

OASIS RAIL TRANSIT OVERVIEW



Oasis Rail Transit Project – At A Glance

What is Oasis Rail Transit?

Oasis provides a new transportation alternative for the Eastern Corridor region. It will transport residents, workers and visitors between downtown Cincinnati, the City of Milford and the communities that lie in between.

The Oasis line is a foundation upon which future passenger rail lines can be added, connecting communities across the Greater Cincinnati region.

Project Elements

- Evaluate alignment options and identify locally-preferred alternatives
- Determine rail vehicle type to be used
- Develop ridership projections
- Prepare a conceptual operations plan (service days, hours/train frequency, etc.)
- Evaluate and select station locations
- Develop conceptual station area land use plans
- Prepare construction/operation cost estimates; develop conceptual financing plan
- Complete Business Case Assessment



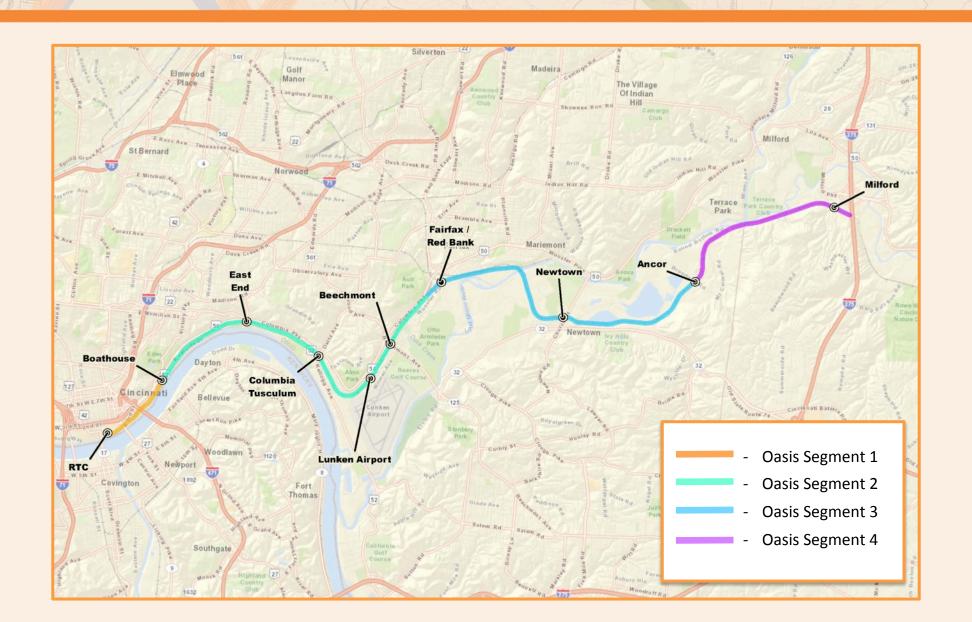
Oasis Rail Transit Purpose and Need

The purpose of the Oasis Rail Transit project is to implement effective passenger rail transit service in the Eastern Corridor. This will provide:

- A new, regional scale transportation alternative to driving
- Increase mobility for non-drivers
- Provide a high-capacity transit mode to support the expanded bus, bike, pedestrian, and roadway systems
- Connect downtown Cincinnati with outlying areas of population and employment
- Support neighborhood development and revitalization consistent with the land use vision plan
- Reduce demand for new roadway capacity while providing a way to meet future travel demand

