

City of Santa Fe – Planning Brief
Bus Route De-Deviation (< 0.5 Mile) & ADA Bus Stop Construction
Prepared for Planning, Public Works, and Transit Coordination

Purpose

This brief provides planning-level cost estimates and considerations for creating a small deviation (less than 0.5 mile) from an existing bus route and constructing a fully ADA-compliant bus stop.

These estimates support budgeting, corridor planning, grant applications, and interdepartmental coordination.

1. Route Deviation (≤ 0.5 Mile)

Typical Improvements

- Pavement strengthening for bus loading
- Turnout or pull-out construction (if required)
- Curb, gutter, and striping modifications
- Drainage improvements
- Traffic control adjustments
- Right-of-way or easement acquisition (if needed)

Planning-Level Cost Range

Complexity	Estimated Cost
Minimal (existing roadway)	\$25,000 – \$75,000
Moderate (turnout, pavement strengthening)	\$100,000 – \$300,000
Complex (drainage, curb, ROW impacts)	\$300,000 – \$750,000+

Typical Santa Fe Conditions:

Most deviations fall between **\$150,000 – \$350,000** unless drainage or utilities create additional complexity.

2. ADA-Compliant Bus Stop Construction

Required ADA Elements

- Concrete boarding pad (minimum 5 ft × 8 ft)
- Accessible path of travel
- ADA curb ramps & detectable warnings
- Bus stop sign and pole

Common Enhancements

- Passenger shelter
- Bench and trash receptacle
- Lighting (solar or electrical)

- Bike rack
- Real-time arrival display (optional)

Planning-Level Cost Range

Stop Type	Estimated Cost
Basic ADA pad & access	\$8,000 – \$20,000
Pad + ramps + accessible path	\$20,000 – \$50,000
Shelter & amenities	\$35,000 – \$90,000
Enhanced stop (lighting & RTPI)	\$75,000 – \$140,000

3. Combined Project Estimate

Project Scope	Estimated Total
Low complexity deviation + stop	\$60,000 – \$150,000
Typical real-world project	\$200,000 – \$450,000
Higher complexity corridor work	\$450,000 – \$850,000+

Planning Placeholder:

City staff often budget approximately **\$250,000 per deviation-stop project** for early planning purposes.

4. Primary Cost Drivers

Costs increase when projects include:

- Drainage channels or arroyo crossings
- Utility relocation
- Right-of-way acquisition
- Extended sidewalk construction for ADA access
- Electrical trenching for lighting
- Work on NMDOT roadways (permitting & design standards)

5. Planning & Coordination Considerations

Transit Operations

- Travel time impacts and schedule reliability
- Ridership demand and accessibility improvements
- Paratransit efficiency benefits

Public Works & Engineering

- Drainage and stormwater compliance
- ADA connectivity to sidewalks and crossings
- Long-term maintenance responsibilities

Community & Safety

- Improved accessibility and equity of access
 - Passenger safety and comfort
 - Lighting and visibility enhancements
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6. Funding Eligibility

Eligible funding sources may include:

- FTA Section 5307 Urbanized Area Formula Funds
 - FTA Section 5339 Bus & Bus Facilities
 - Congestion Mitigation & Air Quality (CMAQ)
 - State transit or safety funds
 - Local capital improvement programs
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Summary

A small route deviation paired with a full ADA bus stop typically costs **\$200,000 to \$450,000** under typical Santa Fe conditions. Projects involving drainage, utilities, or right-of-way impacts may exceed this range.

Strategically implemented deviations can improve accessibility, safety, and system usability while supporting ADA compliance and long-term transit system efficiency.

Operating Impact Overview

A deviation of less than 0.5 mile typically adds:

- **0.5–1.0 additional miles per round trip**
 - **3–6 additional minutes of travel time per trip**
 - Increased vehicle cycles, braking, and idling
 - Additional driver labor time
 - Increased fuel consumption and maintenance frequency
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Annual Operating Cost Components

1. Operator Wages & Benefits

Additional route time requires more paid operator hours.

Assumptions

- Added time: 4 minutes per trip (average)
- 20 trips per day
- 255 weekday service days
- Operator wage + benefits: **\$38–\$45/hour**

Annual Cost

- 340 additional service hours/year
 - **Estimated Cost: \$13,000 – \$15,300**
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2. Fuel Consumption

Increased mileage and idling raise fuel usage.

Assumptions

- +0.75 miles per trip (average)
- 20 trips/day × 255 days = 5,100 trips/year
- Added mileage: ~3,825 miles/year
- Fleet average: 4.5 MPG (CNG or diesel equivalent)
- Average fuel cost: \$2.50 – \$3.50 per gallon equivalent

Annual Cost

- 850 gallons/year (approx.)
 - **Estimated Cost: \$2,100 – \$3,000**
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3. Vehicle Wear & Tear (Maintenance & Parts)

Additional stopping, turning, and mileage accelerate wear on:

- brakes
- suspension
- tires
- doors & kneeling systems
- drivetrain components

Industry Planning Estimate

- \$0.75 – \$1.25 per additional mile

Annual Cost

- 3,825 miles × rate
 - **Estimated Cost: \$2,900 – \$4,800**
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4. Preventive Maintenance & Lifecycle Impacts

More mileage increases service intervals and shortens component lifespan.

Includes

- More frequent inspections and servicing
- Increased tire replacement frequency
- Earlier brake system servicing

Annualized Impact Estimate

- **\$1,500 – \$3,000**
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5. Scheduling & System Efficiency Impacts

Small deviations can affect schedule reliability and require recovery time adjustments.

Potential impacts

- Reduced on-time performance buffer
- Need for additional runtime padding
- Increased dispatcher oversight

Estimated Operational Impact

- **\$1,000 – \$3,000 annually** (indirect)
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Total Estimated Annual Operating Impact

Cost Category	Annual Estimate
Operator wages & benefits	\$13,000 – \$15,300
Fuel	\$2,100 – \$3,000
Maintenance & wear	\$2,900 – \$4,800
Preventive maintenance	\$1,500 – \$3,000
Scheduling/efficiency impacts	\$1,000 – \$3,000

Estimated Annual Total

\$20,500 – \$29,000 per year

Long-Term Budget Consideration

Over a 10-year period, a single deviation may add:

\$205,000 – \$290,000 in operating costs

This ongoing cost should be evaluated alongside capital construction costs and ridership benefit.

Planning Guidance

A route deviation is typically justified when it:

- Significantly improves ADA accessibility
 - Serves high ridership generators (medical, senior housing, schools)
 - Improves safety or eliminates unsafe crossings
 - Reduces paratransit demand and costs
 - Supports equity and access goals
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