December 10, 2008

Central Corridor Project Office
540 Fairview Avenue North
Suite 200
Saint Paul, MN  55104
Attention: Mark Fuhrmann

Re:     Central Corridor LRT – EIS Process

Dear Mr. Fuhrmann,

Enclosed please find Minnesota Public Radio’s request that the CCPO perform a second supplemental EIS relating to noise, vibration and safety issues affecting the “Fitzgerald Park” district in downtown Saint Paul.

Very Truly Yours,

LEONARD, STREET AND DEINARD

Professional Association

Joseph M. Finley

Enclosure

cc:     Thomas Kigin, Esq. (with enclosure/via email)
        Jeff Nelson (with enclosure/via email)
December 10, 2008

Central Corridor Project Office
540 Fairview Avenue North
Suite 200
Saint Paul, MN 55104
Att’n: Mark Fuhrmann

Re: Central Corridor LRT – EIS Process

Dear Mr. Fuhrmann,

As you know, our Firm is counsel to Minnesota Public Radio (“MPR”) on the Central Corridor LRT Project. MPR and our Firm want to thank you and Peter Bell for taking the time on October 27th to visit with MPR’s Public Affairs & Government Relations Committee to discuss the planned route of the Central Corridor LRT line along Cedar Street in downtown Saint Paul.

It is clear that MPR and the Metropolitan Council share much common ground regarding LRT. MPR strongly supports the efforts of the Metropolitan Council and the Central Corridor Project Office (“CCPO”) to connect downtown Minneapolis and downtown Saint Paul with a light rail transit line. MPR also believes that the Central Corridor LRT line is vital to the continued economic viability of both downtowns and wants the project to go forward as soon as reasonably possible.

**Build the Project Right**

But, MPR wants the Central Corridor LRT Project to be built right, based on Environmental Impact Statement studies that adequately and realistically review the noise, vibration and safety impacts of LRT on adjacent uses in downtown Saint Paul—especially protected “Category 1/Special Use Buildings”¹ such as recording studios and concert halls. MPR needs to know the CCPO’s decisions will be based on adequate and realistic studies.

¹ For the purposes of an EIS studying transportation infrastructure, “Category 1” and “Special Use Buildings” have operations that are highly sensitive to noise and vibration, including uses such as recording studios and concert halls. These uses are accorded greater protection against the effects of vibration and noise than Category 2 and 3 uses, which are still considered sensitive to noise and vibration impacts. Historic uses also are to receive heightened noise and vibration analysis in such EIS studies.
Unresolved Concerns

As you well know, MPR has grave and unresolved concerns regarding the deleterious effects of an LRT line on Cedar Street running within 8 to 14 feet of the exterior wall of major recording studios and the main public entrance of MPR’s Broadcast Center. According to Federal Transit Administration guidelines, recording studios and concert halls are considered Category 1/Special Use Buildings and are extremely sensitive to noise and vibration impacts. To date, we have not found an example anywhere in the United States of an LRT line running in such close proximity to a recording, concert or broadcast facility.

While it is true that MPR and its neighbors have been generally aware of the potential for LRT on Cedar Street for some time, it is only in the last six months that MPR has been given access to test data and engineering analysis disclosing the extent of the significant negative impacts created by an LRT line operating in such close proximity to a broadcast and recording center.

More to the point, MPR believes that the completed noise and vibration studies to date have been truly deficient in their analysis of the severe noise and vibration impacts that LRT is expected to have upon the multitude of protected Category 1 uses in downtown Saint Paul’s “Fitzgerald Park” district.

The Fitzgerald Park District

The Fitzgerald Park district is unique; it includes a tightly-packed cluster of Historic structures and Category 1/Special Use Buildings – such as the MPR Broadcast Center – centered around Cedar Street. A map showing the location of the MPR Broadcast Center and other Category 1 and/or “Historic” uses within Fitzgerald Park is attached as Exhibit 1. The map attached as Exhibit 2 shows that this cluster of special land uses is truly unique in downtown Saint Paul.