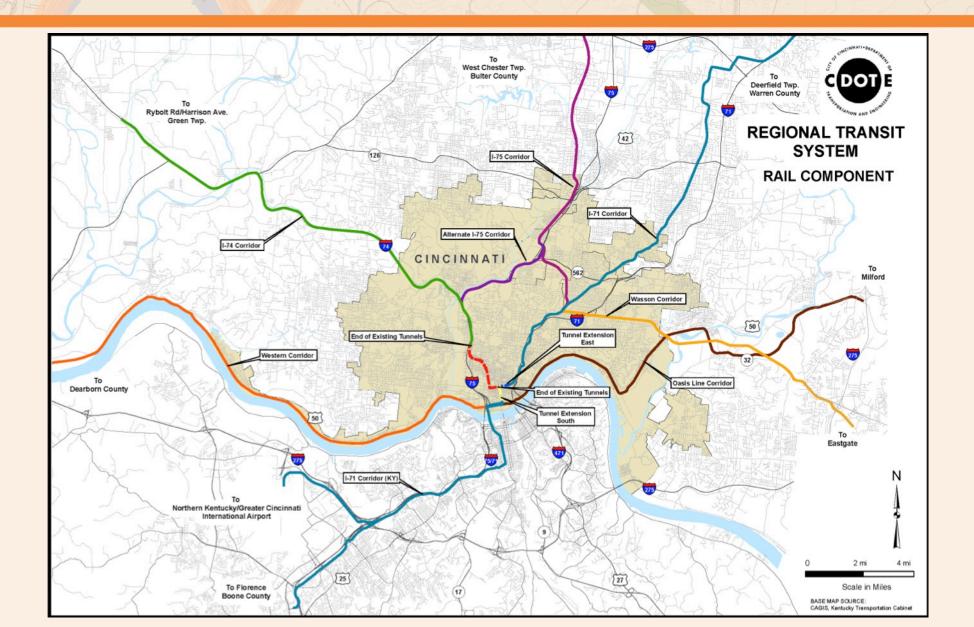


Oasis Rail Transit Corridor – Station Locations Identified in the 2006 Tier 1 Environmental Impact Statement



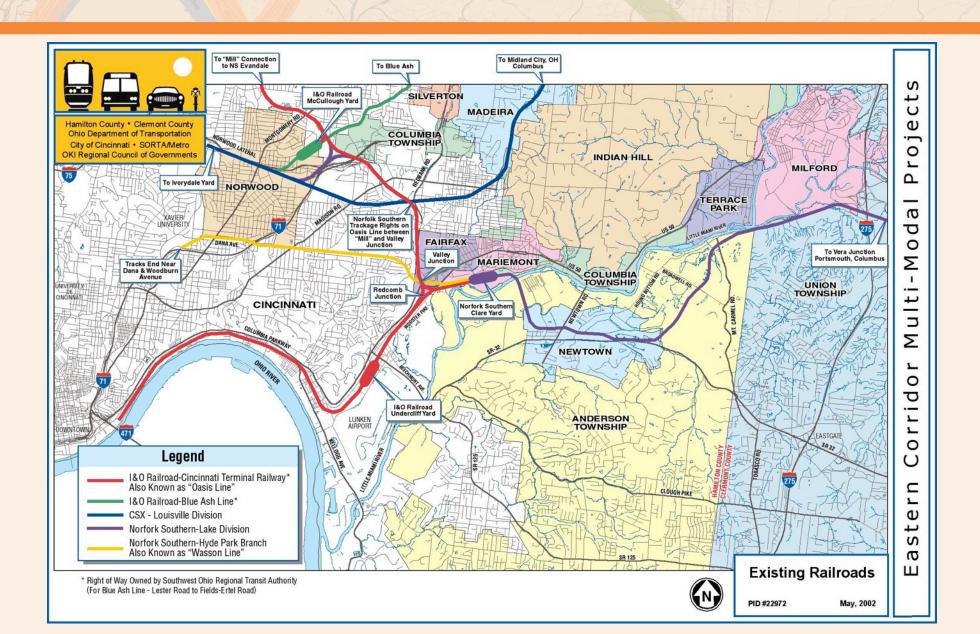


Regional Transit System – Existing Rail Corridors





Existing Freight Railroad Networkwithin the Eastern Corridor





OASIS RAIL TRANSIT RAIL SERVICE



Oasis Rail Transit Service

Passenger rail offers an attractive transit-based alternative to driving.

The initial proposed service would:

- Operate Mondays through Fridays
- Run trains every 20 minutes during peak A.M. and P.M. commute periods
- Run one mid-day roundtrip

Future expansion could include evening, weekend and/or special event service:

- Reds games
- Bengals games
- Festivals (Riverfest, Taste of Cincinnati, Oktoberfest, etc.)
- Concerts, shows and more

Conceptual Schedule

Westbound from Milford	Arrive at RTC		
6:30 AM	6:59 AM		
6:50 AM	7:19 AM		
7:10 AM	7:39 AM		
7:30 AM	7:59 AM		
7:50 AM	8:19 AM		
Depart from RTC	Arrive at Milford		
12:00 PM	12:29 PM		
Depart from Milford	Arrive at RTC		
12:40 PM	1:09 PM		
Eastbound from RTC	Arrive at Milford		
4:30 PM	4:59 PM		
4:50 PM	5:19 PM		
5:10 PM	5:39 PM		
5:30 PM	5:59 PM		
5:50 PM	6:19 PM		



Oasis Rail Transit Service – Vehicle Technology

Rail vehicles (trains) powered by modern low-noise, low-emission diesel multiple unit technology match the characteristics and needs of the Oasis rail corridor and the communities it would serve.

