Network Integration

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What is Network Integration?
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For **users**, network integration fundamentally means creating a **seamless travel experience** across rail and transit in California by eliminating **points of friction**.
Poor service design and lack of coordination across agencies
Inadequate and inaccurate trip-planning information
Unclear fare structure and payments

Incompatible fare and ticketing policies between agencies require passengers to purchase multiple tickets for one journey.
Poor Physical Connections

between travel modes, such as stations that require long walks and lack travel amenities.
The Current Situation: Disconnected Transit
The Future Situation: Integrated Transit
A Real-World Example
Wetzikon, Switzerland
Integrated Planning Approach

- DRMT encourages coordinated statewide investments based on service goals
- Strike a balance between service, infrastructure, and rolling stock needs
- Crucial to make targeted investments that meet near term goals without precluding long term vision.
Wetzikon

1. Buses arrive in advance of the trains
2. Trains arrive in the station
3. All services are in the station
4. Trains depart from the station
5. Buses depart from the station
What is Network Integration?

For the State and our partners, network integration means:

- Collaborating to eliminate duplicate investments;
- Planning of shared corridors and infrastructure;
- Coordinated schedules;
- Coordinating rolling stock procurement and management.
Why Network Integration?
The California State Rail Plan and the forthcoming Statewide Transit Strategic Plan describe the need to coordinate investments in a way that ties together public transit offerings across California into a cohesive system.
Results show incremental increase in rail ridership due to population growth.

However, market potential for networked services is unrealized.
Rail Plan Vision: Ridership – Market Potential

Result of integration and HSR shows **huge increase** in rail ridership demand

Satisfies a **large market potential** for **networked services**
California’s statewide goals necessitate integration of our transportation system for:

- Climate change goals
- Mode shift goals
- Equity goals
Through network effects, economies of scale, simplification, and the adoption of uniform standards and practices, we can realize greater benefits:

• Reduced costs to operate public transportation
• Reduced cost for travelers to use public transportation
• Increased ridership
• Increased farebox recovery and revenue
Network Integration & TIRCP
Network integration is one of the 4 main policy objectives of the TIRCP program.

The guidelines for the upcoming cycle clarifies and makes explicit the expectation when applying for network integration projects.

“Projects eligible for funding under TIRCP include... Rail, bus, and ferry integration implementation, including integrated ticketing and scheduling systems, shared-use corridors, related planning efforts, and other service integration initiatives.”
- CA PRC 75221(a)(3)
• The State is invested in the continued development of a comprehensive, integrated network.

• 18 agencies in 2018 were awarded network integration funds to multiply the benefits of the standalone investments.
Examples of funded network integration projects include:

- Design enhancements to improve ease of transfers from different systems
- Review and support for development of integrated, pulse-schedule service plans for corridors
- Development of a feasibility study analyzing potential for new service
- Identifying best practices for integrating regional transit and rail services, including: scheduling; fare; governance; operations.
Caltrans has a statutory responsibility (AB 528) for interregional transit planning and coordination.

The State serves as a coordinator for planning, funding and technology decisions with system-wide impacts.

We rely on local agencies to know what’s best for their region.
Cal-ITP: Eliminating Trip-Planning and Payment Barriers
California Integrated Travel Project (Cal-ITP)

- Increase ridership by offering seamless trip planning/payment across modes and across California
- Making transit easier for the transit rider by enabling a great user experience
- Meet changing consumer expectations
- Lower costs of fare/revenue collection/information management due to advantage of economies of scale
What Can We Integrate?

TRIP PLANNING PHASE

Mobility Service Data

Payment Systems

Transaction Phase

JOURNEY PHASE

Wayfinding

Customer Service & Feedback

Each journey phase is enabled and improved by a series of processes and technologies.

POST-JOURNEY PHASE
What Can We Integrate?

The
» People
» Operations
» Service
» Vehicles
» Infrastructure

...are the NETWORK

These other 7 components should be integrated
Moving CA Forward
The shift to Zero-Emissions Buses (ZEBs) will require an integrated planning approach that must consider the tradeoffs between service design, vehicle technology, and infrastructure.

Working with multiple state agencies and transit agencies, we can meet our policy goals and make California a global leader in the field of ZEBs.
Questions?