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2 The Fitzgerald Park District contains four structures on or near Cedar Street listed on the National Register of Historic Places: (1) the Central Presbyterian Church; (2) the Exchange Building (former St. Agatha’s Conservatory); (3) The Shubert Building; and (4) The Fitzpatrick Building. Two additional structures are considered eligible for historic preservation status: (1) the Church of St. Louis and its Parish House; and (2) the Fitzgerald Theater. The Fitzgerald Park District also contains, clustered around Cedar Street, a number of “Category 1” or similar “Special” uses that, under FTA standards, are to have the highest level of protection from LRT-caused noise and vibration. The Category 1 and Special uses include: (1) the MPR Broadcast Center; (2) Central Presbyterian Church and the Church of St. Louis (both double as a concert halls); (3) McNally Smith College of Music (which contains numerous studios and a concert hall); (4) the Fitzgerald Theater; (5) the History Theater; and (6) The Saint Paul Conservatory of Music (contains a recital hall). Several of these Category 1 / Special uses contain concert halls and/or recording studios.
The MPR Broadcast Center

The MPR Broadcast Center, on Cedar Street north of 7th, is a renowned cultural center, containing 24 recording, broadcast and concert studios, and critical listening and audio-editing facilities, all of which are highly sensitive to noise and vibration. The importance and sensitivity of this environment must not be understated. Exhibit 3, attached, contains a list of the renowned classical, jazz and pop artists who have appeared in MPR’s studios – Marilyn Horne, Pierre Rampal, Anne Sophie-Mutter, Keith Jarrett, Yo Yo Ma, James Galway, the Guarneri String Quartet and Chanticleer, to name a few. Moreover, radio programming broadcast to 840,000 listeners in our region and 15.9 million listeners nationally originates from the studios in MPR’s Broadcast Center.

EIS Studies to Date Are Incomplete and Insufficient

To date, the Central Corridor LRT Project has completed a “Draft” Environmental Impact Statement (“DEIS”) and a “Supplemental Draft” EIS (“SDEIS”). MPR believes that the Central Corridor EIS process has elevated speed over due care, and thus has marginalized or ignored the noise, vibration and safety impacts of a Cedar Street LRT line on downtown’s unique Fitzgerald Park district, and on the MPR Broadcast Center in particular.

In what specific respects does MPR consider the Central Corridor EIS studies incomplete and/or insufficient with respect to the protected uses in Fitzgerald Park? Here are just a few examples:

- **Noise and vibration impacts were not considered when the Cedar Street alignment was chosen.** The original “scoping” process that led to the selection of a single LRT route through downtown Saint Paul on Cedar Street considered 21 factors, but neither noise nor vibration was considered among those factors. Nor was the unique nature of the Fitzgerald Park district, which contains multiple Category 1/Special Use Buildings and Historic uses, considered as a scoping factor.

- **Only one alignment was studied in the DEIS Noise and Vibration Study.** The DEIS, in the noise and vibration study attached to it as an “Appendix” – hereinafter the “2002 Noise & Vibration Study” – studied only a single downtown LRT route along Cedar Street, eliminating any possibility to contrast the impact of the Cedar Street LRT route on Category 1/Special Use Buildings against alternative routes.

- **MPR and other noise and vibration sensitive facilities were not even analyzed in the 2002 Noise and Vibration Study.** In a remarkable omission, the 2002 study failed to identify or study the noise and vibration effect of LRT upon any of the Category 1/Special Use Buildings in Fitzgerald Park.

- **Historic properties in Fitzgerald Park were not included in the 2002 Noise & Vibration Study.** This 2002 study identified for analysis a total of 23 “Historic” uses in downtown Saint Paul (some of which were 700 feet or more away from the proposed
LRT line). But, in another remarkable omission, the study failed to address noise or vibration impacts upon any of the Historic properties in the Fitzgerald Park district, even though several of these Historic properties are located adjacent to the LRT line.

