactions
- 

## USER INTERFACE DESIGN

**Design Philosophy:** Modern, minimalist interface using Harvard-Westlake's black (#000000) and red (#C41E3A) color scheme with white text for optimal readability. Professional yet student-friendly aesthetic.

**Dashboard:** Clean home screen with four main feature cards for quick access to carpool matching, tandem finding, spot rankings, and rental marketplace. Top navigation includes logo and user profile.

**Matching Interfaces:** Swipeable profile cards (similar to modern dating apps) showing compatibility percentages, schedules, and routes. Filter options for schedule, location, and preferences with red accent buttons for confirming matches.

**Spot Intelligence:** Scrollable ranked list with 5-star ratings, distance indicators, shade percentages, and detailed pros/cons. Interactive parking lot map with color-coded spots and comprehensive filtering options.

**Rental Marketplace:** Calendar-based interface highlighting available days in red. Clean card layout showing available spots with dates, prices, and ratings. Earnings dashboard displays total rental income.

**Additional Features:** Detailed spot pages with photo carousels and user reviews, user profiles with verification badges, notification center with red status badges, and booking confirmations with QR codes for spot access.

---

## WHY THIS MATTERS

**For Students:** Immediate cost savings of up to 50% through carpooling and spot sharing. Generate passive income from unused parking days. Make informed decisions with comprehensive spot data. Reduce daily stress through better coordination and transparency.

**For the HW Community:** Maximize parking lot utilization across campus. Reduce traffic congestion during peak times. Lower environmental impact through increased carpooling. Modern solution to a persistent problem, built by students who understand the challenges firsthand.

**Safety & Trust:** School-verified accounts ensure all interactions happen within the trusted Harvard-Westlake community. No outsiders, no sketchy deals—just fellow students working together to make parking better for everyone.

---

## COMPETITIVE ADVANTAGES

**Comprehensive Solution** - Four major features in one platform (most competitors offer only one)

**Data-Driven Intelligence** - Unique spot analytics and ranking system unavailable anywhere else

**Income Generation** - Only platform enabling students to monetize unused parking days

**Community Safety** - Exclusively for HW students, verified through school email

**Student-Built** - Designed by people experiencing these exact problems daily

---

**Harvard-Westlake Carpool Tandem Finder: Park smarter, not harder.**