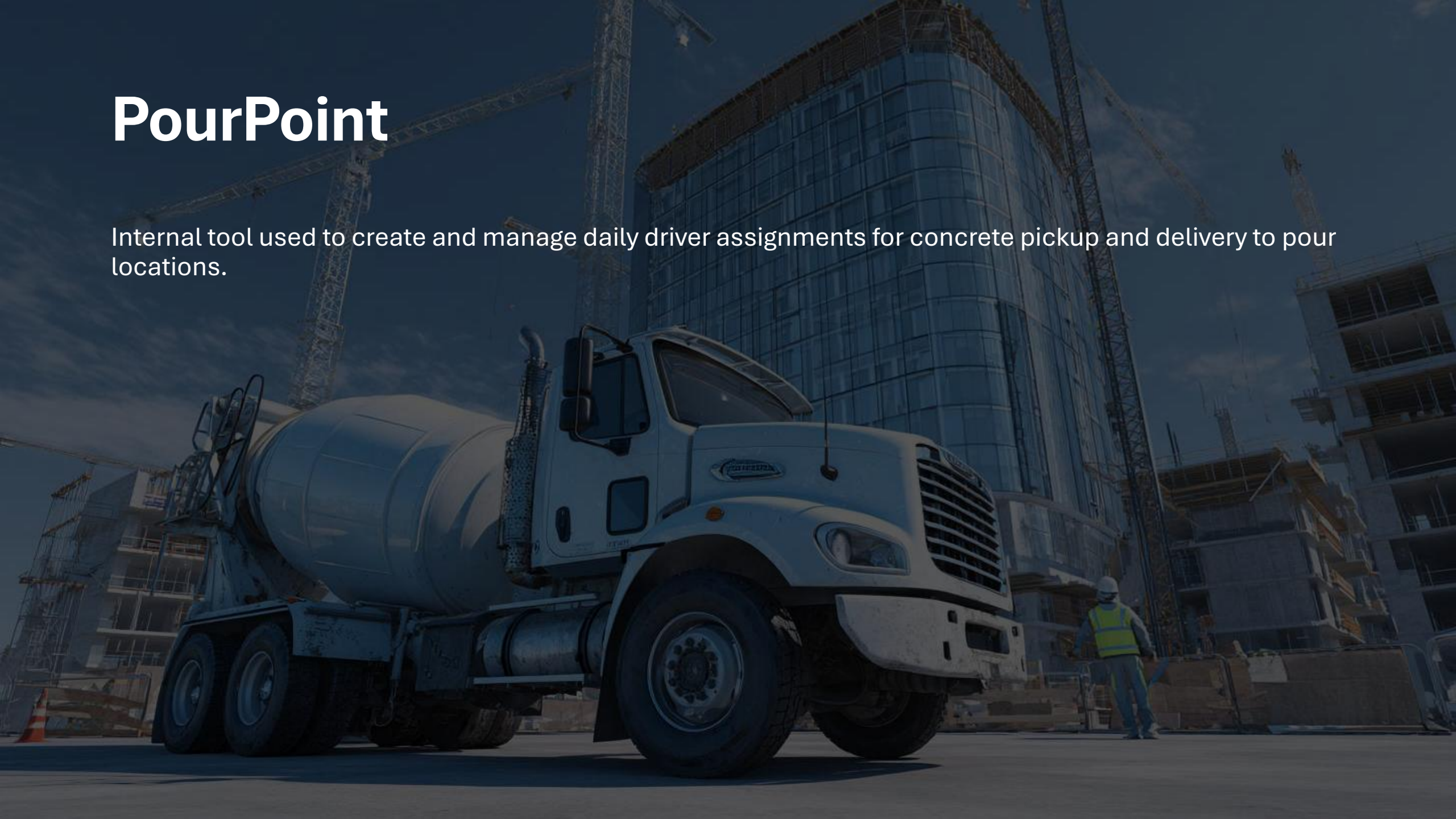


PourPoint

Internal tool used to create and manage daily driver assignments for concrete pickup and delivery to pour locations.