- **Safety concerns caused by the extreme proximity of LRT to MPR and neighboring facilities were not examined in the DEIS.** The EIS process purports to study safety factors relating to a new LRT line. Yet, neither the DEIS or the SDEIS addresses the obvious pedestrian hazards of running an LRT line on Cedar Street within 8 to 14 feet of the MPR Broadcast Center’s main public entrance.

- **The Fitzgerald Park District was not one of the areas designated for additional study in the SDEIS.** While the Category 1/Special Use Buildings and Historic uses in the Fitzgerald Park District were given passing mention in the SDEIS, they still were not subjected to rigorous EIS-style analysis for noise, vibration, safety or like concerns in the SDEIS.

- **The classification of recording studios and concert halls as Category 1 land uses was inexplicably deleted from FTA guidelines when reprinted in the SDEIS.** The FTA’s Transit Noise and Vibration Impact Assessment guide (2006) defines Category 1 land uses as “Tracts of land where quiet is an essential element of their intended purpose. This category includes lands set aside for serenity and quiet and such land uses as outdoor amphitheaters and concert pavilions, as well as National Historic Landmarks with significant outdoor use. Also included are recording studios and concert halls.”

  The SDEIS, when reciting this FTA standard, omitted the phrase “Also included are recording studios and concert halls.”

- **The CCPO has been unable to provide an example of LRT running in such close proximity to a recording and broadcast center anywhere in the United States; examples that have been provided have only raised new concerns.** The CCPO told MPR staff and board members that the Salt Lake City LRT line runs “right past” the Mormon Tabernacle (MT) broadcast studios without any untoward noise or vibration effects. But when MPR staff contacted the senior audio engineer at the Mormon Tabernacle they learned that the Salt Lake City LRT line runs 200 feet (not 8 to 14 feet) from the Mormon Tabernacle and 120 feet from its recording studio. In the view of the MT audio engineer, LRT vibration has rendered this recording studio unusable; it is now used as a rehearsal space only. See correspondence from the MT audio engineer attached as Exhibit 4.

- **Data that did not conform with the CCPO’s assumptions regarding vibration mitigation was thrown out in preliminary vibration analyses.** As part of its currently-pending 2008 Noise & Vibration Study, the CCPO took vibration readings along the Hiawatha LRT line at distances of 25, 50, 75 and 100 feet. Although the MPR Building would be within 8 to 14 feet of the proposed LRT line, the author of the 2008 study simply discarded (as “anomalous”) vibration readings obtained at 25 feet from the
Hiawatha line – readings showing that a Cedar Street LRT alignment would have severe vibration impacts on the MPR Broadcast Center. Instead, the study’s author, without apparent methodological justification, chose to analyze the vibration effects of LRT on adjacent buildings (such as the MPR Broadcast Center) by using the average of vibration readings measured at 50 and 75 feet from the LRT line! The author’s decision to discard the 25-foot readings is even more odd given that the supposedly “anomalous” 25-foot readings appear generally to be in line with those presented in the CCPO’s 2002 Noise & Vibration Study as the FTA’s “typical case.” See Figure 2.2 on page 34 of the Appendix (Section 9.9) to the DEIS.

- **Conclusions regarding vibration mitigation assume an unrealistic level of wheel maintenance.** The 2002 Noise & Vibration Study notes that vibration effects can be significantly amplified beyond the “typical case” by flattened wheels on LRT vehicles. Yet, the DEIS, when projecting vibration effects of LRT, assumes round wheels without flat spots. Among the 200+ LRT trains that will pass the MPR Broadcast Center each day over the next few decades, there will eventually be many wheels with flat spots.

- **Newly developed data refutes the CCPO’s assertion that LRT would cause no severe noise impacts anywhere in downtown Saint Paul.** On-site testing undertaken by MPR at its own expense has now proven the CCPO’s conclusion that LRT will cause no severe noise impacts to be manifestly untrue. LRT noise – bells and horns – will be a constant throughout the day and at piercingly high sound pressure levels, well beyond the ranges permitted by FTA standards for Category 1/Special Use Buildings.

