

Jerome School District Student Transportation

White Paper: Benefits of Implementing a Tiered School Start Schedule

Executive Summary

Jerome School District is evaluating the implementation of a two-tier school start schedule designed to improve transportation efficiency, reduce operational costs, and enhance educational outcomes for students.

Under the proposed model:

Tier	Student Group	25/26 Ridership	School Start Time
Tier 1	Elementary	649 Students	7:30 AM
Tier 2	Secondary (Middle & High School)	639 Students	9:00 AM

The district currently operates 19 bus routes averaging approximately 37 miles per route daily. By implementing a 90-minute tier separation, Jerome School District can significantly improve fleet utilization while maintaining or improving transportation service levels.

Current Transportation Operations

Current Route Structure

- Total Bus Routes: 19
- Elementary Riders: 649
- Secondary Riders: 639
- Average Route Length: 37 miles
- Total Daily Route Miles: Approximately 703 miles

Currently, buses are dedicated to serving students within a single school start window. This limits the district's ability to maximize vehicle utilization and requires additional buses and drivers during peak transportation periods.

Benefits of Tiered School Start Times

1. Improved Bus Utilization

The most significant transportation benefit is the ability to use the same bus and driver for multiple route assignments.

With a 7:30 AM elementary start and a 9:00 AM secondary start:

- Elementary routes can be completed before secondary routes begin.
- Buses can transport elementary students and then be reassigned to secondary routes.
- The district can serve more students with fewer buses during peak demand periods.

Operational Impact

A 90-minute separation provides sufficient time for:

- Morning elementary route completion
- Student unloading
- Travel to secondary attendance areas
- Completion of secondary routes before the 9:00 AM bell

This scheduling structure is considered ideal for transportation efficiency because it provides enough transition time without creating excessively early elementary start times.

2. Potential Fleet Reduction

Tiering allows Jerome School District to reduce the number of buses required during peak operations.

Current Operation

- 19 active routes
- Peak demand requires all available buses simultaneously

Tiered Operation

By staggering school start times:

- One bus can potentially perform two route assignments.
- Peak vehicle demand decreases.
- Spare bus availability increases.
- Future fleet replacement needs may be reduced.

Even if the district chooses not to reduce its fleet immediately, the tiered structure provides operational flexibility and increases system resiliency.

3. Reduced Transportation Costs

A tiered system can lower transportation expenses in several areas.

Driver Costs

- Improved route efficiency
- Reduced need for substitute coverage
- Better utilization of existing staff

Fleet Costs

- Reduced need for future bus purchases
- Lower depreciation costs per student transported
- Better use of existing assets

Maintenance Benefits

Fewer buses operating simultaneously can result in:

- Lower maintenance expenditures
- Extended vehicle life cycles
- Improved scheduling for repairs and inspections

4. Increased Driver Recruitment and Retention

School districts nationwide continue to face bus driver shortages.

Tiered schedules create opportunities for:

- Longer workdays for drivers seeking additional hours
- Improved route continuity
- More attractive employment opportunities
- Better utilization of CDL-qualified staff

Drivers are often more interested in positions that provide additional daily hours and consistent work schedules.

5. Improved Transportation Reliability

When transportation systems operate with additional flexibility:

- Route disruptions are minimized.
- Spare buses are more readily available.
- Mechanical breakdowns have less impact.
- Student arrival times become more consistent.

A tiered system creates operational redundancy that improves overall service reliability.

Educational Benefits

Elementary Students Benefit from Earlier Start Times

Research consistently shows younger students adapt well to earlier school schedules.

Benefits include:

- Consistent morning routines
- Earlier dismissal times
- Additional afternoon opportunities for family activities
- More daylight hours available after school

Elementary students generally experience fewer negative impacts from earlier start times compared to adolescents.

Secondary Students Benefit from Later Start Times

A 9:00 AM secondary start aligns with recommendations from pediatric and sleep researchers.

Benefits include:

Increased Sleep

Teenagers naturally experience a biological shift in sleep patterns during adolescence.

Later start times allow students to:

- Obtain additional sleep

- Improve alertness during first-period classes
- Reduce chronic sleep deprivation

Improved Academic Performance

Studies have linked later secondary start times to:

- Improved attendance
- Increased school bus ridership
- Increased classroom engagement
- Better academic outcomes
- Higher graduation rates

Enhanced Student Safety

Research has also shown:

- Reduced drowsy-driving incidents among teen drivers
- Improved student mental health
- Lower rates of absenteeism

Community Benefits

Reduced Congestion Around Schools

Staggered school start times reduce traffic congestion around campuses.

Benefits include:

- Improved parent drop-off efficiency
- Reduced vehicle queuing
- Improved safety around school zones
- Less congestion during peak morning travel periods

Better Family Scheduling

Many families have children at multiple grade levels.

A predictable tiered schedule allows:

- More structured morning routines
 - Reduced transportation conflicts
 - Improved childcare planning
 - Greater schedule consistency
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Estimated Transportation Impact for Jerome School District

Current System

- 19 routes
- 649 elementary students
- 639 secondary students
- Average route length: 37 miles

Proposed Tier System

Tier 1

- Elementary Schools
- 7:30 AM Start

Tier 2

- Secondary Schools
- 9:00 AM Start

Benefits

- ✓ Increased bus utilization
- ✓ Improved transportation efficiency
- ✓ Potential reduction in future fleet needs
- ✓ Better driver utilization
- ✓ Enhanced transportation reliability
- ✓ Reduced operational costs
- ✓ Improved secondary student academic readiness

- ✓ Increased flexibility for future district growth
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Conclusion

The proposed tiered start schedule of 7:30 AM for elementary students and 9:00 AM for secondary students presents a significant opportunity for Jerome School District to improve transportation efficiency while supporting student success.

With 649 elementary students, 639 secondary students, and 19 routes averaging 37 miles each, the district is well positioned to capitalize on a 90-minute tier separation. This model allows buses and drivers to be utilized more effectively, potentially reducing long-term transportation costs while simultaneously providing educational and health benefits for secondary students.

A tiered transportation system represents a strategic investment in operational efficiency, fiscal responsibility, and student achievement, positioning Jerome School District to meet future transportation and educational needs more effectively.