The vehicles:

- Are sleek, modern, attractive
- Are quiet and comfortable
- Are self-propelled and efficient; train can move back and forth on its own
- Can travel on existing tracks
- Do not require overhead electric lines or electrified tracks which results in significant cost savings











Other Cities Using Diesel Multiple Unit Rail Vehicles

Rail Service	Rail Vehicle	Location	Daily Ridership
Sprinter	PAINTER	Oceanside -Escondido: San Diego County (CA)	8,300
Capital Metro	METROPHI	Austin (TX)	1,800
O-Train		Ottawa (ON) , Canada	14,200
River Line		Camden-Trenton (NJ)	9,000



Oasis Rail Transit Service – Diesel Multiple Unit Vehicles in Service



























Oasis Rail Transit Service – Estimated Travel Times

Station A	Station B	Distance (Miles)	In-Vehicle Travel Time (Minutes)	Wait Time at Station B (Minutes)
Milford	Ancor	3.1	3.7	0.50
Ancor	Newtown	2.6	3.1	1.00
Newtown	Fairfax	2.6	3.1	1.00
Fairfax	Beechmont	1.4	1.9	1.00
Beechmont	Lunken Airport	8.0	1.6	0.50
Lunken Airport	Columbia Tusculum	1.4	1.9	1.00
Columbia Tusculum	East End	1.4	1.9	1.00
East End	Boathouse	2.2	2.9	0.00
Boathouse	RTC	1.1	3.3	0.00
Total		16.6	23.4	6.00



Oasis Average Weekday Ridership Forecasts, 2016/2035*

Station	Opening Year 2016 Boardings	Long-Term 2035 Boardings
Riverfront Transit Center (RTC)	1,400	1,550
Boathouse	0	0
East End	60	60
Columbia Tusculum	30	25
Lunken Airport	60	60
Beechmont	100	100
Red Bank	220	250
Newtown	280	310
Ancor	220	250
Milford	330	375
Total Weekday Line Boardings	2,800	3,100

- Ridership forecasts were developed using OKI's travel model, projecting travel movements between areas based on socioeconomic and land use forecasts.
- Inputs included the proposed operating schedule and station locations.

^{*} Does not include potential Special Event ridership



Ridership of Comparable Commuter Rail Systems to Oasis

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System	Major Cities Served	Ridership (Average Weekday)	Route Miles	Number of Stations	Year Opened	Average Weekday Ridership per Route Mile	Farebox Recovery (in %)
Caltrain	San Francisco/San Jose	41,000	77	32	1987	537.7	47.0
A-Train	Denton County, TX	8,600	21	6	2011	409.5	n/a
Trinity Railway Express	Dallas, Ft. Worth, TX	8,200	34	10	1996	241.2	37.6
Virginia Railway Express	Washington, D.C.	19,200	90	18	1992	213.3	57.3
Tri-Rail	Miami, FL	13,300	72	18	1987	184.7	20.5
Oasis	Cincinnati, OH	2,800	17	10	TBD	168.7	n/a
NICTD South Shore Line	Chicago, IL	12,100	90	20	1903	134.4	44.9
UTA FrontRunner	Salt Lake City, UT	5,800	44	8	2008	131.8	10.5
Sounder Commuter Rail	Seattle/Tacoma, WA	10,100	80	9	2000	126.3	22.0
NCTD Coaster	San Diego, CA	5,000	41	8	1995	122.0	40.0
Westside Express Service	Beaverton, OR	1,600	15	5	2010	106.7	5.0
Capital MetroRail	Austin, TX	2,000	32	9	2010	62.5	0.5
Northstar Line	Minneapolis, MN	2,000	40	6	2009	50.0	15.8
New Mexico Rail Runner	Albuquerque, NM	3,900	97	13	2006	40.2	12.7



Oasis Rail Transit Service – Potential for Quiet Zones

As part of Oasis corridor track and signal improvements, crossings could be constructed to allow for Quiet Zones, which provide opportunities to minimize use of train horns as trains approach roadway crossings:

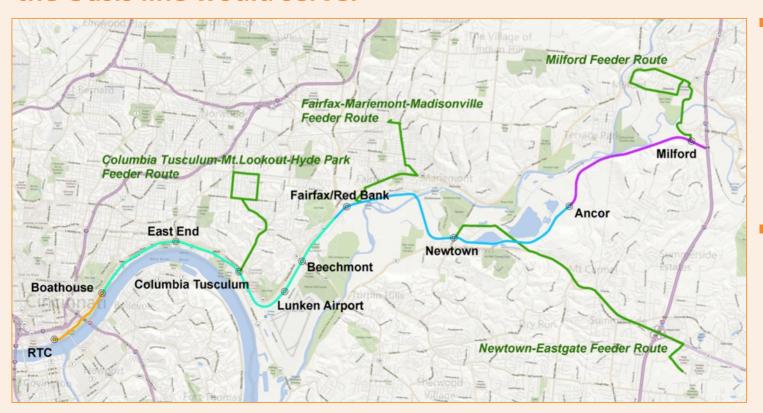
- 2005 Federal Railroad Administration final rules identify alternatives allowing local communities to apply for Quiet Zones
- Safety measures include raised medians, enhanced crossing gates for vehicles & pedestrians, signage
- Ultimate use of horn is at the engineer's discretion, in the case of an emergency





Oasis Rail Transit Service – Network of Bus Feeder Routes

New bus feeder routes would facilitate access to rail service from farther away along the corridor, linking more-distant communities to destinations the Oasis line would serve.