**Request for a Second Supplemental Draft EIS**

The FTA’s Transit Noise and Vibration Impact Assessment guide (2006) (FTA-VA-90-1003-06) states, on pp. 3-11: “[B]efore mitigation measures are considered, the project sponsor should first evaluate alternative locations/alignments to determine whether it is feasible to avoid the severe impacts altogether.” The plain fact is that no alternative route to the Cedar Street alignment has ever been studied in full-blown EIS context (a level of analysis well beyond mere “scoping” discussions). MPR believes that, had alternative routes through downtown Saint Paul been studied in the manner contemplated by FTA guidelines, Cedar Street could never have been chosen as the preferred route for LRT into downtown Saint Paul.

Given FTA requirements and this litany of study shortcomings, MPR hereby formally requests that the CCPO conduct an additional, “Second” Supplemental Draft EIS before moving forward with a Final EIS. This Second SDEIS should contrast the currently-preferred Cedar Street LRT route with at least two alternative LRT routes through downtown Saint Paul, analyzing closely the noise, vibration and safety impacts on the various Category 1 and Historic Uses present along each route.

MPR suggests two alternate routes for study, depicted in Exhibits 5 and 6 attached hereto, but these routes are simply offered as illustrative.
Further Study is Mandatory

The CCPO recently began its own study called “DRAFT: Vibration and Noise Measurements and Predictions for Central Corridor LRT Project,” ATS Consulting (July 19, 2008) (“2008 Vibration and Noise Study”). Out of frustration over the lack of verifiable noise and vibration data made available to it, MPR has also begun its own study to critique the methods and findings in the CCPO’s 2008 Vibration and Noise Study. MPR believes that these studies will provide significant new noise and vibration data regarding the heretofore unexamined Category 1/Special Use Buildings in Fitzgerald Park – information that renders the requested “Second” SDEIS mandatory.3

In summary, the discrete segment of the Central Corridor LRT line running through downtown Saint Paul’s Fitzgerald Park district requires further study regarding the noise and vibration impacts upon Category 1/Special Use Buildings and Historic uses, and regarding safety concerns. Such a study could be undertaken quickly in a “Second” SDEIS – and we believe a Second SDEIS to be mandatory given the new information that has recently been, and is still being, developed.

Additional Project Costs

It is obvious and foreseeable that the noise, vibration and safety impacts of an LRT line operated along the eastern edge of Cedar Street could well shut down the highly sensitive MPR Broadcast Center, leaving MPR with no practical alternative but to sue (in “inverse condemnation”) to recover the value of its $100 + million Broadcast Center—a special use building—plus relocation costs and related fees. The cost of a condemnation of the MPR Broadcast Center is something the CCPO must take into account as it assesses alternative LRT routes through downtown Saint Paul.

We look forward to hearing from you regarding the MPR’s request.

Very Truly Yours,

LEONARD, STREET AND DEINARD

Professional Association

Joseph M. Finley

3 Under the National Environmental Protection Act (NEPA), a Supplemental Draft EIS study is mandated if there are significant new circumstances or information relevant to environmental concerns and bearing upon the proposed action or its impacts. 40 C.F.R. § 1502.9(c)(1). We believe the conditions for a mandatory SDEIS, focusing on the noise, vibration and safety impacts gradually being revealed as to the many Category 1 and Historic Uses within the Fitzgerald Park District are met amply in this situation. Of course, the CCPO may, in its discretion, at any time prepare a Supplemental DEIS if it believes that circumstances warrant.
Mr. Mark Fuhrmann  
December 10, 2008  
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cc: Peter Bell  
    Tom Weaver  
    Kathryn O’Brien  
    Sherry Little  
    Marisol Simon  

Attachments:  