Construction logistics operations operate under constant time pressure, coordination overhead, and human constraints. Dispatchers must balance changing schedules, driver availability, and delivery timing using a mix of systems, paperwork, and institutional knowledge. Small delays or miscommunications can cascade quickly, creating inefficiencies for both office staff and drivers in the field. This context sets the stage for why clarity, reliability, and low-friction tools are essential in daily dispatch workflows.

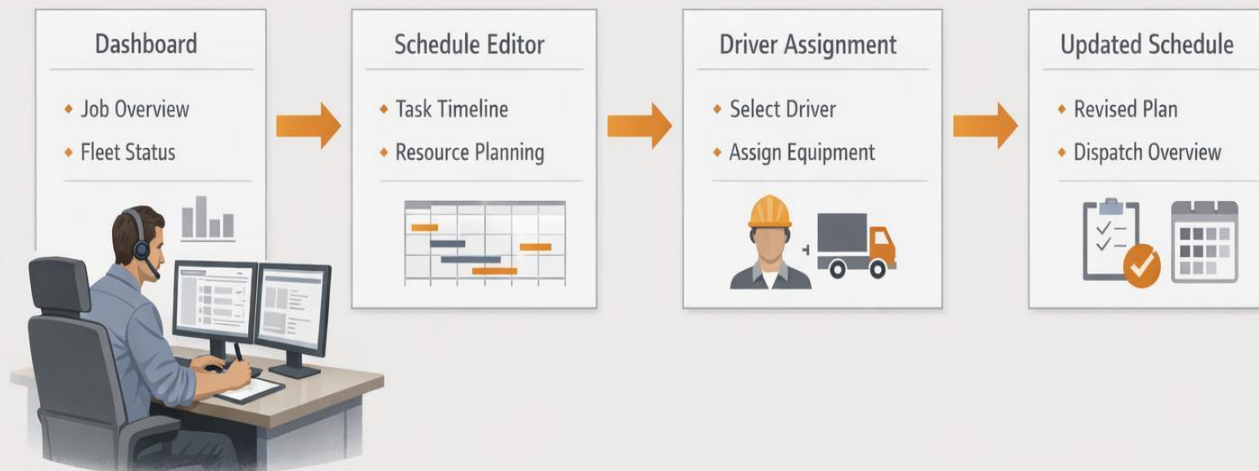
Solution & Design Approach



The solution focuses on simplifying complex coordination into clear, role-appropriate workflows that reflect how dispatchers and drivers actually work. Architectural choices emphasize reliability, offline tolerance, and predictable system behavior, while UX decisions prioritize clarity, low cognitive load, and fast task completion. Rather than adding features, the design removes friction by aligning screens, actions, and data visibility with real operational needs. This approach ensures the system supports daily work without becoming another source of overhead.