- Compact routes would provide quick travel times and easy connections between the rail corridor and regional activity centers
- Feeder services would match their frequency and service hours to maximize ridership and convenience

Other existing bus routes would also be adjusted to provide better connections to the Oasis Rail Transit service and to eliminate duplicative services.



Oasis Rail Transit Corridor – Examples of Active Transportation Facilities

These images show multi-use transportation facilities located next to two rail corridors in San Diego County – one using diesel multiple unit technology similar to that proposed for the Oasis Corridor.











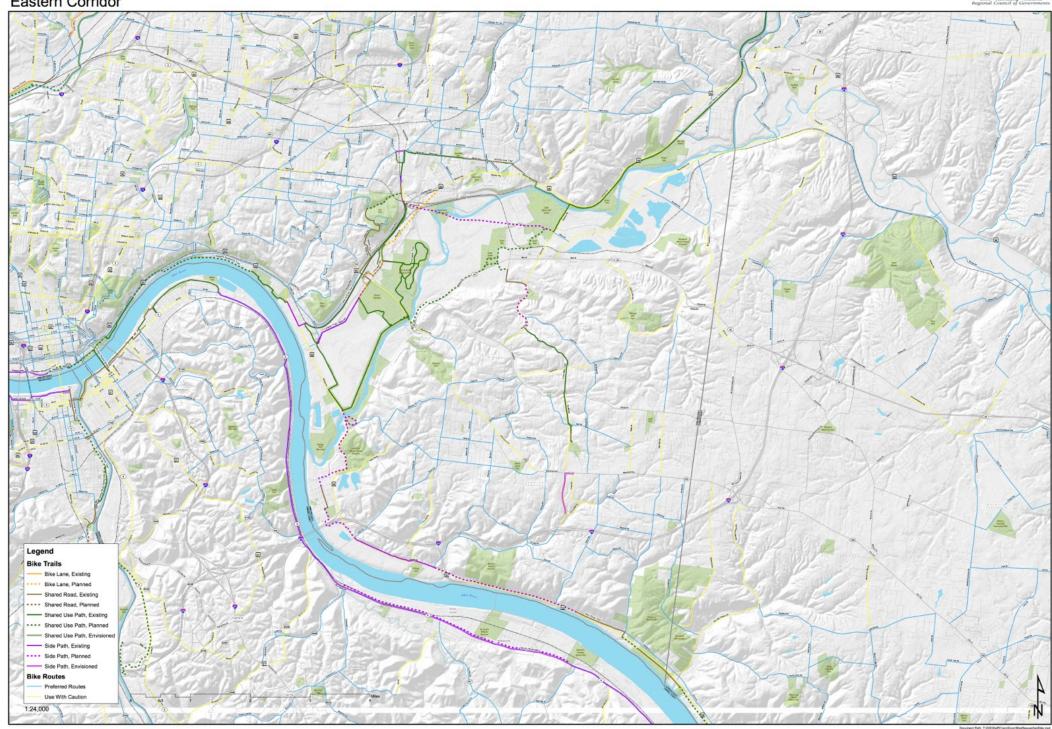




Bike Related Facilities Eastern Corridor









Oasis Rail Transit Corridor – Incorporating Bicycle/Pedestrian Facilities

Supporting Multiple Travel Options

There are opportunities to provide for bicycle and pedestrian facilities to connect local streets with rail stations and also to link the Oasis Corridor with regional active transportation networks.

As the operational requirements for the rail service are advanced, planning and design for parallel bicycle and pedestrian facilities take into account an "operational envelope" for inspection and maintenance of way, security, etc.

Future Considerations:

- The width of the available rail right-ofway (ROW) along the Oasis Corridor
- The need to preserve adequate space within the ROW to accommodate current and future operational, maintenance and security concerns
- In areas where the rail corridor is not sufficient or privately owned, any bike/ pedestrian facilities would need to be located outside the ROW
- Should the rail line use the existing bridge over the Little Miami River, any bike/ pedestrian facility would need to use a nearby crossing



Oasis Rail Transit Service -Tier 2 Study Next Steps

- Continue public outreach
- Identify horizontal and vertical alignment/typical sections
- Determine Federal Transit Authority (FTA) measures (mobility improvements, operating efficiencies and cost effectiveness)
- Prepare rail operations plan
- Draft rail systems plan
- Continue environmental studies
- Prepare capital and operating cost estimates
- Identify maintenance facility requirements and location
- Complete Business Case Assessment
- Develop conceptual financing plan
- Coordinate with freight railroads