Exhibit 1 - Map of Fitzgerald Park District (1 page)  
Exhibit 2 - Distribution of Noise/Vibration Sensitive Facilities in Downtown Saint Paul (1 page)  
Exhibit 3 - List of MPR’s Maud Moon Weyerhaeuser Studio Major Recording Artists (3 pages)  
Exhibit 4 - Letter from Trent Walker, Senior Audio Engineer, Church of Jesus Christ of Latter Day Saints  
Exhibit 5 - Map of Alternative Route on Minnesota Street (1 page)  
Exhibit 6 - Map of Alternative Route on Robert Street (1 page)
Exhibit 1: Map of the Central Corridor Alignment through the Fitzgerald Park District

The Fitzgerald Park District includes:

37 Audio Recording Studios
- McNally Smith College of Music (12 recording studios)
- Minnesota Public Radio (24 recording studios)
- The Fitzgerald Theater (home of A Prairie Home Companion)

4 Buildings Listed on the National Register of Historic Places
- Central Presbyterian Church
- The Fitzpatrick Building
- The Schubert Building / Fitzgerald Condos
- The St. Agnes Conservatory / Exchange Building

2 Buildings Considered Eligible for Historic Status
- The Church of St. Louis, King of France
- The Fitzgerald Theater

* Used for recordings with a live audience
** Used for concerts and other performances/events

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Exhibit 2 – Distribution of Noise/Vibration Sensitive Facilities in Downtown Saint Paul
Exhibit 3: List of MPR’s Maud Moon Weyerhaeuser Studio Major Recording Artists

This is a partial list of classical artists who have performed and/or recorded in MPR’s Maud Moon Weyerhaeuser music studio including notable artists such as Yo Yo Ma, Renée Fleming, James Galway, Joshua Bell, Lang Lang and Dawn Upshaw.

Numerous additional classical and contemporary groups have used the studio which is considered to be one of the finest recording venues in the nation.

Les Arts Florissants
Leo Kottke
Pinchas Zukerman
Keith Jarrett
AAM Octet
Academy of St. Martin Fields Octet
Ahn Trio
Alan Feinberg
Alba Trio/Bassoon Quartet
Alexander SQ
Alexandre da Costa, violin; Margo Garrett, piano
ALK/Harp Consort
Altmanar
Amadeus Winds
Amelia Piano Trio
American Brass Quintet
American String Quartet
Ames Piano Quartet
Anhers Sax Quartet
Amsterdam Baroque Orchestra
Amsterdam Loki Stardust Quartet
An die Musik
Andras Schiff
Andreas Bach
Andrew Manze, violin, Richard Egarr, harpsichord
Angeles SQ
Annapolis Brass Quintet
Anne-Sophie Mutter
Orks
Anonymous 4
Antares
Arden Trio
Ardisi SQ
Arnold Steinhardt, violin; Victor Steinhardt, piano
Ars Musica
Art Farmer Quartet
Arte Chorale
Artymiw
Aspen Wind Quintet
Assad Duo
Australian Chamber Ensemble
Avalon String Quartet
Awadagin Pratt
Baltimore Consort
Baroque Violin Masters
Barry Douglas
Beaux Arts Trio
Belcea Quartet
Bell/Gingold/Cheng
Bell/Thibaudet
Bergen Woodwind Quintet
Best of Bach
Bogorad/Ullery/James
Borodin Trio
Borromeo String Quartet
Boston Cameraa