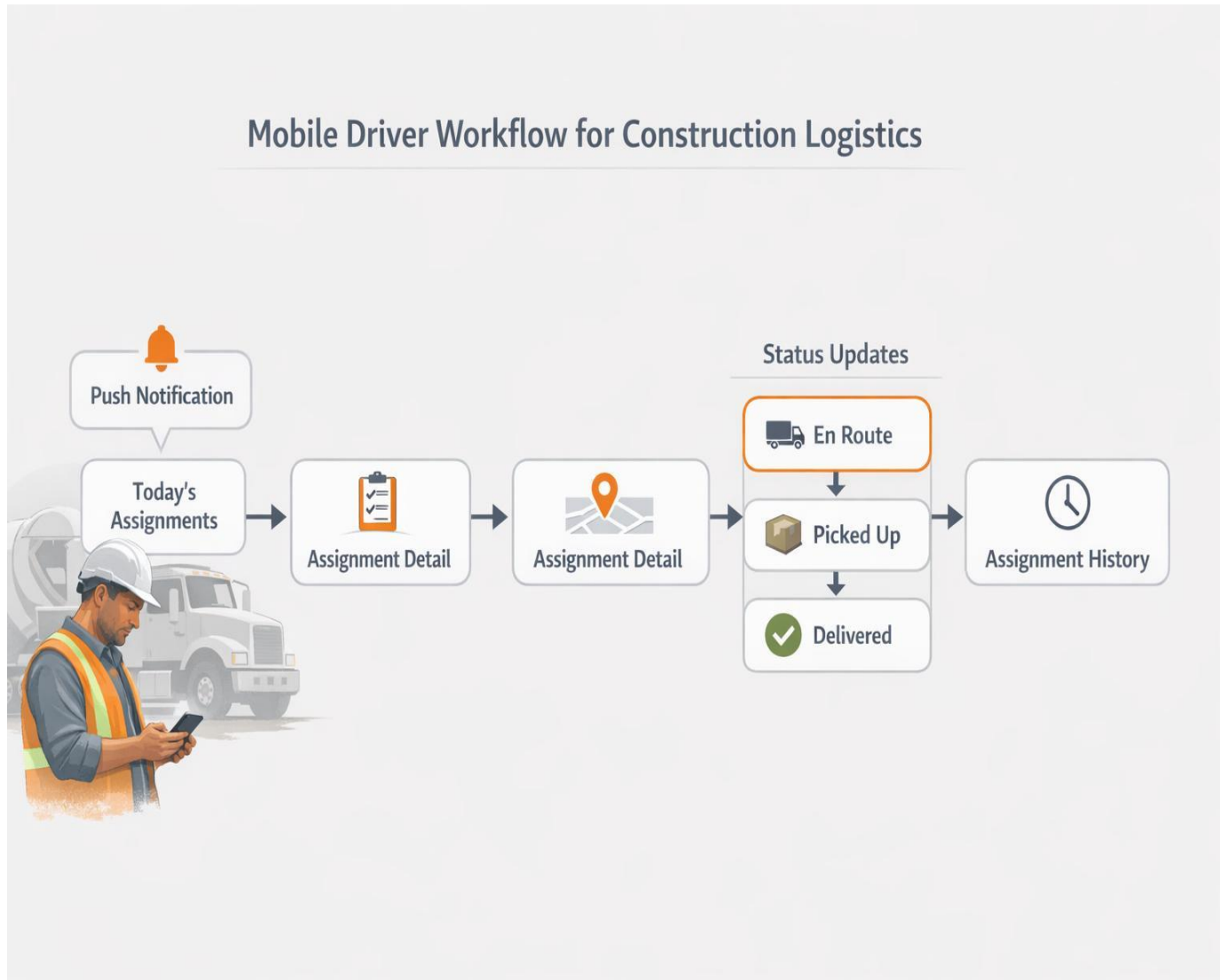
Dispatcher User Flow

Construction Logistics Dispatcher's Workflow



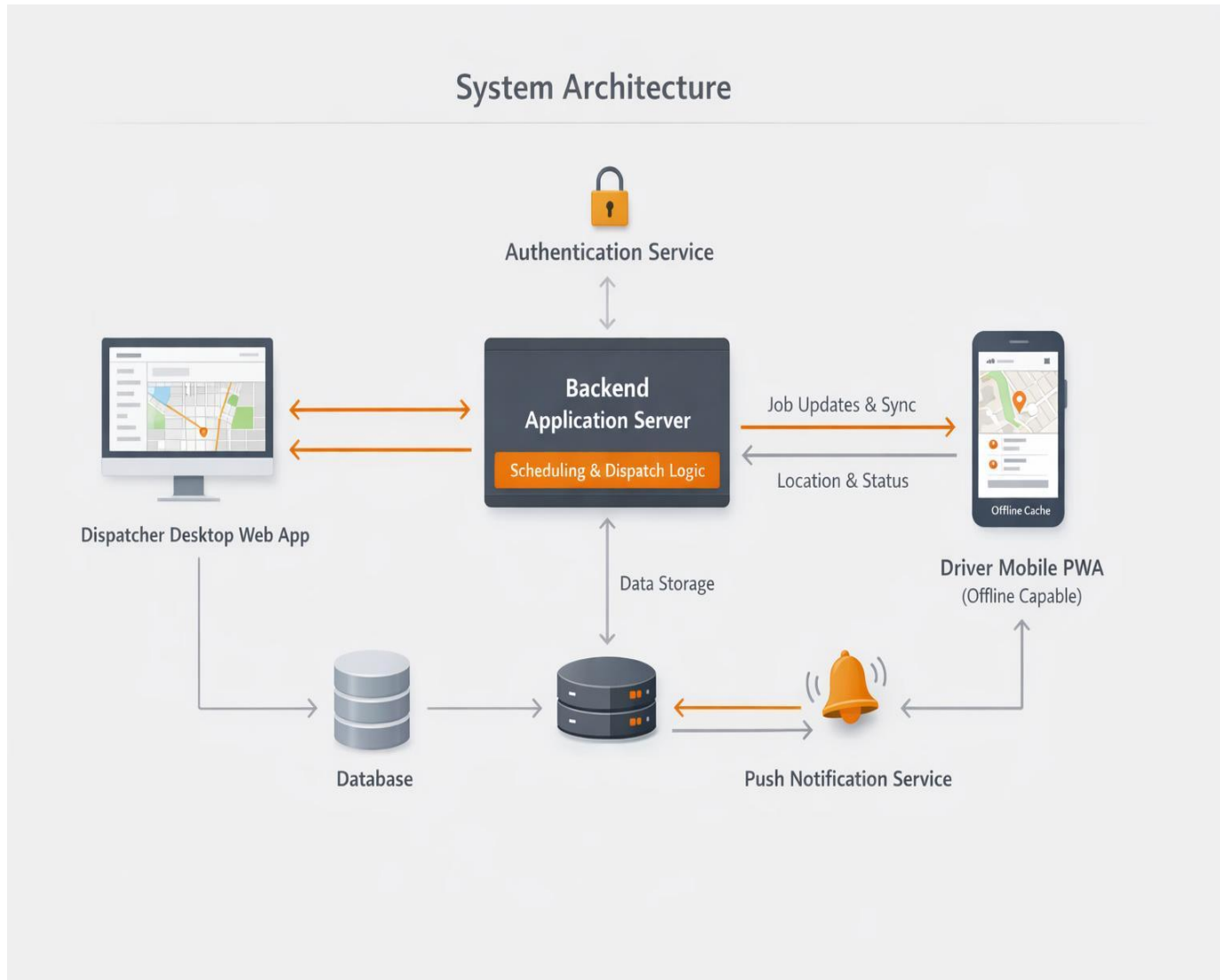
This flow illustrates a typical dispatcher workflow from planning to execution during a normal workday. Dispatchers begin by reviewing the day's schedule, create or adjust delivery entries, assign drivers based on availability, and confirm assignments before work begins in the field. Each step is intentionally sequenced to minimize backtracking and reduce decision fatigue. The flow emphasizes clarity, predictability, and smooth handoffs between planning and execution.

Driver User Flow



This flow represents how drivers interact with the system throughout a typical workday, from receiving assignments to completing deliveries. The experience is designed to surface only what is immediately relevant, guiding drivers through clear status updates without unnecessary choices or complexity. Each step supports quick comprehension and minimal interaction, allowing drivers to focus on driving and delivery rather than managing software. Completed work is clearly separated from active assignments to maintain focus and reduce distraction.

System Architecture Diagram