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Eliot Fisk
Elkina Sisters
Ellen Hargis, soprano; Paul O'Dette, lute
Elmer Isler Singers
Emerson String Quartet
Emma Kirkby, soprano; Fretwork
Emmanuel Palnad, flute; Eric LeSage, piano
Emmanuel Wind Quintet
Empire Brass
Endellion String Quartet
Ensemble for Early Music
Ensemble Wien-Berlin/Elena Bashkirova, piano
Enso String Quartet
Eroica Trio
Estrem/Holmquist
F. Chris Fisk
Robison
Fleezanis/Ohlsos
Fleezanis/Ross/Meyer
Flem & the BB's
Flute Force
FOG Trio
Frank/Frank
Frederic Chiu, piano
Free Flight*
Garrick Ohlsson
Garrick Ohlsson, piano
Gary Burton Quintet
Gibbons
Gil Shaham, Akira Eguchi, piano
Gil Shaham, violin; Orli Shaham, piano
Goluf/Kaplan/Carr Trio
Goode
Gottlieb Wallisch, piano
Grieg Trio
Guarnieri String Quartet
Guildhall String Ensemble
Guin/SPO
Guilli/Cavallo
Gurrutio
Gustav Leenhardt
Guy Bovet
Hagegard/Jones
Hagen SQ
Hampson/Rutenberg
Hanell/Smith
Harrell Bronfman
Helen Callus, viola; Philip Bush, piano
Helene Grimaud, piano
Hesperion XXI
Hewitt
Hexagon
Hilary Hahn, violin; Natalie Zhu, piano
Hilton
Holliger/Ritter
Holloway - Assenbaum - Mortensen Trio
Holloway & Friends
Hugo Wolf Quartet
Ilya Gringolts, violin; Christopher Guzman, piano
Imani Winds
Imogen Cooper
Isbin/Adelante SQ
Isbin/Coryell/Almeida
Isbin/Geanakoplos
Isbin/Van
Israelirich/Schuster
Jacques Ogg, harpsichord; Wilbert Hazelzet, flute
Jacques Thibaud Trio
James Ehnes, violin; Eduard Laurel, piano
James Galway, flute
James Tocco
James/Brunele
Jean-Yves Thibaudet, piano
Jeffrey Kahane
Jeffrey Kahner, flute; Linda Mark, piano
JK Parker
Johannes Quartet
Jon Kimura Parker, piano
Jonathan Biss, piano
Jorg Demus
Jorja Fleezanis, concertmaster of MN Orch
Jorja Fleezanis, violin; Cyril Huve, forte piano
Jorja Fleezanis, violin; Karl Paulnack, piano
Jorja Fleezanis, violin; Kenneth Broadway, piano
Joshua Bell, violin
Joshua Bell, violin; Frederic Chiu, piano
Juilliard String Quartet
Juilliard String Quartet/Grehouse
Kalame/Brey/Swenson
Kalichstein/Laredo/Robinson
Kalichstein/Laredo/Robinson Trio
Kansas City Symphony
Kashkashian/Abramovic
Kashkashian/Nagy
Kavafian-Schub-Shifrin Trio
Ken Kesey, novelist
Kennedy, violin (Nigel Kennedy)
Kennedy/Noda
King's College Choir
King's Noyse
King's Singers
Kirschebaum/Siegel
Kronos Quartet
Krosnik/Kalish
Krosnik/Kalish #2
Kuijken Quartet
Kuijken Trio
L.A. Guitar Quartet
L.A. Vocal Arts Ensemble
Lafayette String Quartet
Lang Lang, piano
Lanier Trio
LAPQ/Bretschger
Lark Quartet
Lark String Quartet
Lars Vogt, piano
Leif Ove Andsnes, piano
Leila Josefowitz, violin; John Novacek, piano
Leo Kottke, guitar
Levinson Family
Lin/Bronfman
Lin/Rivers
London Brass
Lydia Artyomie, piano
Lydian Quartet
Lynn Harrell, cello
Lyra Concert, David Douglas, violin; Ellen Hargis, soprano
M. Dieter
M. McPartland
Marian McPartland, jazz pianist
Marilyn Horne, mezzo-soprano
Mark O'Connor, fiddle virtuoso
Mark O'Connor's Appalachia Waltz Trio
Matt Haimovitz, cello; Jean Marchand, piano
Max Roach Quartet
McKelvey-Costanza/McDermott
McNeil Jubilee Singers
Melvyn Tan
Members of the MN Orchestra
Mendelssohn String Quartet
Mendelssohn String Quartet; Robert Mann, viola
Menuhin-Chen-Coker

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Meridian Arts Ensemble
Meyer/Dorfman
Miami String Quartet/Nokuthula Ngwenyama, viola
Michala Petri, recorder; Lars Hannibel, guitar
Midori
Milan Turkovic, bassoon; David Shifrin, clarinet; Shai Wosner, piano
Millenium
Milis/Mpls Artists Ens.
Minneapolis Guitar Quartet
Mirecourt Trio
Miro String Quartet
Modern Jazz Quartet
Mozartean Players
Muir SQ/Orth
Music from Oberlin
Musica Antiqua Koln
Musical Offering
Musicians from Marlboro
Musicians of Swanne Alley
Musicians/Newberry/Library
Nash Ensemble
Neidich/Levin
New World Quartet
New Zealand String Quartet
Newberry Consort
Nigel Kennedy
Nigel North
Nixon/Mayorga
NY Cornet and Sackbut Ensemble
NY Wind Soloists
Oberlin Baroque Ensemble
OPUS ONE
O'Reilly/Brey
Orion SQ
Orion String Quartet
Orpheus Quartet
Osiris Trio
Palladian Ensemble
Parn Frank, violin; Claude Frank, piano
Paris Piano Trio
Parley of Instruments
Pasquier Trio
Paul Coletti, viola; Lydia Artymiw, piano
Paul Coletti, viola; Phillip Bush, piano
Paul Jacobs, organ
Peabody Trio
Pepe and Celia Romero
Pepe Romero, guitar
Peterdm String Quartet
Petri/Hannibal
Petri/Petri
Phantasm
Phelps
Phillips/O'Reiley
Pierre Rampal, flute
Pieter Wispelwey, cello, Dejan Lazić, piano
Pinchas Zukerman, violin
Portland String Quartet
Prague Wind Quartet
Primavera String Quartet
Pro Musica Nipponia
Quartet Sine Nomine
Quartetto Gelato
Rachel Barton Pine, violin; Matthew Hagle, piano
Ragin/Hogan Chorale
Rampal/Ritter
Ravi Shankar
Rebel
Reiko Aizawa, piano
Renée Fleming, soprano
Bado, piano
Richard Goode #2
Richie/Wright-Duo Geminiani
Robinson/Gibbons
Robinson-Lubambo-Baptista Trio
Romanesca
Ronald Smith
Rudolf Firkusny
Rumilajta
Sanders/Revzen
Sanders/Wadsworth
Saturday Brass
Savall/Hespereion XX
Schickele/Lark SQ
Schiff/Sanders
Schoenberg SQ
Schroeder/Thomburgh
Seattle Chamber Players and Friends
Sequenza
Sequioa String Quartet
Sequioa String Quartet/Claude Frank
Shaham/DeSilva
Shai Wosner, piano [Ara Guzelimian, guest host]
Shanghai String Quartet; Eugenia Zukerman, flute
Shank/Hagedorn
Sherman/SPCO
Shifrin/Sherry/McDermott (CMSLC)
Shifrin/Valleccillo
Siegel/Horvath/Frisch
Silverstein
Skampa String Quartet
Slatkin/Buechner
Smithson String Quartet
Smithsonian Chamber Players
Smithsonian Chamber Players #4
Smithsonian/Byslma
Saint Paul Chamber Orchestra
Speidel/James
Spillville
SPSM (Easter) Brass and Chorus
St Lawrence String Quartet
St. Lawrence String Quartet
St. Lawrence String Quartet, Todd Palmer, clarinet "Goliyov"
St. Olaf Choir
Stars of D'Oyly Carte
Stephen Prutzman, piano
Steven Isserlis, cello; Ana-Maria Vera, piano
Stockholm Chamber Choir
Stoltzman/Allen/Vallcillo
Stoltzman/Douglass
Stoltzman/Foss
Stravinsky
Stuttgart WQ/Davies
Summit Brass
Swanne Alley*
Swenson/Kahane
Swingle Singers #1
Swingle Singers*
Sylvan/Breitman
Sylvan/Breitman*
Takacs Quartet
Talich Quartet
Tallie Scholars
Tan/New Mozart Ensemble
TASHI
Taverner Consort
The Art Farmer Quartet (jazz)
The Beaux Arts Trio
The Czech Nonet
The Dale Warland Singers
The Emerson String Quartet
The Empire Brass (holiday program)
The Guarneri String Quartet
The Harp Consort ("Missa Mexicana")
The Juilliard String Quartet
The King's Singers
The Modern Jazz Quartet
The Romeros
The Romeros (Royal Family of the Guitar quartet)
The Sixteen
Theatre of Voices
Thomas Hampson, baritone
Thomas Hampson, baritone; Craig Rutenberg, piano
Tokyo String Quartet
Tree/Artymiw
Trevor Pinnock
Trio Fontenay
Trio Mediaeval
Trio Solisti
Truls Mork, cello; Mark Gimse, piano
Tuba Quartet/Bassoon Quartet
Turtle Island String Quartet
U of M Wind Ensemble
Upshaw/Goode
Valente/isbin/Artymiw