This diagram presents the high-level architecture that supports both dispatcher and driver workflows without tying the solution to specific vendors or infrastructure choices. The system is designed around clear separation of responsibilities, enabling reliable scheduling, secure access, and consistent data flow between office and field. Offline support and push notifications ensure drivers remain informed even in low-connectivity environments, while the backend coordinates state, synchronization, and validation. The architecture prioritizes predictability, resilience, and clarity over technical complexity.

Dashboard

Delivery Management Logged in as: Dispatcher ▾

Dashboard

Schedule Editor

Driver Assignments


Drivers

Today's Delivery Assignments

Time	Plant	Delivery Address	Driver	Status
8:30 AM	Plant 3	1245 Oak St, Brookville	Mike S.	Assigned
7:45 AM	Plant 2	350 River Rd, Ashton	Tom G.	Completed
8:15 AM	Plant 1	782 Pine Ln, Westwood	Dave R.	Pending
9:00 AM	Plant 4	615 Maple Ave, Eastview	Jason L.	Assigned
9:30 AM	Plant 2	220 Birch Ct, Milltown	Eric P.	Pending
10:00 AM	Plant 3	480 North St, Clayville	Kevin M.	Assigned
10:30 AM	Plant 1	150 Brentwood Blvd, Hayes	Steve D.	Pending
11:00 AM	Plant 4	900 Cedar St, Fairview	Frank J.	Pending