Vandervelde
Vellenger String Quartet
Verbruggen/Haas
Vienna Piano Trio
VocalEssence
VocalEssence and Philip Brunelle
Wallace Collection
Waverly Consort
Weilerstein Trio
Wincenc
Winkler/Lee/Levine/Berman
Winslow/Betta/James/Nilsson
Xmas Brass Ensemble
Yefim Bronfman, piano
Ying Quartet
Yo-Yo Ma, cello
Ysaye Quartet
Zehetmair String Trio
Zehetmair/Gross
Ziegler New Tango
Zuill Bailey, cello; Awadagin Pratt, piano
Zukerman/ Kondenanis/Shanghai SQ
Zukerman/Neikrug
Exhibit 4: E-mail correspondence from Trent Walker, Senior Audio Engineer, Church of Jesus Christ of Latter Day Saints (typographical errors corrected/emphasis added)

12.01.2008

Dear Minnesota Public Radio:

I am writing in regards to the proposed rail system being built next to your recording studio and audio production facility. I am only stressing my opinion and not that of the LDS Church. I am the Senior Audio Engineer for the LDS Church and the lead engineer for The Mormon Tabernacle Choir. I am the Mixing engineer for Music and the Spoken Word, a weekly music broadcast on CBS Radio Network. The longest continuous network broadcast in the world.

I only tell you this to let you know that I am directly involved in recording and music production on a daily basis, not only for radio but for TV and live events as well.

In hearing of the proposed rail system next to your production facility it brings up some of the same issues which we deal with here at Temple Square in our newly built recording studio. Our studio is located underground about 120 feet from a rail tracks station. **Since the rail has gone in the studio is not useable for recording of most programs and has been only useable for rehearsals.** There is excessive low-end transfer from the weight of the train through the ground and into the studio. It is very easy not only to hear with the naked ear but to be picked up on condenser microphones used in the recording process.

We however have a different set of problems in The Tabernacle, which is our main concert performance and recording hall for The Mormon Tabernacle Choir. The Hall is located at ground level about 200 feet from the tracks. The low-end transfer is not as much of a problem because of another building between the tracks and the hall. However high end transfer is a problem generally related to sirens and bells from emergency vehicles. The train, when it passes by, does not use a siren or bell. This is the only reason we are able to record and do not have major problems with the train in the hall.

When I heard of the closeness of the tracks to your facility and that there would be a horn involved in signaling the trains arrival I was highly concerned that you would experience the worst possible situation in operating a production studio next to this. Not only will you have low-end transfer but also worse is the high-end transfer that will be very difficult if not impossible to eliminate from interfering with or destroying your recordings being produced.

If you find you can hear the sound being transferred with your ear, the problem will only be far worse once you start using microphones.

I wish you the best in trying to resolve this situation. Let me know if there is any additional information needed.

Best of luck.

Trent Walker
Senior Audio Engineer
Church of Jesus Christ of Latter Day Saints
Exhibit 5: Map of Alternative Route on Minnesota Street

Minnesota Street Alignment: Takes advantage of TOD opportunities and saves $7 million in utility relocation.
Exhibit 6: Map of Alternative Route on Robert Street

Robert Street Alignment: Saves the CCLRT project millions of dollars by shortening the route by four blocks and eliminating three turns.