The dashboard serves as the primary operational workspace for dispatchers at the start and throughout the day. It provides a clear, prioritized view of current delivery assignments, allowing staff to quickly assess status, identify issues, and navigate to detailed scheduling or assignment tasks. The layout is intentionally restrained, focusing attention on active deliveries rather than secondary metrics or analytics. This screen is designed to reflect a realistic, busy workday while remaining predictable and easy to scan under time pressure.


Schedule Editor

Dispatch Portal Dispatcher  ▾

Schedule Delivery

Delivery Address

Concrete Quantity
 cubic yards

Expected Delivery Time
 

Assigned Driver
 ▾

Notes / Instructions

The Schedule Editor is designed for fast, accurate entry of delivery details during a dispatcher’s planning workflow. It provides a structured, form-based layout that reduces ambiguity while supporting frequent updates throughout the day. Validation and feedback are intentionally subtle, allowing dispatchers to work quickly without interruption. This screen emphasizes clarity and predictability, ensuring scheduling tasks can be completed efficiently under real operational conditions.

Driver Assignment

Dispatch Portal Dispatcher ▾

Dashboard
Schedule Editor
Driver Assignments
Drivers

Driver Assignments

Scheduled Deliveries				
Time	Plant	Address	Driver	Status
7:30 AM	Plant 1	1234 Oak St	Unassigned	Pending
7:50 AM	Plant 3	567 Elm Ave	Unassigned	Pending
8:10 AM	Plant 2	980 Maple Rd	Mike S.	Assigned
8:30 AM	Plant 1	245 Pine Lane	Laura G.	Assigned
9:00 AM	Plant 3	801 River Blvd	Unassigned	Pending

Assign Driver for 7:50 AM - Plant 3, 567 Elm Ave

Select Driver:

- Select Driver - ▾

John R.

Chris T.

Debbie H.

Assign Driver

The Driver Assignment screen supports one of the most critical dispatcher decisions: matching deliveries with available drivers. It presents delivery details and driver options side by side, allowing assignments to be made quickly and confidently. Clear status indicators help dispatchers understand what is pending, assigned, or completed at a glance. The design minimizes friction and ambiguity, ensuring assignments can be managed efficiently during busy operational periods.

Driver List

Dispatch Portal Dispatcher ▾

Dashboard

Schedule Editor

Driver Assignments

Drivers

[Add Driver](#)

Driver Name	Phone Number	Home Location	Status
John Miller	555-203-4789	Plant A	Active
Sara Collins	555-408-6523	Plant B	Active
Mike Johnson	555-312-9876	Plant C	Inactive
Eric Davis	555-789-2351	Plant A	Active
Eric Davis	555-789-2351	Plant A	Active
Tom Lewis	555-604-1124	Plant D	Active
Andy Rogers	555-877-4509	Plant B	Inactive
Kevin Hall	555-102-3345	Plant C	Active
Jason Ward	555-456-7820	Plant A	Active
Bryan Harris	555-659-9987	Plant D	Inactive
Laura Scott	555-298-6541	Plant A	Active

The Driver List provides dispatchers and back office staff with a clear, centralized view of all available drivers. It is designed for quick scanning, simple maintenance, and fast navigation to individual driver records when updates are needed. By keeping the layout straightforward and action-oriented, the screen supports routine administrative tasks without adding unnecessary complexity. This view serves as the foundation for accurate assignments and day-to-day operational continuity.

Driver Details

Dispatch Portal Dispatcher ▾

Dashboard
Schedule Editor
Driver Assignments
Drivers

Driver Details

Driver Information Edit Delete Driver

Name: Mike Thompson
Phone: (555) 123-7890
Home Location: Westside Plant
Status: Active

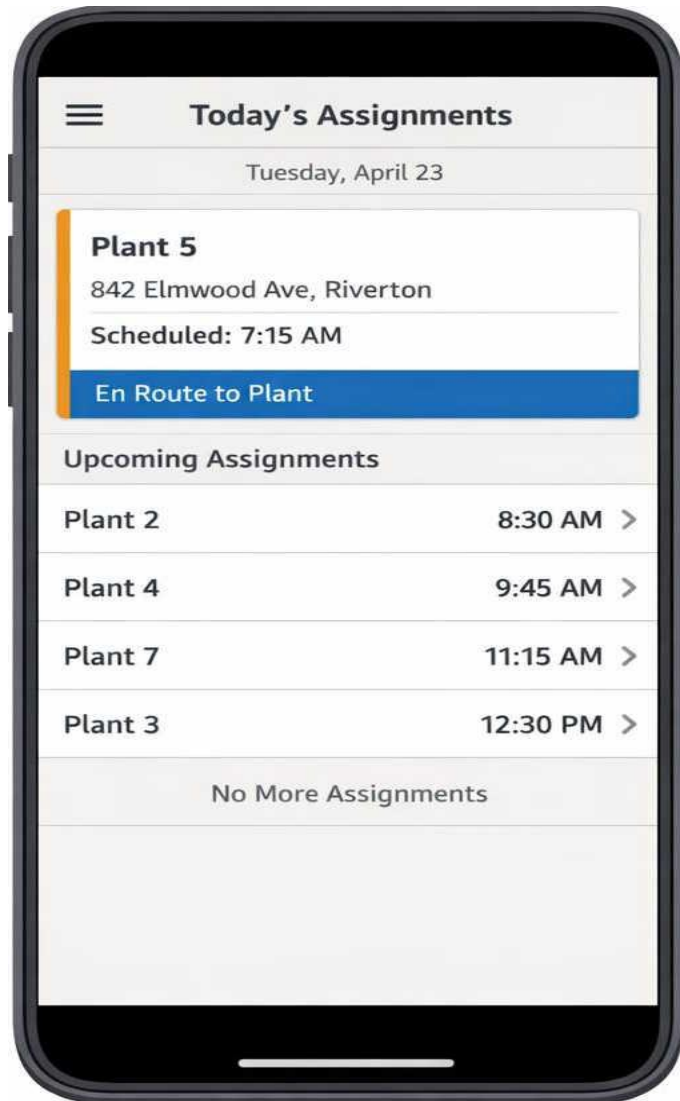
Assigned Deliveries

Time	Plant	Delivery Address	Status
7:30 AM	Westside Plant	1420 Elm St, Brookfield, TX	En Route
9:15 AM	Westside Plant	305 Oak Ave, Riverton, TX	Scheduled
11:00 AM	Eastside Plant	875 Industrial Rd, Meadow, TX	Completed
1:45 PM	Westside Plant	652 Pine Ln, Salem, TX	Scheduled

Showing 1 to 4 of 4 entries

The Driver Details screen provides dispatchers with a focused view of an individual driver's information and current workload. It brings together contact details, status, and assigned deliveries in a single, predictable layout to support quick updates and informed decisions. Administrative actions such as editing or removing a driver are clearly separated from day-to-day viewing to reduce accidental changes. This screen supports accurate driver management while maintaining clarity and control in busy operational environments.

Today's Assignments



The Today's Assignments screen acts as the primary home view for drivers at the start and throughout the workday. It surfaces the next active delivery prominently, while keeping upcoming assignments visible without distraction. The layout is optimized for quick glances and minimal interaction, allowing drivers to understand priorities and update status efficiently in real working conditions. Offline support ensures assignments remain accessible even when connectivity is limited in the field.

Assignment Detail

Today's Assignments Assignment Details

Plant #12
2435 Oakwood Ave, Riverton, TX

Scheduled: Mar 15, 2023 - 7:30 AM
Driver: Mike S.

Status: Delivered

En Route to Plant

✓ Picked Up (Full Truck) Updated

Pending Sync...

Delivered

Retry Sync

Order Details

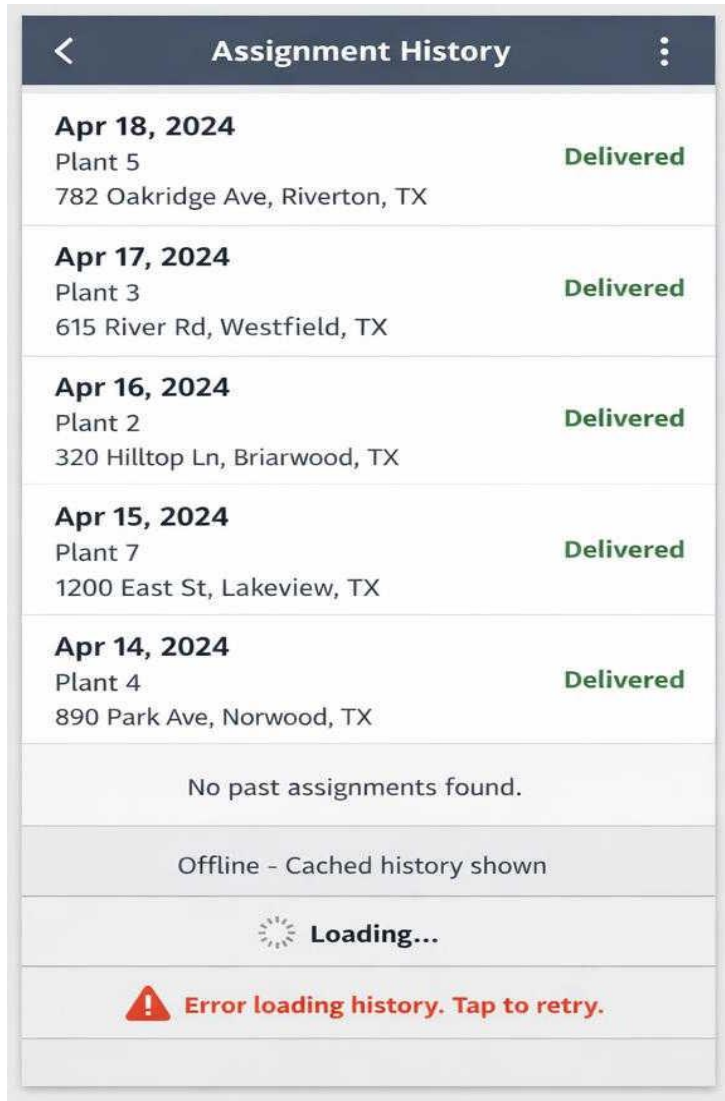
Quantity: 8.5 cu. yds.

Notes: *Pour into foundation pit. Call foreman on arrival.*

Sync Error: Waiting for connection...

The Assignment Detail screen provides drivers with all relevant delivery information in one focused view while enabling fast, reliable status updates. It is designed for use in real working conditions, with large tap targets and clear separation between information and actions. Status progression is deliberately constrained to prevent errors and reduce cognitive load during active deliveries. Offline support ensures that updates can be captured immediately and synchronized automatically when connectivity is restored.

Assignment History



Assignment History	
Apr 18, 2024 Plant 5 782 Oakridge Ave, Riverton, TX	Delivered
Apr 17, 2024 Plant 3 615 River Rd, Westfield, TX	Delivered
Apr 16, 2024 Plant 2 320 Hilltop Ln, Briarwood, TX	Delivered
Apr 15, 2024 Plant 7 1200 East St, Lakeview, TX	Delivered
Apr 14, 2024 Plant 4 890 Park Ave, Norwood, TX	Delivered
No past assignments found.	
Offline - Cached history shown	
Loading...	
Error loading history. Tap to retry.	

The Assignment History screen allows drivers to review completed deliveries without cluttering the active workflow. It is designed for occasional lookup rather than frequent interaction, providing clear, concise records ordered by recency. By separating historical reference from active tasks, the screen helps drivers stay focused on current work while still maintaining access to past delivery information. Offline access ensures history remains available even when connectivity is limited.

Assignment Push Notification



The assignment push notification serves as a timely, low-disruption alert that informs drivers when a new delivery has been assigned. It is designed to be immediately understandable at a glance, providing essential context without requiring the driver to open the app. Tapping the notification deep-links directly to the relevant assignment, reducing friction and ensuring drivers can respond quickly when schedules change. This approach keeps drivers informed while respecting the realities of in-field work and limited attention.